EDUCATION:
FROM CONCEPTION TO GRADUATION
A SYSTEMIC, INTEGRAL APPROACH

By

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Certificate of Approval

I certify that I have read EDUCATION FROM CONCEPTION TO GRADUATION: A SYSTEMIC, INTEGRAL APPROACH and that in my opinion this work meets the criteria for approving a dissertation submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Humanities with a concentration in Transformative Learning and Change at the California Institute of Integral Studies.

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Knowledge is not a matter for the head alone, but for the heart and spirit,

the body and mind; an adventure for the whole of our human being.

The integration of all aspects of an individual

prepares one for collective knowledge,

a new knowledge…

Tarthang Tulku, 1987, pp. 80, 164

EDUCATION

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Abstract

This dissertation contributes to the development of a model of education that is *systemic,* from a person's conception to graduation from school. It is *integral,* that is, it develops and integrates the spiritual, emotional, physical, and mental intelligences. This definition of *integral* was grounded in the philosophy of Sri Aurobindo (Ghose, 1990). The research explored nine integral educational programs, gathering interviews of high school seniors identified as representatives from each approach, and their parents. Using their narratives, this study reveals the learning experiences that helped shape the integral development and competencies of these young people. The research question is: What learning experiences support the development of the physical, emotional, mental, and spiritual intelligences of representative seniors of integral educational programs?

Integral programs associated with the following individuals were explored to understand their particular approaches to education: 1) Sri Atmananda, 2) Krishnamurti, 3) Montessori, 4) Fox (Quaker schools), 5) Sri Aurobindo, 6) Gandhi, 7) Yogananda (The Living Wisdom schools), and 8) Steiner (creator of Waldorf schools). Integral education addresses the whole person by creating an environment in which students engage in learning processes and experiences that focus on developing and integrating the mental, physical, emotional, and spiritual intelligences.

In this dissertation, the qualitative paradigm serves as the context for joining integral and constructivist approaches to create a theoretical framework for understanding integral education. The methodology of narrative inquiry captured the experiences of the nine students and their parents who represent the research population. This purposeful sample is gender-balanced and diverse. Data collection and analysis utilized interviews with students and their parents, curriculum document collection, program observations, and conversations with educators in each school setting. This research provides four specific contributions to systemic, integral education: 1) a theoretical framework, which distinguishes various definitions of *integral*, and its relationship to holistic when referring to education, 2) a portrait of an individual educated within that framework, 3) extensive examples of learning experiences in each domain of intelligence [physical, emotional, mental, and spiritual, with corroborating research], and 4) a model for a systemic, integral educational approach.

Dedications

To my Parents without whom I would not be HERE
Both literally and figuratively

And

Sedonia Cahill who guided me
in remembering why I am HERE

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During this journey I have discovered many people who are committed to an integral approach to education and who are stimulating a transformation in humankind . . . a new quality of consciousness and relationship with themselves, others, and the world. These people deserve accolades and public recognition. Because the research interviewees are to remain anonymous, their names are withheld. However, the students and parents who took part in this inquiry are extraordinary individuals. I salute their commitment to developing and weaving together their emotional, spiritual, physical, and mental intelligences, as well as their willingness to explore these domains with me through their personal narratives. I thank the following programs and individuals who supported me during this process. They are partners in co-creating a different future for us all.

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The first thing you have to learn about history is that because something has not taken place in the past does not mean it cannot take place in the future. To believe what has not occurred in history will not occur at all is to argue disbelief in the dignity of humankind.
Mahatma Gandhi, (as cited in Easwaran, 1978, p. 49)

Chapter 1: Introduction

The findings of this inquiry into integral education offer exciting possibilities for the future of education. Due to the very nature of integralism itself, this dissertation delves into a wide variety of factors that make up an integral education. Every attempt was made to approach this inquiry with an integral viewpoint, i.e., employing literature, methods, philosophy, attitude/mindset and related research that focus on the development and integration of the whole person–mental, physical, emotional, and spiritual intelligence. This research explored nine integral programs in order to understand their approaches to education and how each contributed to the development and competencies of integral attitudes and practices in young people. Representative high school seniors and their parents were interviewed from each approach.

This dissertation provides multiple responses to the many facets of integral education. Chapter 1 lays the groundwork with definitions of key concepts and worldviews that have influenced education; it provides a foundation on which to understand the merits of a systemic, integral education. Chapter 2 covers literature and research that grounds the reader in the historical and philosophical background of education in general, with particular emphasis on the holistic and integral approaches. The literature review draws from philosophy, education, and new scientific understandings that validate an integral approach. Chapter 3 provides a full description of the research methodology, and Chapter 4 describes in some detail the nine programs that were studied. Chapter 5 presents a unique way to relate to data collection and analysis, while Chapter 6 treats the data analysis and interpretation with a broad sweep that includes the research participants and relevant scientific corroboration.

Chapter 7 addresses the multiple contributions of integral education–for example, its potential impact on changing paradigms and philosophical frameworks, identity creation, the evolution of consciousness, and the facilitation of transformative learning. Chapter 8 outlines an integral network in which the multiple viewpoints utilized in this inquiry converge in an example of an integral approach in action. Chapter 9 proposes a unique model of education that is systemic and integral. Chapter 10 is comprised of a summary, a discussion of possible concerns about this approach to education, recommendations for future research, and the researcher's reflections on the integral research journey.

This dissertation was undertaken in response to the many concerns voiced by educators, business people and philosophers about quality in education (Senge, 2000, 2004; R. Miller, 2000, 2001; Hock, 1999; Laszlo, 2002, 2005; Ghose, 1990, 1992; Clark, 1991, 1997; & Marshall, 2005), to name a few. Many of our Western pedagogical models are still rooted in an industrial mindset, yet our world has dramatically changed over the past 40 years. In their collaborative book, *Presence: Human Purpose and the*

Field of the Future, Peter Senge, Claus Otto Scharmer, Joseph Jaworski, and Betty Sue Flowers (2004) speak to the need to address this shift:

> Though the need to encourage thoughtful, knowledgeable, compassionate global citizens in the twenty-first century differs profoundly from the need to train factory workers in the nineteenth century, the industrial age school continues to expand, largely unaffected by the realities of children growing up in the present day. (p. 7)

In this study, the broad definition of *integral education* implies that such programs specifically develop and integrate the physical, emotional, mental, and spiritual intelligences throughout the curriculum from pre-school to high school. The intent of this research is to evaluate if and in what ways these programs have succeeded in graduating individuals who are "thoughtful, knowledgeable, compassionate, global citizens" (Senge et al., 2004)–in other words, individuals who embody integral values.

Systemic, Integrating, Education

This dissertation addresses a key area of importance of the twenty-first century: the development of a replicable educational model that supports young people in developing a sense of wholeness and of connection with self and others and in preparing them to live in a complex and changing world. In this model, the first 18 years of life are focused on developing and integrating the human physical, spiritual, emotional, and mental intelligences. Thus, the entrée into the next phase of their life is anchored in a powerful sense of self and an integral educational experience.

The future in this scenario is different from the present. It offers people of all ages, cultures, races, genders, and religions, a way to be engaged and excited about what could happen in the years to come and a way to co-create that future. This educational model utilizes some of the learning in the last few decades from the theories in the new sciences of chaos, complexity, and systems. The model also incorporates recent scientific revelations in biology, neurobiology, physiology, biochemistry, neurophysiology, neurocardiology, psychoneuroimmunology, physics, and psychology.

One of the assumptions presented here is that there is a way to approach education that captures the whole educational and human development cycle in the formative years. This cycle begins with young adults considering having children and culminates when the children they *chose* to have graduate from high school, which begins another cycle. This dissertation looks at some important and specific aspects of this early life cycle.

I intend to generate a compelling invitation to people to be co-creators of their future such that their passions are ignited and their desire to take effective, coordinated action is kindled. This dissertation is contributing to a systemic, integral educational model in partnership with others, i.e., colleagues, educators, young people, and their parents. By looking at our educational process as a system–i.e., a process that begins from the earliest beginnings of a human being and continues to graduation from school–we can discern how the various aspects of educating the child are developed, connected, coordinated, and function together.

A Westerner, Ervin Laszlo (1987, 2005) [systems philosopher, evolution theorist, and integral scholar], and an Easterner, Sri Aurobindo (Ghose, 1976, 1990, 1992) [philosopher, spiritual leader, and integral educator], pose very similar questions about

the quality of development of human consciousness over the last century. Sri Aurobindo saw the evolutionary crisis humankind is undergoing. "Man has created a system of civilization which has become too big for his limited mental capacity and understanding and his still more limited spiritual and moral capacity to utilize and manage" (Ghose, 1976, pp. 1053-1055).

Laszlo (2005) has been expressing these same concerns. In a recent appearance at a conference, he spoke about the seriousness of our situation. "We are in a spiritual crisis at the moment. We need to upgrade and update our consciousness. Our technology has evolved faster than our spirits have; we need a spiritual revolution" (conference).

Our world today requires a different kind of human being–one who can think, create, imagine, and act–with flexibility and adaptability in an extremely complex world. This human being has a vital spirit, a healthy body, feels deeply, and is fully present to life. Today, being present means being aware in the moment and knowing how to move with and coordinate actions in a highly diverse and accelerated world. Thomas L. Friedman (2005) highlights the "profound, sweeping, multifaceted, hard to predict changes taking hold" (p. 46) in the world today. From his research of cultures, corporations, institutions, families, and schools, his conclusions point to the "lack of leadership, flexibility and imagination to adapt" (p. 46).

Todd Jennings (1997), in his research into integral education, highlighted the way that "It promotes learning and teaching in nonfragmented ways that embrace notions of holism, complexity and interconnection" (p. 1). This approach "embraces the links, rather than the divisions, between the academic disciplines (e.g., arts and sciences) and between various subjective and objective epistemologies and methods of inquiry" (p. 1). This kind of education educates for being adaptive and flexible in a "profound, sweeping, multi-faceted, hard to predict" (Friedman, 2005, p. 46) changing world.

This dissertation proposes a way to approach education that captures the entire cycle of education and human development in the formative years, from conception to high school graduation. The significance of a systemic, integral education is the interweaving of the human intelligences: the spiritual, emotional, physical, and mental. Integral education relates to human beings as wholes rather than as separate parts divided into disparate learning domains. This kind of education focuses on integrating intelligences from the very beginning–at the point of deciding whether or not to conceive a child. Sri Aurobindo pointed to the notion of wholeness in his writings about integral yoga, which relates to the human being as a whole from the beginning of life (Ghose, 1990).

Worldviews Influencing Education

There are four particular worldviews that have informed Western philosophical orientation and associated beliefs, practices, and actions in education. A worldview or paradigm is a particular perspective of reality or lens through which we see and experience the world around us. Peter Reason and Hilary Bradbury (2001) define it as "an overarching framework, which organizes our whole approach to being in the world" (p. 4). In the context of education, if a worldview does "organize our whole approach to being in the world," it is imperative that we take a point of view that allows us to see clearly how a particular organizing principle impacts education. Education frames the

relationship we have with ourselves, other people, how we perceive reality, our values– literally everything.

As we entertain a new paradigm for education, it is crucial that we be astute observers of influential worldviews, i.e., to experience ourselves in relationship to a particular way of thinking that permeates our lives. Only when we are observers, when we can step back and experience what is informing our thinking, can we have choices and a freedom to discern when a particular paradigm is "using us," that is to say, we are unaware of the influence it has in our lives, and when *we* are "using it," i.e., we are conscious of our beliefs and their persuasion. It is important that this dissertation takes into account existing worldviews that have been so influential in the development of our educational philosophies. In this exploration I too have had to practice being an observer of the paradigms that "use me." The integral worldview is one that is continually being co-invented as this dissertation is being written. I have experienced its influence in my own thinking and feeling, and resultant perspective. Engaging in an integral viewpoint calls forth a profound depth of engagement in life's interconnectivities.

The Traditional, Modern, and Postmodern worldviews have distinctly affected our pedagogy over the last number of centuries. The Integral lens has more recently invited much interest as a worldview within which to educate. These delineations provide us with a clearer understanding of the philosophical perspectives, beliefs, and characterizations of each. These delineations represent ways of thinking that can also coalesce as epistemology, ontology, axiology, and relational contexts. It is the intent of this section of the dissertation to acknowledge each viewpoint and provide an experience of how education is viewed within each framework.

These perspectives represent powerful movements, each carrying an interpretation of the purpose of education. They range from maintaining a way of life, acculturation, vocational training, socialization, teaching scientific methods, competitive advantage, to revolution, liberation, integration (a unity in diversity) and a search for authentic global ownership (Tyack, 2000).

While reading in each of the areas, I have found that as some writers express their views in support of one orientation, they blame others for the problems or lacks in our educational system. I contend that each of these worldviews grew out of a particular way of thinking that at the time of its conception was consistent with what appeared to be collectively needed and wanted. In addition, I am speculating that every approach correlates with the level of consciousness available at a given time. It is useful to ask, "How wide was the scope of vision or what was the current knowledge and understanding of the world that gave rise to the *Traditional, Modern, Postmodern* or *Integral* ways of viewing reality?" Although worldviews are generally associated with certain timeframes, their power to influence does linger, and as result, they can show up in education in different areas at different times. What is pertinent in this overview is to appreciate the context in which each worldview evolved and the ways in which it has influenced educational philosophy and practice.

As I delve into the distinct aspects of each of these worldviews, the terrain is filled with irregularities. There are many different interpretations, which can be viewed as both positive and negative offerings to our education and culture. We must bring both a sense of appreciation and an ability for fine discrimination to each viewpoint in order to

assess its lineage and contributions to education. Engaging with these views of reality requires a worldview that is panoramic in nature.

Traditional

The *Traditional* approach to education has been identified by various themes. As the word itself implies, it is focused on "an inherited, established or customary pattern of thought, action or behavior and cultural continuity in social attitudes, custom and institutions" (Agnes, 2001, p. 1517). In defining traditional education, although we have some agreed upon definitions of what we mean, there are many disparate interpretations of which educational traditions we are perpetuating–from a Greek and Roman classical education, highly authoritarian and disciplinary models, knowledge-based curricula as defined by society, to approaches associated with a specific religion, philosophy, or person. Traditional education, although not tied to a specific timeframe, is rooted in the philosophy, religions, and history of Western civilization (Miller, 1991). What most educators might refer to as Traditional education began before the mid-nineteenth century; yet "traditional" trends in education have continued to exist throughout the modern and Postmodern eras into the twenty-first century.

Originally, Traditional education in America was associated with religious indoctrination, moral training, social discipline, cultural conformity, national unification, and as John Dewey (1968) noted, it was aimed at forming the "citizen," not the person. In order to ensure cultural continuity, this kind of education concerns itself with preserving a way of life and with assuring that the largest number of people hold the same goal (Bennett, 2001; Bertsch, 2000).

The Traditional approach to education has some overlapping values with the Modern worldview, as education in the late nineteenth century and early twentieth century began to rely more on the productivity and efficiency movement of Friedrich Taylor and Elwood Cubberly. As a result of the Industrial Revolution, schools during this time began to mimic the working of the factories. Cubberly, a well-respected Traditional educator, believed that the public schools' mission was to assimilate new immigrants by changing their behaviors and assuring that they would be both English speaking and thinking. Schooling would implant the Anglo Saxon conception of righteousness, law and order, and popular government into the immigrant children (Miller, 1999).

A view into the traditional classroom would see well-mannered students, sitting in rows, with textbooks in front of them, listening to the teacher and speaking only when recognized. Implicit in this scene is the relationship between the teacher and student–it is hierarchical and the latter is subordinate; the subject content is considered unquestionable; the student is viewed as a vessel to be filled with culturally or religiously essential information.

> There was a common belief that there was a relatively fixed body of knowledge and certain basic skills to master . . . teachers were authoritative conveyers of the knowledge, manners and morals most highly approved by the dominant society, they stressed conformity to laws and regulations and obedience and submission to authority. (R. Miller, 2001, p. 43)

Traditional education is a one-on-one relationship between the learner and the objective material to be learned. Learning is more of a passive acceptance of knowledge that exists "out there" (Dewey, 1968).

Because of its commitment to acculturation and knowledge acquisition, there is much evidence of the success of a traditional pedagogy, including closing the economic gap between races and social classes as well as advances in scholastic achievement for large populations of students. Traditional education is associated with the value of hard work, gaining the knowledge that leads to understanding, and mastering the traditional culture in order to command its rhetoric (Hirsch, 1997).

An example of a current traditionalist is Bill Bennett (2001), who has led an effort he calls Empower America, which is on the frontline to reform America's education system. This group promotes higher standards and greater accountability for students, teachers, principals, and schools, and more choices for parents. Diane Ravitch (2000), another traditionalist advocate, stands powerfully for these values as she speaks of concrete knowledge transmission, high standards, and equal educational opportunity as critical to the success of our country. The focus on higher standards, accountability, and knowledge transmission, as well as equal educational opportunity, is an area that some traditionalists have embraced as an essential platform for education. This is a topic of some controversy with other educators who represent the modern, Postmodern or integral perspective, as each would echo these goals, yet from divergent vantage points.

The traditional way of viewing the world can reflect loyalty and adherence to group norms and an external authority (such as God, the boss, the teacher, the principal, or the president). Taken to extreme, this viewpoint can manifest as unexamined beliefs, myopia, or a "group think" mentality, e.g., fundamentalism.

Modern

Agnes (2001) defines the term *Modern* as "a self-conscious break with the past and a search for new forms of expression" (p. 926). Modernism is concerned with exploring new subject matter, values, and relationships. Inherent in modernism is a questioning of the past (how things were done, what we believed), the present or the conventional (what we believe and how we do things now), and the "inventional" (what could be). Modern thinking is about opening up new ways of seeing the world, releasing dependence on outside authority, and learning to use one's own ability to reason and discover the truth for oneself. This kind of questioning has resulted in many tensions between the traditional and modern ideologies (Witcombe, 2000).

Modernity's distant roots can be seen in the Scientific Revolution; the dramatic growth of scientific knowledge–with its complete trust in human reason to provide answers to heretofore unanswerable questions and its promise that humans could master nature–helped to catalyze modernism. Many of the scientific truths that were discovered by men like Galileo and Newton seriously challenged the traditional thinking and values of the churches, monarchs, and educators of the time. The discoveries and advances of science, including Darwin's theory of evolution, helped to launch a modern age, identified loosely as the late nineteenth century through the few decades after the mid-twentieth century (R. Miller, 2001).

Modernism is allied with industrialism, capitalism, and scientism, which are associated with a reductionistic view of reality that tends towards strongly analytical and

quantitative approaches and a devaluation of the subjective and nonmaterial. The reliance on science and the power of reason were applied to areas including "tradition, customs, history, art, and the political and social spheres to improve the condition of humankind" (Witcombe, 2000, p. 2). Education and business were readily influenced by this modern approach to life. Modernity, in the context of education, has expressed itself in a number of different ways, which reflect the various relationships Moderns have had with Traditionalists. Modern thinking in education expressed itself as either how to apply scientific methodology and an industrial mindset to effectively perpetuate traditional values, or how to support a distinct break with the past and create educational responses that address the unique issues of the late nineteenth and early twentieth century in the United States.

Modernism required different educational structures and curricula depending on which of its qualities were being interpreted by which group of people. One group, representing the Modern Traditionalists, sometimes referred to as the "conservative progressives," was committed to maintaining the divisions between social and economic classes. Their intent was to fashion a "culture of professionalism" which educated the privileged by applying the discoveries of science to the creation of specialists, who learned how to effectively contribute to the solving of problems in the physical, social, and cultural environments. They turned away from the democratic, egalitarian ideals, advocating rather for educated "professionals" who would effectively relate to the complex, industrial, and technological world of the early twentieth century, thus allowing the middle-upper-class to maintain control. The influx of immigrants from a variety of countries during this time compelled many educators to stress education that shaped people for industry and commerce and obeisance to rules (R. Miller, 2001).

Other manifestations of Modern thought in education were those that embraced the scientific methods and began dismantling much of the Traditional moralistic dogma. John Dewey (1968), known for his liberal progressivism, proposed rethinking some of the American values and purposes of education. He, like many other Moderns, was interested in educating for a different kind of society, one that was truly people-oriented, democratic, entrepreneurial, and egalitarian, i.e., inclusive of the poor and the immigrant populations. These Moderns exerted a major influence on education during this era, creating equality of opportunity in the United States by address equality of educational opportunity (Spady, 1992). This group also provided "an important element in the emergence of the urban, secular society" (R. Miller, 2001, p. 46) that also has been related to Modernity.

In his *Reflections on the History of Education*, David Tyack (2000) gives us a window into the thinking of some of the Modern minds. As our society became increasingly pluralistic, the country required an educational mindset that provided a common ground for our multiple, diverse perspectives; one that could embrace diversity and know how to deal with the size and complexity of societal changes. Some of the Moderns brought to our awareness, like never before, issues around which education could exercise a much more powerful influence. Inherent in inventing new ways of thinking and creating a new society, movements, "like activism and social reform, i.e., civil rights and feminism, pilloried many familiar notions" (p. 20). Written history had for some time ignored most of humanity, and Moderns viewed liberation as a more

suitable aim of education. Modernism could also claim much of the impetus for a long awaited righting of the injustices to many people.

Those sharing this Modern view sought to move away from the traditional way of thinking, since it narrowed the possibilities that students would have to realize their potential through their own means of learning. It certainly did not allow for the many ethnic and culturally diverse people who were entering the United States and living together at this time (Spady, 1991, 1992). The increase in numbers and diversity of students, with their accompanying learning styles, brought to our educational institutions a level of complexity never before confronted. Teachers' and schools' roles, the quantity of available information, the scope of different aptitudes and the learning rates and styles within the student population, forced deep, systemic changes in all areas in education: structure, organization, methodology and curricula (Miller, 1991). The modernist educational approach focused more on the individual and his or her success as opposed to the group mentality seen in the traditional view. Competition, grading, and upward mobility were important aspects of the modern educational mindset. The modern era had ushered in a new way of thinking in education; anyone can learn anything from anywhere at any time (Spady, 1992).

William Spady (1992) spoke to the shift in the way in which students are viewed from the Modern point of view. When the outcome for an educational engagement is a "higher-order role capability and complex role performance" (p. 4), students are not seen simply as test-takers or academic-content-sponges. This suggests a fundamental shift from the linear, tactical learning of the Traditional era to the more contextual and encompassing approach of the Modern. Some of the Moderns were committed to "design better programs and measure success for a new and evolving set of competencies: the entrepreneurial spirit, emotional intelligence, the ability to integrate, problem-solve, innovate, and mediate" (p. 4).

Modernism has had other great influences on our educational approaches. In many people's minds, the purpose of education became acquiring knowledge sufficient to discover truth, enlightenment, and the means by which to create a new kind of society. Within this educational model, a dilemma occurred that turned out to be an opening for new thinking. The more knowledge and truth were uncovered through education, the more the nature of humankind was revealed. There was not only the rational mind that reasoned; there was also the emotional life that emoted and countered rationality. The imagination and creativity of emotions seriously interfered with reason, and reason stifled imagination; without imagination progress is limited (Witcombe, 2000). This seeming impasse created a dynamic tension powerful enough to usher in the new paradigm of the Postmodern, which is addressed in the next section.

Some of the issues of the Modern mentality highlight the down side of rationalism, reductionism, scientism, individualism, etc., which clearly reveal the next evolutionary theme for education to address. Philosophically, the Modern paradigm is representational, as it views the world through an objective, symbolic lens, e.g., theories are maps that mirror the territory, or language really does symbolize objective things "out there" (Wilber, 2000). Vaclav Havel (1992) pointed to a culminating belief that began to dominate during the later years of the Modern era, as it began to view

> the world–and Being as such, [as] a wholly knowable system governed by a finite number of universal laws that [humans] can grasp and rationally direct for [their]

> own benefit. This puts humans at the pinnacle of everything that exists, capable of objectively describing, explaining and controlling everything that exists and of possessing the one and only truth about the world. (p. 15)

Havel (1992) has pointed to some of the characteristics of the Modern era, that when taken to extreme, can produce a mentality that does not encompass the world as a whole. Being too objective, external, mechanistic, competitive, technological and scientific, etc., can tip the scales away from the value of the subjective, internal, cooperative, natural, intuitive and inquisitive aspects of life. There is general agreement in the literature (Spretnak, 1997; R. Miller, 2001; Havel, 1992; Griffin, 1987; Anderson, 1990) that in the late 1970s early 1980s there was an ideological shift in reaction to the many unpredictable, seemingly detrimental outcomes of the Modernistic worldview. Havel (1992) speaks eloquently regarding the forces that had been instrumental in creating this shift. Life, the human spirit, conscience, and the resistance of human beings to manipulation forced this change. It was made "by a revolt of color, authenticity, history in all its variety and human individuality against imprisonment within a uniform ideology" (p. 1).

Postmodern

One of the distinguishing characteristics of Postmodernism is its multiple "self-expressions." There is no single Postmodern worldview; rather the Postmodern orientation encompasses a wide range of ideas and methods, most of which arose in reaction to Modernity and the extreme value it placed on objectivity, certainty, and solidity. Postmodern philosophy holds three distinct assumptions, 1) reality is not in all ways pre-given; in significant ways it is a construction, an interpretation; 2) meaning is context-driven and contexts are boundless, and 3) cognition, which is integral and aperspectival, must privilege no single perspective (Wilber, 1998). Entering the Postmodern era, many people had "a growing suspicion that all belief systems–all ideas about human reality–are social constructions" (Anderson, 1990). Belief systems themselves were up for scrutiny in the Postmodern world, as people were shifting their relationship with language and reality. Unlike the Moderns, who seemed to accentuate the "truth" of dichotomies, Postmodernists illustrated how the seemingly binary oppositions–e.g., good/bad, progress/tradition, science/myth, love/hate, man/woman and truth/fiction–were not necessarily "true." There were many ways to interpret differences (Wilson, 1997).

> Postmodernism looked at the culmination of Modernity in the twentieth century–the results of forces such as nationalism, totalitarianism, technocracy, consumerism, and modern warfare-and said, we can see the efficiency and the improvements, but we can also see the dehumanizing, mechanizing effects in our lives. (p. 3)

The Postmodern paradigm shift came in response to many important human values and experiences that had been put aside during Modernity. Arthur Koestler (1978) called it a "reductionist fallacy" that persistently denied a place for values, meaning, and purpose that cast its attitudinal shadow over the whole culture. Some writers called this period a crisis, as the Modern approach had left "no place for the influence of normative

ideals, free will, consciousness, genuine creativity, inspiration, spiritual experience and our kinship with nature" (Griffin, 1987, p. 4). There was an abundance of information and little understanding.

Within the Postmodern framework, distinct interpretations of constructivism–that is, the notion that reality is created through language and culture–arose and although the roots were shared, those roots were expressed in divergent fashions. Deconstruction and construction grew as two limbs off of a tree, the former a more extreme way of questioning the meanings or the representation of an objective world. A good deconstructionist proposes that it is nearly impossible to tell the truth. Texts and discourses are interpretations; *deconstruction* literally means "to take apart." What deconstructionists were critiquing is representation–language or symbols standing for some "thing" out there as the "truth." They challenged the idea that there are any clear values and beliefs held publicly in any modern society (Anderson, 1990). The deconstructionists opened history–along with our shared "myth of the given"–for a review and a reconstruction (Wilber, 1998, p. 122).

The constructionist perspective has two proponents, one more radical than the other. The radical constructionist would state that everything out there is a construct, and that humans in their language bring forth those constructs. The more mainstream constructionist would acknowledge the raw material, e.g., electromagnetic currents, waves, particles and energy, and say that through our language we make meaning from our experiences with them (Anderson, 1990). The constructionists contribute to our thinking about education as they point out "the crucial role that interpretation plays in our perception of the world" (p. 193) and the fact that we humans belong to a "vast network of background contexts and cultural signs that are instrumental in the creation and interpretation of meaning itself" (Wilber, 1998, p. 128). I would add that this vast network includes conversations–with oneself, others, and what one hears/sees/reads in society and the media. These "conversations" hold a dominant place in our experience of and relationship to reality.

Vygotsky (1978) and Maturana & Varela (1992), Winograd & Flores (1986) have argued that language and learning are inextricably intertwined. A constructionist coming from the Postmodern world of education sees the learner, not the academic content, as focal point. The learner and the way he or she makes meaning are the subject of pedagogy. The constructionist worldview provides opportunities for students to interact with many different people and experiences and then apply their knowledge to other relevant situations. In addition, this kind of education allows students to "construct" their own world by relating what they are learning to the lives they are living (Bencze, 2005). Postmodern philosophy emphasizes the contextual construction of meaning by people with other people. Social constructivism beliefs supported students and educators working in groups again, and not being so individually focused. It also brought on constructivistic methodologies of education, which are more experiential and less didactic.

Postmoderns see reality as multiperspectival and try to accept other points of view. Life, which includes science, philosophy, and all human activities, is value-laden and invented by those who live it. Thinking is an interpretive act, and truth is grounded in everyday life and social relations. Truth is dynamic and changing within time, space, and

perspective (Griffin, 1987). Postmodernists celebrate the immense diversity of life (Wilson, 1997; Hlynka & Yeaman, 1992).

As an outcome of Postmodernism thinking and its resultant "commitment to plurality of perspectives, meanings, methods, values-everything" (Wilson, 1997, p. 1) and an appreciation for multiple meanings, interpretations, and perspectives in life, education assumed a much more encompassing role. People began embracing ideas of social justice, and this sensitized minority education. This worldview is one of sensitivity to others' views and ways of being. Many changes took place. Curriculum was designed to respond to a different kind of instruction. Learners were more often supported in pursuing their own goals and exercising their responsibility; the interdependency of content and method was appreciated; instruction was more interactive, experiential, responsive and spontaneous (Wilson, 1997).

Spretnak (1997) writes about "the real"–the realities of nature, our bodies, and our physical surroundings as integral to the Postmodern mentality. She names three major sources of discovery that have greatly contributed to a shift from a Modern to a Postmodern way of thinking. First, new scientific insights into the nature of chaos, complexity, and systems dynamics effectively upended the classical notion of a clockwork universe. Second, a new understanding of health and healing broke down the traditional split between mind and body. The third was a reassertion of the importance of community. Postmodernism is grounded, spiritual, and profoundly ecological in orientation and outlook. The body, nature and place, as reflections of oneself, are embraced within its philosophical threads. The earth, the cosmos, and the sense of sacredness of the whole universe are deeply interconnected within the outlook of the Postmodernist. The holistic approach to education took firm root from this worldview.

Jack Miller (2001) provides a valuable context for understanding how worldviews can manifest in education. He sites three educational orientations that help elucidate how the Traditional, Modern, and Postmodern perspectives show up in our pedagogy. "*Transmission* learning is characterized by the student receiving and accumulating knowledge and skills" (p. 6, italics mine). What is to be learned is viewed as fixed rather than as process, and material is broken into small units of easy-to-assimilate portions. This orientation is revealed in either behavioral or lecture-recitation type learning. Transmission learning is more typical of the Traditional way of educating.

Transactional learning is interactive, primarily in the cognitive domain. Analysis more than synthesis and thinking more than feeling are stressed. Dialogue between teacher and student is encouraged. Learners are seen as rational participants, capable of intelligent behavior and problem solvers. The transactional orientation is most representational of the Modern approach to education. *Transformational* learning "acknowledges the wholeness of the child; the curriculum and the child are seen as interconnected. Connections are made so that learning is "personally and socially meaningful to the student" (J. Miller, 2001, p. 7). The transformational orientation expresses the Postmodern perspective and is foundational to the Integral worldview.

Integral

The Integral worldview began to emerge in the last quarter of the twentieth century as a response to the evolutionary and at times revolutionary advances in many areas. These include the natural sciences (physics, chemistry, biology) and psychology,

philosophy, sociology, anthropology, business, education, politics, art, ethics, medicine, neurology, ecology, and religion and spirituality, all of which contribute a transdisciplinarity never before experienced. It is now regarded as a vital and evolving worldview. The discoveries of quantum physics and of chaos, complexity, and systems theories have exploded our understanding of reality and consciousness. Humans are viewed as complex dynamic evolving systems within larger complex dynamic evolving systems.

These new openings have given rise to a desire for connection and inclusion never before imagined. An Integral culture has been seeded and attempts are being made to incorporate all approaches (Ray, 1996). There is something of an "integral revolution" occurring around the world, as old and partial approaches are being questioned, and new and more integral responses are being explored (Wilber, 2003 p.1). This nascent Integral worldview is still being defined and redefined by many scholars, scientists, philosophers, spiritual leaders, educators, etc.

What is emerging is a new possibility for a transformed perspective of the world, one that is more prepared for a nonlocal, nondual universe of multiple perspectives and dimensions. The Integral worldview reflects a consciousness that is beginning to embrace a *both/and* universe, i.e., scientific materialism, transcendental nondualism, and the space that divides them. Integrality encourages a

> New mode of perception which transcends the illusion of separateness to discern the unity which underlies the diverse forms of existence . . . it supports an integrated epistemology that embraces both the rational knowledge of scientific empiricism and the inner knowledge of spiritual experience and diminishing the barriers separating scientific and spiritual understanding. It realizes fundamental sacredness and profound meaningfulness in all life, giving rise to a more integrative, holistic, and ecological perception of the cosmos. (Maxwell, 2002, p. 1)

Many of the Integral persuasion believe that human consciousness is expanding to bring together a formulation of one uniting principle that represents the source of all understanding–a synthesis. Physicists such as Heisenberg, Bohm, and Einstein recognized the integral quality of the universe. They acknowledged the underlying nature of matter and its relationship to consciousness; the nature of particles and their link to every other particle in the universe. These scientists represent the revolutionary thinking that has contributed to the paradigm shift that has resulted in the beginning of a more integral viewpoint. Nature manifests beauty, creativity, and divinity, reflecting the interconnectivity of all life, a mystical type of experience. Einstein called this phenomena "the source of all true wisdom, which frees us from the delusion of separate existence by widening our circle of understanding and compassion, to embrace all living creatures in the whole of nature and its beauty" (as cited in Maxwell, 2002, p. 6).

According to Wilber (2000), one of the defining features of the Integral perspective is the acceptance of the developmental and evolutionary aspects of consciousness, in which each stage of expansion includes and transcends the prior ones as it evolves. Each developmental step is seen as necessary as people move to more complex levels of consciousness. Each reflects a level of awareness that manifests through modes of thought, values, actions, etc. The more complex and inclusive stages,

or "Post-Conventional" stages as defined by Wilber (2000), exhibit integrative, holistic, and planetary values and actions that begin to unify humanity. Integration manifests in the dynamic quality of opening up to new levels of experiencing one's self in relationship to the universe. Egocentric views may become ecocentric; materialism may acknowledge idealism and spiritualism; individuals may express individuality *and* communitarian qualities; diversity may result in unity. There is a collective consciousness that is aware of actively participating in the evolution of humanity. There is a knowing that each phase is intimately interrelated to and interdependent with all the others.

The term *Integral* implies a sense of being all encompassing. As a designator of a way of thinking, doing, and being, it requires full engagement at a very fundamental level. How does the mind grapple with and try to wrap its "cognitive arms" around the connection of everything? The very act of defining *Integral* demands a willingness to wrestle with a multi-dimensionality that is revealing itself as the identifying process continues. It is a yoga of consciousness in which one must stretch and breathe into areas of rigidity in order to open up ways of viewing the world. This elucidates another critical characteristic of the Integral viewpoint–that it is *participatory.* The Integral worldview calls everyone to participate, to engage in the co-evolution of a new kind of consciousness. This worldview is being created by peoples' participation in this new expression of awareness, through attending to the expansion of their own consciousness.

The origins of the Integral perspective can be traced to many philosophers and educators such as Alfred North Whitehead, Pierre Teilhard de Chardin, Jean Gebser, and Sri Aurobindo. The perspective continues to be shaped by philosopher Ken Wilber, systems theorists such as Ervin Laszlo and Allan Combs, and developmentalists such as Robert Kegan and Don Beck. The work of Gebser, Sri Aurobindo, Wilber, and Beck are further highlighted in this dissertation, as their engagement in integral thinking has more specifically contributed to this research. In the last few years the widening acceptance of Wilber's AQAL (all quadrants, all levels, all lines, all states, all types), with its roots in the works of Sri Aurobindo and Gebser, and Beck's developmental Spiral Dynamics Integral models make them particularly valuable in exploring integral approaches to learning and their potential application to education. Both Wilber and Beck have impacted millions of people on a global scale (Wilber, 2000, 2006; Beck 2002, 2005). A more thorough treatment of their contributions, along with notable holistic philosophers and educators, will be given in the Literature Review, Chapter 2.

Because the Integral paradigm is nascent and still forming, its demonstration in education is likewise emerging. Some of the early uses of the term "integral" with respect to education were almost interchangeable with the "holistic" and more philosophically related to the postmodern paradigm transitioning to integral. This will be discussed more fully later in this chapter. The nine educational programs researched for this dissertation provide illustrations of educators, parents, students, and communities grappling with what an integral approach might be. There was a purposeful intent to lay an integral foundation for education by developing and integrating the fundamental and multidimensional aspects of being human–the mental, emotional, spiritual, and physical intelligences. The mind, emotions, body, and spirit were recognized as interconnected and vital to the expansion of consciousness.

The inner and outer experiences of both the individual and the collective were included, since both self-knowledge and world knowledge are essential to an integral

education (Ghose, 1972). The lives of these students, parents, educators, and community members were not artificially divided into separate "knowing" or "experiencing" domains. The interdependent nature of reality and the interrelatedness that connects all life forms was acknowledged and permeated the curricula of the educational approaches in this study, manifesting in programs with such titles as *Cosmic Education, Awareness through the Body, Education for Life,* and *The Examined Life.* All drew from many different areas of science, psychology, philosophy, spirituality, etc. to teach about the integral nature of life and provide experiences to help advance consciousness.

From the Integral perspective, education is both individual and collective, scientific and spiritual, knowledge and imagination-based, society- and student-centered. Pedagogy, to be consistent, shows up in a multitude of expressions. Classrooms may be anywhere with one person working alone, two people working together, small groups working together, with or without teachers, students addressing peers and teachers, teachers lecturing large and small audiences, tutoring, etc. The future of education in an integral worldview has endless possibilities. The Integral worldview proponent is clear that the future of the evolution of human consciousness depends upon going beyond the acknowledgement and acceptance of multiple viewpoints, per Postmodernism. It is the ability to provide a synthesis to these various perspectives, a recognition of the organic, interconnected nature of the universe, and the demonstration of an inclusive, integrative and holistic way of being that distinguishes the integral mindset.

The Integral stance is one of inquiry, fluidity, and openness to invention, complexity, chaos, quantum and emergent phenomena (Harmon, 1996; Laszlo, 2002). Some of the purposes of education are to challenge ideas and practices, inquire, and fully engage in life, bring forth new knowledge, ways of thinking and approaches to living life, and excite attention, as well as maintain foundational building blocks of a civilization. (Tyack, 2000) The art of critical thinking, the joy of discovery, risk taking, and the development of a lifelong curiosity and love of learning are fundamental elements to education (Ghose, 1992). The Integral viewpoint provides the depth of context to fulfill these intentions.

Concept Definitions

It is the aim of this dissertation to understand, appreciate, and include the aforementioned worldviews in the creation of a systemic, integral model of education. Their history, evolution, and attributes provide evidence for the importance that language, perception, and interpretation play in the creation of our epistemology, ontology, axiology, and relational context.

The language used to describe a systemic, integral education is not trivial–as what we read and write changes us–we will not be the same after interacting in this conversation about systems, intelligences, and integral education. Participating in the interpreting of conceptual meaning provides us all with a foundation for shared meaning making (Maturana, 1998, 1999). The words being used in this dissertation deserve engagement, because their significance provides a powerful grounding for this proposed inquiry and an invitation to create new shared meanings of integral education. Many of the interpretations employed are examples of extended epistemologies that have emerged in discoveries and dialogues in biology, neurobiology, physiology, neurophysiology, biochemistry, physics, and psychology, as well as from chaos, systems and complexity

theories. The following paragraphs contain definitions and interpretations of central ideas employed throughout the dissertation. These definitions provide a backdrop against which the findings of this research may be illuminated.

System

According to Agnes (2001), a *system* is a "regularly interacting or interdependent group of items forming a unified whole" and "a group of interacting bodies under the influence of related forces or groups of related natural objects" (p. 1453). A system is an integrated whole whose essential properties arise from the relationship between its parts. To think systemically means to put things into a context and establish the nature of the relationships. A system's properties are interconnected and interdependent (Capra, 1996). "A system is a set of elements that function as a whole to achieve a common purpose" (Betts, 1992).

"Systems philosophy brings forth a reorientation of thought and worldview manifested by an expansionist, nonlinear, dynamic and synthetic mode of thinking" (Banathy, 1996, p.1). A systems way of thinking generalizes about models, principles, and laws across disciplines, resulting in "a transdisciplinary perspective that emphasize[s] the intrinsic order and interdependence of the world in all its manifestations" (p. 1).

In the educational model I am proposing, a systemic view attends to the development and interrelatedness of the emotional, spiritual, physical, and mental intelligences from the conception of a human life to that person's graduation from school. This viewpoint looks at that entire timeframe to discover the way all the aspects connect and function together as a whole. This model naturally includes parents, health care professionals, educators, and children and extends to elders, other professionals, and community members, since they are important participants in the extended system.

Systemic thinking acknowledges the connection of all life and energy such that actions of the part affect the whole. The reality of our essential connectedness and the relatedness of all life are recognized. Each person's identity is seen in relation to all others (Whitney, 1995; Clark, 1991).

Integral

Agnes (2001) defines the term *integral* as "lacking nothing essential, essential to completeness, whole, made up of parts forming a whole" (p. 742). Wilber (2003) defines it as "comprehensive, inclusive, balanced, not leaving anything out" (p. 1). The inclusiveness of these definitions may confuse more than clarify, since they often mean different things to different people. It is essential that the term *integral* be clearly defined, as it is comprised of two correlated yet distinct meanings. One definition is nearly synonymous with the holistic approach, yet it is informed by an evolutionary, developmental philosophy in general, e.g., Ghose, (n.d. [a], 1992). This way of using *integral* emphasizes "whole," and "inclusive." The second usage of the term is multifaceted and has unfolded in the last three decades as more has been revealed about complex adaptive systems and evolutionary and developmental processes (e.g., Wilber [2000, 2006] and Beck [2002, 2005]).

Philosopher Stephen Pepper's (1982) pioneering work in world hypotheses (worldviews) is helpful in revealing the subtle distinctions between these two often confused uses of integral. He identified a pair of worldviews, Organicism and

Contextualism, which were both holistic and synthetic, yet fundamentally different from each other. . Organicism, as its root implies, comes from *organism* and as such manifests in a "dialectic dynamic of structure and process . . . which resolves in an integration, a higher synthesis" (Rose, 2003, p. 4). This final creation "recognizes the claims of each fragment, 'transcends' them, and harmonizes them in a richer, more concrete whole" (p. 4). Organicism is both integrative [that is, "facts occur in a determinate order, and if enough is known, can be predictive" (p. 4)] and synthetic (as in *synthesis*). It addresses the question, "How does anything develop?" Developmental stage theorists such as Gebser, Wilber, and Beck have their roots in the dynamic dialecticism of Organicism.

Contextualism (root, *context*–whole situation, background, or environment relevant to a certain event) indicates a sense of an historic event unfolding in time. Contextualism is dispersive (facts distributed loosely and widely, not necessarily determining one another) and synthetic (Rose, 2003, p. 5). This philosophic delineation acknowledges the essentially contingent relationships binding the diverse elements together within a context. These elements are "all intrinsically complex composed of interconnected activities with continuously changing patterns" (p. 5). "How it is happening" is the focus of contextualism, which uses verbs to represent its "present," dynamic relative nature. Ecological, systemic, and holistic theorists are based in contextualism.

In the context of this study, *integral* refers to education that provides curriculum that purposefully develops and integrates the physical, emotional, mental, and spiritual intelligences. This definition most closely reflects the meaning of *integral* as it is understood in contextualism. The schools represented in this study were founded prior to the emergence of the later (Organistic) integral movement that is more directional, holarchic, and specific in its integrative nature. This dissertation intends to contribute to the meaning of *integral*–i.e. wholeness and completeness–by exploring the evolutionary, 'transcend and include' aspects of its organic quality and the 'encompassing' aspects of its contextual expression.

Integrative–Integration–Integrating

Integrative is used in this research to represent a particular type of program that weaves together many pedagogical aspects within a curriculum to support the integration of various learning modalities and subjects. Dower (1990) defines integrative education as "the development of the mind, body, emotions and spirit and it serves to create a balance among all four areas. It equally addresses the teaching and learning processes" (p. 1).

Kris Roose (2002) further contributes to the understanding of this concept.

> Integration can be regarded as the highest, 'healthiest' style of behaving, of living… Integration can be seen as the core of the communication process, a kind of 'cooperative thinking'…Integration enables us to bring divergent and even conflictuous views together: a reintroduction of seemingly conflictuous elements to their non-conflictuous core(s), and the combination of these cores into a higher logical frame. …Integration leads to construction and positive evolution. Thus integration can be seen as the ultimate objective in the evolution of the universe, the very

> sense of existing… Integration is a fundamental process in cosmic existence… Happiness can be seen as the consciousness of a successful integration. (pp. 1-10)

I have introduced the word *integrating* as a way of approaching education that brings forth a sense of continuous integration. Agnes (2001) defines *integrating* as "to make into a whole by bringing all parts together, uniting, joining, connecting, and weaving together" (p. 742).

Intelligence

Intelligence, as employed in this research is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience" (Agnes, 2001, p. 742). It is the faculty that provides us "with an ability to respond successfully and appropriately to new situations and adapt to changing environments" (p. 742). Humberto Maturana (1998), a Chilean living systems biologist, expands the meaning of intelligence. His definition, "the plasticity for participation in changing behaviour and changing relations" (p. 10), contributes to this research inquiry and the understanding of intelligence within a system.

The notion of humans having more than one kind of intelligence is supported by a number of scholars, i.e., L. L. Thurstone, J. P. Guilford, and Howard Gardner. Thurstone and Guilford believed that that intelligence was "better conceived of as a set of possibly independent factors" (as quoted in Gardner, 2002a). Guilford stated that "'intelligence' is too complicated to be subsumed by a few primary mental abilities" (as cited in Plucker, 2003). Other investigators have put forth the view that there are several independent modules or "intelligences" (Chapman, 2005).

> Gardner (2002a) defines *intelligence* as:
> An interaction between biological proclivities and opportunities for learning in a particular cultural context . . . the ability to solve problems that one encounters in real life, generate new problems to solve and make or offer something that is valued within one's culture. (p. 1)

In his theory of multiple intelligences, he highlights various intelligence-capacities that manifest differently as people learn: linguistic (as in a poet); logical-mathematical (as in a scientist); musical (as in a composer); spatial (as in a sculptor or airplane pilot); bodily-kinesthetic (as in an athlete or dancer); interpersonal (as in a salesman or teacher); and intrapersonal (exhibited by individuals with accurate views of themselves) [Gardner, 2000a].

The mental intelligence he highlights, the linguistic-logical categories, parallel to some degree the mental domain I am suggesting. His bodily-kinesthetic capacity corresponds in some aspects to the physical intelligence I propose, and his interpersonal-intrapersonal domains have some similar qualities to the emotional intelligence I am advocating. Gardner has also suggested the presence of other kinds of intelligence, including the spiritual (2002b).

The idea of multiple intelligences is also supported by Wilber (2000) through his identification of multiple lines of intelligence such as cognitive, ethical, aesthetic, spiritual, affective, kinesthetic, mathematical, musical, spatial, logical, karmic, and moral.

In recent years, findings from fields as disparate as artificial intelligence, developmental psychology, and neurology, have proven that intelligence is distributed, i.e., that not all intelligence is "located" in the head (Gardner, 2002a). Intelligence is found throughout the physical body (Pert, 1999, 2005), within the energetic field around a person (Sheldrake, 1981), in the interconnectivity of people and life forms (Whitney, 1995; Maturana & Varela, 1992; Sahtouris, 2002), and in the collective intelligence, e.g., the Internet, libraries, computers, and within every human being (Gardner, 2002b). For the purposes of this research, the distributed nature of intelligence will focus on the spiritual, emotional, physical, and mental expressions and how these particular intelligences contribute to the integral development of the human being. Gardner (2002a) spoke to this very well,

> If we are ever to obtain a comprehensive and fully integrated picture of human beings, we need to meld our insights about cognition with comparable insights in respect to these other aspects of the human being. Perhaps, indeed, a different view of human nature will result from this activity of synthesis. (p. 1)

I would add to Gardner's insights that with the development and integration of the mental, physical, spiritual, and emotional intelligences, a different expression of self, i.e., ways of being and relating to the world would emerge–an ontological intelligence. This integration would provide an ontological foundation for Gardner's 'scientist,' 'poet', 'sculptor/pilot', 'composer', 'athlete/dancer' or 'teacher,' as it would concentrate on the development of the human being, as in the *being* of the human being. It would contribute to understanding *how* that scientist, poet, composer, athlete/dancer or teacher, etc., expresses his or her self in their epistemological intelligence-capacity. I am interested in the ontological nature of intelligence as much as its epistemological nature.

Our intelligence expresses our relationship to the experiences we have had throughout our lives. Inherent in a systemic, integral education, there are many representations of intelligence, as people learn through different modalities (e.g., through emotional experiences, physical engagements, and spiritual connections as well as mental interactions and reflections).

Development

In the context of the research question being studied here, I use Agnes's (2001) definition of *development* to mean "to cause to grow, expand, make stronger, more effective" (p. 394). This definition is distinct from the more structurally and directionally explicit definitions held by developmentalists such as Wilber, Kegan, and Beck.

The work of a number of early developmental theorists has informed to differing degrees the integral educational approach. This includes Jean Piaget's four developmental stages (as cited in Smith, 2002), Lev Vygotsky's (1978) emphasis on sociocultural contexts, Erik Erickson's identity creation (as cited in Combs, 1996), Lawrence Kohlberg's (as cited in Combs, 1996) focus on moral reasoning, and Abraham Maslow's (1968) hierarchy of needs. The educational approaches I am studying–based on the works of Steiner (1995), Montessori (1949), Sri Atmananda (as cited in Borich, 2004), Sri Aurobindo (Ghose, 1990), Yogananda (1974), J. Donald Walters (2002) representing Yogananda, Krishnamurti (1964b), the Gandhis (as cited in

cmseducation.org), and the Quaker schools (Fox, n.d.)–all have their own interpretations of developmental stages. Undoubtedly, developmental theorists have also learned something about developmental theory from these integral educators, much as Gebser's (as discussed in Mahood, 1996) and Wilber's (2000) philosophies have been influenced by Sri Aurobindo (Ghose, n.d. [a]).

What is consistent among all the integral education programs studied in this research is they acknowledge that all humans pass through developmental phases during the educational process. They all respect their students' individual differences, and curricula and instruction are tailored to individual strengths, limitations, and readiness. Each program is committed to educating people in a manner that honors the integral nature of human beings.

Physical

According to Agnes (2001), the word *physical* means "having material existence, perceptible, especially through the senses: sight, sound, smell, taste and touch. Also, it is subject to the laws of nature, measurable by weight, motion or resistance, of or relating to the body, of or relating to natural science" (p. 1086). For the purposes of this dissertation, *physical* also includes health, diet, exercise, flexibility, strength, resiliency, the energetic body, somatic awareness, embodiment of experiences, and being fully present in the body. Gardner (2000b) acknowledges the intelligence of the sensory body in his statement that, "Bodily-kinesthetic intelligence entails the potential of using one's whole body or parts of the body to solve problems or fashion products" (p. 42).

Linda Olds (1992), with a systems perspective, views "the body [as] a context for knowing." (p. 8). John Heron's (1992) extended epistemologies present experiential knowing that highlights the perceptive body and its place in knowledge acquisition. Heron places special importance on the "felt encounter" and the acknowledgment of the presence of energy or empathic resonance with others. Knowing through the perceptions of the body is an area that is rich with possibilities for further exploration.

Tom Johnson's (1987) exploration of embodied knowing is based on a premise that meaning making "is never merely a matter of abstract conceptualizations and propositional judgments" (p. xix), but is grounded in our bodily experiences, which then "work their way up to abstract meanings and patterns of inference" (p. xix). The neurobiologist C. S. Sherrington, just prior to the turn of the nineteenth century, named *thinking with the body* via our sense of muscle movement, posture, balance and touch-*proprioception.* Learning through the body is one of our most fundamental experiences (Smetacek & Mechsner, 2004). In his explorations of the body from the internal, first-person viewpoint, Thomas Hanna (1993) offers further texture to the physical through his work in the field of somatics.

Emotional

The *emotional* is "the affective aspect of consciousness, the arousal of feelings or subjective experience or any of the various complex reactions with both mental and physical manifestations" (Agnes, 2001, p. 466). Other ways we think of the emotional are through the expression of many different feeling states, e.g., anger, sadness, joy, fear, happiness, passion, etc. For this study, the *emotional* encompasses the recognition of the various emotions and feelings humans have and their expression. Being aware of and able

to express emotions naturally and appropriately provide people with a continual flow of energy and a state of equilibrium. This quality of consciousness and ease of expression requires education and practice.

One aspect of the human emotional domain involves the awareness that we have repressed and not experienced or expressed certain emotions. Emotions can be powerful communicators, giving energetic feedback to a person about his/her life experiences. Through the energy and the vibration of our feelings, the input we receive from our bodies point us in a particular direction. Many of our symptoms and diseases are literally an alternative expression of energy that has not been expressed and remains in the cellular memory (Epstein, 1994).

To distinguish and highlight different types of intelligence, Daniel Goleman (1995) introduced the phrase *emotional intelligence* and distinguished self-awareness, self-regulation, empathy, motivation and social skills as areas that can demonstrate emotional maturity.

Within the last decade, a number of scholars, including John D. Mayer, Peter Salovey, and David R. Caruso (2000), have studied the emotional domain and provided valuable distinctions that previously were missing. One perspective of emotional intelligence focuses on the integration of the emotional centers of the brain (the limbic system) and the cognitive centers (neo-cortex, prefrontal cortex). Mayer et al. have conceived of emotional intelligence as a set of skills that involves processing information about emotion. Perceiving, managing, understanding, communicating, generating, feeling, and employing emotions in cognitive processes are the designated areas Mayer et al. focus on.

Mental

The term *mental* is distinguished as, "of or relating to the intellectual, or the mind, occurring or experienced in the mind, the ideological" (Agnes, 2001, p. 900). Concepts that have been used to describe the mental domain include: the reflective, creative, connective, contextual, cognitive, analytical, and understanding. Heron (1996) provides more clarification of the mental domain through the concept of "propositional knowing" as it is "formulated by intellectual statements, both verbal and numeric [and] organized with logic and evidence" (p. 33).

Capra's (1996) living systems theory proposes that mental activity is the organizer of organisms on all levels of life, "mind is not a thing but a process–the very process of life" (p. 172). The interactions of living organisms with their environment involve mental processes that include knowing, thinking, learning, judging, and problem solving, i.e., cognition. Life and cognition are intimately correlated. Mental process is intrinsic to matter at all levels (Capra, 1996). Language is an essential component of our mental processes as we bring forth our world in conversation and relationship with other people (Maturana & Varela, 1992).

It is here in our definitions that we begin to come full circle back to the definition of *systems.* In the Santiago systems theory, "cognition involves perception, emotion and action . . . language, conceptual thinking and all the other attributes of 'human consciousness'" (Capra, 1996, p. 175). This systemic way of viewing the world eradicates the centuries old split between mind and matter. Mind and matter are no longer

separate, belonging to two distinct categories. They represent the complementarity of structure and process (Capra, 1996).

Spiritual

Diana Whitney (1995) suggests that *spirituality* is our sense of connectedness to other humans and all forms of life, the life force energy, a focus on exploring the *being* of the human being (our inner journey of discovery of consciousness), and our quest to make meaning of our lives. Danah Zohar and Ian Marshall (2001), in *Spiritual Intelligence,* call spirituality the ultimate way of knowing, because it "rests in that deep part of the self that is connected to wisdom, from beyond the ego or conscious mind . . . it is the realm in which we heal ourselves and make ourselves whole" (p. 9). Webster's *New World College Dictionary* (Agnes, 2001) defines *spiritual* as "the animating or vital energy giving life to physical organisms; the breath of life; a concern for the spirit, in contrast with the earthly" (p. 1382). The term *spiritual,* as it is used in this dissertation, is inclusive and represents what is common to all human beings: an appreciation of our different beliefs, expressions of faith and relationships with nature, God or other ways of connecting with a power that is beyond our self. The spiritual domain contains the world's religious traditions without the dogma in their expression or practice. It acknowledges a spirit that is present in everyone, a reverence for life and relating to life, nature, and the growth of every person as mysteries to be honored (Miller, 1991).

Sri Aurobindo (Ghose, 1990) further clarifies the spiritual as:

> An awakening to the inner reality of our being, to a spirit, self, soul which is other than our mind, life and body. It is an inner aspiration to know, to feel, to enter into contact with the greater Reality. Spiritual values are central values and they must therefore govern and guide all the values and aspects of education. In the spiritual life there is no sense of the separate self. (p. 857)

An Integral Education for an Integral Worldview

As stated earlier, many historical accounts of education and its ideologies contain criticisms by those holding one worldview of those holding a different worldview. One of the purposes of creating a pedagogical model that integrates the emotional, spiritual, physical and mental intelligences from conception to graduation is to educate for a different quality of person. The premise is that when someone has engaged in an integral educational environment throughout the first 18 years of life, that individual will emerge as someone who is accepting of multiple points of view and listens, speaks, and acts in ways that generate a more interconnected world (Morin, 2001, 2002) and a "new expression of humanity" (Laszlo, 2002, p.6).

These integrally educated high school graduates would have a strong sense of self and relatedness with others and be able to accept many different points of view. Their identities would not depend on having to be "right" or be validated for their point of view. They could "have" a point of view and not have to "be" that point view; their identity would not be determined by their point of view. This systemic, integral education would focus on both the individual and the collective viewpoint, since they are inextricably connected. The self and the world would be honored. What is anticipated is that these individuals would be much less likely to see themselves as "right" and others

who do not share their point of view as "wrong." They would be able to appreciate and integrate the different disciplines within worldviews through their experiences of connecting their own emotional, physical, spiritual, and mental intelligences (Ghose, 1976, 1990; Krishnamurti, 1912, 1953; Montessori, 1949; Steiner, 1995; Yogananda, 1974; Walters, 2002).

Researcher's Context

Joining–Integrating

This is not only a dissertation as we ordinary think of the word. It is also a *joining* process in my own life, which is one of the original meanings of the word *dissertation:* "to join." In addition, this written work is an invitation to a larger *joining* process within education; one that has developing and integrating the physical, emotional, spiritual, and mental intelligences of human beings, i.e., making whole, *as a purpose of education.* I experience this unfolding process, my passion, as an invitation or call to pursue a particular direction in my life (Hillman, 1996). This is such an irresistible power, an idea whose time has come. Perhaps it is an idea whose time has come for all of us at this time in history. Perhaps there is so much fragmentation in the world that we are now strongly being called to both an individual and collective integration–"making into one by bringing all parts together: to unite, to join" (Agnes, 2001, p. 771).

Western Education Result

I am a result of the Western educational approach in which self is separated into disjointed areas, subjects are segmented, learning takes place with little relevance to one's life, and the *whole* of anything seems elusive in the educational process. I was very successful in this approach in terms of accomplishing the tasks and passing the tests with honors. I was a model student in thinking "in opposites; mind versus body, reason versus emotion . . . that something is either one way or the other" (Montuori & Conti, 1993, p. 12). I was educated to do something set out for me by someone else rather than to be reflective and creative in my own life. I was not educated to think about the whole of life, the connections within myself, my connections with others, and the interconnections between all people, the earth, and the universe. My choices up until I left formal schooling were reactive, disjointed, and informed by a narrow, predominately mechanistic view of life.

Buckminster Fuller (1979) once drew a circle and said some people operate inside this circle and don't even know what is outside of it. He was describing a closed system. My education was focused on *knowing the inside of the circle well.* It paid little attention to two other aspects of the circle: 1) that there is *a circle,* a context, inside of which the content exists, and 2) *what is outside of the circle and its relation to me.* He also said that there are those that can see the inside of the circle, the circle itself, what is outside the circle, and the relation they all have to each other–the whole picture, all of it. He was describing an open system. The quality of education I am advocating through a systemic, integral approach, is one that educates people to relate to all aspects of life–the inside of the circle, the circle itself, as well as beyond its boundaries and the relationship they all have with one another.

I have spent my adult life reopening the system by reconnecting the parts, both in and outside the circle: the mental, physical, emotional, and spiritual, as well as the relational aspects with myself, with other people, and all forms of life. As a psychology student in college, I resonated with the work of Carl Rogers and Abraham Maslow as they crafted the model of the self actualized person. They both agreed that "the ultimate goal of education is self actualization–its job is to help people transcend the conditioning imposed upon them by their own culture" (the inner circle) "and become world citizens" (Maslow, 1971 p. 184). World citizens are people who know that there is a circle, what is outside of it, and the relationship it has to them.

To transcend conditioning implies knowledge of the conditioning and an ability to step outside of it to see its scope and form. It also includes knowledge of self and the various intelligences that make up that self. It was in this inquiry that I embarked on the journey of self-integration of the mental, physical, emotional, spiritual, sexual, and relational expressions of myself. I think that to be self actualized is to be self realized, i.e.*, made real to one's self.* As my own journey progressed, it became more obvious that my passion for releasing my own spirit paralleled my passion to help release the human spirit through education. The reflections of this journey are captured in Chapter 10.

Education: Drawing Out the Human Spirit

Education, as I view its purpose, is to draw out the human spirit and in doing so, acknowledge the power people have to create their own lives. Inherent in an educational system is an openness and invitation–of new energy, ideas, and the flow of the human spirit and intelligences. In order to maintain an open system in education and ensure its vitality and creativity, it is necessary to continually question the underlying assumptions (and the sources of those assumptions) of the educational system and what purpose they serve. This keeps a dynamic tension in the system. Banathy (1991, 1996) suggests that there is an intelligence and responsibility that emerges from this tension.

Betts (1992) states, "To continue to exist, a system must be able to import and export energy across its boundary [and] to have a capacity to create new sources of energy. A closed system that cannot generate a sufficient amount of energy internally to replace what is lost to entropy will die" (p. 39). Too often, our educational system has been more closed than open and slow to interact with the changes in the world around it.

Using Fuller's metaphor, education becomes myopic and focused on what is inside of the inner circle only, ignoring the existence of the circle, what is around it, and the relationship between them. This narrow focus results in a network of beliefs that crystallize within a closed system.

Challenging Beliefs

There are many accepted beliefs about life and human beings that I am challenging through this dissertation process. Five specific ones are: "that's the way parents are"; "that's the way teenagers are"; "that's the way children are"; "that's the way teachers are"; and "that's the way it is." In an integral educational system, the physical, spiritual, mental, and emotional intelligences of people are acknowledged, developed, connected, and respected. Within this systemic view, a different way of knowing–knowledge of oneself and others as wholes comprised of self-integrating parts which are also wholes–can open up a new ontology. This ontology, this way of being and relating to

reality, is one of wholes and parts that are themselves wholes–holons nested within a holarchy. From this new way of defining what is real and what it means to *be* in the world comes a new way of knowing and a different quality of epistemology.

A new axiology (set of values) can emerge from this shift of emphasis from either/or to both/and. We are able to invent new values that include each person and the group–the parents, elders, educators, students, related professionals, or community members. What becomes apparent is a different quality of relationship with oneself and others (Banathy, 1991, 1996; Capra, 1996; Morin, 2001, 2002; Miller, 2000; Wilber, 2000).

The kind of shift that occurs when wholes and parts (which are themselves wholes) and their relationship are valued has far reaching possibilities. Our thinking would not be automatically dichotomized, as though life was about choosing one way (of knowing, being, relating to reality and others, valuing, or thinking), one belief or one position over any other. To include both the parts and the wholes allows us the opportunity to experience the whole; all of it: Fuller's inner circle, the circle itself and everything outside the circle. Rogers remarked, "The deeper we go into ourselves, as particular and unique, seeking for our own individual identity, the more we find the whole human species" (as cited in Maslow, 1971, p. 187). He illustrates this shift very well. When one experiences one's wholeness and is related to as whole, it creates a profoundly different person with whom to relate. Centers of learning can be created to systemically educate human beings, through the integrating of their own distinct intelligences (spiritual, emotional, physical, mental) to experience and express–reflection, complexity, paradox, dichotomy, choice, dialogue, love, flexibility, compassion, partnership, new paradigms, and our connection to all life, etc. These experiences would be fully interwoven throughout an academic curriculum.

Collective Denial

I am accusing us, the citizens of the United States in particular, of living in a time in which there is, as Goleman (1985) calls it, a "collective lacuna," i.e., blind spots and denial. We are asleep to what is all around us. Blind spots and a veil over our senses are the result of following the "rules for what cannot be noticed" and "not noticing that it cannot be noticed" (p. 218). We don't know that we don't know and we don't notice that we don't notice. R. D. Laing (2002), the philosopher and psychiatrist, provides a provocative statement to further illustrate the point.

> The range of what we think and do is limited by what we fail to notice. And because we fail to notice THAT we fail to notice, there is little we can do to change until we notice how failing to notice shapes our thoughts and deeds. (p. 1)

My premise is that this collective unconsciousness, denial, and illusion permeate our lives like an invisible fog. This lack of awareness shows up in every area of our lives: our relationship with ourselves and others, family, school, community, religions, organizations, businesses, media and in general in the way people relate to life. As a collective, we humans are not fully present to life (Montuori & Conti, 1993; Morin, 2001).

Having an aggregate denial as the background for our lives makes it impossible for people to see clearly what impact their environment has on them. 'Psychic numbing'

has occurred. By environment, I mean what is around us every day and so transparent it is like the air we breathe. Much of our life: media, advertising, books, newspapers, magazines, or stories we read; the reports from businesses, corporations or the government; the conversations we speak and listen in, or overhear; our television and movie messages; the modeling of adulthood, leadership and parenting; and the foods we eat, all play a significant role in perpetuating a life style that insists on the "rules for what cannot be noticed," and "not noticing that it cannot be noticed" (Goleman, 1985, p. 218).

We are living in a world that we are ill-prepared to live in; not mentally, psychologically, physically, emotionally, spiritually, sexually, etc. Our collective selves are not yet up to it. In this country, we have a multitude of examples and evidence of this gross educational oversight. People are disconnected from themselves, other human beings, and life forms and what is happening all around them every day. One example of this disconnection is television, which literally molds our perception of life. Elgin (2004) describes its power in our lives.

> Television may be our social window onto the world, but the view it provides is cramped and narrow. Television may be the collective mirror in which we see ourselves, but the reflection it gives is often distorted and unbalanced. Television may be the primary story-telling machine through which we find shared meaning in our lives, but the stories it tells are typically shallow, violent, demeaning and shortsighted. An average child sees 25,000 commercials per year. (p. 5)

He continues,

> We are entertainment rich and knowledge poor. We need a far healthier diet of images, ideas and messages that portray the reality of our changing world situation. Many people do not want to acknowledge how severe and urgent are the challenges we now face-to do so would bring disruption to lives that already seem impossibly stressed and stretched. (p. 7)

> Roger Walsh (2005), a psychiatrist and educator points out that,
> For the first time in human history every single one of our global problems is human created. Every one is a reflection of our individual and collective choices and behavior. Every single global problem is a symptom, a symptom of our collective and individual psychological and spiritual distortions. And this means that the state of the world is a reflection of the state of our minds. (p. 303)

Eminent biologists, E.O. Wilson, P. Ehrlich, and P. Raven, agree that human beings are eliminating thousands of species a year, devastating our abundance and diversity of plant and animal life and committing irreversible biocide and geocide (Swimme & Berry, 2005, p. 516). In the next chapter, a more thorough assessment of our education will be undertaken to provide the reader with a more grounded understanding of its history and influence on our collective consciousness.

Conclusion

In a country that has freedom and human rights at its constitutional core, it is crucial that we notice the extent to which they are not being exercised. How often do people vote, take a stand, speak their mind fully and be responsible for maintaining those rights and freedoms? We seem to have accepted a life of being searched or being suspected: when we travel, go to school, sports events, buildings, etc. Our media and spin wizards have successful confused our reality to such a degree we have to stay very awake to catch the inconsistencies. When I look around today, listen to or read the news or popular books, watch television, or listen to clients in Fortune 50 companies or my family, friends, students, and colleagues, the conversations taking place in our congress and from the words of our president, I ask myself, "Why isn't *everyone* thinking about the transformation of education?" Why isn't *everyone* seeing the huge gap between what is provided in our schools as educational experiences and what is required to live in the world of today? The questions I am posing are, "What are we attending to?" and "Where is the demand for transformation?" Olds (1992), systems psychologist, offers one explanation,

> How is the search for a sense of wholeness to be achieved in a world whose specialty is specialization, whose language is linear and literal, and whose sense of the symbolic is derived from cartoon and caricature? How is the search for wholeness to be expressed in a world made horizontal by the sheer immensity of our knowledge about this world? (p. xi)

I think as a nation we have settled. There is a quality of benign resignation. I think that many do not know what to do. This dissertation is my response to what could be done through a systemic, integral approach to education that weaves together the spiritual, emotional, physical, and mental intelligences of young people from their conception to their graduation from school. This timeframe, approximately 18 years of a human being's life, would provide a securely integrated foundation for living the rest of one's life and would effectively inform the choices made in life, i.e., spouses, having and raising children, careers, citizenship and political engagement, relationships with other people, life on earth, ecological sustainability and the global community.

The "overwhelming success of our educational system as a pattern maintenance institution is at the heart of its failure to match changing societal expectations" (Betts, 1992, p. 38). "The inevitable conclusion from the evidence at hand is that the old system is no longer adequate to the task" (Betts, 1992, p. 40). Banathy (1991) and Morin (2001, 2002) also offer ample evidence of our educational institution's manifestation of "*paradigm paralysis*, or *mumpsimus*, which Webster defines as 'persistence in a mistaken belief,' the attempt to interpret current experience using old models and metaphors that are no longer appropriate or useful" (Betts, 1992, p. 39). Banathy (1991) observed that the world has moved on while our model for education remains firmly rooted and ill equipped "to design a system that is more open, organic, pluralistic, and complex" (p. 80).

Education in the United States gives much evidence to me of our system's expression of a "persistence in a mistaken belief" which has kept the energy necessary for a vital system from flowing. As a result there is currently an illness and a lack of sufficient energy in the system to revitalize itself.

The 'Possibility' Statement

The following presents possibilities for transforming education. This research is not attempting to fix a problem. The intent is to highlight the possibilities available through systemic, integral education. Using the integral worldview for the education and development of young people offers a powerful philosophical and theoretical approach to learning. However, I could not locate research regarding the influence these integral programs have on the creation of integral characteristics, behaviors, and competencies of their graduates. I have not found any studies assessing the impact the integral educational environment has had on its students and the development of their mental, spiritual, physical, and emotional intelligences.

There is some research regarding integral education, yet little has been undertaken to compare and unify these educational approaches. I am interested in exploring in more depth the similarities and differences between the 1) Sri Atmananda Memorial School (Sri Atmananda); 2) Oakgrove School, (Krishnamurti); 3) School of the Woods, (Montessori); 4) Moorestown Quaker School, (Fox) 6) Auroville Schools (Sri Aurobindo); 7) International Centre of Education (Sri Aurobindo); 8) CMS (Gandhi) and 9) Waldorf School (Steiner) educational experiences. There is a need to integrate the information, experiences, and curriculum from these programs and to hypothesize the potential these programmatic methodologies could have on our future world. In addition, the research literature of integral education provides no "representative" of what characteristics, behaviors, and competencies a young person educated in an integral environment might demonstrate.

The Research Question

The primary question of this research is: What learning experiences help shape the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral education programs?

The Purpose Statement

The purpose of this study is to discover what learning experiences have helped contribute to the development of the spiritual, emotional, physical, and mental intelligences of high school seniors representing integral educational programs. Based upon the findings, the intent is to formulate recommendations for the design and implementation of educational programs on a wide scale that encourage the growth of young people educated in an integral viewpoint. Included in this intent is a commitment to provide a deeper understanding of the integral educational process by highlighting its practical and theoretical underpinnings and the contribution it can make to our future society.

This has been done by listening deeply to the narratives of program seniors, who were chosen as representatives of the selected integral educational approaches, and their

parents. The focus of these stories is the educational experiences, influences, relationships and life events that were instrumental in the integral development and competencies of these young people. Observations were carried out in the following nine programs, each a specific interpretation of integral education; 1) Sri Atmananda Memorial School (Sri Atmananda), 2) Oakgrove School, (Krishnamurti), 3) School of the Woods (Montessori), 4) Moorestown Quaker School (Fox), 6) Auroville Schools (Sri Aurobindo), 7) International Centre of Education (Sri Aurobindo), 8) CMS (Gandhi), and 9) Waldorf School (Steiner). Common themes and patterns were identified in the narratives of the research participants, as well as those from the educators in the integral educational programs researched.

The ultimate aim, to which this dissertation is supplying fundamental research, is to create and direct a learning center campus that offers communities access to systemic, integral educational programs that span from conception to graduation from high school. The pedagogy will provide an integral educational experience, weaving together the spiritual, emotional, physical, and mental intelligences throughout. It will include parents, students, educators, elders, higher educational institutions, related professionals and community members in its creation and operations.

The Researcher's Assumptions

- People who are educated in a systemic, integral educational environment that continually connects the intelligences: spiritual, physical, mental and emotional, from their conception to their school graduation are prepared for adulthood in a highly complex and chaotic world. They are present to life, at home in the universe, aware that they are the creators of their life and responsible for that life, able to think for themselves and conscious of their connection to themselves, other people and other life forms.
- People having an experience of their own wholeness and the interconnection of their spiritual, emotional, physical, and mental intelligences would collectively create a different world in which to live. They would be more likely to look outward and take on the larger issues of unworkability that exist in the world today. As Rogers was quoted, "The deeper we go into ourselves, as particular and unique, seeking for our own individual identity, the more we find the whole human species" (as cited in Maslow, 1971, p. 187). This has been my own personal discovery as well as many others with whom I study or speak. The more I know myself the more I know you. The more wholeness I sense in myself, the more I am able to experience in you.
- I know that as long as human beings have bodies they will have accompanying points of view. The education I am proposing would acknowledge that and support educators, parents and students to confront their belief systems continually. Being connected through the spirit, feelings, body and mind is a very powerful stance in life. As high-speed changes take place, this stance gives its owner firm grounding as well as an ability to 'dance,' that is to say, coordinate well, with these changes in a highly synchronized fashion.
- This quality of 'dancing' with life extends to the quality of conversations one can have. When there is room to inquire, question, confront, disagree and reflect, etc.,

there is less commitment to know 'the answer,' or 'have to be right' about a topic and more discovery and creation of new, more situationally appropriate responses.

- ❖ We human beings have a great deal to say about how we want our world to be, today and in the future. We must however learn how to exercise our influence and know what is involved in making choices that are consistent with a world that is inclusive of all its inhabitants.

Significance of the Research

This study will provide further research and understanding to the emerging philosophy and literature of integral education. The following are some of the designated outcomes:

- A foundation for a model of a systemic, integral education, (the emotional, spiritual, physical, mental intelligences) for future application in a 'campus' learning center environment that will include students, parents, educators, professionals, etc.

- A 'portrait' of what characteristics are demonstrated by someone who has been supported in their education to develop their integral intelligences: physical, spiritual, emotional, mental.

- A theoretical background for systemic, integral education

We must have faith in the child . . . capable of regenerating the human race and society. Within the child lies the fate of the future.
Montessori, as cited in Rohrs, 1994, p. 16

Chapter 2: Literature Review

This chapter opens with a brief review of education today and its underlying principles. The intention is to firmly root this dissertation as a response to twenty-first century education. Following this overview is an appraisal of literature that illuminates the heritage of integral and holistic education and contains current writings that offer further understanding of the research subject matter. This section defines and distinguishes concepts used in holistic and integral education and provides a historical perspective of the development of this approach to education. The remainder of the chapter is devoted to four areas in which relevant literature is appraised. There are a number of elements that are fundamental to understanding integral education as an essential response to the challenges of the twenty-first century. This integral education would be a) systemic (i.e., span from conception to school graduation and include parents, educators and students); and b) develop and integrate the intelligences (physical, spiritual, emotional, mental) of young people throughout the first 18 years of their lives. The fundamental elements required for understanding such an education are 1) philosophers and educators, 2) examples of integral and holistic educational programs and integrative curriculum, 3) related research concerning holistic and integral worldviews in education, and 4) new scientific findings

The inquiry of this study contains many facets. The topic encompasses a variety of related areas, as its question reveals: What learning experiences help shape the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral education programs? Because of the complexity of the research question, related studies and literature are found throughout the dissertation. Chapter 1 has explored some of the associated literature. Also, in later chapters, additional introductions of relevant material are interwoven with the research findings, analysis and interpretations. Chapters 6, 7, and 8 in particular, contain literature with new insights from education, philosophy and science that are pertinent to the subject matter covered in these chapters. They are presented in this fashion to demonstrate their integral nature.

Current Education Assessment

Authentically assessing education today requires a worldview that includes multiple beliefs about the purposes of education and a capacity to draw a connection between what results from these purposes and the impact those results have on the individual, the society and the world. Chapter 1 captured this dilemma by using Fuller's anecdote about how one's perspective changes the context of what is being viewed, i.e., the inside of a circle, the circle itself, the outside of the circle, and all of it seen from a distance. As we look at our current education, a question arises. Are we only focused on what is inside a circle? Are we aware that there is a circle, and there is an outside the circle, and there is also a relationship that all these points of view have, and . . . there is a view that includes it all.

In the twenty-first century, through technology, science, education, communications, and relationships, there is at the same time both a provision for a different quality of learning and understanding, and an increasing demand for it. In Chapter 1 a thorough review of the *Traditional, Modern, Postmodern* and *Integral* worldviews was presented to lay the groundwork to understand how each has influenced our educational philosophies and approaches over the last few centuries. Some examples were given to illustrate how these particular ways of thinking show up, literally, in curriculum, classroom practices, student, teacher, and parent behaviors and engagement, etc. What follows is a look at education with a current lens to establish what are its underlying principles and various expressions.

Deeply rooted beliefs die hard. In the late nineteenth and early twentieth century the Traditionalists' and early Modernists' purposes of education were to prepare people to competently execute instructions given by those in power–in government, education, and business. *Reductionism* (which leads to fragmentation, the division of subjects and a sense of an either/or world); *competition* (which creates a win/lose mentality); and *mechanical* and *materialistic thinking* and *learning* (which accentuate the material/physical/sensory experiences over all others, including the experience of self), were institutionalized in schools. Even though our views of reality have been greatly influenced by the Postmodern and Integral ways of thinking in the beginning decade of the twenty-first century, there are many well-positioned groups and individuals in the United States who still perpetuate a multitiered educational system.

Originally, our schools were intended to meet the needs of another age, and until we redesign them to meet the needs of the current century, our educational efficacy is in jeopardy. Our present education limits, and at times, ruins the lives of the potential learner, and it definitely hurts both our students and our country as a whole. Our schools cannot teach students what they need to know to do well in the twenty-first century marketplace. These preceding three sentences were paraphrased from words spoken at a National Education Summit, by Bill Gates (2005), who has been engaged with educational issues for years traveling around the United States and the world assessing what education is providing students in different states and countries. He is speaking from a more integral worldview, as he sees so many of the educational problems as being systemic, i.e., we are not looking at education with eyes that include the whole picture of what is needed today.

In comparing our schools to others around the world, Gates (2005) points to the disparity of some of our educational approaches. Senge et al. (2004) and Hock (1999) note that other business leaders are also concerned, and Miller (2000), Marshall (2005), Laszlo (2005), Lantieri, (2001), and O'Sullivan (n.d.) include educators who address this as well. Gates is shining a light on aspects of our educational system that are not operating consistently with the world we are now living in. As an example, American fourth graders are among the top students in the world, yet by the time they reach the eights grade, they are in the middle of the pack. By the twelfth grade they are scoring near the bottom of all industrialized nations. Currently, we have one of the highest high school dropout rates in the industrialized world (Gates, 2005).

We are only really preparing one-third of our population for college, work, and citizenship. The other two-thirds of the population are not equipped to succeed at either college or a family-wage job. Even when one-third of the population gets to college,

many end up dropping out. The United States college dropout rate is also one of the highest in the industrialized world. Recently it has dropped from first to fifth in the percentage of young adults with a college degree (Gates, 2005). There is a vicious cycle in play for close to two-thirds of our population that perpetuates a cycle of failure in an ability to engage in the learning, behaviors, practices, etc. that contribute to a healthy society. Too many people are not able to create and sustain an adult life style that allows them to enjoy a meaningful work and personal life, and if desired, marry and raise a family successfully. Gates (2005), using an integral lens as he views the current condition, declares that "every human being has equal worth–that all students can and should graduate from high school ready for college, work, and citizenship" (p. 3) through a curriculum that is rigorous, relevant, and relates each student with adults and peers so s/he are known and supported in productively participating in school.

Others educators reviewed in ensuing sections point to practices that still prevail in schools that add to the vicious cycle mentioned above. Learning that emphasizes performance skills versus mastery skills illustrates what Gates and others are saying about often irrelevant learning, i.e., great test-takers whose learning is disembodied and disconnected from their life. "Instead of fostering meaningful discourse, tolerance of divergent thinking, and the opportunity to get to know ourselves and each other, schools today look more like what social psychologist, Kohn calls 'giant test prep centers'" (as cited in Lantieri, 2001, p. 2).

There has also been an ignorance of the diversity of learning styles, and a lack of appreciation for affective learning, context creation, a sense of higher purpose, deeper meaning-making, and consciousness, and their contribution to our quality of education and subsequent thought processes. Our educational institutions have placed a disproportionate value on the material world, teaching children that they should look to the outside rather than the inside–rather than to their own self awareness and internal experience (Miller, 2001; Clark 1997; Marshall 2005; Miller 2006; Lantieri 2001; Palmer 1998). Education in the twenty-first century is about the joining of both sides, the internal and external, the both/and quality of thinking. Morin (2001) challenged us to educate in a way that distinguishes and connects" (p. 38), and to consider parts *and* wholes, analysis, *and* synthesis.

A major area of focus in education is the teacher and his or her role. Many of the educators reviewed and participants interviewed for this dissertation pointed to the significant role the teacher plays in the education of young people. The examples these individuals provide, in not only modeling behaviors and ways of being, but also the quality of knowledge in a subject area, are significant. Yet, the way teachers are educated to teach, their qualifications, and remuneration are examples of an outdated worldview. Our teachers represent the lowest scoring groups on national tests, and belong to one of the lowest paid professions. Over one-third of our teachers are teaching in subject matter that they are not credentialed to teach (Williams, 2001). These are the people that have the most influence on our population. What is the mindset that allows these practices to continue?

Conti (2002) discusses the sense of self and consciousness of the teacher and the impact of these on the growth of their students. He also accentuated the paucity of teacher education that provides preparatory experiences in the areas of self-reflection and knowledge, and development of consciousness for prospective teachers. Jennings (1997)

speaks to the need for teachers to be able to educate students with multiple ways of learning with multiple styles of teaching, which has only begun to be well represented in some teacher certification program's curricula in the last decade. The examples of educators that follow represent a small minority. They relate to education as a dynamic and important ontological gateway for all students, "an interwoven web of *knowing, doing, being* and *becoming*" (Yihong, 2002).

In the late twentieth century and beginning of the twenty-first, there has been a collision of worldviews that has not been effectively addressed, and it has led to confusion, uncertainty, isolation, security seeking through material possessions, the known turning into the unknown, etc. Sri Aurobindo (Ghose, 1976, 1990) and Laszlo (2002) explain this clash in an historical and integral manner. They see that civilization has greatly expanded, yet in ways that have not included a parallel expansion of our mental capability and understanding, our spiritual and moral ability to help guide its future.

The response to this confusion and chaos has been insufficient–too little dialogue with way too little integral perspective to provide people with a large enough contextual view to be able to see a whole picture. The reaction to this chaos has shown up in fear and uncertainty, which has translated into violence against self, i.e., suicides, addictions and societal withdrawals, and violence aimed at others (note the high profile of violent incidents in American schools in the last decade and the atmosphere of aggression in society in general). Our high speed pace is another result of fear and not knowing as velocity prevents reflection, inquiry, observing, engaging, and acknowledging what is going on around us (Lantieri, 2001).

As highlighted in Chapter 1, a consequence of fear and uncertainty is a societal consensus trance or collective denial that shields us from offensive emotions or experiences. This response makes it nearly impossible to address the issues, because the issues are nearly impossible to discern. There is no clear background against which to distinguish the problems.

Senge, et al., (2000) has critiqued the education system for its inability to see its own systemic requirements. He says, "These systems, the classroom, the school and the community–interact in ways . . . that shape the priorities and needs of people at all levels . . . changes will make a difference only if they take place at all three levels" (p. 11). I would also add that the students provide another perspective in the system that must be included in the integral approach to education, which requires another systemic shift in the way we view education. Integral education is intent on providing a systemic approach, which is also focused on continual reflection, assessment, and regeneration. Educating people is the foundation for the future of any country, yet the way our education is currently structured it is not addressing issues that are current, let alone those that may concern us in the future. Many alternatives have been proposed. Private, charter, magnet, and home schools are some of the responses to what is missing in our public education. Charter schools number 3,600 in 40 states, with enrollment of over one million students in the 2005 school year. Another phenomenon occurring is the explosive movement in home schooling. Parents are removing their children from schools; home schooling is on the increase totaling close to two million students across the United States, and proving that this approach is educationally successful. Eighty-five percent of

these students score higher on academic tests than their peers in schools (Williams, 2001).

Another powerful response to education is the integral approach, which emphasizes a particular way of viewing education that focuses attention on the whole as well as on the child, student, family, community, society, nation, and world. This viewpoint includes what it means to be a feeling, thinking, participatory, and conscious member of the human race. This dissertation is my response to how we can redesign and restructure our educational institutions to be systemic and integral–providing environments in which people grow up having the ability to grasp the complexities of our twenty-first century world and capable of participating in birthing a different kind of future.

Distinguishing Integral and Holistic Education

The words *integral, holistic, integrative,* and *integrating* are used throughout this document. All are words that elicit a sense of oneness, wholeness, connection, and integrity. *Holistic* and *integral* are accepted designations for a particular quality of educational approach, while *integrative* and *integrating* are more often associated with educational content and curriculum. *Holistic* and *Integral*, when applied to education in their definitions and approaches, have often been used interchangeably because of their apparent epistemological similarities (promoting holistic, inclusive approaches). There are, however, distinct differences to be recognized as we explore a systemic, integral education model.

As explained in the concept definition of *integral* in Chapter 1, there are two distinct expressions of the term that are both holistic and synthetic, one being more closely aligned with the root metaphor of Organicism and the other Contextualism. *Integral,* within the context of this research of education, refers to education that provides curriculum that purposefully develops and integrates the physical, emotional, mental, and spiritual intelligences. This definition as it was intended, more closely reflects the meaning of integral rooted in Contextualism. Sri Aurobindo, the originator of the term *integral* as it refers to education, was also a proponent of an evolutionary, developmental philosophy to educate the whole person. Sri Aurobindo knew that an integral way of educating would be a catalyst for the advancement of consciousness. What makes the exploration of holistic and integral approaches so valuable at this time is the opportunity to benefit by both their organic and contextual contributions to education in service of the evolution of consciousness. What follows is a review of the historical roots of the holistic and integral approaches as they shed light on how they have manifested as valuable foundations to education.

Holistic

Holism, when referred to in education, has been traced to the influence of eighteenth and nineteenth century educators Jean Jacques Rousseau, Johann Pestalozzi, and Friedrich Froebel (Miller, 1991; Forbes, 2003). Their child-centered, spiritually-oriented approach was echoed by the human potential educators of the late 1970s. People such as Abraham Maslow (1968), Joseph Chilton Pearce (2002), and Carl Rogers, Jack Canfield, Theodore Roszak, James Fadiman, and Beverly Galyean (as cited in R. Miller, 1991, 2001)–representing diverse professions from child, transpersonal, and ecological psychology, to history, spiritual traditions, and confluent education–advocated for

integrating the body, mind, and spirit in our pedagogy. They called this education *holistic*, a term adopted in the mid-1980s by theorists such as Ron Miller (2000, 2001) and John P. Miller (2001, 2006). They saw it as a way of synthesizing various approaches, embracing educational traditions that embodied spiritual development, ecological viewpoints, and a connection to the holistic perspectives in science and philosophy (e.g., the work of Fritjof Capra [1996], David Bohm [1985], Rupert Sheldrake [1981], Ervin Laszlo [1987, 2003], and Riane Eisler [2000, 2002]). It provided a context for the parallel intentions of various expressions of education in a way that gave them a unifying thrust.

Holistic education is committed to 1) educating the whole person and integrating the multidimensional aspects of being human, 2) educating the person as a whole as opposed to an assemblage of parts, and 3) educating the person within a whole (i.e., in the whole context of family, school, neighborhood, society, culture, and the wholeness of the universe [Miller, 1991, 2001]). Holistic education aims for the highest state of being that a human being can aspire to–Ultimacy–as a process and an end state (Forbes, 2003, pp. 17-18). Holism is based on the premise that people find identity, meaning, and purpose in life through their connections to the community, natural world, and spiritual values through the direct engagement with them (J. Miler 2001; R. Miller, 2001). Holistic perspectives emphasize the integration of multiple dimensions. Holistic educators who are recognized for their scholarly work in education are included in the section below, *philosophers and educators.*

Integral

The Integral perspective traces its lineage to the Hindu teachings of the Vedic tradition interpreted by Indian sage Sri Aurobindo (Ghose, 1972), the cultural philosopher Jean Gebser (as discussed in Feuerstein, 1989), and more recently, Ken Wilber (2000), an integral philosopher, psychologist, educator who distilled and mapped a comprehensive integral framework from major knowledge systems and philosophies throughout history and across cultures. Sri Aurobindo was writing and speaking about integral philosophy and education in the first half of the twentieth century. Although his audience at that time included some Indian and foreign scholars, e.g., Gebser, his work was not widely disseminated. Yet, he amassed an extensive body of work that is becoming more available through the current attention paid to the integral viewpoint. Sri Aurobindo used the term *purna*, which means "full," to describe his integral yoga, which was a complete education of the self and involved the transformation of the entire being.

Sri Aurobindo (Ghose, n.d. [a]) believed the "new aim of education [was] to help the child to develop his intellectual, aesthetic, emotional, moral, spiritual being, and his communal life and impulses out of his own temperament and being" (p. 1). He defined integral education as including the "body, emotions, mind, soul, and spirit" within the context of assisting the child to discover for himself/ herself the aim of life and the divine purpose that he or she has to play in it (p. 1). Sri Aurobindo developed a richly textured treatise encompassing integral philosophy and education that ultimately led to inner self-development, which opened one up to a discovery of the One Self–an evolved higher consciousness, beyond the mental to a spiritual and supramental consciousness capable of transforming and divinizing human nature (Ghose, 1972).

He emphasized in his writings the importance of including, "individuals with themselves, the integral nature of relationships among individuals, individuals with nature and the universe itself, matter and spirit" (Ghose, 1972), pp. 27-28). Sri Aurobindo in teaching integral education spoke about its purpose. "The net result is a student who has wisdom with his or her knowledge by focus[ing] on gathering and processing information in order to learn how to learn" (Ghose, n.d. [a], p. 1). Key to integral education is child centered learning which "synthesizes and harmonizes the modern aim of world knowledge with the ancient aim of self-knowledge" (p. 1).

> Their education in self-knowledge will allow student to truly discover who they are and to know their inner spiritual beings, as well as to help them to discover their life purpose. At the same time they will also be developing world knowledge by developing their mental, emotional, and physical capacities and skills, which prepare them to interact with the world around them in creative and meaningful ways. (p. 1)

Jean Gebser (as discussed in Mahood, 1996) was a European philosopher and cultural historian. From those combined viewpoints, he contributed to the lineage of the integral worldview and education via his research on the evolution of human consciousness. He predicted a new quality of awareness being birthed in the world in the mid-twentieth century, beginning to redirect people's thinking from the Modern to the Postmodern era, which laid the groundwork for a more integral perspective. Gebser distinguished the archaic, magical, mythical, mental, and integral structures as a way of describing the shifts that individual and cultural consciousness have made over the centuries, and at the same time, presented them as a unity of interrelated stages that emerge, then transcend and include all that came before. As an integral philosopher, he cautioned that the overly rational (reasonable) mind can "reject magic, myth, religion, feeling, empathy, and not least ego-transcendence" (as cited in Feuerstein, 1989, p.5). He wanted people to understand the interconnected nature of the relationships among the structures.

Gebser's studies of Eastern spiritual philosophies, particularly the integral philosophy of Sri Aurobindo, brought him to "the realization that East and West are complementary and unifying, and their encounter is central to personal and cultural integration" (as cited in Feuerstein, 1989, p. 7). Gebser made two contributions to integral education. The first is glimpsed in his statement, "Individuality arises in participation with the larger reality; a reality that by far eclipses the rational mind and even the feeling heart" (p. 5). The second is the arational structure that he foresaw as the next expression of human consciousness by way of our "personal and collective self-transcending practice[s]" (p. 5). Mahood (1996) further highlighted Gebser's gifts to an integral view of education through his commitment to an expansion of consciousness that is inclusive, that manifested as "unity in diversity." Gebser's perspective was inclusive and embraced a global worldview.

Integral, as a designation of a philosophy, as well as for psychology and education, has emerged in the mainstream during the last five years. It has specifically shown up in the extensive writings and work of The Integral Institute founded by Ken Wilber (2006), currently one of the most recognized scholars in the field. His view, that "people are starved for a truly holistic and genuinely integral approach to the world–in

psychology, in spirituality, in politics, in education" (p. 1), has prompted him to fully develop an integral philosophy.

Wilber (2000, 2006) is very precise in his definition of *integral,* which is expressed in his AQAL model of integral theory that was briefly discussed in Chapter 1. The model comprises: 1) all quadrants; according to Wilber, any thing and any event which exists has four irreducible dimensions of experience: interior (subjective) and exterior (objective) aspects, both of which have a perspective from the individual holon and from the collectives of which it is a part. In other words, everything has an "I", "We", and "It/Its" aspect, sometimes referred to as Self, Culture, and Nature; 2) all levels, i.e. the stable developmental levels or stages of consciousness that unfold in increasing complexity, e.g., subconscious to superconscious, or egocentric to worldcentric; 3) all states, i.e., waking, dreaming, and deep dreamless sleep, 4) all lines (of intelligence), e.g. cognitive, aesthetic, spiritual, affective, kinesthetic, mathematical, musical, etc., and 5) all types, or equivalent but different expressions, such as masculine and feminine. Wilber's all-encompassing model makes evident the sheer complexity of what it means to design an integral education, and provides a clear map to support the process.

Wilber's interpretation of reality is multidimensional and nondualistic and includes interdependent domains of existence. He characterizes it as a grand synthesis that is comprehensive enough to embrace all of life in its many manifestations, connecting science and spirituality in the process. His model has incorporated Gebser's consciousness stages, (archaic, magical, mythical, mental, integral) and also reflects the philosophy of Sri Aurobindo. All three would agree that the integral view of reality includes the interrelatedness that connects all life forms, the outer and inner aspect of everything, and the multidimensional experience of space and time.

Wilber (2000) sees the evolution of our consciousness through an integral context unfolding in five distinct stages: matter, body, mind, soul, and spirit. Matter is the material plane, the physical universe, the grossest form of Spirit (the domain of physics). Body is the animal plane, the realm of the instincts (the domain of biology). Mind is the human plane, the realm of intellect, logic and language (the domain of psychology and philosophy). Soul is the higher, subtle mind, the realm of archetypal intuition (the domain of theology and art). Spirit is the transcendental summit of reality, the eternal Godhead (the domain of contemplative mysticism). Although there are many areas found in this research that reflect what is contained in Wilber's model, e.g., addressing the physical, emotional, mental, and spiritual expressions of consciousness, his definition and theoretical model of integralism clearly extend beyond the scope of this study.

The term "integral" is often used to define a particular level or stage of development of a human system, be it an individual, organization, or a culture. Within the last decade, the introduction of the developmental stage model Spiral Dynamics (SD) by Don Beck and Christopher Cowan (1996), expanding the work of psychologist Clare Graves, has illuminated the mainstream understanding of the evolution of consciousness through successively more complex and inclusive worldviews. . Their model provides an extensive exploration and description of the values line of intelligence that is the underpinning of what humans believe and the actions they take. Eight successive stages unfold in a spiraling and wavelike (rather than linear or stepwise) manner describe the values systems or core intelligences at each stage, or *meme* (self-propagating ideas,

habits, or cultural practices). The memes are colored coded for easy identification; each provides an understanding of what people and communities value, how they think at each stage, organizing principles, and what it might take to move from one stage to the next. For example, with regard to education, individuals with a dominant "orange" meme (fifth of eight known stages) would be focused more on individual achievement and competition, with an emphasis on empirical science; those with a dominant green meme (sixth stage) would be more oriented toward egalitarian or community interests, humanism, postmodernism and an holistic education.

The yellow meme (7th stage) would manifest more integrative interests and capacities, learning to live as an adaptive organism in a constantly changing and chaotic world. Accumulating knowledge and understanding how various systems work and interrelate naturally is a priority, as is learning to live a full and responsible life as who one authentically is and learns to become. This particular level is also considered the first truly "integral" stage because it is the first that is able to recognize the other values system or memes as diverse and necessary participants in the whole rather than as competing worldviews, and is able to erect frameworks to hold them all in a coherent system. The turquoise meme (8th stage) recognizes the world as a single dynamic organism with its own collective mind; self is both distinct and a blended part of a larger, compassionate whole. It recognizes and is comfortable with paradox and has a macro-view of life, focusing on the good of all living entities as integrated systems. Priorities include fully integrating feeling and knowing, having access to the world, particularly with the use of advanced technologies, exploring expanded use of brain/mind tools and competencies, and a deep spirituality.

The integral philosophies of Sri Aurobindo, Gebser, Wilber, and Beck have provided extensive theoretical treatment of integrality. Their models present a clarity that reflects integral thinking and in my mind have helped extend the philosophical thinking of holistic educators and added new depths of discernment. These models create new openings in which people can engage in thinking that develops an Integral worldview. These philosophers have highlighted consciousness and its evolution as an essential context in the formation of an integral perspective.

Sri Aurobindo (Ghose, 1972; 1992) declared that existence is consciousness; consciousness is energy and at every level of existence (matter, life, mind, soul, spirit) there is an expression of conscious being. He implies, as does Gebser, Wilber and Beck that all life is interconnected and inter-reflective. Consciousness creates its own reflections of being through its existence (Ghose, 1992). The integral invites an ownership and inclusion of all stages of development, as they are all intimately interrelated (Wilber, 2006; Beck, 2005). Rather than parts of a whole or members of a team, they are holons inside a holonic world; wholes within a whole (Wilber, 2000). Consciousness, matter, mind and body are all aspects of the same thing and are necessary to existence as we know it; nothing is exclusively either subjective or objective (Ghose, 1992).

The depth of this integral thinking is giving birth to a new depth of an integral approach to education, much like what Auroville (Sri Aurobindo's 2000 person experimental community in India) and the community-oriented educational programs based on the teachings of Yogananda, Sri Atmananda, and Krishnamurti, Montessori,

Steiner, Fox, and Gandhi. They are designing themselves to accomplish a more integrative and global holistic stage of development.

The worlds of quantum physics and chaos and complexity theories, along with breakthroughs in all areas of science, have greatly impacted our ability to construct comprehensive models of life's interconnectivity, and its natural flows and patterns. Wilber's and Beck's integral models emerged in a world where more people were able to be more observant of self and world with a different level of consciousness. Sri Aurobindo, as well as the founders of the educational programs highlighted in this study, received wisdom about consciousness through a different kind of research, e.g., silence, reflection, meditation, prayer, and connections with a higher power.

Integral philosophy as expressed in integral education reflects the development of our human consciousness as it has emerged throughout a process of multidimensional evolution, i.e., the social, cultural, spiritual, mental, emotional, and physical domains. This consciousness is unique, as it is conscious of itself and recognizes the inseparability of all life forms. Laszlo (2002), philosopher, evolutionary systems scientist, and futurist contributes these remarks: "It is in the coalescence of the world's cultural and racial diversity that a new emergent is beginning to take form. This emergence is not merely the union of differing peoples, but a fundamentally new expression of humanity" (p. 6).

Literature Review

Philosophers and Educators

The following offer different yet essential perspectives on pedagogies that provide students with integral educational experiences: John Dewey (1968) and (as cited in Field, 2001); George Fox (n.d.); Friedrich Froebel (1826) and (as cited in M. K. Smith, 2001); Jagdish and Bharti Gandhi (as cited in cmseducation.org); and Jean Gebser (as cited in Feuerstein, 1989; Mahood, 1996), Krishnamurti (1912, 1953, 1964a, 1964b) and (as cited in Forbes, 1997), Maria Montessori (1949) and (as cited in Epstein, 1996; Seldin, 2005), Johann Heinrich Pestalozzi (as cited in Silber, 1965; Kilpatrick,1951), Jean Piaget (as cited in Smith, 2002; Papert, 1999), Jean Jacques Rousseau (as cited in Chew, 1996, Fieser, 2001, Kemerling, 2002), Sri Atmananda by way of his son, Sri K. Padmanabha Menon's interpretations (as cited in Nair, 2002 and Borich, 2004), Sri Aurobindo (Ghose, 1972, 1992), Rudolf Steiner (1995) and (as cited in Davy, n.d.), Yogananda (1974) and the writings of J. Donald Walters (2002).Collectively, they bring wisdom from many areas of the world and embody the main educational and philosophical contributors to this research. Because of the nature of this dissertation, the philosophies of the eight founding sources of the researched integral programs are highlighted in Chapter 4 and may be found in other relevant sections of this document.

Other educators and scholars steeped in the traditions of holistic education have provided the field with valuable contextual, historical, and pedagogical perspectives: Ron Miller (2001), Edward T. Clark (1997), Scott Forbes (2003), and John P. Miller (2006). Ron Miller (1991, 2001), as the founder and editor of *The Holistic Education Review,* has been engaged in that discourse for a number of decades with hundreds of educators committed to bringing a comprehensive holistic worldview to teaching, learning, culture and human development (1991, p. 290). His intention for holistic education is in itself holistic, as he has created a forum for many diverse expressions of holistic and integral

education to cross-pollinate. The environments that offer a holistic approach to education have four characteristics in common.

> 1) Teaching styles that address multiple learning styles and abilities;
> 2) A sense of community, even family, is strongly developed among the students, staff and parents;
>
> 3) Experiential, self-guided learning–consisting of projects, cooperative work, field trips and independent study–is central;
>
> 4) Students are encouraged and supported in their questioning; their critical awareness of the world they will inherit (p. 290).

Ron Miller's books have a keen historical and critical contribution to make to the study of holistic education. *New Directions in Education* (1991) presents 33 articles addressing the philosophical and global-ecological perspectives of education, and a recontextualization of old problems, new goals, and practices for education. *What are Schools For?* (2001) roots American education from a cultural perspective and critiques American education using a holistic lens. Miller is a comprehensive historian and gives our current education a background woven together by five themes: a religious worldview that has Puritan theology; a fascination with the power of science and technology; a restrained democratic ideology that celebrates freedom and individualism within a defined boundary of social discipline; capitalism, an economic system that emphasizes competition, meritocracy, and self interest; and nationalism, the belief that the state is the sacred guardian of cultural ideals (p. 3).

Each idea represents a different goal of education, yet together they have created a consensus consciousness that dictates the quality of education offered. Education is seen as responsible for fulfilling these desires, and as Miller points out, in the process of fulfilling these desires has "suppressed the most vital, soulful, creative energies of human growth" (p. 3). His historical perspective has provided me with a powerful framework with which to view the holistic landscape over the last few centuries and against which to assess what is required to create an integral worldview in the twenty-first century.

Edward T. Clark, Jr. (1991, 1997) calls for a systemic restructuring of the established educational framework, which he states is vital to democracy. He criticizes the current educational thinking that is ill prepared for the universal changes taking place in the world. Clark places the student where s/he belongs–in the center of his/her education. He poses questions about the role the student plays in his/her own life, the community, society and the world. His work in integrated teaching includes the processes of learning: meaning making, understanding context, relationships, and connections within a learning community. Like other educators who are interested in creating an integral worldview, Clark's interpretation of the purpose of education is away from stockpiling facts and information and toward inquiry, personal understanding, and engagement. He echoes the concerns voiced by Laszlo, Sri Aurobindo, Goleman, and Friedman in Chapter 1, that our historical approach to education is insufficient to prepare young people for the fast changing, complex world of today.

Clark, through his own teaching/workshop knowledge, offers design and implementation strategies for an integrated curriculum with many specific examples

taken from his direct experience. This book supports teachers, administrators and students in learning about creating their own responses in an integrated, ecological curriculum. He also provides lessons in addressing questions worth arguing about that stimulate individual learner's engagement with the curriculum. Many interpretations of his curriculum ideas are being utilized in the schools visited during this research inquiry, and there is valuable material to interweave into a systemic, integral model of education.

Forbes (2003) undertook to "construct a coherent account of holistic education that would include as many of its various forms, initiates and ideas as is possible . . . both the thoughts and actions of holistic educators" (p. 3). He chose six men–Rousseau, Pestalozzi, Froebel, Jung, Maslow, and Rogers–to represent the historical lineage of holistic education, "as they are most cited by educators as being the originators (except for Jung)" (p. 5). Half of his volume details their lives and the specific addition each made to holistic education. Other contributors, like Steiner and Montessori, followed and built on their ideas. Forbes points to the ultimate state a human can aspire to–Ultimacy–and primary human values as the underpinnings of holistic education and the two kinds of knowledge, experiential and sagacious competence, which best develop the individual in meeting these goals.

One of the more useful distinctions Forbes makes is contained in the principal questions he uses that organize the ideas in an educational approach. Applied to holistic education, these questions serve to elucidate what makes it unique from others. The questions are:

> 1) What does an educational approach claim is the goal of education?
> 2) What does an educational approach claim needs to be learned in order to achieve its goal?
>
> 3) What does an educational approach claim facilities or causes the needed learning? (2003, p. 4)

Used as a framework for the remainder of the book, he reveals several themes that have also shown up in this research–learning how to learn (p. 218); being precedes doing (p. 225); self-knowledge as essential to world knowledge (pp.277-278); and societal renewal (p. 279) as primary goals for education. The participants in this dissertation's interviews spoke to some of these same themes as they described their learning experiences in their educational programs.

John P. Miller (2001, 2006) offers a two-pronged approach–context and practices–for nurturing holistic education. This structure is supportive as it provides the two elements needed to represent the holistic perspective. In the first volume, he presents a foundational look at holistic education, which includes balance, inclusion, and connection, followed by the philosophical, psychological, and the social contexts of a holistic curriculum. Miller's treatment of this contextual material, while not lengthy, is thorough. The second part of the work presents the application of the curriculum and is useful to understand how the concepts can come alive in a holistic program. He acknowledges the many connections on which holistic education focuses, i.e., mind-body (p. 107), self-subject (p. 122), community (p. 138), earth (p. 153) and self (p. 164). These connections, as well as his declaration, "The way we learn is as important as what we learn" (p. 155), are consistent with the discoveries in this research as well.

Miller's newest contribution (2006) reflects the evolution of consciousness in the integral education movement over the last five years. His theme for this work is "timeless learning," which he defines as having a quality of presence and connecting the intellect, emotions, body, and soul/sprit. He uses words such as *integrative, embodied, connected, soulful, transformative, flow, participatory, nondualistic, mysterious, unexplainable,* and *immeasurable* to create an experience of timelessness for his readers. Miller delineates many different types of concentration, meditation, and quieting exercises to support teachers and students to receive the benefits of the timeless experience. He specifies the research of Murphy, Donavan, Ornish, Walsh, Levete, Benn, and Miller, (as cited in Miller, 2006, pp. 142-143), as giving strong evidence for the relationship between meditation and physiological and psychological growth and well-being, and at times academic improvement. His explorations in this area support what has been revealed in this dissertation's inquiry as well.

A comprehensive literature review of *the Theory and Practice of Transformative Learning* by Edward W. Taylor (1998) was valuable to me as I began to draw parallels between the theories and practices of integral education and their correlation to transformative learning experiences in this research's participants. Taylor, in his interest in the process of making meaning from experience, reviewed and synthesized major contributions to transformative learning over the last 20 years, from researchers such as Mezirow, Boyd, Myers, Freire, Neuman, and Clark (as cited in Taylor, pp. 17-18).

He highlighted some of the disparities among the views held. Important outcomes of this review revealed the influences of 1) multiple ways of knowing and relating, 2) context, and 3) critical reflection on the transformative learning experiences. Taylor also accentuated one major element that prevents congruent understanding among researchers–their own frame of reference, which seems to narrow their perspective of how the individual (self) and the collective (sociocultural) are interpreted in the transformative learning experience. His key criticism is the lack of recognition of emotions and relational knowing in transformative learning theory, an assertion with which I agree and sought to validate through this research into integral education.

Peter Senge (2000, 2004) and his colleagues, well known in business circles for their integral approach to learning communities, have also gifted that expertise to education as well. Senge et al. (2000), in *Schools that Learn*, uses a systems perspective to introduce himself and reveals an integral educator speaking:

> There are three nested systems at play . . . all interdependent with one another and all with interwoven patterns of influence. These systems, the classroom, the school and the community–interact in ways ....that shape the priorities and needs of people at all levels....changes will make a difference only if they take place at all three levels" (p. 11).

Senge uses the South African tribe greeting–*Hello,* meaning "I see you"–as a metaphor for how these areas must "see" each other; they must recognize the existence of the other before any meaningful conversations can take place. His experience in a systems perspective is mirrored by most of the integral education programs researched in this study.

Senge (2000) as a professor of organizational learning and business consultant is well grounded in what it takes to be successful in the twenty-first century. He advocates

that a systems education is crucial to students learning 1) how to shape their own future and 2) confront and engage in our national and global unsolved problems. System modeling allows the students to formulate the structure and policies to attend to what is causing dysfunctional behaviors (pp. 236-237). Senge brings a depth of experience with systems thinking to his commitment to create schools that have the capacities to learn. He refers to learning as connections among a network of relationships rather than the assimilation of isolated, objectified, disconnected facts or data, i.e., "thing" acquisition (pp. 20-21). He contributes to the notion that learning is distinct from information gathering and processing. "Fields of knowledge do not exist separately from each other, nor do they exist separately from the people who study them. Knowledge and learning . . . are living systems made up of often-invisible networks and interrelationships" (p. 21).

Schools that Learn is filled with practices that enliven the experiences of learning in the classroom, the school and the community, with examples from numerous educators, parents, administrators and students. Creating a learning community around education is a vivid example of integral education in action.

Examples of Integrative Education Programs

There are numerous integrative educational programs and related research available to support this dissertation. The following represent a sampling of the integrative education programs that are providing useful study material for a more comprehensive, systemic, integrating educational model.

> Betty Shoemaker (1996) found that:
> Teaching facts and skills in a school day artificially compartmentalized into separate subjects fail to prepare students for a swiftly changing world. An integrative education involves the whole person, the learner's body, thoughts, feelings, senses, and intuition in learning experiences that unify knowledge. Integrative education immerses students in an enriched environment that reflects the complexities of life. This provides a holistic context for learning that leads to a greater ability to make and remember connections and to solve problems. (p. 1)

> Mary C. Dower (1990) developed a powerful program to better prepare young people for the world of today and tomorrow. She created a model called, Integrative Learning System, which incorporates five, interrelated bodies of research, each of which has stood on its own: accelerated learning methodologies, multiple intelligence theories, neuroscience of learning styles, global vs. linear thinking, and the integration of the arts into the learning process. (p. 38)

This system is another model of holistic education as it addresses the development of the mind, body, emotions and spirit and serves to create a balance among all four areas. Students' preferred learning style and intelligence expression are acknowledged and honored.

Dower (1990) brought more distinct meaning to intelligence by introducing Sternberg's triarchic theory of intelligence, i.e. the relationship between intelligence and our experience of our internal and external worlds. Intelligence to Sternberg is "the manner in which we order and make sense of events that take place around and within us,

and our mental self-management' (as cited in Dower, p. 44). This way of distinguishing intelligence supports this research. The four expressions of intelligence: the physical, emotional, mental and spiritual studied in this research are viewed through the internal and external experiences by the participants sharing the way they make sense of their world. Dower (1990) brought many examples of how teachers can support the multiple ways of students assimilating information and knowledge, i.e., multi sensory and in different types of styles. She revealed through educational interactions that intelligence can be developed and improved, which is a theme seen throughout this research and validated by other researchers (Gardner, Goleman, Diamond, & Feuerstein as cited in Dickinson, 1988) and Zohar (2001). Her research provided me with confirmation for what has been emerging in this current study of integral educational approaches.

An eight year study of 30 schools found that students who engaged in the integrative curricular design displayed more intellectual curiosity, a better attitude toward learning, and higher achievement in college than students in a traditional college-prep program (Kain, 1993). Another study of 15,000 eighth-graders showed that students from schools using an interdisciplinary approach scored higher on standardized tests than peers who were enrolled in single-discipline subjects (Lawton, 1994).

Barbara Clark (1986) has created an outstanding model of integrative education in Los Angeles, California. Her program integrates many different aspects of learning theory, from the sources from which she draws her philosophy and methodology, to their daily implementation. Her sources range from Plato and Socrates, to Froebel, Pestalozzi, Dewey, Montessori, and Piaget. Research findings from physics, psychology and the neurosciences have been interwoven with educational philosophy. Throughout this interactive educational system, the learners, who ever they may be, are involved through their thoughts, feelings, senses and intuitions.

Educators employing Clark's integrative education model are aware of the brain's biological design. "It is organized in a highly integrated manner. Most of its area is composed of associative tissue; it is organized–for high levels of synthesis" (Clark, 1988, p. 44). Reviewers of her educational model have repeatedly commented when they have compared participants in her programs to children who are not.

> Her students are more relaxed with themselves and others; they are more caring and respectful of each other and of the faculty; they are more creative, try more unusual solutions, and engage in more alternative and higher level cognitive activities; they initiate more learning activities and are more enthusiastic about their learning; they are more highly motivated toward learning; and they are more independent and responsible. (p. 44)

Related Research

There have been some recent dissertations that have been invaluable to my specific inquiry. Fan Yihong (2002), in her writing, *From Holistic Worldview to Holistic Education*, brings an exciting perspective to my own research through her work with educators. In relating her own journey she said,

> Salient themes and patterns evolved and unfolded into an interwoven web of *knowing, doing, being* and *becoming*. These illustrate the four most important dimensions of holistic educators: 1) The integrated *knowing* of the self, the subject, the students and the world; 2) The harmonious *doing* to create nurturing

> learning environments; 3) The genuine *being* to serve as authentic modeling; and 4) The ever-evolving *becoming* that seeks deeper meaning and larger purpose of life. (p. viii)

She has designed a model of the Integral educator inside concentric circles that conceptualizes visually all the dimensions: Learning to learn, learning to live, learning to be and learning to transcend (p. 181). This particular piece about the educator provided me a much-needed perspective, as I looked at systemic, integral education. It offered a background against which to compare all the worldviews and how each relates to these dimensions. This has informed the blueprint for a systemic, integral model being developed as well.

Yihong, like a number of other researchers, has supported my inquiry with the inclusion of the new sciences, i.e. systems theory, quantum physics, evolutionary biology etc., validating the interdependent nature of the universe, and the Eastern philosophies and cultural values. She chose many of the same scientists and educators as I did to represent and model holistic viewpoints. Coming from an Eastern worldview, she was able to contribute also to my perspective as a Westerner, to becoming more of an observer of my own culture.

Todd E. Jennings (1997) offered an extended meaning of integrative education in his dissertation, *Restructuring for Integrative Education: Multiple Perspectives, Multiple Contexts.*

> Integrative education is defined as education that promotes learning and teaching in non-fragmented ways that embrace notions of holism, complexity, and interconnection. Furthermore, integrative education embraces the links, rather than the divisions, between the academic disciplines (e.g., arts and sciences) and between various subjective and objective epistemologies and methods of inquiry. (p.1)

The result of his research is a book with chapters representing different theoretical perspectives of integral education. They include complexity theory, critical theory, social constructivism, phenomenology and Postmodernism, all which added depth to my inquiry and ultimate result.

Enoch Haga (1972) wrote extensively about integral education while he studied with Haridas Chaudhuri, a scholar in the field. In his dissertation, *An Introduction to Integral Education,* he provides an in-depth view of all aspects of integral education: the psychological, philosophical, spiritual, physical, sensory, scientific, sexual, etc. He is grounded in the theoretical background of integral education and the philosophy of its founder, Sri Aurobindo.

The dissertation of Scott Conti (2002) regarding *The Spiritual Life of Teachers,* written from a holistic perspective, provided me with knowledge of the practices of teachers in holistic educational environments and how their spirituality informed their pedagogy. His choice of programs included two that I had chosen to research, the Waldorf and Quaker approaches. His findings correlate with many of the findings of this research. Viewing education from a holistic vantage point accentuates 1) connectedness; 2) spiritual wisdom as a source of insight in pedagogy; 3) authenticity as a whole person

contributes to success in teaching; 4) grounding in individual holistic growth; and 5) teaching as a sacred calling.

Conti's research brings a deeper level of understanding of the teachers of holistic education and the vital part they play in bringing a sense of themselves and a high level of consciousness to the profession of teaching and the growth of the students. He also brought a sharper clarity to spirituality and how it might be naturally incorporated into a secular curriculum. In his interviews with Rachael Kessler (2000), another contributor to this research via her work with the rites of passage of young people, Conti echoed her challenge to educators to redefine spiritual outside of a religious context. This is a goal of many of the schools I researched–to provide experiences that nourish the soul and spirit of the human being and the deep connection that exists in the world, without it having to be attached to a particular world religious view.

New Scientific Understanding

There is much new scientific understanding over the last decade that points to the efficacy of integral education. Each time anyone can provide evidence for the integrative nature of the body with itself and the body's connection with all other aspects of learning, i.e., the mind, emotions, brain, spirit, etc., it opens up more opportunities to design our education from the very beginning with the holistic nature of humans deeply in mind. What follows is a sampling of the research being done in the brain-mind-body system over the last 15 years.

In the sciences of the mind, brain, and body interconnectivity (for example in neurobiology, neurophysiology, anatomy, and psychology) many researchers have given new proofs for the way the brain, body, feelings, and thoughts interact throughout the educational process. Among these researchers are Drs. Diamond, Bogen, Sperry, Feuerstein, MacLean, Perkins, Gardner, and Sternberg (as cited in Dickinson, 1988). Their findings provide further grounding for my dissertation's premise–purposely integrating the intelligences can make a substantive change in the way a young person thinks, behaves, and develops as a human being. More specific application of these research discoveries to this dissertation's findings can be found in Chapters 6, 7, and 8.

Judith A. O'Brien's (1991) research, *A Systems View of the Mind*, provides evidence of the dismantling of the mechanistic worldview in education. She claims that what is needed is a robust, new view of reality that is holistic and systemic in nature. Her inquiry brings a critical assessment of the information-processing model of thought, since that limited formulation does not accurately reflect all dimensions of thinking. Her chapter on a systems view of the mind discusses how the sciences are influencing our current worldview. The implications are enormous when applied to education.

O'Brien echoes the paradigm shift of the late twentieth century and borrows from quantum physics (the observer and the observed, interrelatedness, and dynamic patterns); biological systems theory (dissipative structures [open and closed systems] and autopoiesis); and the neurosciences (the triune brain, hemispheritcity, brainwaves, and brain plasticity). Her work gives rise to a new definition of thinking that is much more holistic and integrative. Her findings support this research by stressing what has been missing in education–the diversity of learning styles. Education is still too oriented around information processing rather than relevant learning. Her criticisms of modern education the factoring out of -1) the affective contributions to thought, 2) the context

which surrounds a thought and 3) the role consciousness plays in thinking–have been acknowledged and echoed by Senge et al., 2004; Havel, 1992; Goleman, 1995; and Laszlo, 2002. Her findings are further corroborated in Chapter 8.

There is much to be excited about as I see what many people are exploring throughout many diverse areas of education and locations in the world. The more I read and talk with students, educators, parents, community members, and business people, the clearer I become about the importance of integral education to our future world. The integral qualities of education are not well developed on a large, systemic level as yet. It is my intention through this dissertation to contribute to a transformation in education such that integrating our mental, emotional, physical, and spiritual intelligences throughout the first nineteen years of life is as fundamental to and accepted in our educational foundation as is "reading, writing and arithmetic."

Learning will always be an adventure for which
education should supply the indispensable travel kit
Edgar Morin, 2001, p. 27

Chapter 3: Research Methodology

This chapter situates the research question within a framework that guides the methodology. Included are the philosophical foundation, methodological description, program and participant selection, pilot study, an explanation of the data collection, analysis processes, the presentation of the findings, and standards for assessing the quality and validity of the research. The question this dissertation addresses is: What learning experiences help shape the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral education programs? This inquiry includes an exploration of the learning experiences, relationships, environments, influences, practices, and pedagogical approaches that have provided an integral education to nine participants of these programs.

The intention of this research is to combine methods that fall under the qualitative methodology umbrella. The integral and constructivist contexts also have informed the quality of research, e.g., the framing of the interactions with participants, the interview questions, etc., as each has contributed a quality that allows this study to truly represent an integral educational approach. Within these paradigmatic frameworks, the narrative research and analysis has been utilized, since this approach provides such rich data with which to engage. By the purposeful combining of the various approaches, this inquiry sought coherent themes among the life stories of the participants, their parents and educators. The observations of the nine integral educational programs plus the theoretical and philosophic contributions of these approaches has provided the contextual framework for this research.

Situating the Question in a Research Paradigm

Philosophical Framework

The philosophical underpinnings of the dissertation design include the paradigm or worldview in which the research and researcher is situated. "A paradigm is an overarching framework which organizes our whole approach to being in the world" (Heron & Reason, 1997, p. 1). Research and researchers combine beliefs about ontology; (the nature of being; the nature of reality) epistemology; (the theory of the nature, sources and limits of knowledge; how we know what we know) and methodology (how we know the world or gain knowledge of it) [Denzin & Lincoln, 2000].

In addition, the axiological domain, representing what people value, is important to incorporate in this research design (Heron & Reason, 1997), as is relational context: how we relate to one another (Eisler, 2002; Montuori & Conti, 1993). We view the world through these interpretative networks that are influenced by our particular ontology, epistemology, axiology, and relational contexts. The question of how an integral education can impact a philosophical framework is a significant theme of this dissertation. In order to transform education, it is essential to reveal what gives rise to our

philosophical frameworks. This dissertation explores how a systemic, integral education influences these interpretative networks. (See Chapter 7)

"Qualitative research uses multiple methods that are interactive and humanistic" (Creswell, 2002, p. 181). Such an approach is ideal for this study, as its intent is multilayered and tasked, "as a field of inquiry it crosscuts disciplines, fields and subject matters" (Denzin & Lincoln, 2000, p. 2). This research question requires employing different lenses to view different expressions of our intelligence. These lenses include the mental (the cognitive and intellectual); the physical (the somatic, physiological and energetic); the emotional (the feelings, self-expression and balanced sense of self); and the spiritual (the experience of connectedness with all life, with one's own spirit and the spirit of life, nature, or God), which are all crucial areas of exploration in this integral inquiry. The ways in which the domains relate to transformative learning, the evolution of consciousness and the development of an identity are also addressed. Students, parents, and educators from various cultures supply various points of view. The following section reviews the multiple approaches that have been employed in this dissertation that shed light on these contexts and assure an integral approach to this research.

Research Methods Selection

The contexts and methodologies utilized in this research represent a systemic and holistic approach to the dissertation query. The qualitative, integral, and constructivist paradigms, and the narrative inquiry and analysis are interrelated. The purpose of their relationship in this dissertation is to provide a depth of understanding of young adults and the meaning they give to their emotional, physical, mental, and spiritual intelligences from their integral educational experiences. Including their parents and educators brings additional essential perspectives, which contribute to an integrated, multidisciplinary, multigenerational, and interdependent whole. The intent of this dissertation is to stimulate a reorientation of thought and worldview; thus the methodological paradigms and practices seek to provide a research environment in which a reorientation of thought and worldview can show up and take root (Banathy, 1991, 1996).

The qualitative paradigm provides an overarching context for the employment of two complementary and essential lenses for this research, the integral and constructivistic, which are well reflected in the narrative methodology. Their multiple expressions of reality and meaning making emerged as a contribution to a systemic, integral model of education. This way of combining these frameworks opened up an understanding of the meaning making process and its role in explaining human experiences (Polkinghorne, 1988). What follows is a more detailed look at each aspect of the system so the reader may better comprehend the role each plays in the research methodology.

Qualitative Paradigm

This section highlights the qualitative approach to research that fundamentally informs this dissertation. Valerie Janesick (2000) admires the qualitative approach for its

> passion for people, passion for communication, and passion for understanding people. What it means to be alive, our lived experiences and stories are captured and appreciated. The individual is the backbone

> of the study. The qualitative researcher is like the dancer or choreographer, in seeking to describe, explain, and make understandable the familiar in a contextual, personal and passionate way. (pp. 394-395)

The reach of qualitative research is broad, extending to include the liberation of "the human body, mind and spirit in the search for a better, freer world" (Reason & Bradbury, 2001, p. 2). This research style is designed "to view social phenomena holistically–the more complex and encompassing the narrative, the better the qualitative study" (Creswell, 2002, p. 182). All of these attributes are valuable in the search for the kind of systemic education that will span the formative years of a young person's life (from conception to graduation from school) and integrate their spiritual, mental, physical, and emotional intelligences.

John W. Creswell (2002) highlights some valuable aspects of qualitative inquiry. "Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible; these practices transform the world" (p. 3). Implicit in this definition is an important key to this dissertation, because it is the aim of this research to make visible the practices of a systemic, integral education and the people engaged in those practices and to contribute to the transformation of education in the process.

Qualitative research is also about the meaning people make of their natural lives, the way they experience and exist in the world. Yvonna Lincoln and Egon Guba contribute these thoughts:

> Within this kind of inquiry, empirical materials represent the world through personal experiences, life stores, narratives, interviews, conversations, artifacts, case studies, etc. Each of these representations shed light on different aspects of a person's experience. Because there are as many perceptions as there are people, qualitative approaches attempt to understand not one, but multiple realities. (as cited in Creswell, 2003, p. 199)

Qualitative research puts the research subject at the center of the research efforts as a major player as opposed to an object of observation (Denzin & Lincoln, 2000). This wide range of "interconnected interpretive practices" (pp. 4-5) is what makes utilizing qualitative research so appealing.

One of the more compelling characteristics of qualitative research is its capacity for generating new theory (Merriam et al., 2002). The intent of studying existing integral educational programs, by listening to and gathering the knowledge and wisdom from the narratives of young people, their parents and educators, is to contribute what is discovered to a new emerging model of education that is systemic and integral.

Integral Paradigm

To serve this research question best, integral inquiry, as William Braud and Rosemarie Anderson (1998) define it in their writing, "provides both a comprehensive overview of psychological research methods and a means to apply and blend these methods to a particular research topic" (p. 29). The value of the integral paradigm in this study lies in the usage and balance of a variety of lenses through which to view the

subject matter. The integral paradigm "seeks to learn how people can become more whole through integrating the somatic, emotional, intellectual, spiritual, creative-expressive, and relationship and community aspects of their lives" (Braud, 1998, p. 37).

Braud, in distinguishing the integral approach, points to its contribution to "complementary ways of knowing, being and expression" (p. 35); it favors "inclusivity, integration, and discerning discrimination" (p. 67). Life experiences have richness, breadth, depth, and intensity. A plurality of approaches allows us to access the extent of what is available. Human experience is multileveled and complex, and thus the way research is carried out must be correspondingly multifaceted and pluralistic.

In exploring the integral paradigm more deeply, it also invites the researcher's participation in the integral experience–"a bold step: knowing through becoming–to know what is being studied as *subject* rather than object" (p. 51). As part of the natural engagement in this inquiry, I have been engaged in my own personal research question, "What supports the development of the spiritual, emotional, physical, and mental intelligences in my life?"

Bringing an integral lens to the construction of our world is consistent with the purpose and outcomes for this research as they are multiple. Contributing new insights about the themes and patterns in learning experiences that help support the development of integral behaviors and competencies, understanding the world of integral education through wonder and curiosity and delighting in the various programs and participants through discovery are parallel motivations inside the integral inquiry. This dissertation focuses a high degree of energy, intentionality, and attention on the benefits of integral education, which will in turn increase the likelihood of its prevalence in our society through the participants and the readers of this research (Braud, 1998).

Constructivistic Paradigm

Constructivism honors the human world through the cultural and linguistic constructs that make up human perception. Our particular perceptions and experiences of the world are very real to us. "The constructivist studies multiple realities constructed by people and the implications of those constructions for their lives and interactions with others" (Patton, 2002, p. 96). According to Lincoln and Guba,

> Constructivism adopts a relativist ontology, (relativism) a transactional epistemology and a hermeneutic, dialectical methodology. Users of this paradigm are oriented to the production of reconstructed understandings of the social world . . . constructivists value transactional knowledge . . . constructivism connects action to praxis. (as cited in Denzin and Lincoln, 2000, p. 158)

A constructivist lens is employed in this research because the experiences and interpretations of high school seniors, their parents, and educators are pivotal to its discovery aims. How the emotional, physical, spiritual, and mental intelligences are translated within each of the chosen programs and subsequently understood by the research participants is vital to the purpose of this study. The way students, their parents, and educators view the education of these intelligences offers a richly textured composite from which to view the integral phenomenon.

Michael Crotty adds, "Social constructivism also provides some insights as it emphasizes the hold our culture has on us: it shapes the way in which we see things (even in the way in which we feel things)" (as cited in Patton, 2002, p. 97). This approach is useful in assessing the value of existing integral education models, particularly in how they relate to the way cultural influences can mold individuals within their reach.

Methodological Description

The methodological approach used in this research draws its framework from the qualitative and integral paradigm and reflects its integral nature as it utilizes various accesses to the research question. There are "pragmatic knowledge claims, both emerging and predetermined approaches and qualitative data and analysis" (Creswell, 2003, p. 19). The narratives of the participants and their parents, conversations with integral educators and observations of and engagement with their programs and curricula, all represent the multiple lenses used to view this study. For the outcome of this research to be faithful to the whole of what is being studied, the blending of the different views forms a more complete picture (Braud & Anderson, 1998). "They are all necessary to a complete understanding of the whole" (pp. 42-43). The aim of the qualitative, integral approach "is to be as whole and inclusive as possible" (p. 58). The integration of these various methods will be apparent in the outcome of the research–a contribution to the development of a systemic, integral educational model that spans the years from conception to graduation.

Narrative Methodology

Many research scholars write about the narrative as a powerful way to access the personal, richly textured lives of human beings (Merriam et al., 2002; Denzin & Lincoln, 2000; Patton, 2002; & Creswell, 2003). "Narrative is both a mode of reasoning and a mode of representation" (Richardson, 1990, p. 119). It provides a wide scope of the human experience and an "especially translucent window into cultural and social meaning" (Patton, 2002, 116).

Dorothy Ettling (1998) creates a memorable image of the narrative when she acknowledges, "The narrative itself holds the wisdom and contextualizes it in a way that elicits a rich and unique tapestry, a virtual gold mine for research" (p. 177). Narratives make sense of experience, demonstrate the constructing and communicating of meaning and reveal many different aspects of our conversational lives. They can reveal how a culture shapes understanding, how developmental change affects personal identity and how language structures the meaning of experience (Merriam et al., 2002; Polkinghorne, 1988).

As an approach to research, the narrative "reveals these patterns through the lens of individual experience" (Patton, 2002, p.115). The story is analyzed for connections amongst the psychological, cultural, sociological, and the other dimensions of human experience. For the purposes of this research, the emotional, physical, spiritual, and mental intelligences are highlighted for developmental and connective links. The narrative includes the facts and the interpretations of those facts from a particular point of view. What the speaking reveals about the person and their world is a key concern for the narrative analyst (Patton, 2002). This approach encouraged me to be flexible in the way I related to the participants, their parents, educators, and the data collection process

itself. The quality of the interview reflections and responses was vital to the emergence of the stories and as such an equivalent quality of listening and openness to exploration was required. The interviews, the interviewees, the data collection and I were all "in a dance" with each other. Paying close attention to this was crucial in this research, since the essence of an integral education was unfolding through the process.

Polkinghorne (1988) contributes a way of thinking about narrative that has been particularly useful in this research. He states that the end in mind is an "understandable composite," i.e., for my purposes, characteristics that reflect an integral education. The narrative is the "fundamental scheme for linking individual human actions and events into interrelated aspects of an understandable composite" (p. 13). The intent to help create a systemic, integral education has been greatly served by the narrative as it links actions and events and "displays the significance that events have for one another" (p. 13). The aim of this inquiry is to gain insights into the processes individuals use to make meaning of their integral education and the events, learning experiences, relationships and influences that supported the development of their emotional, physical, spiritual and mental intelligences. I believe, like Ettling (1998) "that the life stories lead the way to new knowledge and to new policy" (p. 179); this research aims to go beyond interpreting to changing the world (Denzin & Lincoln, 2000). I was much impressed with the organic research methodology for which Ettling is so well known, yet I felt the emphasis on the researcher's own personal experience and voice, the realms of the unconscious, the feminist focus and the depth of involvement of the research participants were not fully consistent with the intent of this study. The focal point of this query is the experiences of the young people particularly, and their parents and educators. Certainly some aspects of organic research have been widely borrowed, e.g., the intention to transform all those connected with this inquiry, the heuristic methods and the telling and listening to stories. I speculate that using an organic approach in a future iteration of this theme would no doubt yield a deeper insight into my own integral experiences in the dissertation process.

Process Outline

The research methodology process began with the identification of experts in holistic and integral approaches to education that could provide entrees into possible programs to explore. Schools were located and nine were chosen that fit the criteria of having classes from preschool to twelfth grade with a specific focus on developing the physical, emotional and spiritual intelligences along with the mental. Once the schools accepted the invitation to take part, one student from each program was selected as a representative of that school's educational approach and philosophy. Schools were visited within a six-month timeframe and data was gathered during a one-time, two- to three-day stay at each location.

Parents and students were interviewed either at the school or at their home, and educators and students were observed and consulted in classrooms and on the school campus. Interview questions were designed with the collaboration of my peer reviewer and professors supporting the proposal writing phase of this dissertation. The questions were tested in a pilot study, which is presented later in this chapter. During the interview, the researcher inquired into the emotional, spiritual, mental and physical domains and asked participants to look over their lives and recall how they were educated, what their learning had been in each of these areas and how they experienced the expression of each

of these intelligences in their lives. The specific interview questions can be found in Appendix C. The interviews were transcribed and analyzed for data highlighting the learning experiences that the high school seniors and their parents acknowledged were supportive in the development of the emotional, physical, spiritual and mental intelligences and other related themes. A sample of the data analysis is located in Appendix D.

Selection of School Programs

I sought out experts in education through integral networks and websites, conference attendance and reading in the subject area. I also utilized the expertise of one of my dissertation committee members, Ron Miller (1991), who as an historian of holistic education and author of numerous holistic educational books was very helpful in contacting a number of possible candidates. Being a student of the California Institute of Integral Studies furnished me with other avenues to pursue, e.g., schools in India employing integral approaches to education, as well as other educators in my own network. The programs that were selected for this study were acknowledged to be integral because they offered classes and programs to develop the spiritual, physical, emotional, and mental intelligences from preschool through high school graduation and had published materials, articles, books, brochures, websites, etc., stating that their approach was integral in nature. A number of schools, The Neo-Humanistic and The Robert Muller World Core Curriculum, to name two, were visited, yet were not incorporated in this research as their programs extended only from preschool to middle school at the time of this study.

Selection of Participants

Participants in this study were high school seniors who were within months of graduating from a holistic/integral educational program. These students had engaged in specific integral educational approaches that included classes, programs and experiences focused on the maturation of the physical, emotional, spiritual and mental intelligences. A letter describing the goals and parameters of this research, which included the research abstract, was sent to candidate schools. (This can be located in Appendix B). Research participants were selected by a consensus between the school's director and designated representatives of the educational institutions. These were teachers that had played a leadership role in the high school programs, e.g., developing integral curricula, teaching, counseling and who were very familiar with the students and their parents in the senior class. Each student interviewee had participated in their school's program for the majority of their educational career. Sampling was purposeful as students were selected to participate in the research because they were seen as representatives of their particular school by the school's principal or director, and senior class teachers considered to be appropriate to make those recommendations.

This sampling offered rich information about the phenomenon of interest and gave me ample data about what factors contribute to young people leaving their formal education having developed the emotional, mental, spiritual and physical intelligences (Patton, 2002), as these students had engaged in specific integral educational approaches that included classes, programs and experiences in these areas.

Nine representatives were chosen, five young women and four young men, from the following integral educational programs.

1) Sri Atmananda Memorial School (Sri K.P. Menon) in Kerala, India
2) Oakgrove School, (Krishnamurti) in Ojai, California
3) School of the Woods, (Maria Montessori) in Houston Texas
4) Moorestown Quaker School, (George Fox) in Moorestown, New Jersey
5) Auroville Schools (Sri Aurobindo) in Auroville, India
6) International Centre of Education (Sri Aurobindo) in Pondicherry, India
7) CMS (Jagdish and Bharti Gandhi, Baha'i/M.Gandhi) in Lucknow, India
8) Waldorf School, (Rudolf Steiner) in San Francisco, California
9) The Living Wisdom School, (Sri Yogananda) in Nevada City, California

The students and their parents reflect a diverse population. Religious affiliations include Judaism, Hinduism, Baha'i, and Christianity, e.g., Quaker, Catholic, Baptist, Protestant, as well as shared spiritual practices with communities created by sages from India, e.g., Sri Aurobindo, Sri Atmananda, Yogananda, and Krishnamurti. Some students and their parents engaged in spiritual practices of an eclectic nature or did not have a specific relationship with any religion or spiritual practice at the time of the research. Participants were American, American /European/Russian/Polish, German, Scottish/Chinese, Swedish/American, Latin American/American, and Indian (Telegu, Malayalee and Northern Brahmin). This research intended to have many diverse voices representing integral education and I sought respondents with wide-ranging perspectives.

Pilot Study

A pilot study was undertaken with one male and one female, both seniors within months of high school graduation, and their parents. Although the parents had been friends of mine for over 30 years, the families had lived a distance away and I had not spent much time with them during their child's upbringing. These parents were chosen because of their own awareness of and commitment to an integral approach to life, (developing the spiritual, emotional, physical and mental intelligences) their comprehensive child rearing philosophies, and their interest and willingness to contribute to the forthcoming research concerning integral education. One set of parents was a doctor and nurse who have spent years engaged in transformative practices in health and education and the other parents were educators and philanthropists committed to the efficacy of the community, cooperative living, conscious relationships, and global involvement.

The purpose of the pilot was primarily to work with the delivery of the interview questions to determine what was required to elicit the quantity and quality of data needed to respond powerfully to the research question. The quality of the relationship between interviewer and interviewee, the quality of listening to the interviewee, the questions and the manner in which they were posed, and the logistics and timing of the interview process were all evaluated.

As a result of the four pilot interviews, one with each student and one separately with each set of parents, I was able to experience the way the introduction to the interview could create trust and a level of intimacy that supported the gathering of quality data. Having full attention on the interviewee and not on the logistics, taping devices, or

the questions, allowed for a high level of personal connection and ease in the interactions. A practice of setting up all the equipment ahead of time, to see where people would sit, if the microphone/camera really would pick up the interviewee's body and voice properly, using equipment that is *not* voice activated, and carefully reading the duration of a tape, are simple, yet not always obvious critical measures to take. Having the correct number of interview consent forms and someone nearby to be a witness are particulars that can cause major upsets if overlooked. Finding out from each interview source what the rules are for them with regard to being interviewed is essential, e.g., some people do not want to be on camera, and some are unwilling to disclose where they are from.

The pilot provided an opportunity for me to be aware of my thoughts and expectations of the interviews and to become an observer of them. When conscious and acknowledged, thoughts and expectations can be "suspended" so that the interview can take place in an environment as attentive to the interviewee and his or her experience as possible. Also, these prior sessions allowed me to exercise my "listening muscles," to "tone" my ability to distinguish between theoretical/ conceptual and experiential speaking, and to learn appropriate guiding signals to move people back to the questions if they digressed. After the practice sessions, I was able to be comfortable with silence, which allowed the interviewee some thoughtful, reflective time in which to answer.

On the other side of respecting the person's reflection, some interviewees require prompting, e.g., a personal example, and it is essential to be aware, particularly talking with high school seniors, that they may not have thought about an area before or they may not know what to say. From the initial pilots, I became more sensitive to when to give personal examples and be more relational and conversational than intent on receiving an answer. Questions were asked in a number of different ways to give each person an opportunity to relate to the question in their unique fashion.

Given a desire to examine certain data that is representative of a category, it is useful to ask questions pertaining to that category one right after the other, as it consolidates the data and makes it more easily accessible for analysis. It is supportive when interviewing a number people to keep the sequencing of the questions the same throughout, as it makes comparing the data much simpler.

The content that surfaced in the pilot studies was valuable in further crafting the research interview questions using current child rearing experiences. It gave me many dynamic examples of both the male and female points of view about families and education within months of the beginning phase of research gathering. An immense amount was learned about how a child might be raised in an environment that is conducive to the development and integration of the mental, physical, spiritual, and emotional intelligences. My pilot participants learned to appreciate and acknowledge the importance of these four domains in the development of a human being. Each interviewee commented that they had learned something about these intelligences that had not occurred to them before.

A powerful outcome of these pilot interviews was the personal experience of gratitude by the parents. The parents felt tremendous gratitude, both for their child and the way s/he turned out, and also for the teachers who had loved their child and had given so much to him/her over the years. I, too, as the researcher, was left with a deep sense of gratitude for these parents and their children. The parents deserved acknowledgment for the great job they had done in raising such responsible, insightful, and loving children,

e.g., integral, whole, connected, and their children merit praise for the young adults they had become.

One surprising result of the pilot interviews was that both the young people and their parents felt strongly that the interview process had provided an essential completion process as they entered a new phase of their lives. Nearly all of them agreed that the interview had given them the opportunity to acknowledge and reflect on the most meaningful times of their lives, which in turn allowed them to open up to a new future. The interview was a rite of passage–one that I would recommend for every senior and their parents.

Data Collection

The data collection for this project included five different yet related sources; 1) interviews with nine seniors near graduation from high school, 2) interviews with their parents, 3) observations of integral educational programs, 4) conversations with the program's educators representing different academic perspectives, and 5) curriculum documents from each school. Participants were videotaped in interviews that lasted for one and one-half to two hours in a location of their choice. One set of parents and their young adult were audio taped, which honored their wishes. All interviews were conducted either in the school or the home of the participants in rooms that were quiet and secluded. The choice to tape the sessions allowed visual contact between the researcher and the participants throughout the session. Recording devices were placed in such a way that participants had little or no attention on the machine throughout the interview. The video recorder was placed behind the interviewer and just above her head so the interviewee could look at the interviewer and engage in a continuous conversation. The audiotape was placed on a table between the interviewer and interviewee(s) so each voice could be easily picked up and eye contact was maintained throughout the interview. Most people interviewed commented that they were surprised that they forgot they were being recorded. This was an indication that they felt the environment was safe for them to express themselves.

The interview, because of its criticality to the research, required a great deal of presence, sensitivity, and a demonstration by me of my intent to listen with interest and compassion and a commitment to fully embrace what was being offered. Comments by interviewees such as, "I can not believe I told you all of that," or "I have told you things I have never told any one else," gave evidence that the participants did experience being listened to with interest and an intention to deeply understand them.

Because the purpose of this research has been to understand the life experiences of young people who have illustrated an initial embodiment of the spiritual, mental, physical, and emotional intelligences, as well as their parents, the interview was a solid method of data collection, as participant's own personal accounts were encouraged. The open-ended questions were posed to "elicit views and opinions from the participants" (Creswell, 2003, p.188).

The interviews were in-depth and semi-structured. The minimal structure was represented by the four specific intelligences being studied: the emotional, spiritual, mental and physical and the timeframe from conception to school graduation. To be clear, for the graduates and their parents, this encompassed what they had experienced and what they could remember about their life experiences, events, relationships, and the

learning that took place in each of the four domains during that time frame. This was obviously different for both the young person and their parents. This design assured a space for new, emergent information and an ability to adapt to what was unfolding. This has been a discovery-oriented approach (Patton, 2002).

The data was collected purposefully to support the research intent. "The logic and power of purposeful sampling derive[d] from the emphasis on in-depth understanding" (Patton, 2002, p. 46). In this case, the data was collected to give a level of insight around how these intelligences were developed in the nine young people over time, what meaning was made about them in the process, how they have been expressed and what kinds of behaviors and competencies are evident in a person who has engaged in an integral educational process.

Data was also collected throughout the timeframe of the interview process through, 1) observations of the interviewee's educational institution, 2) conversations with integral educators, 3) reading about these specific integral educational methodologies and their curriculum documents. Detailed field notes were taken throughout the program observations and conversations with educators. These notes included the context of what was observed, specific examples, generic comments of what was being said in the classes, and descriptive statements of what was observed (including the setting of each observation, the researcher's feelings, reactions and reflections of what was discerned) [Patton, 2002]. What these educators agree is essential to their programs is included in the data collected for this study and integrated with the narratives supplied by the participants and their parents. Elements such as educational context, philosophy, content, practices, and results supplied a backdrop with which to listen to the life experiences of the research participants. These methods of data collection offered ample access to the different qualities of integral education.

Narrative Analysis

Because of the dynamic tone of this research, analysis began with the first interactions in the study and continued throughout the process, allowing the researcher "to make adjustments along the way, even to the point of redirecting data collection, and to test emerging concept, themes, and categories against subsequent data" (Merriam et al., 2002, p. 14). I stayed open to changes consistent with what emerged from the different sources. As new insights, knowledge, and wisdom were revealed, the analysis process was crafted to include them. The collection of data was impacted by the initial phases of analysis. I discovered two additional contributions to integral education. Yogananda's Living Wisdom Schools and George Fox's Quaker Friends Schools provided important distinctions in integral education. Also, it was revealed during this time that two of the initial choices to represent integral education were not appropriate for the research protocol because their programs did not yet include a high school curriculum, and other potential schools turned out to be too difficult to visit either because of distance (one was in Australia, and there were language barriers in certain states of India).

Data analysis led to the discovery of recurrent patterns and themes, their strengths and interdependencies, and how they manifested in different students, their parents, educators, and the integral educational environments. The similarities and differences in the education, practices, experiences, and their embodiment and application by the

participants, their parents, and educators were also examined. Chapter 4 addresses these in greater detail. Data was scrutinized from distinct vantage points.

The transcripts of the recorded sessions were reviewed while listening to or viewing the audio/video tapes to assure their completeness and accuracy. Each interview transcript was sent to the parents and student separately. They were asked to go over the transcript and either validate what they said as accurate or make changes and send the transcript back to me. Every student and set of parents save one sent them back with either an indication that what was in the transcript did represent what they wanted to say or they provided minor changes. The one set of parents who did not send theirs back, did indicate verbally on the phone that they approved the transcript as it was. The narratives of the participants and their parents supplied extensive examples of the patterns and themes for further study and corroboration.

"Finding categories and the relationship and patterns between and among categories leads to completeness in the narrative" (Denzin & Lincoln as cited in Janesick, 2000, p. 390). Norman Denzin (as cited in Janesick, 2000) offers steps that support the data analysis process. They have been utilized in this portion of the research.

> 1) Locate within the personal experiences, and self-story, key phrases and statements that speak directly to the phenomenon in question. 2) Interpret the meanings of these phases as an informed reader. 3) Obtain the participants' interpretation of these findings, if possible. 4) Inspect these meanings for what they reveal about the essential, recurring features of the phenomenon being studied. 5) Offer a tentative statement or definition of the phenomenon in terms of the essential recurring features identified in Step 4. (p. 390)

Amia Lieblich, Rivka Tuval-Mashiach, and Tamar Zilber (1998) in their book, *Narrative Research*, distinguish classifications and organizations of types of narrative analysis in a new model that provides greater possibilities in the examination of this research data. There are *categories* and *content,* both of which are crucial to this dissertation question. The emotional, spiritual, physical, and mental intelligences, etc., as well as emerging themes that showed up in the process of data analysis, such as, 1) being known, listened to and related to with respect as a human being from a very early age, 2) the profound influences of parents, families, friends, teachers and pedagogy on the development of integral intelligences, and 3) the importance of the environment in which these intelligences are developed and integrated, are some examples of the *categories* being utilized in the data analysis. *Content* was captured in response to specific questions in the interview, e.g., the four major categories were purposely called out in the interview and participants were asked to comment on them–the emotional, spiritual, physical, and mental intelligences. Emergent themes consistently repeated themselves throughout a number of the interviews and were deemed valuable to include. The parents, educators, and education milieu provided rich data to help draw a more complete picture of the integral nature of the educational experience and are essential aspects of the *categories* and their accompanying *content.*

In addition, incorporated in the data analysis is the *category* of the integral educational program. Each program is distinguished using the school visits, classroom observations, curriculum study, and conversations with the educators. Their similarities

and differences are revealed. For the purposes of responding fully to the dissertation question, "What learning experiences help shape the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral education programs?" each program was examined for the unique contributions it is making to the development of these specific domains of intelligence. The account of the schools is in Chapter 4 of this research. Researchers analyzing the narrative have a number of possible strategies to use. The psychological and biographical analyses are natural to the narrative, particularly in exploring this research question. "The psychological focuses on the internal thoughts and motivations, the biographical takes into account family and societal influences" (Merriam, et. al, 2002, p. 9).

In addition, there is a third type, the integral *category,* which is not as well known, yet is an essential analytical addition to this research. An integral inquiry "seeks to learn how people can become more whole through integrating the somatic, emotional, intellectual, spiritual, creative-expressive, and relationship and community aspects of their lives" (Braud & Anderson, 1998, p. 37). Lieblich, Tuval-Mashiach and Zilber (1998) also present the integral for analyzing data, which they call the "holistic approach." It focuses on a person as a whole–his or her development to their current position. Because of the nature of this inquiry, that of the integral expressions, behaviors, and competencies, this way of viewing the data presents an indispensable resource. A composite picture, e.g., Polkinghorne's (1988) "understandable composite," of an integrally educated student taken from the data from the nine interviewed seniors, their parents and the integral educators represent this holistic approach.

Presentation of Findings

The findings from the research contribute to a body of knowledge regarding integral education. Included in the presentation:

1. A portrait of a young person educated in a systemic, integral educational setting–an integrally educated student based on a composite of the nine programs studied. (Chapters 8 and 9)

2. A clear description of the patterns and themes found in the qualitative narratives of participants, particularly in the domains of intelligences–emotional, spiritual, physical, and mental. (Chapters 6 and 7)

3. A portrayal of the integral educational programs derived from the conversations with the educators, observations of their programs, the reading of their curricula and philosophical foundations. (Chapter 4)

4. A model of a systemic, integral education program. (Chapter 9)

Validity

Qualitative research "consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations" (Denzin & Lincoln, 2000, p. 3), the interpretations of which help us make sense of our world. The validity of these interpretations and practices is very

important, because people want to trust research findings and to extrapolate and apply them to their own lives. The validity of a constructivist, interpretive inquiry is represented by terms such as *trustworthiness* and *authenticity* (Denzin & Lincoln, 2000). "Credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) are viewed in combination as trustworthiness (rigor)" (Patton, 2002, p. 546). Uwe Flick (1998) calls qualitative research "inherently multi-method in focus. Multiple methodological practices, empirical materials, perspectives and observers . . . are best understood as qualitative strategies that add rigor, breadth, complexity, richness and depth to any inquiry" (p. 229). Validity in this research is accomplished through multiple methods (Denzin & Lincoln, 2000).

Crystallization, offered by Laurel Richardson (2000), is a validity lens fitting for the integral worldview advocated in this dissertation. Crystallization "recognizes the many facets of any given approach to the social world as a fact of life. [It] provides us with a deepened, complex understanding of the topic" (p. 934) . . . . Crystals, like the research participants, "grow, change, alter, but are not amorphous . . . [they] are prisms that reflect externalities and refract within themselves creating different colors, patterns, and arrays casting off in different directions" (p. 934). The multidimensionality of our current physics (where light, for example, can be both waves and particles) replaces the plane geometric approach of triangulation, a valid yet limiting validity marker for this research. "We recognize that there are far more than 'three sides' from which to approach the world" (p. 934).

The facets of this research include multiple sources of data, e.g., the high school seniors, their parents and educators, program and curriculum documents, campus events, and the researcher's field observations. Also, many theoretical contributions, from scholars, researchers, philosophers, and educators in the four intelligence domains, have been juxtaposed with the interviewees' responses to increase the number of angles with which to view the research data. In addition, 1) member checks; interviews verified by interviewees, program descriptions validated by educators from the schools, 2) peer review; using colleagues for discussing interpretations, process and congruency in emergent findings, and 3) reflexivity; critical self-reflection regarding assumptions and biases, are actions that have been taken to provide valid and reliable findings in this study (Merriam, et al., 2002). This research utilized data from many different sources of integral or holistic education as a platform from which to explore. It included visitations to numerous schools and institutions that have programs that represent integral educational programs, as well as conversations with various experts in the field of integral education.

Merriam also has an invaluable tool, "Assessing the 'Quality' of Qualitative Research," a check sheet that provides essential questions to answer in addressing The Problem, The Methods, The Findings and The Discussion of research (Merriam et al., 2002, p. 23). This checklist has been utilized to support the researcher in addressing essential aspects of the research during each phase of writing the dissertation.

Daisy Nelson-White, my peer reviewer, supported the initial phases of analysis of the interviews by reviewing three separate transcripts and reporting her interpretations of the content from each domain of the emotional, physical, spiritual, and mental. She also gave feedback with respect to emerging themes she felt were critical to responding to the research question and some insights about the interview questions and process. Her

contribution to this analysis component of the research extended beyond the interview analysis, as it opened up many possibilities for interacting with the data and the students. The power of the constructivist nature of qualitative research was demonstrated as Daisy and I conversed. It became clear that the interview process itself was a completion event for the interviewees. It was an opportunity for them to be observers of themselves, to embrace the different qualities of their intelligences and ultimately experience more of a sense of their own integral nature.

Limitations

There are a number of natural conditions that restrict the scope of this study and may have affected its outcomes. The number of integral educational programs that span from early childhood to high school is limited. As site observations were part of the data collection and analysis of this study, the observer may have affected the events being observed in unknown ways. Although the program observations were of many different circumstances and classes from preschool to high school within two and one-half- to three-day visitation period, they still represented a limited sample of situations in an entire school year. Also, during these sessions, only external behaviors and conversations were noted, and it is the possible that the researcher saw what she expected to see rather than what was actually going on.

The interview data was determined to some degree by the mood and comfort level of the interviewee and his or her ability to recall memories and relate with the researcher. Other limitations of the interview data might be distorted responses due to bias or lack of awareness. The documents and records of the program might have been incomplete, inaccurate, or misrepresentative (Patton, 2002).

The generalizations from this theme are limited. The researcher is biased in her belief that developing the physical, emotional, and spiritual intelligences along with the mental is essential to our future education success. The methodological design might have affected the data available for analysis.

Delimitations

The restrictions that the researcher has imposed on this study correlate to the inquiry question: What learning experiences help shape the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral education programs?

This study only includes young people who are representatives of nine particular integral approaches to education, along with their parents and educators. These schools have as their purpose the development and integration of the emotional, mental, spiritual, and physical intelligences as a philosophical and theoretical foundation for their pedagogy. The focus of this work is on specific intelligences. Although other intelligences have been identified as distinct learning modalities (for example, see Gardner, 2000), for the purposes of this study, the development and integration of the spiritual, physical, emotional, and mental intelligences have been highlighted. This study sample is purposeful.

Conclusion

This research utilized a process that brings together important methodological contributions from the qualitative paradigm. In this dissertation, the qualitative paradigm provides a powerful context within which to integrate the constructivist and integral viewpoints. These lenses are complementary as they provide essential, multidimensional linkages that represent human beings and their richly textured lives. This study "expand[s] the knowledge base of scholarly disciplines, in new and important ways" (Braud & Anderson, 1998, p. 29), by viewing what has been known in new ways that reveal knowledge, understanding, and a wisdom that supports a more integral way of relating to the world.

True education is not pumped and crammed in from outward sources but aids in bringing to the surface the infinite hoards of wisdom within.
Yogananda, 1974, p. 306

Chapter 4: Integral Education Program Descriptions

This chapter provides a picture of each program taken from the onsite visitations, observations and conversations with students, parents and educators for two to three days in each location. Much of the content in these descriptions is taken from these interactions and my field notes. The intention of this section is to supply the reader with a feeling for how each program uniquely approaches the development of the spiritual, physical, emotional, and mental intelligences. Each program differs in its interpretation of the intelligences, and it is revealing to experience the distinct ways each educates. The treatment of the programs is descriptive, not analytical, so readers will not find a systematic handling of them. They will however, experience a real sense of what the schools are like from an experiential perspective. A comparison of the programs concludes the chapter.

Rudolf Steiner (1861-1925)

The San Francisco Waldorf School is the representative for the integral approach to education by Rudolf Steiner. Waldorf Education in North America began in 1928 and presently has 150 schools and 800 worldwide. The Waldorf School in San Francisco began in 1979, followed by a high school program in 1997. The school is diverse, nonsectarian and serves over 300 students. The campuses, K-8 and High School, are separated by a number of miles and located in an urban setting. Both programs take full advantage of the city with its multiple parks, museums, zoo, libraries, community centers, theatres, bay, etc. A community is formed with teachers, students, parents, and families openly acknowledging their partnership and relationship. All members are known to one another.

The Waldorf School honors the developmental stages of human beings and the curriculum reflects this philosophy. Steiner contributed an important insight to education. He saw that children in their developmental journey mirror the evolution of human consciousness so that at particular stages they are ready to engage in a subject content that reflects what they are experiencing within themselves. Some examples of this are working with geometric forms when reasoning abilities are evident in the student or moving from myth to history as a student shifts from childhood to puberty.

Children younger than seven learn concretely, through movement and imitation. The environment of the school during these early years is protective, non-competitive and free for creativity. I watched as children were learning through many different kinds of movement, from fingers and toes to whole bodies. All materials, from furniture to toys to handicrafts, are of natural substances, e.g., acorns, sticks, stones and pinecones are used for many different lessons. Children have both structured and unstructured time to explore and imagine . . . they are encouraged to give themselves wholly to the world around them. I watched as the children were immersed in creative play. Learning is grounded in storytelling, singing, movement and games that provide the oral, kinesthetic

and experiential knowing necessary for later literacy. The classes have a sense of order in the play. Everything seems to be well thought out so that whatever is needed for the child's full engagement is present. Aprons, gloves, shovels, cloths, materials, etc., are laid out to support the functioning of the class.

From seven to fourteen years of age, students actively learn with their senses, imagination and artistic expression, with a teacher and classmates in a continuous, consistent relationship. Students and teachers remain together for the first seven years to develop close, trusting and respectful relationships and discover together through stories, myths, artistic creations, handicrafts and music with the inclusion of the physical and emotional domains. Teachers during these years attend to the balance of the intellectual, physical, emotional, artistic and spiritual growth. Science and art projects are side by side. Mastery of the basics of academic, practical and physical skills is accomplished during this developmental stage. Classrooms are painted in muted pastel shades with many living elements, e.g., plants and flowers dispersed around. Artwork and class work is displayed throughout the school as every student is considered an artist at Waldorf. In the fifth grade art class I visited, students were using chalk to create pictures that related their experience of spiritually, themes like angels, symbols, nature or seasonal cycles. I was surprised at how free the students were with their artistic expression. Their drawings, in my opinion, illustrated a depth of artistic sensitivity.

From fourteen onward, young people are able to abstract and analyze using the foundation laid throughout the earlier years. Year long themes (such as Polarities, Process, Identity and World Consciousness) are selected to reflect the inner development of the adolescent and provide them with congruent ways of relating to themselves and their world throughout their high school years. The Waldorf philosophy acknowledges that high school students learn best in an atmosphere in which they can exercise their independent thinking and problem solving skills. The chemistry class I observed gave credence to this as students were given many opportunities to do the experiments in small groups and work out the answers to the questions concerning chemical compounds. Students were not just answering the immediate question, they were also extrapolating and finding about the chemistry of materials that are relevant to their everyday lives, e.g., metal, wood, cars, salt, etc. Classes also had room to have fun and talk about what teenagers want to talk about. There was flexibility to be social and work on the required tasks and an ease of moving back and forth between the personal and the immediate task at hand.

High school pupils are given increasing amounts of responsibility for their learning through individual project work with an advisor on topics shaped by their passion. Modern dance, war, mental retardation, stand up comedy, and Michael Jackson were some of the areas of interest chosen in the class I observed. These projects include interviewing, public presentations, computer technology, books and articles. They are reviewed by peers and advisors and employ an element of self evaluation. Waldorf has an implicit intention for the project work–to have the heart and mind meet, to learn to think clearly using both. The way these projects were introduced was indicative of the relationship of the teachers and students. Everything needed to take on a project was available and the question/answer session not only covered the research territory, it also included seasoned students sharing their experiences–what to pay attention to and what works in doing a project. One student said how much he regretted not choosing

something he was passionate about and he urged all pupils to find their passion–as the assignment was for a six-week period of time. This project also supports the independent, problem solving aspect of Waldorf education as the student is totally responsible for getting the kind of support he or she needs, setting up meetings and making requests of the people who have the expertise necessary to fulfill the project.

The classes I observed were casual, with most students fully engaged in the lessons. The atmosphere was relaxed, with laughter as evident as serious inquiry. There was a mixture of teacher lecture, students working in small groups or pairs, and subject focus and social interaction. Students were given many different opportunities to create together, e.g., games, math problems, a fable in a foreign language with a moral or a list of possible test questions for chemistry. The environment throughout the school was supportive of asking for help. It was all right to "not know," and often students were heard requesting explanations or assistance from both teachers and other pupils. In the grammar class I viewed, the teacher invited the students to work and "if mistakes were made, it was fine, as mistakes teach us what we don't know."

The Waldorf curriculum has an integrated continuity from pre school to graduation, so themes that start with myths, fairy tales and fables evolve into much more complex, historical and cultural concepts. This provides students with a depth of understanding and insight of the interrelatedness between the individual and the cultures they develop. Steiner brought a high degree of congruence to his educational approach that influenced the development and integration of the mental, emotional, physical and spiritual domains. He knew that the only way people really comprehend things is by relating them to themselves and each other. He not only connected the threads of the content and lessons of the stories throughout a child's education, he also tied together how and what that child thinks with his/her emotions, physical movements and spirit. The 'Main Lesson' books, which are personal portfolios of students' work throughout their school career, are multidimensional representations of each subject area which integrate art, literature, music, poetry, science, geography, mathematics, history, etc., with accounts of field trips, physical activity and their personal experiences while learning. These 'books' remain part of a Waldorf's students' library as a reminder of the depth of engagement and dynamic ownership of their education.

Waldorf Schools are committed to the understanding and care of the physical body. Students take part in many sports, games, skill development and integrated activities in all grades. Older students participate with other schools through an independent league which offers competitive team sports as well as tennis, sailing and golf for both boys and girls. Attention is paid to diet and health so that there is much conversation and awareness about what foods and activities support the well-being of a person. In most classes, the learning of a subject is accompanied by physical movement, e.g., clapping while learning numbers, molding clay into geometric shapes, building models to represent cultures, etc. Wilderness experiences also provide an extended education in endurance, strength and teamwork.

Physical development in the Waldorf School is greatly supported by Eurythmy, an artistic representation through movement in which the entire human being becomes a medium of expression. Steiner wanted to provide his students with an opportunity to experience the creative rhythm, harmony, flow and relationships in the natural world. The cycles of the seasons, tides, planets, plants and the geometric, spiral and patterned shapes

in nature all come together in the human expression in Eurythmy. Music, colors, movements, sounds, feelings, thoughts, speech and song are all brought together in a reawakening of our human creative forces. The body is to the Eurythmist as words are to the poet or music notes are to the composer.

Eurythmy improves concentration, observation, imagination and brings an acuity and integration to the senses; seeing, hearing, smelling, touching, as well as breathing, feeling and speaking. It also provides a physical entrée to subjects such as geometry, abstract thinking, world literature and drama. Eurythmy opens pupils up to the world of improvisation, which improves their emotional, mental and physical agility. While observing Eurythmy classes in various age groups, I felt like I was seeing an expression of self that I had little reference to in my own life. I watched a group of teenaged boys and girls moving their bodies together with music and a storyline in a synchronized flow of energy. There was an engagement and lack of pretense or 'being cool' or self-consciousness. It was clear to me that this was a practice that had been deeply embodied over years and as one student commented to me, 'it allows what is inside to come outside.' One other student's response to what it feels like, said, "I feel more myself doing it." I watched as boys and girls took off their personalized 'expression of adolescence'–shoes, e.g., heavy boots, heels, etc. and donned the white slipper of the Eurythmist with the naturalness of any dancer.

The emotional growth of students is supported from the beginning of school to graduation through the expression of fables, myths, poems, stories, plays, music, art and movement, etc. Pupils are encouraged to explore their emotions and feelings openly in their play, dramatic portrayals and artistic expressions. Everyone is considered an artist of one's life. The Waldorf approach engages the feelings of the young person because the faculty is clear that students learn more thoroughly when their feeling life is activated. The theatre class I monitored was teaching the theatrical process. The play was rehearsed from many different points of views so each person could see what it would take to play a character from multiple viewpoints. Students were learning how to move themselves from being 'me' to being a character in a play. The essence of what it means to create in a play was being addressed thoroughly.

Teachers are committed to addressing the emotions and feelings through the integrated curriculum, as each year's lessons are aimed directly at building emotional stability and confidence. In addition, they know their students very well, as they visit the home, know the family, greet and dismiss them everyday with a handshake and eye contact. Contributing to society through community service projects is another avenue students have to enhance their understanding of themselves and their relationship with others.

Little formal evaluation is used for the first eight years of school. This allows room for students to connect with their unique mode of learning in a relaxed, non-confrontational way. They said that this removes the fear and anxiety that can hinder a child's emotional development. The family-like environment also supports the exercising of interpersonal skills among students of many different ages.

The regularly scheduled assemblies give children many opportunities to strengthen their emotional maturity. They can choose to perform on many different levels; musically, intellectually, artistically, etc. The audiences vary from peers, faculty, families, to the community and public gatherings. These presentations ground young

people in a reality that contributes vastly to their emotional development. I was told by both teachers and students that, "People do make mistakes. It is all right to make mistakes. Making mistakes is part of learning. The larger the risk taken, the larger the potential mistake to make." They can see what it takes to demonstrate competency, what is appropriate for age groups and their own progress from year to year, rather than unrealistically comparing their expressions with MTV, the movies or television programs. There is also a community that forms which supports its members as they grow together.

Waldorf has a particularly distinct expression of the spiritual domain and its relation to education. Steiner introduced anthroposophy, i.e., an awareness of one's humanity, as an approach to the whole human being, which sees spirit, soul and body as indivisible. He designed his curriculum to help harmonize and balance human expressions, i.e., emotional, physical, spiritual and mental. He felt strongly that one of the main purposes of education was spiritual awakening, an opening to the mystery of being human. The Waldorf Schools acknowledge the spirit in their education. The individual's spirit is honored and allowed to freely express. Through unstructured play, expression and engagement with the natural world, it was obvious that students experience a joy and exuberance in their learning. In many aspects the journey of the Waldorf student is a journey of the discovery of the self.

In every aspect of the Waldorf curriculum there is a 'pointing' toward beyond the physical and the visible. Inside of the lessons there dwells a deep appreciation for who people are and the spirit they bring to life. Steiner was committed to having his education grapple with the 'unknown,' question and engage with the forces and energy that are so much a part of our connections with one another. He was willing to bring the soul into the conversation for education. He knew that a spiritual education is not about a religious education, far from it. He took the notion of soul to a point that transforms differences among people so they are able to relate to one another on an entirely different level of consciousness. In the process, the relationship of all living systems transforms as well (San Francisco Waldorf School, 2002, http://www.sfwaldorf.org/aboutus/ philosophy. asp).

The verse he wrote to be spoken in the morning meeting is an example of his belief in having students relate to the universe in a unique and spiritual way and to take time for reverence for and reflection of life. What follows is an excerpt from his life-affirming morning verse.

I look into the world,
Wherein there shines the sun,
Wherein there gleam the stars,
Wherein there lie the stones.
The plants, they live and grow,
The beasts they feel and live,
And Human Being to spirit give…
(Pleasant Ridge Waldorf (n.d.), attributed to Rudolf Steiner).

This philosophy creates a worldview of the unity of all people irrespective of race, religion, ethnicity and citizenship. Also, the notion of an interconnection among all life forms manifests in students planting and tending the school garden, participating in many

experiments with the natural world and having practical work experiences on a bio-dynamic farm, in which the soil, plants and animals live in a healthy and natural relationship, i.e., sustainable agriculture.

Maria Montessori (1870- 1952)

The School of the Woods in Houston Texas, which commenced in 1962, is the representative for the Montessori approach to integral education. 300 young people from 2 ½ to 18 years of age are educated in multiple, well designed, age-appropriate environments, divided into five separate developmental cross age groups–(2½-6, 6-9, 9-12, 12-15, and 15-18 years. The location of the school is in a thick, wooded campus, with a nearby building housing the high school.

The aim of the Montessori educational approach is to provide children with life experiences and educate the human potential. Montessori's commitment to an integral environment that facilitates the natural development and adaptability of young people has been well interpreted at School of the Woods by its director and the teaching staff. The emotional, physical, mental, spiritual, and social aspects of a child's education have been developed and integrated throughout the curriculum. An education in the Montessori approach to learning is also provided to the parents, so they know how to be powerful partners in their child's education.

The intellect is engaged and expanded through learning experiences and at the same time students have choices about how they may interact and express themselves. Modules for each age are well coordinated in an interdisciplinary and immersion fashion, giving each individual an opportunity to learn the interconnection of subjects and disciplines through different modalities. Students learn through a progressive mastery process in which they continue to advance as they fulfill the lesson's requirements without a standardized grading system. Students create their own texts by tapping into many different sources of knowledge and intellectual interpretation. Older students are responsible for the management of their academic competency through parent, teacher, peer, and self-evaluations. The pedagogical orientation is to a successful entrée into higher education, and 100% of the graduates have pursued that direction. Reflection is a valued skill for embodying learning and is introduced in age-appropriate ways throughout a child's education. Time at the end of many lessons is given to reflection and journal writing, and there is a specific time after lunch in which students can rest, muse, and write, while listening to relaxing music.

The physical aspects of Montessori education include yet extend beyond the traditional physical education of sports and games, to respond to student-requested activities, such as martial arts, dance, ropes courses, yoga, and rock climbing. Sensory education begins at the earliest ages; this develops the acuity of the senses and kinesthetic abilities through dance, music, and interacting with special materials designed by Maria Montessori and her supporters. Art classes are daily for the elementary students and weekly for the upper grade students. Students spend time in nature exploring their physical relationship with themselves and with the physical universe in hiking, camping, and wilderness experiences at the Educational Land Institute, property that focuses on eco-diversity and sustainability.

There is a Cosmic Education that explores evolution and human beings' relationship to the cosmos and how and to what extent our consciousness has evolved

over time. This approach to evolution accomplishes many of the aims of integral learning, as it highlights the common history of the species, the interconnectivity of all life, reverence for the earth, the interwoven quality of science and the sacred, and an inclusion of a spiritual quality to education. The Montessori approach emphasizes the wholeness of the universe in this cosmic study by connecting, for example, history, art, geography, astronomy, music, etc., or history, literature, cosmology, psychology, etc., in its exploration.

Peace and global education are a natural manifestation of this curriculum, and students explore their own personal participation in and expressions of it. The universality of life is an aspect of the Montessori's approach to spirituality. Spiritual intelligence is readily noticed in the way plants are referred to with wonder and awe during lessons, or the manner in which a bird that flew into the window was responded to with such care and concern (the class stopped and people took care of the bird), or the way the earth is honored in the classroom. The creation story has multiple versions that are addressed in the Montessori curriculum. Both science and nature are included in the explanations. Balance is a valued foundational distinction that is explored in many domains throughout a student's education. The orderliness of the universe is reflected in the classroom. Materials are labeled and have a place, and students are supported in appreciating order and learning to be responsible for creating order in the school and in their own lives at appropriate times.

A student's emotional development is supported in a myriad of ways. Self-expression is respected and given freedom. Feelings are talked about, and posters labeled "How Do You Feel?" are placed on some walls. Active learning experiences are provided in quality listening, speaking, responsibility, and self and global awareness through programs such as community service in places like Santiago, Chile, Monterey, Mexico, and Santa Domingo, where students support local people in their community, e.g., building homes. Stephen Covey's book, *The 7 Habits of Highly Effective Teens,* is utilized throughout the high school to provide structure to students engaging in developing responsible habits.

Students help plan their own experiences of adolescent rites of passage through The Vision Quest and The Hero/Heroine Journey. This is accomplished through classes and adventures such as ropes courses, camping, and connecting with themselves and nature. These programs attend to issues that adolescents feel deeply–friendships among the sexes, belonging, connecting, contributing, being listened to, known, and respected, cooperative learning experiences, expressing the self, courage, being afraid, and so on. Periodically students are asked to bring items from home that have served an important role in their maturation, and that they are now ready to give up. Rituals are designed to support young people in acknowledging a completion of an era and the readiness to embrace new challenges.

For two weeks of the year, middle schools students of both sexes engage with real babies or life-sized dolls as part of "The Baby–Think It Over" program, which is designed to give them a sense of the demands and responsibilities of parenthood. These babies are fully integrated in the routine of the school day. While I observed, students were carrying these babies around and caring for them while doing schoolwork and projects. A well thought-out program has been developed to introduce teenagers to the realities of parenting that is rigorous in its follow-through.

The school atmosphere was warm, friendly, inviting, respectful, and family-like. Students of all ages were seen interacting with one another (for example, a teenager offering his back to younger students as a foundation for a pyramid). The school was replete with learning materials, pieces of art, and other artistic expressions, music and musical instruments, and special places to play and engage with others. An abundance of activities, books, cards, educational games, blocks, paper, pens, pencils, crayons, and paints awaited the eager child's creative instinct. Everything was set up for quick and easy accessibility.

The environment was rich with colorful materials and creative exploration throughout the day–math classes using shapes with which to study geometry, experiments with fossil fuels and their impact on air, displays with solar panels and information about how they work, and a Socratic dialogue. The dialogues I attended were lively, with students commenting about how much they appreciated the opportunity to grapple with what it means to think for oneself and to be listened to with respect by both peers and teachers. Very few textbooks are used in the school, and student centered teaching/learning was the focus. Classes were small groups, with or without teachers, large group community meetings, students working together one-on-one, teachers working with students one-on-one, or independent study.

The community meetings were impressive, as students planned and executed the agenda, which included an inspirational introduction and welcoming of visitors, cleaning up any aspect of the space that required it, presenting a lesson as a theme of the day, acknowledging students' behavior and handling any areas of student concern. The scene included the director of the school, her daughter (who teaches at the school) and her baby–all naturally included as part of the community. In the meeting I attended, after all aspects of the community meeting had been addressed, fossil fuel was the theme presented, and that lesson permeated the whole day in classes in math, science, reading, and so on.

My impression in spending time in the middle and high school was that the young people were responsible for themselves and that working independently was appropriate to their level of maturity. The curriculum includes multi-aged, randomly selected groups of students who explore certain phenomena. The groups I watched were experimenting with running a company, complete with budget, accounts payable, stockholders, and profit/ loss conversations. The school café the students ran was the source of income. Students in all classes were given freedom to choose and room to assume increasing accountability for their lives and the environment of the school. One middle school student was responsible for making certain the juice machine was regularly filled with juice and the proceeds noted and put in the school's "bank account."

The high school code of conduct (dress code, rules and consequences for not keeping them, and vision and mission statements) are written and published in a handbook by the students with assistance from the faculty. All students are accountable for the cleanliness of the school and can be seen cleaning desks and floors and emptying trash at the beginning and ending of each day. They are also responsible for replacing all materials to their proper place after use. The school is "green," so emphasis is placed on recycling and using products that support ecological sustainability.

From the beginning of a child's education, Montessori teachers are guides, facilitators, and observers. They organize activities, mentor students, and provide quality

communication to the parents. The classes I observed supported this philosophy. The calculus and English literature lessons were collaborative, with teacher and students sharing the conversations and actions. Much of the work was done in a circle where people could see one another, and the experience was a dialogue rather than students being "talked at." Material is presented to students in a three-pronged approach: 1) the framework, 2) the practice, and 3) the application of the lesson to one's life, so lessons were set up to deliver these learning modalities.

The class in English literature was engaged in the original story of Frankenstein, which was compared with various versions and popular movies. The session was very animated with much laughter and fun, and it was clear that students took part in choosing the subject matter and the way it was to be handled.

During their last semester of school, seniors participate in a unique exercise in which they spend one week at the school, which is turned into a college dorm-like environment, complete with over night accommodations, i.e., cots and sleeping bags. Students are given experiences in being interviewed, communications and interpersonal skill building, writing college essays, and support in taking exams, along with having fun with one another. They also engage in many activities that mimic college life; they have opportunities to ask questions and get coaching from recent graduates and/or teachers. Both teachers and students spoke highly of this approach to the last rite of passage and commented on how much fun they had had together. This retreat has proven very valuable, resulting to date in 100% of the students successfully going on to college (School of the Woods, 2004, http://schoolofthewoods.org/cgi-bin/site.cgi?p=history/index.html&t=9).

Jiddu Krishnamurti (1895-1986)

Oak Grove was selected to represent the integral educational approach of Krishnamurti. The school was established in 1975 and is located in Ojai Valley, California. Its modern, open, spacious complex of classrooms, labs and pavilions are situated on 150 acres of clear playing fields, groves and forestland servicing approximately 200 multicultural students.

Krishnamurti's intent for education was to bring about an integrated individual who is capable of dealing with life as a whole. He felt the school was the foundation for a societal transformation and enlightenment of human beings. His focus was on self-understanding, because he knew that if one understands oneself, then one can connect with the whole of existence. He was committed to creating an educational environment in which students could give of themselves–their whole body, mind, and spirit–to what they loved. The approach to education aims to free the mind from fear, from petty, egotistical struggles, violence, cultural conditioning, and so on.

Krishnamurti's legacy is somewhat ethereal, as there is no creed, ideology, method, or technique to replicate. This inheritance has obvious strengths and challenges, as people engaged in preserving his wisdom must commit themselves to this vision of education, and at the same time grapple with how to create a structure that does not reify Krishnamurti's intent.

The school emphasizes observing, listening, questioning, self-reflection, and self-knowledge. Inquiry into the meaning of our lives is an important educational context at Oak Grove. One area for reflection is how human beings are conditioned–by family,

culture, religion, etc.–so that students can become keen observers of cultural fears and prejudices and how these contribute to their own behavioral patterns. Students also reflect on how to embody what they learn so that they can authentically "own" ideas and philosophies. They can then exercise their own authority in making choices. It was clear that in most classes time was allotted for reflection or journaling. Over the years, young people engaged in many personal inquiry projects with different subject matter.

Teachers and students explore and learn together in both the outer world of information and knowledge and the inner world of thinking and experience. The atmosphere is casual, collegial, dynamic, and deeply relational, without fear, punishment, or competition. Teachers are not authoritarian or disciplinarians. They are respectful and allow for the social interaction that accompanies learning. Everyone is on a first name basis. Dress is very casual, and individuality and diversity are highly valued and accepted. Many interactive conversations amongst teacher and pupils were taking place either in or outside the classroom or at the community meetings. The courses are integrated; i.e., one module might include science, social studies, math, English, and human development. There is a healthy combination of chaos and order that allows enough disequilibrium to support a creative, open system.

Oak Grove supports the emotional development of its student body in numerous ways. In daily community meetings, individuals share about themselves and have opportunities for group interactions and exercises. One of the community meetings I took part in was planning the senior prom, which was renamed The Bash; agreements for the evening were set by the students with the faculty's support. Friends outside the school were welcome to come. Affection was demonstrated among the students and the teachers, e.g., younger students on the shoulders of older, easy small gestures of affection, joking, smiles, etc. Incidents among students are handled immediately, and "teaching moments" are part of the emotional growth of the young people. Conflict resolution and Marshall Rosenberg's nonviolent communication approach are part of the curriculum, so children of all ages learn practices that help them to deal with emotionally difficult situations. Within the classes and public presentations, fables, myths, plays, and stories are utilized to supply multiple venues for acknowledging, exploring, and dealing with emotions and expressing them appropriately. A fourth grade class I visited had been reenacting a combined story of The Big Bad Wolf, Hansel and Gretel, and Chicken Little in a creatively integrated play the prior week. They spontaneously voted to include me in a reproduction, including props. They were very excited to be able to act again. The play was clever, funny, and thought provoking, as they were asked to think about what they were learning from the stories.

In addition, each student is involved in the planning and carrying out of field and camping trips and excursions; this requires a continual expansion of the ability to coordinate action and be responsible. I saw the first grade class preparing for their first camping trip. They were washing dishes and packing the equipment they would need for their overnight. Tasks were divided up among the children, and they were invited to help invent the trip and how they wanted it to unfold.

Relationship Classes play an essential role in the emotional development of Oak Grove attendees. These are weekly scheduled sessions in which young people work on any issue they deem important, and they are presented with many techniques, practices, lectures, conversations, and dialogues to support them in developing emotional maturity

throughout the year. Specific classes are given in the Human Development Curriculum that address feelings, emotions, sexuality, dealing with grief, etc., in age-appropriate time frames. One module is called, What are You Doing with Your Life? Mentor and buddy relationships, which foster atypical friendships and support the emotional and academic development of each age group, are created yearly among the older and younger students.

I observed students in conversation and reflection about their feelings, as the school's culture allowed for the open acknowledgement of the emotional side of life. The videos of the graduating seniors' final presentation to the student body exemplified the emotional intelligence of these young people–the authenticity of their speaking, their attention away from themselves and on the audience, the quality of their self-reflection and expression. They demonstrated ease in showing emotions and opening acknowledged peers, teachers, and parents for the part they played in their accomplishments in school. The young people used phrases like "listening to the heart," "being present," and "deep friendships" with one another.

Also, videos of Krishnamurti are played from time to time to stimulate conversations around both emotional and spiritual topics. I listened as a group of high school students asked questions and engaged with a number of teachers about Krishnamurti's life and philosophy after one of the video presentations. The questions they were considering were, "What was alive in you as you listened to the video and what were you attending to when you watched?" The theme of the lesson entailed considering the choices we have in how and where we place our awareness and the value of becoming more interested in asking questions in life rather than always seeking answers. Some resistance to the topic was obvious, evidenced by some people not paying attention and talking while others were talking. This behavior was addressed in the inquiry, and resistors were asked to pay attention to and observe their resistance to the topic to see if they could locate its source.

The spiritual aspect of education, although not referred to directly in this way, is a significant part of the Oak Grove experience. The curriculum invites the spirit into the fiber of the school through opportunities for inner reflection, awareness, and mindfulness education; connecting with nature through camping, hiking, field trips; reference to and reverence for the oneness of all life (humans, animals, plants, nature etc.); and talking about beingness and its impact on the quality of our actions. Krishnamurti felt that the spiritual manifested in a life lived integrally, which includes all of life in its ugliness and its beauty, its pleasures, its misery and confusions. To him, school was an appropriate place to explore these existential issues. Oak Grove follows his thinking by fostering an exploration among teachers and students of their relationships with one another. Students also participate yearly in an in-depth community service project, which affords them an opportunity to experience spirit in action. The travel program, some of which is planned by students, provides the young people with a more global perspective. Among the countries students travel to are India, Spain, Italy, and Mexico; some study Native American cultures. I sat in a class of seniors who had recently returned from a trip to India and were preparing for an all school/parent, multimedia presentation, with pictures, music, and costumes.

The physical aspect of education is supported through a comprehensive program that includes fitness, cooperative games, sports, skill development, physical challenges, and a health curriculum. Brain Gym, an approach to physical education that enhances

learning ability, is utilized in the lower grades. Through movement and specific activities, the neural pathways of the brain are developed. The success of the program is demonstrated in improvements in physical coordination and concentration, as well as memory, reading, writing, and listening. Also, art and music are integral experiences in which students interact with many different mediums to experiment with their relationship with the physical domain. Students have multiple choices to express themselves: painting, weaving, sewing, drawing, pottery, photography, etc. In one of the art classed I observed, students were planning a fantasy trip and had their creation inform their art project.

Oak Grove has its own organic garden where students learn about healthful eating by working in the garden; vegetarian lunches are provided on campus every day. Most students and families are vegetarian. Classes regarding healthy habits and nutritional consciousness are interwoven throughout the curriculum. Reinforcing messages, in the form of posters and reading materials are visible and accessible. There are no soda or candy machines on the campus. Hikes and camping trips are designed to challenge students both physically and emotionally. Each year the expectations are higher in terms of degree of difficulty and level of responsibility required from each student. Also, I observed a biology class that demonstrated to me the level of engagement students at Oak Grove have with the physical universe. The conversation about the sea world included all students, with everyone participating at a high level of acceptance and presence. As a class, they were buying fish and a tank, and everyone needed to answer specific questions about what the purchase: what size was needed, what the best filter would be, what fish would be appropriate, and what other kind of sea life was necessary to sustain the fish.

Oak Grove's commitment to the mental development of its pupils is obvious in its well-designed, integrated learning experiences and courses. The school recognizes and appreciates the developmental stages of children and provides support to each student such that his/her unique learning capacities are honored. Homeroom teachers, because of their close relationships with their students, play a significant role in the development of their students' mental capacities. A child's readiness is respected, and individualized attention is offered when needed. By progressing at their own pace, students gain self-confidence and self-esteem. A fully accredited college preparatory program is available. The manner in which courses are offered differs from many other educational institutions because it is student-centered. Because self-reflection, inquiry, choice, and relationship are such cornerstones of the school, academics take on a more personal relevancy for students at Oak Grove. Mental intelligence is expanded greatly through experiential activities, e.g., turning a classroom into an airplane or another country, creating a skeletal system with clay, writing scripts and creating a school movie, working in different modalities in artistic creations and relating them to class studies, or learning history, geography, and social studies through a dramatic reenactment. In addition, the school extends its support of intellectual growth to its community by hosting community dialogues exploring topics of timely importance.

A high school drama class had rewritten a Harry Potter script and was filming it during the time I was a guest. They had researched what they needed to create the film, been on a field trip to find authentic backgrounds and props, and were also using the school grounds and buildings for their adventure. The younger elementary students were out on break to watch their older buddies being filmed. The learning opportunities were

plentiful for everyone. It was so enticing that I had to be very careful to remain an observer and not join in the creative energy. A senior English class was collaboratively writing a book of short vignettes created by the students. They focused on the theme of "what makes teens tick?" The science classes add experiential learning at every opportunity, e.g., tying down the thumbs of students for a whole class period to have them directly know the importance of thumbs.
Teachers are well grounded in the philosophy of Krishnamurti; in fact, many studied with him before his death in 1986. The partnership among teachers, the director, and staff is evident, and the administration of the school and curriculum development appears to be shared by all. This group of educators is unique in continuing to adapt and reinvent their programs so that they remain dynamic and creative (Oakgrove School (n.d) http://www.oakgroveschool.com/ welcome/ history_and_philosophy.html).

Jagdish Gandhi (1937-) and Bharti Gandhi (1936 -)

The City Montessori School (CMS) is an anomalous example of integral education in that it has multiple origins. Chosen as a unique model of an integral approach to education, the school was founded in 1959 in Lucknow, India, by Jagdish and Bharti Gandhi, a husband-wife team committed to education as a transformative vehicle for humankind. They began with five students in a Montessori-inspired school, but through the years the teachings of Mahatma Gandhi, the world's major religions, and the Baha'i faith (which provides deeply rooted values of human unity and recognition of the common elements of all religions) strongly influenced their philosophical and educational approach. The school educates its students to think in terms of the welfare of all the peoples of the world. Its motto, "Jai Jagat" (Glory be to the World), is borrowed from Mahatma Gandhi's campaign in India. So although the name Montessori remains in its title, CMS is not considered a Montessori approach to integral education. It is more eclectic and has a strong Baha'i presence.

Today, CMS is the world's largest city school. It has 21 branch campuses spread over the city of Lucknow, with over 29,000 students. Because the school's purpose is to educate world citizens and promote world peace, CMS hosts at least 17 international events each year with different themes aimed at global communication and cooperation (examples include International Conference of Chief Justices of the World, World Peace Festival, and International Youth Festivals). It is very proud to be the only school in the world to be awarded The UNESCO Prize for Peace Education.

Human unity on a global scale is an undeniably powerful context for exploring integral education. What will allow human unity to show up on a global scale? What relationship does human unity on a global level have to human unity on the individual level? Because this dissertation is interested in the development and integration of the spiritual, emotional, physical, and mental intelligences of humans (that is, the unity of a human being), CMS appeared to be an excellent candidate to study.

The emotional development of CMS students starts immediately when they enter the school. All pupils are included in peace education, so peace as a context for living life is nurtured from an early age in the hearts of the children. Teachers educate within this curriculum so that respect and appreciation for differences and social justice, nonviolence, communication skills and values clarification are taught in many different

areas. CMS' commitment to its pupils and their families is to develop an authentic consciousness about global citizenry and transform the way people think about the world.

The programs supporting emotional development are plentiful. Daily there is a short assembly on each campus in which students participate in skits, poems, singing, playing music, dancing, or giving speeches that focus on themes of human unity, peace, spiritual perception, and emotional intelligence. These are aimed at providing students, teachers, and at times, parents, a particular quality of knowledge and wisdom. The one I observed introduced a number of ways to settle disputes and disagreements through many different learning modalities. Also, the words, "may peace prevail on earth" are spoken in each presentation.

Starting at five years of age, CMS begins classes for children to learn to express themselves and connect with their emotions through storytelling and elocution practice. I watched as young children were encouraged to feel the feelings presented in a story of a lion and a mouse–happiness, fear, sadness, anger–and convey them in their own ways. They were very quick to learn the different emotions, and it was with delight that I saw their creativity in trying on different expressions of feelings. The teacher was inviting the children to make the feelings their own. Eloquent speaking is one of the pillars of the school and is highly valued. The 17 annual conferences and other celebrations of special days during the year give girls and boys many opportunities to demonstrate their expertise with language and self-expression in front of audiences ranging from a few to several thousand. They also provide access to professionals from different areas of politics, business, law, education, journalism, and other fields to encourage students to engage in and learn from the conferences.

Also supporting emotional development is the relationship that teachers have with their students. In India, the culture maintains a respect for elders, and teachers are often welcomed into the student's circles. They have lunch together from time to time, and one teacher interviewed spoke about how he could influence what his pupils ate based on regular conversations about health, well-being, energy, and the foods they were eating.

Teachers are specially educated to teach at CMS. They learn how to interact with students having problems without using punishment, harassment, or negative judgments. They use love, respect, praise, appreciation, and confidence-building methods to support emotional growth, as well as their own modeling behaviors. Teachers are aware of how important it is to teach from an open heart and to demonstrate their love for learning through their own teaching. They have learned when to close the book and ask a child "How are you really doing?" A teacher told me how validating it was to have a young boy feel secure enough to express his love and gratitude for him. Teachers also know meditative techniques and utilize them to strengthen sensitivity, concentration, and relaxation in their students.

Every child has a teacher-guardian who supports his/her growth and development. The guardian also visits the home and provides modeling, learning experiences, and regular coaching for both parents and children. The families are encouraged to spend quality time with one another and to limit the outside media's influence on their lives. The school is equally committed to the emotional development of the parents as well.

Physical education includes gymnastics, sports, games, swimming, dance, and yoga and is treated as an essential aspect of the curriculum for every age. I observed yoga being practiced both on the auditorium stage and outside in the open spaces with as many

as 25 students in each class executing different postures, and at the same time, students were playing soccer and basketball or swimming in the pool. At a glance, I could see as many as 200 young people engaged in different physical activities. One aspect that has been retained of Montessori's influence is the use of the body in learning for the younger students. Clapping, stomping feet, jumping, and flapping arms as wings were all employed to accentuate a lesson to be learned. Repetition was frequently heard to support the memory of numbers, letters, sounds, words, colors, and languages.

Another contribution to the development of the physical body at CMS is the regular productions that classes present to the school. These involve much activity from planning, producing, and executing on a theme. Each student may play a number of roles in the process that include an ability to coordinate a number of different physical skills, from speaking, acting, playing music, to dancing, etc.

CMS's roots in the principles of major religions of the world–especially the Baha'i Faith–bring a particular approach to the spiritual development of its students. Baha'i views human beings as essentially spiritual, and its values introduce an expression of spirit that manifests in action and is spoken as such in the school curriculum through continuous reference to the following themes: unity in diversity, equality of women and men, oneness of humanity, elimination of extremes of wealth and poverty, universal education, entrepreneurial enterprise, , global governance, oneness of religion, ecological sustainability, harmony of science and spirituality, and global justice. Spiritual development at CMS aims to educate for a new expression of humanity, one that acknowledges the universal and unifying qualities of spirit.

In its international conferences, CMS honors these themes through public presentations such as The All-Religions Prayer Dance and The World Parliament. I observed two different conferences in which students spoke and performed in service of these values. The ceremony and impression they leave an audience with is quite inspiring, and often there are hundreds of people taking part. CMS teaches that every word is endowed with spirit, so speakers know that their words may have great or little impact, can nurture or inspire, or affect others negatively.

God is referred to through prayer and declaration, yet at CMS, when someone refers to God it is understood that this is intended to be inclusive of all religions. They honor everyone's personal relationship with God. The school has families from different religious backgrounds and accentuates ways of learning about and understanding all the religions. The way God is introduced in CMS does not appear to cause its teachers, pupils, and families any discomfort, as it might in other settings. One teacher interviewed spoke about the teachings of scriptures of all the major religions so that students would have experiences of each one. In this Indian culture, the inclusion of all religions in a school provides a solid foundation on which to build character and a powerful understanding and interrelationship among people. Thus, all religions are known, appreciated, and seen as equally supportive of creating human unity. Often moments of silence and reflection are given to pupils to start or complete a session of an assembly or class.

The development of the mental intelligence is an area in which CMS has been building a recognized reputation for many years, as most of its 29,000 students pass the rigorous Indian Certification 12^{th} standard exams with high marks. The educational culture of India upholds discipline and academic excellence. The atmosphere in the

school was orderly and attentive to learning. I watched as close to 1200 uniformed students came to school. Their bikes were lined up outside in an organized fashion. Their entrance to the school was also well orchestrated, and considerably quiet, given the numbers of students, and their manners in the classrooms were exemplary; they were well-behaved young people. The younger children were quickly initiated into the appropriate way to act in school by direct requests from the teachers. The academic program, including the classrooms and teaching styles, appeared to be very traditional. Repetition, lecture, recitation, and writing were the major learning methods. Most classes that I observed were orderly, and students were engaged in the lessons. I was amazed at how little movement there was and how well-disciplined the students of all ages were in reading, writing, math, literature, geography, drama, and languages. In classes like chemistry, assembly preparation, music, dance, or physical education, the level of activity was very high. Most classes from kindergarten to twelfth grade have 35-45 students in each. Younger children sit at round tables of 5-10, while the older students sit two per each rectangular table in three rows across a room. In most classes, the group was attending to a subject lecture or reading out loud with one other. One class had a vigorous interaction around mathematics. I overheard the teacher tell the class to let students think for themselves and not to hurry or feed them the answer to a problem. A few in the younger grades were working in small groups. The intellectual development of young people is taken seriously by parents, students, and the school, which makes its pursuit reinforced by all constituents. Because of the number of students on each campus (over 1000), there appears to be a cultural agreement to fully participate. Also, CMS provides its students with many opportunities to compete within CMS and with students of other schools, both inside and outside India in a wide variety of academic areas.

In one literature class where I spent time, students were reading a book by Robert Browning and talking about silence. The teacher was pointing out that silence is not only the absence of sound but also the stillness of mind. She was engaging her students in what they thought about that. The students' ability to engage in imagery and respond to what silence meant to them was insightful.

The walls in the classrooms and hallways have very little attached to them, except in the primary grades, where the stories, letters, numbers, or words being learned held a prominent place on the wall. There were pictures of students being acknowledged for their achievements plus signs and quotes along some of the major thoroughfares. One particular sign in the primary school hallway, I thing, conveys a flavor of the school atmosphere and culture: *God blessed you with babies and we at CMS wrap them with knowledge that gives an everlasting smile on their face.* Classes often have a theme and a quote written on the board, e.g., "Honesty is the best policy," or "Learning is a process that never ends" (City Montessori School (n.d.) http://www.cmseducation.org/about/rolegoal.html).

Sri Aurobindo (1872-1950)

The Sri Aurobindo International Centre of Education in Pondicherry, India, and the schools in Auroville, India (Crèche, Kindergarten, Deepanam, Transition, and Future), were chosen as representatives of the integral educational philosophy of Sri Aurobindo. Both were selected, since they are located near one another and provide two different translations of his work and that of The Mother, a French woman who was his

collaborator in realizing this approach to education. The philosophical foundations for both programs are parallel, drawing on the teachings of Sri Aurobindo and adhering to the interpretations of his work by The Mother. Integral education, as developed by Sri Aurobindo over many years of study, has specific characteristics. Fundamental to this approach is the acknowledgement that 1) human beings have many dimensions to their wholeness–the physical, emotional/vital, mental, and spiritual/psychic, and the awareness and integration of these dimensions is essential to education, 2) there is an interrelatedness that extends to all processes of life and all areas of knowledge, and 3) self-knowledge and knowledge of the world are equally important educational aims. Sri Aurobindo's principles underlie the pedagogy in the schools. His first principle in education is that nothing can be taught. The second is that the mind has to be consulted in its own growth, and the third is all teaching works from that which *is* to that which *shall be* (from the near to the far). Using these fundamentals and principles allows children to discover, develop, and pursue their unique capacities and life purpose.

Early in the twentieth century, Sri Aurobindo could see an evolutionary turning point occurring for humanity. The mental capacities of human beings far exceeded their spiritual, emotional, and physical development, and the size and complexities of the emerging civilizations far surpassed the capabilities of the educated populace. Creating an integral model of education was one of his responses to this crisis.

The following are descriptions of two separate programs, one in Pondicherry, India, and the other in Auroville, India. There are many philosophical similarities and a few marked differences, which I will indicate (Sri Aurobindo Society, 1998, http://www.sriaurobindosociety.org.in/onsas.htm).

The Sri Aurobindo International Centre of Education: Pondicherry, India

The International Centre began in 1943 at the Sri Aurobindo Ashram in Pondicherry with 20 students. Today the Centre has 450 students ranging from pre-school to university; most are from states around India, while some are from Europe and other countries. The school is housed in multiple nineteenth century buildings one to two stories high, extending over numerous city blocks. High ceilings with fans, wooden shutters, double doors, neatly organized and labeled closets, and sturdy furniture in open, small classrooms with chalkboards, and courtyards with trees, flowers, grassy knolls, and a concrete outdoor staging area for presentations by students all help create the school's atmosphere. Art rooms, lecture hall, meditation and quiet rooms, resource and computer rooms and library, conversation areas, and an aquarium room also add to the milieu. Its roots of tradition and longevity run deep.

The Educational Centre is an ashram school, which gives it some unique features. There is an international group of teachers, staff, and assistants who are all part of the Sri Aurobindo Ashram. Most of the teaching staff is Indian and European with a few from other countries. They are dedicated to this educational approach, and many have been participating in the school their whole life (in some cases up to 50 years). Ninety percent of the core teaching staff was also educated at The Centre. Integral education demands highly conscious and developed teachers who have committed themselves to their own ongoing integral growth. Teaching and being with children is their life. Teachers are not paid, but all their personal needs (food, health care, food, lodging, living stipends) are taken care of by the ashram. Within the community, there are long accepted ways of behaving and operating that its members embrace. Often these are the very reasons why

people have chosen to participate in The International Centre of Education either as teachers, parents, or pupils. Students recognize that certain activities, such as seeing unapproved movies or going to restaurants without parents, are inconsistent with their engagement in the educational program. There is a collective agreement; indeed a reality that has been created that supports everyone in participating in this particular lifestyle.

The school day begins at 7:45 a.m. with inspirational words and music from The Mother, and many days do not end until 7 p.m. with the completion of the physical education program. The ashram school is a community in which students, parents, administrators, and teachers act as an extended family. There is a coherency that flows throughout all subjects, actions, practices, and interactions, which establishes deep connections and stability in their lives.

The kindergarten and primary classes I observed were all engaged in projects that were both creative and educational. In a Sanskrit class, children had made a board game on which they were playing and at the same time learning the sounds, spelling, and meaning of the words. In each class I visited, children were fully engaged in small groups working with projects that introduced different skills; clay molding, woodworking, painting, pasting, making simple toys that moved, a group collage, or puzzles. The attention to detail in their learning as well as the storage of all the materials is noteworthy. It was clear that the school is supportive of recycling and using materials in many different creative ways. Children were using items that most people would throw away to make some imaginative toys and pictures. There was no waste of resources.

Classes had multiple usages, e.g., a math group using computers and learning multiplication tables at the same time that another cluster of children was designing models. Art and its many expressions was the key focus in the lower grades. The creations of all the children were displayed on the walls, hung from the ceiling and atop tables, desks, and bookcases. I observed many classes of children laughing, enjoying activities, and learning together with others. Inclement weather did not deter groups from outings, as I watched one group prepare to go out in a light rain. The surrounding grounds were filled with ample room and colorful and inviting equipment on which to play.

The intention of The Centre's physical education program reaches way beyond most other educational institutions' offerings. Sri Aurobindo and The Mother stated from the onset that physical education was designed to build a body, beautiful in form, harmonious in posture, supple and agile in its movements, with strength and balance, powerful in its activities and resistant in its organic function. The health of the internal organs as well as the physical frame was included in their curriculum. Sri Aurobindo's philosophy was to strengthen the physical structure so it was capable of receiving higher levels of consciousness and energy, leading us to experience the Supermind–the Truth-Consciousness. Physical education at The Centre includes everyone, and students from their ninth year onward participate close to two hours every day in some sports, games, exercises, track, swimming, gymnastics, or other physical activity. When it is appropriate for certain age groups and skill levels, some sports or games are co-educational. Only during four months of the year are these activities competitive, and when they are, the emphasis is on the individual and his/her performance from year to year. Younger students have physical activity every day with a different schedule. The development of the physical attributes is considered to be very important in the ashram school. There is a focus by everyone to support each and every person in their relationship to their physical

self, no matter what skill level. Teachers become captains and coaches; they create an environment in which everyone joins in. That is the shared "reality" of the school.

The development of the intellect at The International Education Centre has a particular tenor given the direction set by Sri Aurobindo and The Mother. Because such value is placed on the student's unfolding, self-knowledge, and discovery, learning is encouraged with the individual's own evolution in mind. The courses that are offered are available for the acquisition of knowledge for its own sake and for building values for life, not for test scores, degrees, or competitions. Classes include humanities, sciences (physical, life, applied, computer), languages (English, French, Sanskrit, various Indian languages), mathematics, history, geography, engineering, technology, physical education, art (drawing, painting, handwork, crafts), music, dancing (Indian and Western), and dramatics. There are no conventional examinations, degrees, or diplomas at The Centre, and with the successful completion of the higher courses, a certificate is given.

Teachers are guides whose role is to support the student in growing according to his or her own nature and drawing out the best of her/himself, i.e., self-education. The Centre's education of mental intelligence often steers away from that on which so many traditional schools heavily rely–a subject-, textbook-, text-oriented system of education. The Centre's curriculum tries to match the emotional and developmental stages of children such that each person is supported in moving through each phase in his/her own way, at her/his own pace. The aim is toward increasing levels of responsibility and eventually for some students to move into a "free progress" track, which encourages them to create their own curriculum, both coursework and timeframe, with the assistance of a teacher/mentor. The school believes that this kind of free and natural growth is an essential element of individual development and love of learning.

The powers of the mind–comprehension, expression, reasoning, discernment, concentration, independent and original thinking, imagination, understanding, synthesizing, and judgment are all aspects of intellectual growth that are addressed at the ashram school. In the free progress curriculum, they are presented in ways that are relevant to the individual, interwoven into his/her courses and within the unique path traveled by that particular student. I observed and talked with a number of students in the free progress system who were personally engaged in educating themselves. This engagement calls forth a quality of wisdom as each student learns what it means to apply the knowledge acquired to his/her own life. The school focuses on synthesizing the arts/humanities with the sciences/technologies in order to prepare their graduates to contribute a new kind of thinking in the world of the twenty-first century. I conversed with a few graduates who had taken their education on in a manner I had not witnessed before, even to the extent of convincing international universities to accept them into their programs without the formal certificate or exam. The university representatives spoke about the extensive world- and self-knowledge exhibited by the youth as their reason for accepting them into their programs.

The basis of all Sri Aurobindo's teachings is the awakening and development of the spiritual being, and this is used as a central guide for all aspects of his approach to integral education. He knew that the spiritual path is the most direct for the evolution of consciousness of human beings, and he had an unceasing commitment to contribute to that progression. His way of defining and expressing the spiritual, however, included no

dogma, worship, or obeisance that might be identified as religious. The Centre attempts to focus on spirituality as a living process and the process of opening up to one's own inner light. The uniqueness of each person's nature and spiritual consciousness is meant to be fulfilled without boundaries, limitations, or rules. People are left free to seek and discover their own consciousness and their own relationship with what is spiritual to them. Sri Aurobindo knew that there is a direct knowing that is available to each of us through our own conscious explorations. This direct kind of knowledge is expansive, inclusive, and moves people beyond their egos.

As an observer of the school, I could not see much obvious evidence of the spiritual because it was so much a part of the air people were breathing, their relationships, practices, value, and collective reality-agreement. I was surprised that there were no formalized meditation or yoga classes, yet people seemed to have their own spiritual practices and expressions as individuals or families. The ashram has many programs, events, and celebrations in which people regularly take part. To know calmness and silence is another way of experiencing a spiritual quality at The Centre, and students use reflection, breathing techniques, centering, contemplation, and meditation for this experience.

Sri Aurobindo also further delineated a psychic expression of the self that is the innermost and deepest being in us. The inquiry into the soul that he proposed is also present in the ashram school experience. Knowing this deepest inner self is what allows education to take on a very different perspective, because it becomes an individual's discovery of her/his own soul's journey.

Sri Aurobindo, in his explanation of integral education, introduced the term *vital*, which refers to the forces and movement of life itself, covering the whole range of human emotions and feelings. With this expanded definition, The Centre's approach to emotional development has multiple aspects. The school within an ashram community provides much support for emotional growth from the beginning of life and in the crèche at three years of age. There is a continuity of people, practices, courses, and locations. The close ties among teachers and students provide a safe and accepting environment in which to experience one's emotions and feelings. I talked with a few students regarding their experience of the development of their emotional self and they pointed to their participation in the drama program over the years. Drama is taken seriously, and these productions give young people opportunities to be in touch with a wide range of their own emotions and practice generating appropriate feelings as required in roles they played.

Character building is part of many different classes, given at appropriate ages, from physical education to history, social studies, to English or Indian literature, to music and drama. Teachers engage in topics about cultivating positive qualities such as honesty, unselfishness, generosity, and tolerance and about acquiring a dynamic vital nature.

Sri Aurobindo distinguished the heart from the mind in his teachings. He said developing the mind does not develop the heart. What is learned as a mental lesson, as an abstraction, must be given life through personal experience. What is true knowledge and wisdom has matured from these experiences, which incorporate the understanding of the heart.

Each week some students visit one of two farms or acres of land that represent 25 years of ecological involvement by students. I observed young people transplanting lilies

from pots to ponds and completing the construction of the pond area. Students over the years have spent hours on this land learning about all aspects of flowers and vegetables gardening, landscaping, and building ponds and habitats for wildlife. Teachers, staff, and students work side by side, and the atmosphere is one of deep connection with each other and the land. The farms give students opportunities to learn about and care for horses, ducks, chickens, pigs, cows, and birds in an easy, casual environment. The quality of relationships with peers and adults that is cultivated in this setting forms a strong foundation for emotional intelligence, which is understood as interpersonal and intrapersonal connecting, empathy, self-confidence, and identifying and managing emotions.

Much of what has been written for each of the domains (emotional, physical, spiritual, and mental) for the Sri Aurobindo International Education Centre in Pondicherry may also be found in the Auroville schools with some variations. Auroville, although a spiritually motivated community to some degree, is not an ashram, so the approach to the spiritual development is different.

Auroville Schools, Auroville, India
Crèche, Kindergarten, Deepanam, Transition, Future

Auroville began in 1968 as a township devoted to being a living experiment in human unity. It was supported by the government of India, UNESCO, The Sri Aurobindo Society, and The Mother and was collectively viewed as an important project for the future of humanity. The beginning was auspicious, as its inauguration ceremony was attended by representatives of 124 nations, including all the states of India. Each representative brought soil from their homeland, which was mixed together and placed at the center of the village.

Today, this is an international community that has close to 2000 people from 40 different countries and various ethnic, religious, and cultural backgrounds. They have committed themselves to live together and discover what it takes to transform consciousness, while exploring sustainable living and the cultural, environmental, social, and spiritual needs of its residents. It fulfills Sri Aurobindo's intention of having people be fully involved with and conscious of life and using their engagement to discover their own integral nature. To live in Auroville is to participate in unending education.

There are numerous schools that serve the families of Auroville. I was able to visit five of them, which serve over 300 students, and spend quality observational time in three–The Crèche, Kindergarten, and Future School. The architecture of the buildings is modern, with touches of a futuristic flare. There are many open spaces for movement, which also add to the aesthetic quality of the designs. Given that Auroville is a radical experiment, it says a great deal about the inhabitants who have chosen to live and learn there. These are experimenters, people who are committed to discovering what is not yet known. The educational programs that represent these pioneers are also experimental and open to change and reinvention. They are engaged in continual conversations about how to improve their offerings to students.

The classes in Auroville schools are small and multicultural. Students come from all over the world, but the majority are Indian and European, with a few Asian and other countries. The programs are child-centered and the curriculum is designed to forward the individual child. The student and teacher in partnership make educational assessments.

Freedom is given, but within well-defined guidelines. The schools have grown in response to different community needs. As a result, different schools concentrate on different thrusts, e.g., artistic, vocational, academic, cultural, etc. At the same time, they retain the foundational teachings of Sri Aurobindo and The Mother.

The walkway leading to the elementary school is lush vegetation, and the entrance to the school is lined with flowers. The circular foyer is bordered by an aquarium, pictures from the various classes, and a small altar with lighted candles and flowers. When I visited, the classes were beginning their day with a short connection in a circle followed by art activities. Groups of children and their teachers were laughing, talking excitedly, and engaged in the lesson. Each classroom has a small space set aside to honor the world's religions with representative icons, flowers, and candles. Teachers physically supported students who might have been angry or sad with hugs or lovingly holding them. It was obvious in the many classes I observed that the students and their education were foremost. The atmosphere was relaxed and congenial yet focused. Art classes connect art with nature. In one class, children held a magnifying glass up to jars containing different substances (such as granite, sand, and shells) and looked closely so they could recreate what they saw in their pictures. In another, children were using paints in a way to learn how to utilize different art mediums.

I saw a number of conflicts handled on the spot during my observations, with teachers allowing each student to talk about his/her experience and get to the source of the issue immediately. One altercation with sand throwing was handled by the teacher providing the students with verbal ways of resolving the upset and having them practice the use of language to express their ill will and reconciliation. My overall impression of the children was that they were self-contained, relaxed, and not overly stimulated. Faces were filled with smiles and children helped each other with art projects.

The school offers students one-on-one time with a teacher from time to time, so that they can discover their own interests, strengths, and challenges in a manner that affords them support. Students are also provided with a balance of stimulation and calm time so they can experience that learning requires both.

There is a comprehensive physical education program for the Auroville schools called *Dehashakti,* which means "the full power and perfection of the body." Sports of some kind complete every school day. Students take part in athletics, gymnastics, games, and both individual and group sports, some of which are co educational. The sports complex for Auroville is extensive and future development is planned.

The spiritual experience is engrained in every family, and each expresses their relationship with the philosophy and teachings of Sri Aurobindo and The Mother in their own way. These teachings are threaded throughout the education of everyone living in Auroville. There is a spiritual center for the village that is in a magnificent sphere, The Matrimandir, which houses a white chamber–a completely silent meditation area. Villagers frequent this quiet space often. Also, there are numerous gatherings for everyone to explore their spiritual journey together.

In addition to all the standard courses and classes–language (English, French, Tamil, Sanskrit), mathematics, reading, writing, arts, sciences, music, social studies, computers, history, and so on, there is a unique program available in every grade in some schools in Auroville that is designed to develop and integrate the physical, emotional, and mental intelligences and includes some spiritual aspects. It is called *Awareness through*

the Body. This innovative approach expands the consciousness of young people and the relationship they have with their mind, body, and emotional self, and their inner experience and outer manifestations. This program acknowledges both the surface exterior consciousness and the inner consciousness. One intention of the program is to have students experience these realms as integrally linked. Another is to have pupils identify their own senses (sight, sound, smell, touch, and taste) and sensations and refine and internalize them without unconscious judgments and preconceived ideas. They are encouraged to generate their own perceptions and relationship with their mental, physical, spiritual, and emotional intelligences. Throughout the program, students acquire the capacity to observe themselves. They are guided to see how they respond in many different circumstances with the aim of distinguishing an automatic reaction from a purposeful action.

Through a great variety of exercises, tools, games, interactions, and practices, students expand their awareness of themselves. Age-appropriate activities are set up to explore sensory awareness, balance, breathing, physical structure, the body's relationship with gravity, recognizing, discerning and controlling energy, the exploration of emotions and attitudes, attention, concentration, relaxation and the interaction between mind, spirit, emotions, and body. Each session has a completion phase to give students ample time to explore and internalize the learning, for themselves and the group.

I observed two different classes participating in the *Awareness through the Body* program, one of teens and one of first and second graders. The former group was held in a large well-designed activity room. The students were lying on mats and working with their breath, i.e., following it and placing their conscious attention on sensations throughout their body. The first phase of the exercise was feeling the sensations, noticing the skin, the physical structure, and so on. They were asked to listen to the body and see if they could be connected to it and sense anything it might want to communicate to them. They were asked to notice their thoughts, emotions, and spinal alignment. Students were engaged in their experience of their own body, its structure, sensations, emotions, thoughts, and how one side may differ from the other. Students then worked with their vertebrae and moved their head toward their feet and were asked to be aware of each separate movement. Afterward, they paired up with another person and worked together on feeling simple sensations in the body as someone else moved their arm or leg. The teacher would go around and answer questions and assist partners in working together. Pairs would be asked to see if they could access the breathing patterns of the other and feel what that other person might be feeling. They were asked to listen to the sounds of the morning. The atmosphere was peaceful, gentle, and contemplative. This session addressed many different areas from concentration, relaxation, awareness of the breath, body, senses, energy, charkas, and emotions to listening and serving another.

The session for the younger group was just the opposite–noisy, and full of movement and laughter. This group started quietly listening to the morning sounds, which led to an exercise to see just how many parts of the body they could open and close. In the middle of the exercise, the whole group stopped to remove a bug–honoring the insect and returning it to the playground rather than killing it–and then resumed the activity. Boys and girls were walking or running with their feet turned in or turned out. There was an opening for their ideas and input as children offered new suggestions. Two rubber rings were given to each child and they were asked to use these rings to slide on,

twirl, walk between, and jump over, with eyes opened and closed at various intervals. As an observer, I watched all the children participate and grapple with balance, concentration, physical coordination, eye hand coordination, depth perception, and energy control. The session ended with bodies lying on the floor with a ring over the solar plexus so each person could become more aware of his/her breathing.

The context for education at the Auroville School is individualized development. Each student is an active participant in creating his/her program. I observed a number of upper grades in classes in biology, English literature and grammar, and economics. Classes are causal and on a first name basis. Students did talk among themselves during class as well as interact with the teacher during a lecture. Great emphasis is placed on young people discovering the wisdom that is available through the choices they make. The teachers instill in their students their ability to make informed choices about their education and to be responsible for those choices. These range from enrolling teachers to teach what the student wants to learn to learning on their own or in small existing classes. Teachers interviewed repeatedly affirmed that the students are active participants in creating the atmosphere and programs in Auroville schools. At times, teachers collaborate and integrate classes such as geography, social studies, current affairs and history, or science, math, and the arts. The school has no graduation exams or diplomas. However, students can be prepared to take any test, from their own country's university entrance exams to the standard Indian certification examinations, if they desire. One student took a two-day university entrance exam at his country's embassy, a four-hour taxi ride away (Auroville Foundation, 1998-2004, http://www.auroville.org/education/ avschools/ saiier_schools_av.htm).

Sri Atmananda (1883-1959)

The Sri Atmananda Memorial School was founded in Malakara, Kerala, India in 1987 by K. Padmanabha Menon (Sri Adwayananda) as a tribute to his father, Krishna Menon (Sri Atmananda), who was a noted Indian sage, teacher, and writer. Also, a branch of the school was opened in 1995 in Austin, Texas. K. Sri Adwayananda, a former Secretary to the government of India and past president of the Kerala Education Society, continued his father's teachings through the Atma Vidya Educational Foundation. This organization has taken a leadership role in educational reform by creating a unique school program, teaching approach, educational consultancy training, and publications. Sri Adwayananda used the following declaration as his philosophical foundation,

> There is a latent push in any man which is only a search for perfection. Rightly pursued, one finds this in one's awakening experience to one's real nature through the atmosphere between the real teacher and the taught. Education is only an attempt towards this.

It is interesting to note that in 1919, Krishna Menon met Yogananda only one time and became his disciple, the only one of Yogananda's disciples that maintained a secular role as a householder, family man, lawyer, and an inspector of police. Yogananda knew he would become a great teacher. From this time on Krishna Menon followed the path of yogic disciplines, spiritual practices, self-inquiry and selfless love. Somewhat later Yogananda gave him the name of Atmananda and the blessing to be a teacher.

Sri Atmananda knew that happiness and peace are the true being, the true self, the true consciousness. He taught from his own learning and experience that the sense of separateness in life disappears in the face of true knowledge. His teachings were dynamic and particular to circumstances and people. He opposed any institutionalization of teaching other than the living teacher. This philosophy is the foundation of the Sri Atmananda Memorial Schools.

The Sri Atmananda Memorial School in Kerala, India, was chosen as a unique expression of integral education. Its 200 students come from various socioeconomic, ethnic, and religious backgrounds and are equally gender balanced. Some live in the immediate village and others come from farther distances. Most are Indian and a few are Americans or Europeans. The teacher population generally mirrors this profile also. The school, which serves students from kindergarten to twelfth grade, is located on two campuses about two miles apart; both areas have two simple yet attractive three-story buildings that are airy and spacious, with large playgrounds. The school takes great advantage of the weather. There are tables and chairs outdoors and a great deal of learning takes place outside, particularly for children in the kindergarten and primary grades. Classrooms are open and nature is included in most everything done there.

The day starts with the buses arriving and students and teachers on both campuses cheering and calling out to one another. Smiles, hugs, claps, greetings, and touching are part of the beginning of a school day. They come together and share in unison an honoring of the best in everyone. This verse was translated and shared with me verbally by the director of the school:

> In the form of Atma in every being–shining, sparkling, twinkling, peaceful, the Truth, knowledge eternal (is) never ending, the sages (rishis) hailing most pure intelligences always witnessing being . . . without change . . .

This is a way of acknowledging one another that includes all religions and beliefs. From the morning affirmation onward, there are opportunities to learn everywhere, with students participating in classroom or veranda activities, outdoor games, etc., and children in the primary grades choosing what and how they want to learn at any given moment.

As I observed the lower grades, I could see as many as 15 different activities going on at once, each providing a different quality of learning and experience, with and without teacher assistance. Mats for gymnastics and wrestling, soccer or cricket, numbers games, cutting out letters and making words, drawing, painting, listening to music or nursery rhymes, using video or audio tapes to learn subjects, building a city and naming its various sections, play acting, reading books, swinging, cooking a snack in the kitchen, or a few children talking with a teacher in the corner of the play yard. What struck me the most was the amount of creative energy that was present in just that one snapshot of a moment. I thought to myself: I can see why we adults try to suppress children; we can not keep up with them and we do not know how to be with that much innovative energy given the way we were educated. Their ability to generate more energy whenever needed seems limitless! We call it chaos and want to control it.

One day while I was visiting a heavy rainstorm appeared. Students and teachers stayed on the playground and used the downpour to build dams and rivers and explore their learning through that lens. They were laughing and exhibited a true abandonment to

their enjoyment of the moment. Students have an extra change of clothing and towels at school and teachers have umbrellas for just such occasions.

The school has rooms for science, geography, history, social studies, computers, mathematics, language, cooking, video viewing and art, along with a library and a workshop for crafts. Yet what was remarkable was how much learning took place in the movement and inquiry of the children, which was wherever they were. The teachers have been reeducated in the art of allowing young people to discover for themselves the interconnections in life and their own imagination and self-expression, and to provide unconditional support.

The integral approach to education was clearly evident in the children's' regard for their own and other's feelings. Their curiosity, love of learning, ability to reflect and make decisions or solve problems, and gain self-confidence were happening simultaneously within the physical action and academic instruction. Students were engaged first hand in making the connections between the concrete world in which they were playing and that wonderful, creative world they were sharing with their classmates and teachers. Activities were geared for children at different skill and developmental levels, which supported the younger students modeling the older students. Throughout my observations, I noted the engaging quality of the interactions between older and younger students. I was amazed one afternoon when a second bus was late and the lower school students were waiting on the upper school campus, how much genuine affection and connection there was shown by the older students to the younger.

Teachers keep daily diaries of students' interests and activities, as well as their academic, behavioral, and developmental progress, and they use them regularly in pupil assessment meetings and communications with students and parents. Teachers know the students and their families very well. No grades are given to students in the primary classes (kindergarten-fifth grade).

As I observed the older pupils, I was struck by their easy familiarity with each other and the teachers. Everyone ate lunch together and enjoyed each other's company. There was an adolescent energy characterized by lots of connections, talking, and laughing, and it was truly affectionate with little affectation. There were no cliques or exclusion of pupils so often found in other schools. Students were kind and courteous to me and genuinely interested in who I was and what I was doing at their school. In numerous classes they asked me questions about my research and what I was finding in my visitations to schools. A number of classes I visited felt chaotic to me, as the level of interaction, conversation among the students, and laughter, was much higher than I was used to. One debate class had 25 students with a number of teachers, and students were weighing the differences between monarchy and democracy. I had to keep checking my own beliefs about how I think people learn (i.e., in quiet and controlled surroundings) and staying present to what was actually transpiring in the classroom. One thing I took from this experience is that learning can take place in a loud, lively, unmanaged setting. In questioning one of the teachers about the class, I also learned that debate classes are another way of accessing a student's emotions; they can provide an opening for working with a student if necessary.

Classrooms in the upper school were similar to the lower, simple and sparsely decorated, and they had additional scientific equipment for advanced science and mathematics programs. The timing of classes does not start until the upper grades. The

chemistry lab had a periodic table made by the students. Classrooms had only what was essential to learn in the upper grades to begin the preparation for the ICSE and ISC Indian exams in tenth and twelfth standard respectively. These tests cover English, a second language (Malayalam, Hindi, or French), civics, history, geography, mathematics, physics, chemistry and biology, and an elective in environmental or computer science. Every one of the students is successful in taking these rigorous exams, and they do it by deeply engaging in the subjects and supporting one another in passing.

One of the questions everyone has about The Sri Atmananda Memorial School, including me, is how the pupils complete these exams with such achievement after having spent the first six-plus years in school not sitting at desks and learning in the traditional manner? My answer after spending time there is this. The student's integral experiences literally reorder the way s/he develops. As a child grew and integrations were made, each subsequent level was more integrated. Students love to learn and have truly embodied the learning of their earlier school years. They have the ability to think both creatively and critically. The camaraderie of the young people provides a strong network of support for each person. Many of the well-known teenage conversations about being liked, gossip, exclusion, belonging, and so on were missing from this environment.

The school program includes regular science projects that are geared toward practical understanding of real issues. On numerous occasions these projects have far-reaching effects on the parents and surrounding community. One project, a water conservation lesson, extended out into the surrounding areas, and community members, through a letter to the school, commended the students for their partnership in handling some very immediate issues of water conservation.

The teacher in the Sri Atmananda School is specially educated in an "unlearning" program, the purpose of which is to have each individual teacher examine his or her own beliefs, implicit rules, and preconceived ideas about how s/he was educated and what s/he thinks education is. The teacher uncovers his/her own unexamined assumptions about curricula, practices, theory, regulations, structure, and student-teacher relationships Sri Atmananda's commitment to the "living teacher" is essential in this approach. Teachers learn how to enter the child's world and provide a genuine reflection of what that child wants to explore and create and then provides the necessary freedom and space to fulfill that exploration and creation. Learning is in the immediacy of the moment. Teachers are conscious of those momentary openings or gateways through which students can see life's connections, and they make good use of them. The teacher is so fundamental to this way of educating that resources go first to the teaching and assisting staff and then to materials and textbooks, as the school is certain that within the teacher-student relationship the foundation is laid for everything else to follow.

Inherent in the relationship with students is the teacher's agreement not to shame, condemn, punish, scold, or present any negative behaviors or cues. Pupils requiring special attention are intervened with by a diversion of attention, an invitation to talk, or help in settling a dispute or an offer of alternative choices. Teachers educate the students within the context of an implicit promise of unconditional support. They explore within themselves what it takes to provide that level of commitment over and over and over. In addition, teachers visit the student's home and coach parents in this way of educating a child. They are specifically asked not to coerce or force a child to read or write. Parents make an agreement to collaborate with the school and reinforce this philosophy. I think it

goes without saying that there is level of trust in the young people that is deeply rooted. As the students mature, the quality of responsibility, embodied wisdom, and emotional intelligence validates this approach. There is a self-knowledge that promotes continual self-healing, self-nurturing, self-governing and self-educating.

The school has no formal physical education program, but there are teachers who help plan many different physical educational activities. Younger children, as stated earlier, are participating in some form of physical activity many hours a day. Students in the higher grades do take part in some games or dance, and many students choose to be part of some sports programs after school. Although there are no formal music, dance, or drama classes, students bring in their own music, and there is regular entertainment once per month that the students organize and perform. During my stay, I saw no self-consciousness about performing in front of one another as girls and boys engaged in various kinds of performances.

Although there is no particular focus on the spiritual domain, there is a palpable experience of the deep respect everyone has for the connection of humans to one another, to nature, all religions, and individual expressions of spirituality. Spiritual experiences are woven throughout the entire school program, (Atma Vidya Educational Foundation, 2004. http://www.kpmapproach.org/index. php?//).

Paramhansa Yogananda (1893-1952)

The Living Wisdom School was chosen to represent an integral approach to education based on the teachings of Paramhansa Yogananda. It was founded in 1971 in Nevada City, California, by J. Donald Walters (Swami Kriyananda), a direct disciple of Yogananda who also founded in 1968 the Ananda community that it serves. Subsequent schools have followed, one in Palo Alto, California, in 1991 and a third in Portland, Oregon in 1997. The school serves approximately 50 students from the 250 resident-community and some foreign countries. It is situated among 800 acres of forests, meadows, rolling hills, and gardens, which it shares with an extensive yoga and meditation retreat center.

I chose to observe the original Living Wisdom School because it is the only one at the present time that includes students from kindergarten to twelfth grade. It was established to provide a more balanced educational experience that integrates body, mind, emotion, and spirit, blending philosophies from Eastern and Western traditions, inner experiences, spiritual insights, and practical efficiency. The program is called Education for Life. It includes parents, teachers, and students, as it recognizes that everyone is being educated. There are 45 students in the school; most live in the surrounding village and some board at the school, as they come from other areas or countries. Class sizes and mixes are purposeful. They are kept small to create a family-like atmosphere and include many cross-age interactions. Each classroom is arranged in a comfortable way with many areas–desks and areas for reading, computer use, circles, and play–to afford participation in a wide variety of activities.

The students' physical development is addressed in many different ways. The Living Wisdom School believes that play and recreation are vital aspects of a child's physical well-being as well as their social and emotional development. Younger children have many opportunities to play during the day between classroom activities. For older students, organized sports, such as soccer and basketball, track and field work, and

games, are regularly scheduled. These are sometimes co-educational and multi-aged, and more traditionally separated at other times.

What is unique about this program is its recognition of the scientifically proven benefits of yoga in providing balance and an increase in mental acuity in the lives of children of all ages. The intention in having students practice Yoga postures is to have them experience first hand its integrating quality and how it can act as a support in managing their energy. A focus that was repeated in many circumstances while I was there was the attention to energy flow and how what we do impacts our energy. While singing, playing music, dancing, reading, or in physical activity, students were asked to be aware of their energy and how it is influenced. I observed a class chanting and heard the teacher requesting that students to pay attention to how the singing was impacting their energy. The Ananda Community teaches 39 Energization Exercises that awaken the inner source of energy by recharging and relaxing the muscles. This short saying was hanging on the wall of a classroom and is spoken in silence when one utilizes these exercises:

> O infinite spirit–recharge my body with thy conscious cosmic energy, recharge my mind with thy concentration and determination, recharge my soul and all souls with thy ever new joy–O eternal youth of body, mind and soul–abide within me forever and ever.

The school encourages healthy diets. Being part of a community retreat center that offers organic, fresh vegetarian food definitely influences the students, families, and teachers. Most people in the Ananda community are vegetarian, and children bring nutritious food to school. There are no restrictions on food, however. My impression was that there was much agreement among people about healthy diet and the attitude was not judgmental or rigid.

The school recognizes the importance of spiritual principles in the lives of its students and focuses on the development of universally valued experiences of peace, love, wisdom, and joy. Every morning there is time set aside for singing, quiet meditation, affirmations, yoga postures, or other activities that help start the day in a conscious manner. One of the beginning classes I visited opened the day with a short silence and singing songs about peace and love, accompanied by a guitar. Teachers and students sang side by side, kidding and laughing together. The atmosphere was relaxed and on a first name basis, and teachers related to the high school students as responsible young adults.

Every class has a special area in which symbols of the world's religions are placed, along with any objects or icons that the students found meaningful. Often, teachers will have silent moments of reflection or centering before a class starts. Another class I participated in had small beads that each student used to focus on their breathing during a beginning exercise. A lighting of a candle was an occasion to teach children how to safely light a match. Each individual's sense of the spiritual is honored, whether it is a still place within, a sense of the reverence for life, or a relationship with a higher power or intelligence that guides their lives. The Ananda approach acknowledges "the truths that vibrate at the heart of every great religion" and the different ways these are expressed, recognizing that everyone seeks self-realization.

There is no specific religious instruction, and each family's faith and beliefs are included in the practices and celebrations. Students do take part in different kinds of dramatic acting and reading of some of the well-known scriptures of the world religions: Hinduism, Buddhism, Islam, Judaism, Christianity, etc. Teachers weave many ways of self-connecting (chanting, reflection, concentration, breathing, meditation, and quiet time) into the curriculum when appropriate. I noticed during my visit that teachers and students were flexible and comfortable in how they related to the whole area of spirituality. It was a natural, shared expression.

True maturity is one of the pillars of the school program. At the Living Wisdom School, *maturity* is defined as the ability to relate appropriately to realities outside our own. This is a powerful context for the growth of emotional qualities in children, as it requires knowing our own reality and that of others. The Education for Life curriculum is designed to facilitate teachers and students becoming aware of emotions, feelings, and moods, and both reactive and proactive operating modes. An exploration of the elements that create a person's particular reality is made through such activities as inquiry, relationship, and communication skill building, conflict resolution, and cooperative ventures. Emotional awareness and maturity is a theme that runs throughout the school and is interspersed with most classes and interactions. Teachers take the time to use critical moments to have a conversation that makes a lasting difference to a child emotionally. I heard a number of such conversations combined with academic work. The threads of personal inquiry were integrated with learning subject matter.

Students are supported in being aware of and understanding their emotions, and perhaps more importantly, how to respond with intelligence to different emotional states. They learn to choose how they want to react in any given circumstance. Life's circumstances that call for emotional understanding–e.g., upset, illness, divorce, family tragedy, death–are addressed within the school setting. These very real life occurrences are handled with compassion and an intention to help students experience and work through the emotions that accompany them. This models a very powerful relationship with life's challenges for students. One class of preteens I spent time with was exploring the experience of a blind walk led by a fellow student. When I arrived, classical music was playing and students were being led through a maze that they had built specifically for the purpose of experiencing being blind and being led by someone their own age.

In addition, learning is directed toward the young person's first hand knowledge of his/her own well-being–what increases or decreases it. With relevant experiences, s/he can observe the outcome of actions taken and quickly internalize the consequences, rather than follow moralistic or dogmatic regulations. A self-knowledge and self-trust ensues that leads to a natural willingness to engage in appropriate changes. While observing the classes, I noticed the freedom students had to express themselves, make requests for changes, ask difficult questions, and challenge the teachers. It was obvious to me that there was no suppression of opinions or avoidance of issues. At times, a teacher suggested a rewording of a request or statement to be more judicious.

Students at the Living Wisdom School are asked to earn part of their educational tuition starting in the seventh grade. With each additional year, the amount increases, starting at $450.00 and reaching over a $1000.00 for high school students. The faculty feels this payment teaches students the value of money, time, and work and fosters a personal commitment to one's own education. They support students in finding

appropriate work. The students I asked about it felt that it was teaching them something about their abilities, and that the actual earning of what was required was not as hard as they thought it would be. Each person has a direct experience of what it takes to manifest money and have it pay for something meaningful.

High school students are engaged in a well-designed unique program called Adventure, Service, and Self-Discovery. As the title implies, adventure, self-discovery, and service are interwoven into a curriculum that fosters emotional maturity, physical strength, spiritual awareness, and mental intelligence. These young people are involved with the community in ways that have an immediate positive impact on their lives and those of other people and the environment. They have assisted Alzheimer patients, local food banks, homeless shelters, severely handicapped children, refugee camp residents, children in an orphanage, and numerous national parks. The quality of these relationships is not superficial, as in some cases student live in a place for as long as two weeks or volunteer with the same group for some significant time during a school year. During my visit, students eagerly recounted their time spent in a Mexican orphanage during the past year, how much they had learned, and what they appreciated about themselves and the relationships they created with the children. They had to confront having little running water or working facilities and unfamiliar food.

There are also a wide variety of trips–field trips to science and art museums; studying marine biology on the coast of Baja; California, hiking, biking and art tours along the California coast; visiting monasteries and ashrams in the US and India; and touring with student drama and music productions. Throughout this exploration, students are continually challenged to expand their own awareness of themselves and the world around them. The teachers feel this approach has been very successful, as it capitalizes on the adolescent's natural tendency for adventure, independence, identity building, and self-discovery. Also, the dimension of service has added to the young person's profound sense of who they are. The students I interviewed about their service were proud of what they had contributed through their projects over many years.

The academic curriculum is geared toward students who plan to attend college, so it includes all courses necessary to fulfill the graduation requirements in the sciences, mathematics, languages, history, geography, literature, social studies, English, and so on. Classes are small and every child receives some individual attention every day in their work. Each student is working on what s/he needs to be working on and at the speed appropriate for him or her. For academic classes, adolescent boys and girls are separated to give them latitude in their self-discovery, conversations, learning styles, and sexual development. This setup has had a meaningful impact on the depth and breath of their engagement with the subject content. There are many other opportunities for boy and girls to relate during the school day and weekends. Because The Living Wisdom approach extends to a university curriculum, from time to time, high school students have the added advantage of sharing some courses with college students, e.g., political science, government.

The Living Wisdom School has chosen to produce an All School Production each year. This is another way the school invites a different quality of relationship and cooperation among everyone related to the school, from community members, teachers, staff, parents and students of all ages. Each class studies some aspect of the program's theme, which is usually someone or something that is worthy of exploration and

acknowledgment. Shakespeare's plays, mystical poets, epic stories, and Greek heroes are examples of past choices. Using this unique interdisciplinary approach, students of all ages learn history, literature, culture, music, spiritual lessons, and art using age-appropriate related material to study. Field trips to local or distant productions may also be a part of the experience. One of the most significant results of this yearly production is the internalization of the admired characters across the school campus, as students of all ages are identifying with the heroes.

The school has recently designed an Experiment in Living Program in which the seniors spend three nights in the dormitory each week creating a "learning community" environment. Students and teachers have evening sessions and early morning meditations and yoga practice as part of their exploration in community learning and living (Living Wisdom Schools, n.d. http://www.livingwisdom.org/philosophy/index.html).

George Fox (1624-1691)

Moorestown Friends School (MFS), a Quaker program in New Jersey, was chosen as a representative of an integral approach to education as its curriculum strives to develop and integrate the spiritual, emotional, physical and mental intelligences. The campus is situated on 44 acres in the middle of a small town. The school began in 1785 in one room and through many additions now has multiple buildings interconnected by a modern library and athletic and art facilities. It has 715 students from preschool to twelfth grade representing a diverse ethnic, religious, and economic population. Students come from families that practice the majority of the world religions and the school provides age appropriate studies in understanding their fundamental beliefs and recognizes their special observances. Although less than 10% of the faculty, parents, and students are Quaker, what draws them all to MFS is the quality of education that focuses on the whole person–all aspects of what it means to be human–which includes parents and faculty as well as students. The Quaker movement was founded in the seventeenth century by George Fox as a stand for an egalitarian, spirit-filled religious expression that includes all people regardless of class, race or gender. It is based in the Christian religion yet has a particular unique way of expressing that interpretation in practice. Quakers believe that there is an aspect of God in each person. They view men and women as equals and encourage minority viewpoints as the tolerance of ideas and beliefs of others is their basis for true community and ultimately true humanity. From their beginning, Quakers have been committed to the integration of disparate views into a unity. These values form a powerful foundation on which to create an educational philosophy and approach. They translate into tolerance, (which is defined on a classroom banner as, "seeing with your heart instead of your eyes") simplicity, service, integrity, peaceful problem solving, and respect for the individual, all of which permeate the Moorestown Friends School curriculum and visible practices. These words from a Quaker theologian–"The really great breakthroughs in human knowledge come when someone is courageous enough to question the assumptions everyone takes for granted"–are a good introduction to MFS.

Emotional learning begins at Moorestown Friends School with the I–Care program, which lays the foundation for later work in emotional intelligence. Every year in the lower school emphasis is placed on five principles for distinguishing and practicing caring: 1) we listen to each other, 2) hands are for helping not hurting, 3) we use I–Care language, 4) we care about each other's feelings, and 5) we are responsible for what we

say and do. By the time a student goes to middle school these principles are embodied and aid in creating the culture of the school. I observed a class in which the teacher was engaged with a group of seven-year-old girls in which one had felt excluded. The I–Care principles were brought up and the girls listened to the hurt feelings of the one not included and then talked about what each one of the girls could do immediately and in the future to demonstrate the I–Care principles in action. In another situation, some students were being disruptive during a story reading. The teacher stopped, pointed to what was not working about the behavior and asked the students what they were going to do about it to support them in being responsible for their actions. They proposed some changing of seats and new agreements were made not to disrupt others, and the story was resumed.

A method of supporting the development of emotional maturity is the role the teaching staff plays in providing council for students. They model behavior, teach practices and provide many opportunities for students to handle their issues among themselves. Each teacher is an advisor to a certain number of students of varying ages. The teacher gets to know the students very well, as do the students each other. Teachers meet both individually and collectively with their advisees. Groups are utilized to address many different kinds of issues together. The aim of the group is to provide practice for all ages to learn about themselves in relation to others; whether it be leading, following, mentoring, respecting, listening, speaking, etc. Older students are trained to help facilitate these advisor groups, with the teacher-advisor close by if needed.

I observed a group of seven teens, four females and three males, talking about issues that were problematic in the high school and what possible actions could be taken. Each person spoke and offered to take some responsibility for getting other teens involved in a dialogue about "how guys treat each other" and "how girls seem to take advantage of situations." They agreed that two gender separate meetings would provide a safe environment to initiate these conversations and support each student in expressing their own views on the topic. The teacher/advisor listened attentively and gave advice when appropriate, and it was clear that the group was responsible for the quality of the present and future meetings. They agreed to continue to meet until the issues were talked through to completion.

Two members of the school's faculty have designed a program called The Examined Life, which begins in the lower school and continues throughout a student's education. Its purpose is to provide an integrated pathway to develop the emotional, physical, spiritual, ethical, and mental intelligences. Classes such as literature, physical education, and history are used to support the acquisition of intrapersonal and interpersonal skills in the areas of personal ethics and resiliency and the ability to think critically, including problem solving and conflict resolution. The curriculum increases in complexity as the student matures, expanding to include the local and global community in its application by high school. It is a potent example of an integral approach to education, as it presents paradoxical situations and ethical dilemmas and educates students with specific skills and traits to help them think through how decisions and actions taken impact everyone. One example is developing empathy in adolescents by an in depth exposure to the Holocaust and apartheid.

Another example of the development of emotional capacity is the Honor Committee, which is comprised of students from ninth through twelfth grades. It is committed to growing and demonstrating itself as a learning community and at the same

time supporting the student body in treating each other as valued community members. I viewed as this group of fifteen individuals and the teacher/advisors grappled with how to set up effective structures in the school that other students would be willing to own. Pairs of these students handle school conflicts and individuals supply mentoring to the middle schools students.

Community service is another program in which all students participate to increase emotional sensitivity. Classes create ongoing relationships with organizations that contribute to the larger community, e.g., UNICEF, the American Heart Association, people affected by natural disasters or poverty, and the Middle East conflict. Students collect funds or goods and provide services as part of their education at Moorestown Friends School. In the high school the students contribute at least 50 hours for hands-on projects, such as tutoring younger students, meal preparation in homeless shelters, being a companion to the elderly, restoring stream banks, assisting in the school, or organizing food and clothing donation drives.

The development of an emotional awareness of the influence of media is a unique addition to the school's curriculum. In certain classes students are actively engaged in observing themselves as they watch news and popular programs. They become astute witnesses to the power of the media to create a reality. The classes open up their thinking about the critical impact these programs have on the quality of their thinking and feeling.

The extensive visual and performing arts program helps pupils cultivate an appreciation for creativity and self-expression. Talented art and music faculty, visiting professional artists, art shows, weekly assemblies of talented performers in music, dance and drama, and quarterly artistic performances for the entire school provide opportunities for students of all ages to demonstrate their unique expression to teachers, parents and peers. I observed a class of second graders learning the Suzuki method of playing violin. The children were learning the inclusive practices of this method, e.g., aurally learning notes, centering, bowing, standing, respecting, instrument care, etc., which also help with many aspects of mental and physical proficiency.

Activities, which are nonacademic clubs, contribute to the middle and high school student's emotional maturation, as they invite pupils of varying ages to interact three times per week with others of mutual interest. Music, art, woodworking, newspaper, drama, chess, and games are some of their active groups.

The school has begun a practice of including everyone in events to distinguish and acknowledge themes and celebrations that are consistent with its values. A Thanksgiving Happening, Earth Day, and Respect Day are three examples of days set aside for parents, faculty, and students to engage with one another at a deeper level of relationship. For the Thanksgiving Happening, 37 groups of more than 20 mixed aged participants took part in many different expressions of thanksgiving, which embraced aspects of the spiritual, emotional, physical, and mental. This community of close to 800 had a powerful sense of itself through activities, art, music, fun, and personally connecting with different ages through valuable communication about being thankful.

Physical education at Moorestown Friends School is considered as important to the healthy development of a child as its academic, emotional maturation, and spiritual emphasis. It is designed to be child centered. The aim of the program is to assist each student in developing attitudes, skills and knowledge of human movement that result in a lifetime of participation in physical activity. Each age grouping, e.g., lower, middle, and

upper, has well defined units of educational skill themes that address all aspects of physical development, e.g., running, throwing, balancing, catching, coordinating. Movement education, space awareness, and relationships, as well as increasing cardiovascular efficiency, flexibility, and endurance are all part of the development of the physical. Cooperative, partner, and large group games give lessons in sportsmanship and teamwork, while individual sports such as tennis, track and field, ropes course, fitness, and gymnastics provide additional learning experiences in self -discipline and personal achievement. During this time, students also participate in greater degrees with interscholastic sports competing with other teams in their league. Also, learning how to compete (to win with grace or lose with dignity) is an essential part of the program. Supporting the physical education mission, lifetime recreational activities, traditional sports, bowling, volleyball, softball, cooperative games, golf, regular camping and outdoor education are offered.

The physical domain takes on a larger definition in the upper grades as a thorough health curriculum is introduced. Students explore the intellectual, social, physical, and emotional benefits of health, fitness, and well-being. Physical development and maturation, nutrition, eating habits and disorders, weight and stress management, safety, first aid, hygiene, substance abuse, human sexuality, relationships, marriage, parenthood, communicable diseases, psychosomatics, altered states of consciousness, personal responsibility, and learning how the mind and body are connected represent many of the topics covered throughout middle and high school.

The spiritual education of students, parents, and faculty at MFS takes many forms. Quaker education seeks to nurture a particular kind of personhood, e.g., a person who has the capacity for reverence and is rooted as much in the spiritual as the material domain. This education is aimed at opening up the eyes for the "invisibles"– that which is beyond what we see, taste, touch, smell, and hear. It is educating that love, beauty, truth and goodness are transforming expressions of spirit. It encourages students to be willing to trust and speak about what is experienced internally as an expression of spirit. It supports everyone in having direct experiences of the importance of spirit in one's life.

The values of peace, tolerance, simplicity, service, and respect for the individual and life are all pathways to the development of the spirit in human beings. These values are presented throughout the curriculum, from discussions of peaceful conflict resolution in the lower school to the formal study of ethics, religions, and philosophy in the upper school. All major religions are acknowledged during their holiday celebrations, e.g., Christmas, Hanukah, Diwalii, Eid Mubarak, and Kwanzaa. One class I visited was spending time differentiating some religions by asking students to share the traditions of their family.

From kindergarten to twelfth grade, students are educated in understanding the importance of reflection, contemplation, and the practice of being quiet and attentive to one's inner experiences. These experiences can come in the form of 1) an appreciation for life, friends, family, teachers, 2) something that we are grappling with or worried about that we want to share, 3) a connection with other people, nature, and God, 4) the spirit that animates all of our lives, or 5) whatever else of which we are aware. Students are offered age-appropriate orientations to the practices of silent meetings. They are given the philosophy and value of the practices and what works to produce the maximum benefits. Sitting quietly with a relaxed body, not interfering with anyone else's silent

time, and attending to the three ways one can participate; listening, speaking, and being present in the moment are what is asked of everyone in the silent meetings.

Each week all students, along with their teachers, spend between 15 and 45 minutes, depending on their age, in a meeting for silent worship in which groups sit on benches facing one another in a square. The "elders" of the group (the fourth, eighth, and twelfth grades) sit in rows that are slightly raised so their behavior can model the appropriate and responsible for the younger students. I observed three different age groups and each was quiet and calm, with little movement or noise in the room for the allotted time frame. Because of the approaching holidays, the theme of light around and within us was prevalent. Some individuals did break the silence to speak about issues they were moved to share, from anxiety about a relative in the hospital, the excitement about the holidays, and upset about the war in Iraq and support for the soldiers to a concern about a college rejection. In one of the meetings I observed two different high school boys standing in front of over 200 of their peers and expressing their feelings freely about the war or the exclusion from the college of their choice. As a student, standing before approximately 250 of your classmates takes a quality of centeredness and self-possession that comes with practice over time. One student wrote of the "Meetings,"

> It is one of the few chances that we have to escape the hectic pace of our world and to think about things that matter. It does not take long for superficial thoughts to yield to deeper ones. It is a time to think about problems that we are facing personally, or those that the world is being confronted with. It is a time to think about what we believe in, and what we stand for. With none of the usual distractions influencing us, meeting is a time when we can truly think for ourselves. Here at Moorestown Friends we are not only taught to think for ourselves, but we are also given the power and responsibility to follow our hearts. (Note from Student Council Meeting, 2003)

Think what a gift it is to have such inner resources as a natural response to life.

A parent adds her views of the Meetings.

> Our children are so inundated with graphics images, extracurricular activities, pleas to "hurry up," "do this" and "stop that." What a refuge Meeting for Worship offers them. It offers a chance to shed outside pressures and listen to their inner voices, to commune with their peers and teachers during times of celebration and sorrow, to reflect and to dream. The result I believe produces individuals who are mature, insightful and inquisitive. (Note from Parent Council Meeting, 2004)

The term *worship* is used in this context as a respect for life and human beings and holding in high regard the experiences and expressions of others.

The focus on the mental capacities of its students is an area for which Moorestown Friends School is well-acknowledged. Its scholastic program is of a very high standard as a college preparatory curriculum. There is a detailed guide for each age group, which makes it clear to parents, teachers, administrators, and students what they can count on and the material being covered at different stages. Mathematics, English, language arts, science, social studies, foreign languages, history, library, computer,

literature, music, art and religions are offered at age appropriate levels to support the intellectual development of the pupils. Often, a multidisciplinary approach is taken that connects various subjects as well as music, art, and comprehensive field trips. I observed a number of highly participatory classes that wove together issues such as social justice, humanitarian law, the Middle East conflicts, and how each relate to the individual and her/his future.

Middle and upper school students take part in Intensive Learning programs, which are total immersion experiences in a specific topic for a period of six days. Seniors are required to complete a Senior Project, an individually designed and executed inquiry of personal learning over four weeks. The learning derived from the Meetings for Worship, The Examined Life, the athletic program, and community service also combine to add to the development of quality thinking skills: critical thinking, communication adeptness, ethical consideration, self-reflection, independent study, inquiry, panoramic viewing, resiliency, and handling paradox.

Moorestown Friends School values its relationship with parents and concentrates on creating powerful partnerships with them. From the beginning of their child's schooling, parents are included in open houses and workshops focused on the philosophical and educational approach of the school, child development, and how they can best support their child in this unique education, e.g., how to handle stress, loss of control, conflicts, tantrums, how to apply the I–Care Rules, etc. Parents are actively involved in many different aspects of their child's education, including volunteering in many areas of the school (Moorestown Friends School, n.d., http://www.mfriends.org/academics/school_life.html).

The oldest Quaker school was started in 1689 in Philadelphia. Currently Quaker schools number over 100 worldwide, the majority of which are in the United States; South America, Africa, Costa Rica, and England also offer Quaker-based education.

Specifically Designed Classes/Courses

The following classes are representative of the different opportunities students have in these schools to participate in programs that support the development of a more integral viewpoint. Further examples of their experiences will be found in Chapter 6, where the interviews are shared in more detail. A number of the programs provided *Relationship Classes*–opportunities to learn about creating relationships, communication skills, and handling issues and conflicts that arise among individuals and groups. Here I excerpt comments from a number of students: Karen, Alan, Amy, Namita, Michael, Raj, Gabrielle, and Erik. Karen said, "We would talk about our emotions or sometimes we'd pass the object around . . . like, a rock–and each person talks–and others listen." There were *Senior Issues* or *Senior Seminar* classes in a number of the schools in which seniors would engage with their feelings about leaving school and creating a new future for themselves. Alan explained, "We talk about how we think going away to college is going to affect us . . . our family, ourselves and whether we're ready for it." Amy described her *Self Exploration* classes where students were experimenting in learning how to prepare themselves to go to college. *Health Classes* are set up to address many areas of health, including sex education in a number of the programs. Alan commented that the students at his school have a big part in planning and suggesting relevant topics, e.g., dialogues about drug abuse and alcohol. Amy shared about the *Personal*

Development class she was taking. "The teacher talks a lot about emotions, as far as stuffing and then over expressing them. She offered us suggestions about things we can do . . . There are other ways to deal with emotions rather than just talking. Talking is good, but you don't always have to talk about it." Amy also spoke about the *Life Experiences* classes "that were not about learning a particular subject. They were more talking about life issues."

Namita explained her school's *Moral Teaching* classes. "We talk about . . . what are the problems we have with the school or with our classmates, or problems at home. They talk about the teenage stress that we mostly are going through and that is one of the more interactive classes we have. That is one place where the students get an opportunity to vent out their emotions . . . once a week." Michael talked about his *Effective Leadership* class. "Our teacher touched on dealing with emotions. Even though it was a leadership class, it made you look inside yourself to see how you dealt with things and what is appropriate." Raj gave the example in his school of the *Group Discussions* in which every one can begin to learn about their emotional development. "If a fight occurred, the discussion leaders gave us a chance to talk to each other. Then we would shake our hands and we would go back to our own lives and be friends again." Namita brought up the *Cooperative Games* in her school, which tested the students' abilities to adapt to different things. "You were put in a group to see how you interact with the group and it was basically an individual analysis done on every student. That was how the teachers actually got to know more about the student individually." Gabrielle mentioned *Rites of Passage* in her school. "It is really good about bringing in the idea of stages, changing, initiation and consciously going from one stage to the next." She also noted that, "We have a *Blame* and *Complain Sessions* . . . people need to vent, and I participated in them with everyone else. They gave us experiences in how to deal with our emotions appropriately. We had classes in *Building Relationships*–using the book, *The 7 Habits of Highly Effective Students."*

Michael pointed to his *Mediation* education, in which students are trained to support other students who are having conflicts. He also spoke about his *Media Literacy* class, which educates students in relating to television and the media with a different perspective and consciousness. Namita's program had *Morning Assembly*, during which they gave talks and performed one-act plays. "We learned how to talk in front of others with composure and control our emotions." Sonia described a self-generated curriculum called, *Free Progress*, in her school, "which works without any kind of outside motivation . . . just self motivation." Most of the students talked about their *Field Trips* as being place to learn things they would not learn anywhere else, and get to know students they would not ordinarily have a chance to know. Namita said, "It actually prepares you for the future, because you know once you get out in the world you have all kinds of people." Erik talked about *The Awareness through the Body* program at his school and its impact on his sense of wholeness. This program is described in more detail in Chapter 6.

Comparisons of the Integral Education Programs

There are many similarities in purpose and some differences in the way the development and integration of the physical, emotional, mental, and spiritual intelligences were addressed in each program. The following tables represent what was

either observed or learned during this research inquiry. The left hand column invites further clarification.

Competition refers to the program's relationship with competition. Some of the programs state specifically that they do not advocate competition, others have minimal competitiveness and only with the older students and some support competition with oneself, while others encourage competition. *Special Materials* refers to specific educational materials created by the founders of that particular approach. All the schools have specific philosophical materials that provide a foundation for their programs, yet only two have recognized educational curricula designed by their founders. *Environment* represents the location and the culture of the program (for example, in the city, in nature, part of a spiritual community, or a combination). *Size* indicates student population. *Small* is fewer than 100, *medium* is from 100–400, and *large* is 401–1000. *Teacher* as a category is what attributes the programs use to describe their teachers' relationship to their students. *Emphasis* is on what the schools say they focus their attention. *Student Centered* indicates that the school acknowledges the student as central to the learning. *Uniqueness* points to what stands out for each school in the way in which they interpret integral education. *Learning* is how each school chooses to approach the acquiring of knowledge.

Table 1a *Comparisons of the Integral Education Programs*

Program	*Steiner Waldorf*	*Montessori*	*Krishnamurti*	*Yogananda Living Wisdom*	*Fox Quaker*
Competition	Minimal Older	Minimal Older	No	Minimal Older	Yes
Special Materials	Waldorf	Montessori	No	No	No
Environment	Waldorf City Communal	Montessori Communal Nature-City	Nature Secular & Spiritual Community	Nature Spiritual Community	Traditional City
Size	Medium	Medium	Medium	Small	Large
Teacher	Awakens Long term connection Spiritual Teacher	Observer Facilitator Guide Spiritual Teacher	Partner Coach Spiritual Teacher	Partner Coach Spiritual Teacher	Instructor Model Spiritual Teacher
Emphasis	Artistic Creative Spiritual unfolding	Sensory Cognitive skills Academic excellence Order	Inquiry Presence Service Contemplate Self - understanding	Adventure Service Self- discovery Religious Tolerance	Leadership Mediation Skills Religious Tolerance
Student Centered	Yes	Yes	Yes	Yes	Yes

Uniqueness	Self awareness through Eurhythmy, Student generated Main lesson, Teacher Continuity	Cosmic Education, Responsible Parenting, Dialogue, Rites of Passage, Community Meeting	Silence Self Reflection Inter-generation Partnerships, Relationship/ Community Meetings	Education for Life, All School Production, Spiritual Community Adolescents pays part tuition Yoga	Value of Silence Sharing self with others The Examined Life, Community Forums
Learning	Paced to student, Specific Curriculum	Paced to student, Specific Curriculum	Paced to student, Teachers create	Paced to student, Teachers create	Traditional with individual support if needed

Table 1b *Comparisons of the Integral Education Programs*

Program	*CMS Baha'i - Gandhi*	*Sri Aurobindo (ICE)*	*Sri Aurobindo (Auroville)*	*Sri Atmananda KPM*
Competition	Yes	Yes Self	Minimal Older	No
Special Materials	No	No	No	No
Environment	Traditional City Global Reach	Historic Ashram City Spiritual Community	Eclectic Experimental Nature Spiritual Community	Experimental Nature; Secular & Spiritual Community
Size	Large	Large	Medium	Medium
Teacher	Instructor Model Spiritual Teacher Guardian	Model Guide Spiritual Teacher	Model Partner Guide Spiritual Teacher	Unconditional Supporter Spiritual Teacher
Emphasis	Global citizen Academic Excellence Religious Tolerance	Prepared for greater consciousness, Life in service of divine, Responsible for one's education	Experimental, Responsible for one's education, Diversity	Freedom, Love of Learning, Spirit of play, Unstructured

Student Centered	Yes	Yes	Yes	Yes
Uniqueness	World Parliament World Peace Global Perspective Dance of world's religions Yoga	Integral Yoga, Physical development Student developed programs, 'Free Progress' Silence	Awareness through the Body, Experimental international spiritual community	Student at choice continually, Inter-generational connections, Inclusion of all religions
Learning	Traditional with Individual support if needed	Traditional self paced Students creates with teacher	Student driven, Students create with teacher	Student driven, Teacher creates with student

Quaker education …nurture[s] a particular sort of personhood…a person who has 'eyes for invisibles;' a person who knows deep down that what we see, taste, touch, smell, and hear is not all there is in life…a person who is rooted as much in the unseen as in the seen, as much in the spiritual as in the physical…a person who has begun to develop the courage to testify outwardly to what he or she knows inwardly… (as cited in Caldwell, 1987, p. 2)

Chapter 5: The Qualitative Connection From Data Collection to Analysis

This chapter follows the progression of the qualitative narrative data collection to analysis and offers an integral window into this dynamic process. I am introducing a particular qualitative connection that can exist between data and researcher and a model that offers a transformation of the relationship one can have with data and information. The entire model is presented in detail later in this chapter and it gives this research a unique context and understanding.

Janesick (2000) has imaginatively observed qualitative research through a choreographer's eye. It is a powerful image, as the source material for the "dance" to be designed is the life experiences of people. Making the narratives of the research participants known, understandable, and meaningful requires an ability to interact with emergent material with both structure and fluidity. Janesick, a choreographic researcher, refers to this as rigor and open-ended-ness. I found that balancing structure and fluidity was essential in the analysis of this data. The structure was provided by the research question–What learning experiences support the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral educational programs? It contextualized the participants' responses to the interview questions. In addition, structure was also supplied by the numerous theoretical frameworks utilized to support the examination of the data. Some of these frameworks were known before the data collection began, and others were discovered during the research process. As such, this portion of the research depended to some degree on deductive reasoning.

The fluidity portion is represented by the people and their narratives, experiences, and interpretations, all of which relied heavily on the inductive inquiry process in seeking themes and patterns intertwined in the stories. It is the emergent nature of qualitative research that it invites fresh, new possibilities for learning. It is the emergent nature of qualitative research that creates an opening for the intelligence and wisdom of the participants to show up. And, it is the emergent nature of qualitative research that demands a good "dancer" to interpret what surfaces.

What emerged from these interviews was people's passion for an integral quality of life. The question I am engaging in while presenting this data and analysis is–how can I best honor this passion in my representation of these people? The answer to that question is to deeply respect the research participants and give them an opening to contribute to us all. As Parker Palmer (1998)

emphasized, I "acknowledged their unique identity and integrity . . . the power of the living subject" (p. 103). To provide other facets to this crystalline approach, scholars, scientists, business people, and educators, who are themselves engaged in an integral inquiry, are included in this dissertation's data presentation.

An Intimate Relationship with Data

In this study, the data represents living, dynamic, and intelligent people who have a valuable contribution to make to the research question. I understood how important it was to relate to their narratives as personal communications–as life stories. This supported the quality of analysis I was able to make. This relationship building required time and an ability to be with large numbers of disjointed threads of stories and experiences that call for understanding, contextualization and formulation. How a researcher relates to the qualitative data determines the extent of knowledge and wisdom revealed. The words, phrases, and expressions of the people interviewed in this study represent approximately 1,382 years of lived-life . . . the stories and meaning making from these 27 people. [This equals the number of interviewees multiplied by their approximate ages, i.e., (9x18) (18x40)].

These young men and women and their parents also represent the voices of many different ages, cultures, ancestors and histories. Their narratives, like any conversation with human beings, merited deep listening, close attention, space to breathe, respect, reflection and an intimate connection. The reading of interview transcripts and the viewing of or listening to tapes over and over and over and over for weeks is like no other experience in life . . . the process invites such extremes in thoughts, feelings, body sensations, moods, etc. Initially, the transcripts were read to reconnect with the people and their experiences. They were read to begin the process of distinguishing the data for the specific purpose of answering the research question: What learning experiences support the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral educational programs? Reading them also facilitated the process of generally discovering emerging themes, patterns, integral messages, and so forth.

The process quickly became an organic one as I became immersed, soaked, and surrounded by data and information. This information was everywhere–in the air I was breathing, in what I thought or dreamed about. It overwhelmed, scared, confused, annoyed, upset, and enveloped me; it surprised, delighted, inspired, enlivened, and humored me. It permeated everything. Every pore of my body was drinking in the lives of 27 people for weeks, for months. These people, from all walks of life, cultures, histories, and beliefs, had shared the most important part of their lives, the essence of their human experiences, with me. "Their narratives were an attempt to convey simply and seriously the most important experiences of their own lives" (Labov, 1997, p. 7). These human beings merit being kept always visibly present (Wolcott, 1994). They deserved a level of presence and consciousness that I continually stretched to reach.

The extremes of my experience can be described as follows. On one end of the spectrum, the intense boredom that accompanies detailed, repetitive work,

and the discomfort and uncertainty associated with not knowing (with no immediate opening for knowing to reveal itself), disappointment in not hearing what I thought I wanted to hear, the numbness resulting from long stints of sitting still, and anxiousness, the partner of overwhelm . . . On the other end of the spectrum, being deeply moved by these young people and their self-expression and ways of being, admiring the strength of conviction, humanity and courage exhibited by their parents and the quality and dedication demonstrated by the educators in the nine researched programs. The extremes also included the wonder and appreciation of all these different people from so many varied religious and cultural lineages sharing a deep commitment to integral education in its many expressions and possibilities for creating new futures. These extremes provided me with the most direct experiences of living with dynamic tension and paradox, between the mechanical and the relational. "The crux of these tensions is the nature of 'truth,' 'knowledge,' and 'research'" (Lieblich, Tuval-Mashiach & Zilber, 1998, p. 8).

One minute I would be stuck in minutiae or the thick fog of not knowing, or the unconsciousness of my preconceived ideas that kept me from being present. In another minute the intrinsic nature of research, e.g., wondering, inquiring, and being opening to new learning, was either being forgotten *or* remembered. In still other moments, I was clear and soaring from an insight or a revealing expression from the interviewees, and feeling honored to be the one with whom they were sharing their stories. This process was a creation of an intimate relationship with 27 people over time connecting around a theme we all cared deeply about: the learning experiences that support the development of the spiritual, emotional, physical, and mental intelligences. Interacting with the tapes and transcripts so many times provided me with the opportunity to relive those moments during the interview in which participants experienced directly their own knowledge, understanding and wisdom. They were interviewed once. I have been in those conversations for months.

Data: The Foundation of Powerful Conversations

People represented in words and phases on a transcript page and on a video or audiotape have something very meaningful to say to the researcher. They have a compelling nature even if it is the same conversation repeated many times. They want to be listened to and understood. Each time they are read, heard, or watched something new appears; something previously gone unnoticed shows up. The same interactions have a way of surprising and continually pointing to the deeper levels available to understand someone. There is a way of being with this process that transports one into "being with" the person interviewed. The experience is like being with *someone*. "Oh, I am going to spend time with *Bill*." I felt what it would be like to be that person, to have the life story of that person, and to spend time with him or her. I let their life story into my life, my body, feelings, spirit, and mind. I engaged in this "interactive process with the narrative and became sensitive to its narrator's voice and meaning" (Lieblich, Tuval-Mashiach & Zilber (1998, p. 10). These "communications" lasted until I understood their messages. One day after weeks and months of listening,

discovering and"being with" each person, it was obvious the "conversations" were complete.

When one creates an intimate connection with someone, it is vital that whatever results from it, in the way of information, knowledge, understanding, or wisdom, is related to in a manner that honors the relationship. As mentioned in the earlier section, there was a powerful dynamic tension and paradox between the mechanical and the relational expressions of this research process. My awareness of this supported me in continually distinguishing and respecting both aspects. In the process I became an observer of the automaticity associated with working with data and information and the generative energy necessary to reveal the depth of the participants' experiences, knowledge, understanding, and wisdom–so *they could be known.*

A Transformative Model for Data: An Integral Creation

The data-transformation framework, which follows the progression of information, from noise, i.e., undifferentiated bits of non-information, to wisdom, i.e., a complete "informational" state change, was first introduced to me by Dee Hock (1999). He is the founder and CEO emeritus of Visa International, and as a businessman, has been cited by experts in chaos and complexity theory and systems thinking, as someone who has successfully applied the theory's principles to businesses (Waldrop, 1996).

He knew the elements for a healthy, adaptive system include both chaos and order, and as an acknowledgment of the dynamic tension required between the two, named his subsequent organization The Chaordic Alliance, and his theoretical framework, *chaordic.* His interpretation of the chaordic principles, i.e., distributed power, diversity and transparency, has led to the company he founded growing exponentially every year and surpassing one trillion dollars in annual sales volume. Hock has been recognized by the Business Hall of Fame as one of the eight individuals who most changed the way people think in the past quarter century.

The historical threads of this Noise to Wisdom data-transformation model epitomize an integral approach, as many wise people from disparate fields contributed to its rich texture. And, there is little in the literature acknowledging the contributions to the model from the various perspectives. This speaks volumes about the lack of connection or collaboration among the many areas of study. From poetry, to information science, knowledge management, systems thinking, geography, human and technological relations and communication systems, many have brought new eyes to the model (Sharma, 2005). The poet, T.S Eliot wrote these words in his poem, *The Rock*,

> Where is the life we have lost in living? Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information? (1934, p. 2)

Harlan Cleveland (1982), a futurist, diplomat, and informational scientist, referred to the poem in a futurist article, "Information as Resource," in which he connected Information-Knowledge-Wisdom. Yi-Fu Tuan and Daniel Bell are

credited by Cleveland as having included *data* to the model because data to become useful has "to be linked to another rung or category of data" (Cleveland, 1982, p. 36), i.e., information. Milan Zeleny (1987), a management systems professor and consultant adds to the model by equating Data, to "know-nothing," Information to "know-what," " Knowledge to "know-how" and Wisdom to "know-why." Russell Ackoff (n.d.), professor of management sciences and organizational consultant, is most often associated with the "Data to Wisdom hierarchy," as it has been called by both information scientists and knowledge managers. He added *understanding* to the flow, because as a systems thinker he knew it was the way the aspects of the model related that mattered.

> You cannot examine a system by looking at its parts; you must look at it as a part of a larger whole. So analysis, we discovered, yields information about the structure of something, and how it works, that's knowledge, know how. Explanations lie outside, that's synthetic thinking. Synthesis yields understanding, analysis yields knowledge, and it was that distinction that was critical for the emergence of the systems sciences. It uses both. To understand systems, particularly those that involve people, synthetic thinking is required. (p. 2)

Ackoff classified the content of the human mind into five categories: 1) data: symbols; 2) information: data that are processed to be useful; provides answers to "who," "what," "where," and "when" questions; 3) knowledge: application of data and information; answers "how" questions; 4) understanding: appreciation of "why"; and 5) wisdom: systemic; a uniquely human state, as it requires one to have a soul, for it resides as much in the heart as in the mind (Bellinger, Castro, & Mills, 2004, pp. 1- 4).

Ackoff also offered a temporal explanation of the various expressions of data. Information "ages rapidly," knowledge "has a longer life-span" and only understanding "has an aura of permanence." It is wisdom that he considers to be "permanent." Wisdom, deals with the future because it incorporates vision and design. With wisdom, people can create the future rather than just grasp the present and past (as cited in Sharma, 2005, p. 5).

Sri Aurobindo although never directly connected with this hierarchy model, has written about data, information, knowledge, understanding, and wisdom. During a lecture about Sri Aurobindo, scholar Matthys Cornelssen (2005), from the Sri Aurobindo ashram in Pondicherry, referred to the model but transposed it to start with wisdom: wisdom-understanding-knowledge-information-data. The teachings of Sri Aurobindo and The Mother that relate to this theme are summarized in the following manner.

> Data are unrelated facts accumulated. Information is organized data so that it can be readily used. The essence of information is an idea. An idea becomes knowledge when it becomes practically usable. Understanding is an organization of the mental energies (including the physical and vital) around an idea that takes a direction so that future thought and action will have its full benefit of support and sure guidance. It is in silence that one can enter into communication with 'integral knowledge and

> understanding. Wisdom is not consummate knowledge of the world; it is to know the relationship between God and the world. (Ghose, n.d. [b])

A last piece of the richly textured history of the data-transformation model is that Eliot, before writing *The Rock*, had spent two years studying Indian philosophy, e.g., the *Bhagavad Gita* and *Upanishads* in Sanskrit and acknowledged that, "My own poetry shows the influence of Indian thought and sensibility' (Eliot, n.d.). He certainly had engaged with the wisdom of the East. Coming full circle, it points to the integral nature of this model. Hock (1999) added *noise* to the model and differentiated his interpretations of relating to data - moving from undifferentiated "noise" to wisdom.

The Transformation of Data: Noise to Wisdom

Hock (1999) contributes his interpretations of the "hierarchy" model by presenting it in a flow, which connects these qualities of knowing in a transformative manner. It brings a greater intelligibility to the process of bridging the collection of data with its analysis and application. He begins with noise and completes the process with wisdom, which for the purposes of relating to data, is indeed a significant contribution to make to research. As a researcher, I intend to have this research data and information transform, i.e., to bring new life, in the form of knowledge, understanding, and wisdom to the reader. The flow model looks like this:

Noise > Data > Information > Understanding > Knowledge > Wisdom

He begins clarifying the distinctions inherent in knowing.

> *Noise* is any undifferentiated thing that assaults the senses–auditory, visual, or textural. *Noise* is pervasive and ubiquitous and it becomes *data* when it transcends the purely sensual and has cognitive pattern; when it can be discerned and differentiated by the mind. *Data* becomes *information* when it is assembled into a coherent whole, which can be related to other *information* in a way that adds meaning, e.g., Bateson's (1972) difference that makes a difference. *Information* becomes *knowledge* when it has interacted with other *information* in a form useful for deciding, acting or composing new *knowledge. Knowledge* becomes *understanding* when related to other *knowledge* in a manner useful in conceiving, anticipating evaluating and judging. *Understanding* becomes *wisdom* when informed by purpose, ethics, principle, memory of the past and projection into the future. *Data* is separable, objective, linear, mechanistic and abundant. *Wisdom* is holistic, subjective, spiritual, conceptual, creative and scarce. (Hock, 1999, p. 223)

The following sections take each phase of his model and relate it to the phases of data collection and initial analysis in this research.

Noise Becomes Data

> Noise is any undifferentiated thing that assaults the senses. It is pervasive and ubiquitous . . . auditory, visual, textural. Noise becomes data when it

> transcends the purely sensual and has cognitive pattern; when it can be discerned and differentiated by the mind. (Hock, 1999, p. 223)

Preparing for and visiting the schools initially had elements of noise for me . . . all the particles to remember: planning trips, travel arrangements, connecting with the schools; the students, the educators, the school campuses, the communities; the unfamiliar, the unknown, etc. As soon as I was introduced to the student and/or the various educators, the program's differentiated character began to take shape. The semi-structured interviews allowed for a sufficient framework to quickly shift noise into data.

Data becomes Information

> Data becomes information when it is assembled into a coherent whole which can be related to other information in a way that adds meaning . . . a difference that makes a difference. (Hock, 1999, p. 223)

The initial readings of the transcripts and the listening or viewing of the tapes opened a window into the not-yet-known–the beginning formulations of initial themes and patterns to address at a later date. Over many months poring through the transcripts, video and audiotapes, I was interacting with the interviews as ongoing conversations with the participants. Each transcript contained notes that discerned specific data associated with the research question. Sections of each interview that pertained to the four domains of intelligence or the integration of those intelligences were placed in files. The interviewee's data was color coded; with both student and her/his parents receiving the same color to keep the narratives from the same educational program distinct and stored in separate categorical excel files. This allowed for ample room to view simultaneously all the responses in a particular area, i.e., emotional, physical, mental, and spiritual intelligence, and to maintain their integrity. In addition, files were set up for related themes and patterns that were showing up with each new interaction over time. Because there were specific questions linked to each domain of intelligence in the interview, the initial distinguishing of some data was made easier. (For interview questions see Appendix C.) Following this specific categorical sorting process, each interviewee's answers were continually reviewed for themes and patterns. The notes taken from program observations and conversations with integral educators were kept in a research notebook throughout the data gathering phase and were stored as information until later in the process.

Information Becomes Knowledge

> Information becomes knowledge when it has interacted with other information in a form useful for deciding, acting or composing new knowledge. (Hock, 1999, p. 223)

Lieblich, Tuval-Mashiach and Zilber (1998) distinguish *classifications* and *organizations* of types of narrative analysis that are critical to this study. They introduce analytical dimensions that lend themselves to the process of interpreting

information in a way that highlights specific aspects of the narratives that relate to the research question: *What learning experiences support the development of the spiritual, emotional, physical, and mental intelligences of representative seniors in integral educational programs?* The learning experiences expressed in the interviews illustrate rich examples of relevant content, i.e., what happened, why, etc., from the participant's viewpoint, and the intelligence domains of the spiritual, emotional, physical and mental correspond to key categories that require deeper investigation in the research. The *classification* and *organization* contributed by Lieblich, Tuval-Mashiach and Zilber (1998) that shift the research information to new knowledge are *Categorical-Content*. They have been utilized in formulating a picture of the content universe of each of the interviewees–their learning experiences in each of the intelligences; spiritual, emotional, physical, and mental.

In addition, significant thematic *categories* emerged throughout the analysis that extended knowledge about these intelligence domains and are included. Some of the meaningful recurring examples from the interviews include: students feeling safe to express themselves fully; being "listened to," being known and respected by parents and teachers from a very early age; having choices; influences of the surrounding culture, i.e., parents, teachers, family, friends, media and the school environment and classes; serving others and have sufficient space and time to reflect. The notes from the program observations and conversations with educators greatly supported this phase of the research as they provided another essential vantage point to the knowledge of the programs.

Knowledge Becomes Understanding

> Knowledge becomes understanding when related to other knowledge in a manner useful in conceiving, anticipating, evaluating and judging. (Hock, 1999, p. 223)

Both existing theoretical contributions and emergent content areas from the reading, listening, and viewing of the interviews were utilized in this study to support me in evaluating the subtext content. Because of the integral nature of the research inquiry, it was essential to have both theoretical and empirically based *categories* to represent a holistic approach to the interview material. In order to answer the research question effectively, *categories* require rich and varied descriptions that do justice to the complexity of the human beings interviewed. The notes from the program observations and conversations with educators were utilized during this phase of research to write a composite picture of the educational program (see Chapter 4). The composite was shared with the program directors and/or representative educators and were validated by them in their feedback. This interaction also brought me and the educators a new depth of understanding of the programs.

Howard Gardner (2000), Linda Olds (1992), John Heron (1996), Fritjof Capra, (1996), Humberto Maturana and Francisco Varela (1992), Diana Whitney (1995), Dinah Zohar and Ian Marshall (2001), John D. Mayer, Peter Salovey and David R. Caruso (2000), Susan Griffin (1995), Tom Hanna (1993) and Daniel

Goleman (1995), add significant insight into one or more of the intelligences categories: spiritual, mental, emotional and physical. These researchers are utilized in the research analysis to provide a theoretical contribution with which to correlate the interviewees' responses. The intention here is to begin a process of witnessing what is possible when scholar, student, parent and educator unite experiences and knowledge. The result is a deeper understanding of the spiritual, mental, emotional and physical intelligences. The development of these intelligences has a profound impact on the identity, i.e., the integral nature and consciousness of young people, their parents and educators.

Understanding Becomes Wisdom

> Understanding becomes wisdom when informed by purpose, ethics, principle, memory of the past and projection into the future. (Hock, 1999, p. 223)

In the final stages of analysis, the students, parents and educators of the integral education programs added the purpose, ethics, principles, memory of the past and projection into the future, to add wisdom to this study. Wisdom is a vital area of inquiry in this research as the development of the spiritual, emotional, physical, and mental intelligences may have more to do with learning how to be effective in transforming information into wisdom than acquiring and managing new information. It requires a different lens through which to view life. The intentional development and integration of the four intelligences provide an integral viewpoint with which to relate to the domains of knowing made distinct by Hock and his predecessors (for example, Cleveland and Ackoff). For him, wisdom is holistic, subjective, spiritual, conceptual, creative and scarce.

This holistic approach to data analysis focuses on the whole, e.g., the person, the phenomenon, the situation (Lieblich, Tuval-Mashiach , & Zilber, 1998). Because this research is interested in the integral experiences, expressions, behaviors and competencies of young people, this way of viewing the data is requisite. The most supportive learning experiences chosen by the students and their parents are presented in the next chapter. The integral dimension is also used to create a composite picture, i.e., Polkinghorne's (1988) "understandable composite" of an integrally educated student taken from the data of the nine interviewees. Major themes that connect and highlight these integral programs will follow in Chapter 7.

The Analysis Steps

The following are the steps taken in the analysis phase of the research.

1. Read every transcript through for reconnection and familiarity

2. While watching/listening to the tapes, followed word for word every transcript for accuracy and completeness

3. Made corrections, additions, omissions

[Note: Some transcribers did not fully understand the interviewee and in some cases had typed on the transcript the OPPOSITE of what was actually said. Also, sometimes the transcribers did not type everything that was said, so the context of what was said was missing and initially misinterpreted. In one case 2 pages of transcription were missing and initially misrepresented that interviewee.]

4. Read the corrected/completed transcripts within the broad categories:

- The intelligence domains: Emotional, Physical, Spiritual, Mental
- What was said or alluded to about the integration of the domains
- Anything the students wanted to be sure was captured from their experiences
- Their experience of being interviewed

5. Any response that was related to A or B (the domains) was placed in a specified excel file with a color code to designate the student and their parents. The same colors were given to a student and their parents to assure integrity of the data once it was moved to a file containing all nine of the students'/parents' responses, e.g., Emotional, Physical, Spiritual, and Mental.

6. Transcripts were marked for themes with comments in the margins highlighting what was being addressed by interviewees, e.g., related themes to the broad categories of the Emotional, Physical, Spiritual, Mental intelligences and other topics that reappeared often which represented some cross category connections, (see Appendix D*).*

7. Themes (those noted four or more times) were placed in separate designated excel files with the same color markings for each student and parent. In each category, 5 outstanding themes were chosen that represented both student and parent. The influences of the school, (philosophy/pedagogy) parents, friends and teachers were utilized in each domain of intelligence because of the number of indications in the transcripts.

A. Students' themes in alphabetical order:

1. Being Known
2. Belonging/Love
3. Centeredness
4. Competition
5. Connection with Nature
6. Energy
7. Experiential Learning
8. Having Choices
9. Healthy Habits
10. Influence–Friends,
11. Influence-Parents/Family
12. Influence–Teachers

13. Intergenerational Relationships
14. Love of Learning/Curiosity
15. Media's Impact on Education
16. Presence
17. Reflection Time and Practices
18. Respect
19. Responsibility
20. Safety and Security
21. School Philosophy
22. Spirituality

B. Parents' themes (relating to their child) in alphabetical order:

1. Being Listened to
2. Choices Given
3. Confronting Problems
4. Connecting to all Life/Nature
5. Continual Learning
6. Creativity
7. Cultural Influences
8. Elders' Influences
9. Healthy Habits
10. Honoring all Religions
11. Love of Learning
12. Parents Changing as Result of having a Child
13. Parental Education
14. Media's Influence on Culture
15. Relationships
16. Responsibility
17. School Philosophy
18. School Uniqueness
19. Security
20. Service
21. Special Things said about their child
22. Testing
23. Thinking for Oneself
24. Wanting their Child
25. Child Centered Education

8. Once the themes had been acknowledged and categorized, an analysis of the data was done within each area to present what emerged for me as the researcher as outstanding insights. Examples from the interviews are utilized to bring these research insights to life (see Chapters 6 and 7 and Appendix D).

9. Each intelligence domain (Physical, Emotional, Spiritual, Mental) was explored using acknowledged theoretical and philosophical frameworks. These provided a context within which to consider the narrative content of each interviewee. Each scholar's work was separated into the appropriate intelligence domain and excerpts from the narratives were sought to provide examples of that intelligence representing that theoretical framework, (see Chapter 6). Below are the scholars whose theoretical frameworks are highlighted in these sections of the research.

10. Besides the analysis and interpretation chapters, themes are threaded throughout the remainder of the dissertation.

C. Scholars Included in each Domain:
The Physical:
Gardner (2000)
Olds (1992)
Heron (1996)
Griffin (1995)
Hanna (1993)

The Emotional:
Goleman (1995)
Mayer, Salovey, & Caruso (2000)
Gardner (2000)

The Mental:
Capra, (1996);
Maturana & Varela (1992)
Heron (1996);
Gardner (2002a; 2002b)
Morin (2001)

The Spiritual:
Whitney (1995);
Zohar & Marshall (2001

The Integral:
Gebser (as cited in Mahood, 1996; Feuerstein, 1989)
Wilber (2000, 2003)
Sri Aurobindo (Ghose, 1972, 1976, 1990)
Forbes (2003)
R. Miller (2001)
J. Miller (2006)
Clark (1991, 1997)
Beck (2002)

When many people join together in conversation their words present themselves before the soul as if among them stood, mysteriously, the Archetype of the Human Being. It shows itself diversified in many souls, just as pure light, the One, reveals itself in the rainbow's arch in many colored hues.

Rudolf Steiner, as cited in Bamford & Utne, n.d., p. 48

Chapter 6: Data Analysis and Interpretation

Integral Education: Its Crystalline Characteristics

The next two chapters are dedicated to the analysis and interpretation of what has been discovered in response to the question of this study. This chapter engages in depth with each of the intelligences much like one might with a crystal as it mirrors many facets. The narratives of the students and their parents reflect the integral educational programs, their founders and philosophical sources. Their accounts have emerged as a new, original way of seeing. The predominate themes emanating from this research and interviews provide rich substance with which to effectively respond to this inquiry.

Analysis and Interpretation: Distinguishing and Connecting

To set the context for the chapter, I am introducing French philosopher-educator Edgar Morin (2001), who has contributed significantly to education in a complex world by challenging people to "exercise thought that distinguishes and connects" (p. 38), which to him meant "conjugating" the knowledge of both parts *and* wholes, analysis *and* synthesis. This research inquiry is one response to his challenge and the presentation of the data in this manner is one example of that acceptance. As systems scientist Ackoff (n.d.) was quoted saying in the last chapter, "analysis yields knowledge, synthesis yields understanding" (p. 2). The intent of this chapter is to present the findings in a manner that acknowledges knowledge and understanding, and also reveals the wisdom inherent in integral education.

It is important to distinguish the word *distinction* at this point, as its usage is essential to the understanding and interpretation of the data and the research intent. A distinction shares three expressions. It is a *concept*–a definition or a differentiation of something; it is an *experience*–an embodied knowing, how to do something, as in "walking," or a direct experience, like "loving"; and it is also a *creation*– a bringing forth into existence. Our first learning in life is being able to discern experientially then conceptually as we grow and develop. Each of these expressions is an example of a way of knowing and relating to the world. The conceptual mode seems to predominate in the way in which most people know and relate to the world, followed by the experiential. Only a relative few bring forth new ways of relating to the world and create through discerning. One's experience of life is very different depending on the way one distinguishes life– from the conceptual to the experiential to the creative spans a substantial distance.

One of the noticeable characteristics of the individuals educated in an integral program was their ability to discern within the physical, emotional, spiritual, mental, and integral intelligences and to express distinct ways of knowing in each domain. They demonstrated their relationship with these intelligences with illustrations through their stories and contemplations as they engaged with the research questions and interview process. Combined, their narratives and reflections acted as a catalyst for new learning to emerge.

These high school seniors (the names used below are pseudonyms) are attuned to relating to these domains of intelligence from a vantage point that reaches beyond their individual perspective and includes that of being an observer and reflector as well. A few students provide an initial impression of the schools. They point to education and its ability to create space for curiosity and passion. Raj recalled what it was like for him to learn in such an environment. He felt the school starting at the age of six, "developed his mind and sense of curiosity," and he was taught "to see, observe and learn through activities that supported his passions." Gabrielle pointed to the universality of all of us wanting to connect to a higher sense of self in the spiritual realm.

> We're all trying to get at the same thing but because of the different cultures and just how everyone has developed differently, there are some very different views on 'divinity,' and I believe this even more now that everyone wants divinity and interprets it in vastly different ways.

Amy gave examples of how her education supported the awareness of her body and its influence on her mental abilities. She spoke of her yoga classes and their help with posture, relaxation, the proper use of the breath to relax and learning about her different muscles and how to relax them. "Yoga helps relax not only your body, but also your mind." Erik's parents gave their children many opportunities to build their identities through increasing the amount of responsibility they were given as they matured. He said, "My parents always gave a lot of responsibility to my brother and me. There were many opportunities to build our personalities." The experience of service, gratitude, and the connection with others who are different from us was represented by Michael in his account of volunteering.

> There are lots of opportunities to give service in the school. I went to a church downtown and did homework and played with some homeless families in the area. They were nice kids, and it just made [me] take a step back and realize how lucky I am. I felt bad afterwards, not being grateful for what I had. That was really emotional for me.

This chapter presents what students and their parents responded in their interviews that illustrate powerful distinctions in the domains of intelligence. The themes that emerged from the narrative analysis address each area and are presented here with a brief explanation. The chapter is structured to offer multiple sources of support for the findings. The primary focus is the responses of the research participants, as their insights and experiences contribute new understanding to the value of a systemic, integral approach to education.

For each area, a definition will be given that represents how the research participants responded to the question, "What words or experiences would you use to describe this intelligence?" The definitions are followed by examples given in response to each domain of the research question. The major contributing themes are supported with comments by the participants. Also note that four students and four sets of parents (12 out of the 27 research participants) were speaking English as a second language during the interviews and their self expression reveals this at times.

A number of theoretical and philosophical offerings conclude each section–the physical, emotional, mental, spiritual, and integral–to illuminate how the qualities of intelligence chosen by these research participants reflect what scholars have also established. Together they illustrate multidimensional facets to be observed and acknowledged. Viewed as a whole, the analysis, interpretation, and the pairing of scholars with research participants provide an integral quality to the findings. This research's intent is to bring this new, emergent knowledge, understanding and wisdom to the field of integral education and a sense of wonderment and appreciation for its crystalline qualities.

Context is Decisive

Participants in their comments in the interviews consistently pointed to the influence *the school, its philosophical and pedagogical approaches, parents, families, teachers, and friends* had in supporting the development of their physical, emotional, mental, spiritual, and ultimately their integral intelligences. This category has been chosen as a context within which all the domains of intelligence will be interpreted. That group of people and structures has undoubtedly the largest opportunity to influence a young person's education. What is worth noting here is the manner in which that influence is 1) exerted by the influencer and 2) received by the influenced. The context in which this influence is exerted and received is essential. In this case it represents an integral approach. A few examples from the interviews highlight the quality of the educational environment.

Namita's school "focused on the positive influences, the positive emotions and encouraged the positive qualities of the students." The teachers purposefully supported any positive aspect of a student. Raj felt connected to his teachers. "The teachers and students were very close. The teachers take care of the students." His parents agreed, "We don't know if there is any other school that takes care of the kids like that anywhere." Gabrielle's parents also commented on the strength of the school environment to "develop emotional strength. They teach the kids conflict resolution skills and they've put their own rules in place, like self-governance. This environment is a godsend. It was perfect; here they really nurture the joyous process of learning."

Themes from the Physical, Emotional, Mental, Spiritual Intelligences

From the interviews, the areas that stood out as major contributors to the developing of the intelligences were: For the *physical,* 1) the connection of the physical aspects of a person with the physical world and nature; 2) somatic

consciousness, being 'present' in the body; 3) centeredness; 4) energy; 5) healthy habits/nutrition, and 6) the school, its philosophical and pedagogical approaches, parents, families, teachers and friends; For the *emotional,* 1) safety, belonging, relationship, love; 2) being known and self expressed; 3) serving; 4) being responsible, 5) mentoring and 6) the school, its philosophical and pedagogical approaches, teachers, parents, families, and friends.

For the *mental,* 1) the encouragement and 'space' to love learning, be curious and follow a passion, 2) have learning be experiential, embodied and relevant to ones life; 3) be respected and honored as an individual and think and learn for oneself; 4) be given choices, trust and responsibility for learning; 5) know the context in which learning is taking place, and 6) the school and its philosophical and pedagogical approach, parents, families, teachers and friends; For the *spiritual,* 1) being educated in ways that spirituality could show up in their lives, i.e., seeing oneself in relation to a larger world, feeling connected to oneself, others and nature; 2) learning and participating in practices that brought them in touch with themselves, through internal experiences, i.e., meditation, yoga, exercises, self-reflection, journaling, silent time, connection with a higher power; 3) experiencing congruency throughout their life; 4) having conversations about spiritual insights and experiences; 5) understanding and honoring the world's religions and learning the distinction between spirituality and religion, and 6) the school, its philosophical and pedagogical approach, parents, families, teachers, and friends.

The Physical Domain of Intelligence

The Fundamental Role of the Physical Domain: A Pattern Emerges.

Taken as a whole, 1) the connection of the physical aspects of a person with the physical world and nature; 2) somatic consciousness, being present in the body; 3) centeredness; 4) energy; and 5) healthy habits/nutrition, and viewed within a framework of influencers, *the school, its philosophical and pedagogical approaches, parents, families, teachers, and friends*, point to an essential understanding these integral approaches have to education within the domain of the physical intelligence. The pattern of these interviewee selections reveals the *fundamental* role the physical domain assumes in this type of learning.

There is groundedness, centeredness, consciousness, connection with the natural elements and acknowledgement of the integral relationship between biology (earth), chemistry (foods), and physics (energy) at the core of the integral approach to education. There is a tacit form of knowledge in bodily knowledge. "The clues that allow us to know anything come from our relatedness to reality–a relatedness as deep as the atoms our bodies share with everything that is, ever has been, or ever will be" (Palmer, 1998, p. 98). This embodiment of the physical has ontological implications. It communicates a particular reality and way of being that introduces students to what is real for them; what is real for them is in their body, in their experiences and senses. It also has epistemological connotations. What and how these students know as a grounded embodied individual influences the way they relate to knowledge; it is relevant to them on a very basic level. It is

learning that is connected on many layers–energetic, cellular, muscular, sensory and kinesthetic.

Defining "Physical"

Before engaging with the physical intelligence from a more analytical and interpretative viewpoint, it is informative to read some of the characterization of the physical domain from the interviewees' responses. The meanings of the words are presented as a composite picture of responses. Words and concepts that were used to express the physical follow. "PE, sports . . . experiencing the energy I have; a body in movement; the body physical or the physical world; different energy moving at different rates through it; this tactile realm; sensation; matter; health, endurance, stamina, suppleness; power, energy; conscious of the body . . . to listen to it and respect it; the physical affects your mind and your spirituality."

The words chosen by the interviewees reveal their particular relationship to the physical realm. Expressions such as *energy, energy moving throughout, the physical universe as energy, a body in movement, a presence, suppleness, physical as matter, consciousness through the body,* and *listening and respecting the body,* are reflections of the quality and depth of education of the physical intelligence in the integral approach.

Defining "Physical Intelligence"

Physical means "having material existence, perceptible, especially through the senses: sight, sound, smell, taste and touch. Also, it is subject to the laws of nature, measurable by weight, motion or resistance, of or relating to the body, of or relating to natural science" (Agnes, 2001, p. 1086). Physical also has other manifestations, which are being explored in this research, e.g., health, diet, exercise, energy, and body awareness. Intelligence is the faculty that provides us with an ability to transfer and apply our acumen from one situation to another. It is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience (Agnes, 2001, p. 742). Physical intelligence (PI) is a quality of discernment in and of the material realm that manifests as awareness through the body and the knowledge of its connection with all matter and energy. PI is a capacity to learn and interact with the world through the physical domain. Our physical intelligence supports us in making necessary changes in our actions, behaviors, habits and patterns that relate to the material world. From the interviews within the physical domain, themes that emerged are presented below. They illustrate a breadth of intelligence available in the physical realm that showed up in different expressions from these integral educational programs.

Major Themes in the Physical Domain

Theme 1: The connection of the physical aspects of a person with the physical world and nature.

Each of the schools researched had extensive programs for the students to relate directly to nature and experience first hand what that relationship was for him or her. These experiences were woven throughout the school curriculum using age appropriate methods. This connection was viewed by the programs as essential to the growing sense of self of students and their grounding in the interconnectivity of nature and humans.

Every student referred to the amount of time spent in nature as part of their integral education. Raj's experience of "being in nature most of the time" as his program educated out doors the majority of the time until age nine. He expressed his deep connection with the elements and laughed about how much time he spent playing in the rain, because students at his school were not required to come inside just because it was raining. Karen and her parents spoke for the majority of these integral programs when they talked about the value of extended time in nature. Karen reflected,

> Since first grade, we have been camping out in the fields and then in high school we started doing hiking, more physical trips, like backpacking, twice a year . . . And that teaches you to know your limits and what your body can do.

Her parents pointed out,

> She doesn't like the dirt and the heat, the hardness of it, but they learn so much. They're out there cooking for themselves, digging holes for bathrooms, they learn to survive. They're interacting. I think it's some of the best time she's had.

Erik, his peers and/or his family would hike and camp in the Himalayas at the reserve forest and stay there for a number of weeks. Erik's parents went regularly with their sons because "they like to go out, they are not people who stay in the house and they like to explore things."

Theme 2: Being "present" in the body; somatic consciousness.

There is an experience that is accentuated in many of the integral approaches to education the opens students up to an awareness of their body - an inclusion of the body in one's consciousness. There is a 'lived experience' in the body and the research participants articulated this experience below. Gabrielle shared her love of figure skating and how her:

> Touch sense just really comes alive and there is a very strong sense of flow . . . everything's very balanced and it's very loose. It's ethereal almost. The spins are great. Every now and then I would snap everything together just perfectly. That's just such an amazing feeling. You're just in this beautiful meditative state, like a zone. It's perfect. The mind . . . it's not there.

Michael commented that sports and physical activity give people a consciousness about their bodies and Erik and Alan both learned to be more

observers of what they were doing with their bodies. Erik observed, "It is more finding out and realizing what you are doing, you know . . . to feel your body," and Alan remembers times when dancing how aware he was of how his body was moving, "I remember running on the stage, toe first, aware of how my feet were moving." He said he could see how he brought that awareness to himself and how he moved through life.

Theme 3: Centeredness.

Within the realm of the physical, interviewees pointed to learning about being centered as another important support to the development of that intelligence. Centeredness is an ability to concentrate and focus and also to know when one is not centered and to have the capability to return oneself to balance. Sonia gave an example of how her school program had taught students to use their ability to concentrate as a way of quieting the mind and returning them to a place of equilibrium. "Before an event, (drama, sports, speaking) I certainly focus always. The beginning of school we have five minutes of music, at that time I concentrated."

Amy and Erik also gave incidents in their schools where time was provided for students to learn and practice how to center themselves. Amy offered, "We learned breathing techniques when you're really nervous, like how to breathe really deep in your belly because that brings energy that calms you down, and helps you concentrate." Erik's school teaches how to,

> Become aware of your heart beat and use it as a 'marking' to control your own nervousness, anxiety or fear. If you interlock your hands, and let your index fingers touch on the tip you can become aware of your heartbeat. Focusing on this pulsation can enhance your performance by letting you calm down and focus your energies.

Theme 4: Energy.

The awareness of energy, both as an inner personal experience and an observation of energy in its outer manifestations in life, was identified as important to the development of the physical intelligence. These interviewees were engaged in conversations about energy consistent with ancient wisdom and new sciences revelations. These integral programs are introducing subtle experiences that contribute to a finely-tuned sense of intelligence in the physical domain. Amy commented that "what is physical is really just energy" and used examples of how she had learned to connect her breath with increasing her energy. She also equated different kinds of music and how the tones and rhythms "bring you to different planes like . . . energy, how they impact one's energy both positively and negatively." Her parents noticed how much her playing an instrument had influenced her sensitivity to energy.

Namita also was learning the value of yoga classes as students were learning "breathing exercises to cleanse the toxins out of the body and breath in new air. There is a whole rush of oxygen down our body that activates us; it actually makes us fresher early in the morning." Sonia used her sports and physical activity to increase her energy. She observed, "I feel that the more you

do the more energy you have. Sports: It's very good for taking out stress and renewing my energy." She also knew that "the body and its various abilities are the base from which we can work and are very important to cultivate, to support our ability to access energy."

Theme 5: Healthy Habits/Nutrition.

These integral programs provide an environment and education that support healthy habits. The schools emphasize how what one consumes impacts the body. Interwoven throughout the curriculum in various classes are age appropriate themes and related practices. A network of support is created among the school and families to be conscious of how students can, at a very early age, make choices that have a lasting affect.

Alan and Karen spoke about their personal experiences with food and nutrition, and they represent most of the other participants in the research regarding having attention on what food is going into their bodies. Alan had started "getting into organic foods" because of the influence of the biodynamic farm students from his school visit during the year. He said I am "fairly conscious when it comes to food. I'm aware of looking at the back and reading ingredients." Alan's father added that working on the farm had an impact on all the students as they connected with the earth and the animals, and "there's a lot more focus on the source of food." Karen's example is quite striking because as she says, "I've been a vegetarian since I was three. I don't know why, but I just stopped eating meat. I kind of said, 'Yucky,' just the look of it and the smell of it." Karen's parents concurred, "At age three she said, "Yucky meat." We've been vegetarians ever since. We eat only organic and extremely healthy foods. The whole school is vegetarian." This also speaks volumes about parents who listen to their three year old.

Research Collaboration

The next few paragraphs provide supportive theoretical documentation taken from noted researchers in the physical domain. The parallels in thinking among the research participants and the researchers are notable. Linda Olds (1992) has a systems perspective and thus relates to "the body as a context for knowing" (p. 8). One student, Sonia, commented, "Exercise prepares the body to be robust so it can contain a higher level of consciousness. I think it is very important to cultivate the body's abilities because it is the base from which we can work." Olds continues, "Our knowledge from its onset is also embodied, embedded in our kinesthetic relationship with reality and in the connection of our bodies to the physical world. Our bodily based experience of moving and interacting in the world impacts our ability to understand our world as much as our abstract intellectual thinking" (p. 8). This observation from Alan and his parents gives a clear example of this. "I'm in this performing group and I really like expressive movement to music now." His parents commented, "One of the things that they do at the school, they teach them to move–you know, they focus in on this movement."

The body's sensory interactive relationship with the physical world greatly influences our perception of our world. Susan Griffin (1995) also acknowledges the body's capacity for embodied knowing. She states, "The body and mind are not separate . . . Consciousness cannot exclude bodily knowledge . . . And this knowledge comes to us . . . with every breath" (p. 226). Gabrielle spoke to this connection in her statement about field trips,

> This school has been really awesome. I love field trips [as they] are what brings the physical kind of sense to whatever you're studying. They make it seem real. Last year in environmental science, we'd go outside a lot to this pond and this boy would just jump in the pond after these frogs. He'd bring this huge frog out . . . you know . . . you don't get that in the classroom.

Hanna's (1986) studies in somatic education–the interrelational process between awareness, biological function and environment–greatly contribute to the differentiation of physical intelligence in this analysis. He offers the notion of *thinking with the body* via our sense of muscle movement, posture, balance and touch. Raj's parents gave a vivid example of this from his school, "You can feel and learn, you can touch and learn. Not something that is forced into you, but here they can feel themselves, and do anything." Sonia's parents reinforce the notion of *thinking with the body*, "If she is overdoing it a bit, I feel, that we are cautioning her sometimes, you listen to your body, don't go with your mind."

Gardner (2000) acknowledges the intelligence of the sensory body, "bodily-kinesthetic intelligence entails the potential of using one's whole body or parts of the body to solve problems" (p. 42). Heron's extended epistemology includes "experiential knowing [which] is evident when we feel the presence of some energy . . . the felt encounter and the acknowledgment of the presence of energy or the empathic resonance with others" (as cited in Kasl & Yorks, 2002, p. 2). Amy shared the education she was receiving in her school, "like auras (a field of energy emanating from the body), our teacher does a lot of experiments and studies with your aura and energy."

The Emotional Domain of Intelligence

The Relational Role of the Emotional Domain: A Pattern Emerges

When seen in their entirety, the interviewees' responses revealing their choices for the experiences that most supported them in the development of their emotional intelligences, i.e., 1) safety, belonging, relationship, love; 2) being known and self expressed; 3) serving; 4) being responsible; 5) mentoring, viewed within a framework of influencers, *the school, its philosophical and pedagogical approaches, parents, families, teachers, and friends*, illustrate a basic understanding these integral approaches have of the role emotions play in education. The pattern of these interviewee selections reveals the *relational* role of the emotional domain in integral educational programs. Connections are seen throughout the findings in the emotional domain. People are in community; they are in communication, with themselves and each other; they are caring and cared

for; they are learning the skills to remain in community and communication, i.e., conflict resolution, dialogue, and mediation.

This relational pattern in the emotional domain has ontological implications. It communicates a particular reality and way of being that introduces students to what is "real" for them; *they are related*. It also has epistemological connotations. What and how these students know as relational individuals influences the way they interact with what they are learning. What they are learning *is connected to them*. What is being learned is not separate or disjointed; it is *related to them.*

Defining "Emotional"

This section contains the interviewees' answers to the question of how they characterize the emotional domain in light of their life experiences. What follows are samples of the meaning that the interviewees gave to the emotional domain. "There are different layers of emotions...emotions of love, hatred, revenge, happy, thriving . . . Security . . . like any strong feeling that takes place in your heart . . . its like, its inside. Emotional security is very important." One student expressed the emotional with a poetic flare.

> Emotions are a kind of energy and when they're too big to handle they spill out of you in the form of tears, laughter, shouts . . . feelings . . . it is important to be related to our emotions and express them and not hide them . . . feel body feelings . . . knowing the wisdom of the body . . . emotions are paramount.

Defining "Emotional Intelligence"

The emotional is "a state of consciousness having to do with the arousal of feelings or subjective experience or any of various complex reactions with both mental and physical manifestations, as love, hate, fear, anger, etc.," (Agnes, 2001, p. 466). Intelligence is the faculty that provides us with an ability to transfer and apply our acumen from one situation to another. It is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience" (Agnes, 2001, p. 742). Emotional Intelligence is an understanding and appreciation of emotions and the role they play in the lives of humans. EI is apparent in the ability to experience and express ourselves in meaningful and appropriate ways. It implies a willingness to acknowledge emotions as rich, human informational feedback that creates a communication bridge between our multiple domains, i.e., our physical, mental, and spiritual aspects. Expanded definitions of emotional intelligence can be found later in the next section.

Major Themes in the Emotional Domain

From the interviews, the areas that most stood out as major contributors to the emotional development of the students were, 1) safety, belonging, relationship, love; 2) being known and self expressed; 3) serving; 4) being responsible and 5) mentoring. The following replies are a representative sample of what interviewees said in response to how their learning experiences impacted the

development of their emotional self. The schools provide an atmosphere that encourages students to have quality emotional experiences throughout their schooling. A few examples of what was said concerning the philosophical approach follow in the observations of Alan, Namita, and Karen's parents.

Alan appreciated the way the teachers and his parents worked together to support him when he was having some problems in school. "The teachers were definitely able to work with me and my parents. Here, the teachers are really involved in the students' life." Namita also felt strongly about the very close interaction between the teachers and the students at her school.

> They know me personally, whenever I fell, the school has picked me up, whenever I have failed to fit in, the school has made me confident, whenever I have actually faltered, the school has corrected me. It has made me emotionally strong and mentally tough.

Karen's parents valued the teachers at their daughter's school "for dealing with situations when they arise. They really stop everything. That's the most important thing, they deal with relationships. Any issues that kids have with each other, they'll get the whole class talking about it." While exploring the narratives, it was apparent that the interviewees shared many instances that reflected the emotional security they experienced during their years in school.

Theme 1: Safety, belonging, relationship, love.

The examples given below clearly demonstrate the students' sense of self - confidence, connection and relatedness in many different situations. Many students highlighted their schools' treatment of dealing with disagreement and conflict. In Alan's class, although it got along well together, if there were disagreements the class would handle them for the most part. The school worked with students to handle upsets themselves. He said, "There were plenty of people who can see both sides of the issue." Michael's parents recognized the power of the "relationships among their son and his peers and teachers." They saw "how the students were treated, how happy, thriving and secure they were." They knew that "his friends watch out for each other."

Amy felt a lot of trust in her class. "You don't have to be afraid of other people judging you or something. If you're having a hard time, you can go and talk with someone, and they'll try to help you through it." Karen called her school 'nurturing.' "You become friends with people that–like you're so totally different from them. I'm friends with a bunch of people that I wouldn't be friends with in public school." Her parents echoed what she had experienced. "It's still okay to play; the relationship between boys and girls is just very interactive as far as friendships. They don't all have roles to play. That's what's really great." Gabrielle's parents saw how much her school had instilled a powerful sense of who she was, in her own right. They noted that once that sense of self is alive, "nobody can take that away from them... ever."

Theme 2: Being known and self-expressed.

The schools for the most part encouraged young people to be familiar with their emotions and learn to express them in appropriate ways. Namita saw that her friends supported her in dealing with her shortcomings. "They actually tell us where we are going wrong, when we are going proud, when we have started overreacting to things." In many of these programs, students, teachers and parents know each other very well, and there is an environment in which people do experience being known. Erik's experience of his school is that everyone knows one another and people do not hide their feelings from one another. He felt like he would know if someone were sad or experiencing some emotions. Here, "we know what happens with people, so I know when they might feel sad, or some other feeling." The atmosphere of these schools was open and friendly, on many different age levels; teachers with other teachers, parents and students, older and younger students with one another.

Amy, Gabrielle, and Karen all agreed that showing emotions at school was an accepted expression. Amy said she did not get angry very often, she was not afraid to be mad and when she does express anger at school she does monitor it. Gabrielle is clear about her relationship with her expression.

> I feel like I can just go ahead and feel whatever emotion I'm in. I mean if I'm mad about something I'm just going to go ahead and be mad right then so that it doesn't mess with me later on. There is a safety at school to express our emotions...there is open expression of emotions in the school.

Karen reiterated Gabrielle's experience about expressing emotions at school.

> It's really accepted. You have friends where you feel really comfortable sharing how you feel and they're really listening. At school, you never feel ashamed of expressing your feelings or being yourself.

It is obvious in the examples that follow that the parents also give their children permission to be self expressed and known, because they give themselves that same permission. These parents contribute to the way their child learns to express him or herself. Sonia sees her parents as having 'emotional intelligence.' "They discuss many things around the dinner table, like philosophy, beliefs, etc. They understand people. They know how to get along well with people." Michael's parents see each other as being very different emotionally, yet give each other room to self express. His father says he "internalizes" his feelings, whereas his mother "verbalizes and shows her emotions. She knows what her kids are feeling." Erik's mother candidly acknowledged,

> I never had a plan of teaching or educating in this or that way. I have just tried to be myself and present myself to my kids in the same value. So I let out my emotions and I scream and I love and I cry in front of my children.

Gabrielle's parents credited the school's philosophy for the way they handled the students' critique of a teacher. "When they get mad at a teacher, they don't get

punished for being angry; they're required to express why they're angry and their emotions are validated.

Theme 3: Engaging in service.

Most of the programs had *service* as an integral educational experience. Students and parents referenced giving service as important to the development of emotional intelligence. Amy spoke about the service project students engaged in every week with either a retirement home or with autistic kids. Namita's school looked out for children needed extra helped and requested of more knowledgeable students to support them. "If a particular child is a loner; teachers actually encourage other students to go and extend the hand of friendship." Michael pointed out that, "There are always different service projects going on in the school. Right now there is the keep-people-warm drive and we are sending clothes, toys and books to troops, CDs, videos, stuff like that to people in Iraq.

Theme 4: Being responsible.

The schools offer many opportunities for the students to learn to be responsible for themselves in relevant ways. This is what a number of interviewees replied when looking at the learning experiences they had that supported them in developing their emotional intelligence, *in being responsible.* Amy's school is structured such that students starting in the ninth grade pay for portions of their education. "The school requires the high school students to pay (a portion) for their education . . . Amy pays $900 a year. She also pays part of the car insurance because it was so expensive.

Gabrielle, Erik, Sonia and Michael comment about how the environment of their school and/or home was set up to support them in learning to learn for themselves and then they were trusted to do it. Gabrielle said, "There hasn't really been anyone at home saying okay, time to learn. There was never any of that." Sonia's program encouraged emotional maturity and offered a system called "free progress," which allowed the students to create their own program with a teacher-mentor. "It was self disciplined and self monitored." Michael's school trained students in mediation skills. "They taught us to basically look beneath the problem, the initial problem . . . because that's not usually what's wrong." Erik school was very experimental and he commented that there were many aspects of the school that developed a sense of responsibility. "Our whole schooling was like that . . . stepping into the unknown … we didn't have a schedule for a week . . . we had to create it. So we had to go and ask the teacher to come and teach us." Erik's parents emphasized the level of responsibility their son exhibited as a high school senior.

> He goes to Chennai (for his final exams for the university). So he has to go there and needs to prepare. It is more difficult for him because he has to go by taxi there for one hour and stay there one night or two nights and the next day he has the examinations. This season he lost two months in his whole summer holiday, he had to go six or seven times to take exams.

Theme 5: Mentoring

Many schools initiate opportunities for students to mentor or buddy with each other, so individuals feel connected and supported by their peers and older and younger students. Teachers also provided mentoring experiences for their students. It was another experience students, educators and parents pointed to as supportive in developing the emotional intelligence. Raj, Karen, and her parents all addressed the quality of relationships between the older and younger students at their schools. Raj said he was part of a large family, "people really cared about each other." His school had many opportunities, from being on the bus to playing sports together for the intergenerational interactions. The lines were not drawn significantly between the ages and the older student looked after the younger and the younger looked up to the older for guidance and modeling. Karen reported, "You really have time to spend with the younger kids, so that's really beneficial for both. Everyone has a buddy here." Her parents commented, "Even in the high school, seniors are friends with the freshmen. Just walking around on a normal day when it's just the kids . . . it was just astounding to see how they got along."

Erik also added his impression of the teachers at his school being close friends. "These teachers . . . I had been with them a long time and they had gone through similar processes, we talked about everything, they supported us . . . because they are older they have more experiences and they experienced the same things or similar [yet with] bigger overviews. It's like I trust them." Erik's parents recounted an opportunity Erik had to replace his teacher at school. "My son came home and said I have taught the younger ones. He took over for his teacher. I think both parties have benefited from it, the younger ones by being taught by a little older guy and he was fulfilled . . . with pride and being able to teach." These impressions are not typical of most educational settings. The sense these students had, was being warmly related to by both younger students and their teachers, and of belonging to a connected community.

Research Collaboration

In his seminal book *Emotional Intelligence* (EQ), Goleman (1995) introduced powerful distinctions in the domain of emotion: the notion that humans have affective attributes that reflect qualities of intelligence. He refers to emotion as "feeling and its distinctive thoughts, psychological and biological states, and range of propensities to act" (p. 289). In his studies, he highlights self-awareness, self-regulation, empathy, motivation, and social skills as areas that distinguish emotional maturity and acumen. His premise is that what shapes our decisions and actions in life relies as much on our emotional intelligence as our mental, and some times even more (1998). In addition, Mayer, Salovey, and Caruso (2000), have observed intelligence within the affective domain and provided valuable insights into the understanding of emotional intelligence. They have focused on the integrative aspect of the emotional centers of the brain and defined emotional intelligence as a set of skills that involve processing emotional information. Perceiving, managing, understanding, communicating, generating, feeling and employing emotions are their designated areas. The Mayer-Salovey-

Caruso Emotional Intelligence Test™ (MSCEIT) was conceived by them as a tool to measure emotional intelligence.

Two representative learning types, the intrapersonal and interpersonal, from Gardner's (2000b) Multiple Intelligence model also correlate with Goleman, Mayer, Salovey and Caruso. Interpersonal relates to the perception of other people's feelings: ability to relate to others; interpretation of behavior and communications; and understanding of the relationships between people and their situations. Intrapersonal includes self-awareness, personal cognizance, personal objectivity, the capability to understand oneself, one's relationship to others and the world. These three frameworks are used in this section to reflect the research interviewees' responses in the emotional domain.

Self Awareness means the ability to recognize and understand moods, emotions, self-confidence and drives, as well as their effect on others. It manifests in honesty, self-confidence, realistic self assessment–able to talk about strengths and limitations and laugh at one's self (Goleman, 1998). *Intrapersonal intelligence* includes self-awareness, personal cognizance, personal objectivity, the capability to understand oneself and one's relationship to others and the world (Gardner, 2000b). Some of the respondents had insightful answers that help illustrate these manifestations of emotional intelligence.

Michael was able to honestly acknowledge he did not do a good job expressing emotions. He also could see how operating that way probably didn't work very well for him. "Like I do keep it inside, and just kind of forget about it. And sometimes it works, and oftentimes it doesn't work." Erik also could step back and see how a way that he had behaved did not in the end really work for him or the other person. Another boy had said something about him that was not true so he began to ignore the boy and his friends began to ignore the boy too. He could see after awhile that the boy was very unhappy and that did not feel very good to him after all. He was able to see what was happening and observed, "I didn't know how strong the emotional feelings are hidden, but after that when I look back at that, I always think that I wouldn't do it again." Sonia was able to share her fears of heights and performing and also how her program is set up to support students moving through their fears. Teachers are available to her in her diving, gymnastics and drama classes to help her overcome her fright.

Perceiving Emotions is the ability to perceive emotions in oneself and others as well as in objects, art, stories, music, and other stimuli (Mayer, Salovey, & Caruso, 2000). A number of the students' remarks reflect their unique perceptions. Amy and Alan both talked about how much music helps generates certain moods and energies. Peaceful, relaxed, energetic, excited, jazzy, etc. are moods that music helps create. Amy noticed "that if you've been suppressing an emotion, it brings it up when you play." Karen uses art to express herself. "Art class helps educate me about my emotions. It doesn't matter about the finished product, just the process that you go through in creating art. And it's really important. It's a personal thing." She knew that with art you can't just sit down and do it without expressing what is inside of you. Sonia and Alan in their dancing experienced how they used their bodies to express different emotions and stories. Sonia "lived emotions in dance. I try to get totally into the emotions.

Love, anger, happiness, laughter, peace, valor, disgust, jealousy and greed are a few of them." Alan sensed a different level of freedom with his body when he danced with the ensemble.

Erik's parents pointed to an experience many parents have to confront when their children are being educated. It demonstrates the effectiveness of an integral educational approach in addressing the emotional needs of the parents as well as the children. Eric's mother spoke honestly about what it was like for her to have to share the raising of her sons with others. She remembered being uncomfortable "accepting that her children would learn more from other people because she was used to copying from her own education." She learned from this integral education community, and "it opened my world up in many ways. My opinions widened and I am glad my kids can experience that."

Drama also was chosen as a vehicle for perceiving emotions and developing a sense of self through the expression of oneself through other characters. Sonia's parents had similar responses to drama in their daughter's life. "Drama supports the young people to learn how to handle their emotions, as they change emotions throughout the drama. Suppose they do a role of anger, in the next scene they may do something else, a different role." Amy's parents agreed, "They learn how to change. In life also they apply the same techniques. Taking something different on helps builds self confidence."

Alan noticed how changing his image in the dramatic roles gave him a different sense of himself, and an opportunity to relate to himself in a different way as well. "I am sick of the nice guy role. We did a piece, and I was Cain, it was definitely a huge change. Now I'm playing a military person; it's definitely a whole different approach."

Self Regulation is the ability to manage and redirect disruptive impulses or moods; also, the propensity to suspend judgment–to think before acting. It manifests in trustworthiness and integrity, an ability to create an environment of trust and fairness, and a level of comfort with ambiguity. Individuals who self regulate are open to change, thoughtful, and reflective (Goleman, 1998). Mayer, Salovey, and Caruso (2000) designate *Managing Emotions* for this area which is the ability to be open to feelings, and to modulate them in oneself and others so as to promote personal understanding and growth. Sonia has learned that you shouldn't judge people according to what others tell you about them. "When you interact with a person you should be able to see him/her just as a blank paper. You are ready to judge him/her on the information that you receive directly from him/her."

Raj "learned that fighting is not good and if there is a situation between me and someone else, I just move back out of it or go to some other place and let us cool down, and then I come to him and say I'm sorry and we will carry on." Raj's father was complimentary about his son. He shared a story. "My son was an example to many of my friends. Actually they are sending all their kids to this school because of my son. They have seen him as a hyper kid and after coming over here and after a few years the changes have really impressed many of our friends." Sonia, Raj and his father have presented anecdotes that exemplify the

contribution these programs have to make to self-regulation and managing emotions.

Motivation is defined by Goleman (1998), as a passion to work for reasons that go beyond status and a propensity to pursue goals with energy and persistence. Motivation shows up in a love of learning, optimism, even in the face of failure, seeking creative challenges and commitment. Here is one example from many that represents the motivation seen in these students. Michael, in talking about his freshman year and the difficulties he experienced with studying, grades, subjects, said, "The school really helped me out dealing with that. I was frustrated, because I was not used to not doing well. My teachers told me they were going to work with me and help me out. Emotionally I always try to conquer anything that I'm trying to do."

Empathy is the ability to understand the emotional makeup of other people–thoughtful consideration of other's feelings and skill in treating people according to their emotional reactions. It is seen in an expertise in building relationship, cross-cultural sensitivity and service to people (Goleman, 1998). Gardner's (2000b) *interpersonal intelligence* relates to the perception of other people's feelings; ability to relate to others; interpretation of behavior and communications; understanding of the relationships between people and their situations. Mayer, Salovey, and Caruso (2000) use the terminology *understanding emotions,* which closely link with *empathy* and *interpersonal intelligence*. Their meaning denotes the ability to understand emotional information, to understand how emotions combine and progress through relationship transitions, and to appreciate such emotional meanings. Erik and Karen and their parents give clear examples of empathy and interpersonal intelligence. Erik has a relationship with his good friend to share with when his relationship with his mother was not going well. "We have a connection, so we can identify and then we try and help each other in that situation." Karen also felt that with her friends at school. She is a good friend "by being there to talk or listen ...being this friend that's interacting with people, resolving conflicts and stuff." Both parents reflect a way of being that illustrates their depth of commitment and willingness to be contributed to by their children. Erik's parents revealed:

> We were brought up in Germany and there the father is the authority in the family and he is almost perfect and his word is valid, which we don't support. We support that we all are humans in the end, we do as many mistakes as maybe someone else and our kids might have better ideas than we do, so we tried to be equal if possible. We never would like to be a parent staying above them. We are friends and we are doing it together.

Karen's father complimented his daughter in this way.

> I've never heard her say one negative thing about anybody. I've been embarrassed. I'll be making some comment–to make myself feel better. I make fun of everybody–and my daughter shakes her head. It makes me feel terrible. I realize what I'm doing. We were driving up to school and I made some comment about someone having a big head and she just gave

me this look and shook her head. She said, "Now, we're trying not to do that, aren't we?" [Laughs]

(*Researcher's Note: His child is modeling behavior for him AND he is willing to listen to her.)*

Social Skill is another designator of emotional intelligence found in Goleman's (1998) research. He identifies it as a proficiency in managing relationships and building networks and characterizes it in effectiveness in leading change, collaboration and persuasiveness. Another aspect of *Social Skills* is seen as an ability to find common ground, build rapport and bonds with others. Individuals with social skill have an expertise in building and leading teams and often pay little attention to conventional boundaries. Sonia was taught that "you can make good friends at any age group, like sometimes you can make good friends with very much older people than you." Alan's father spoke about his son in a way that made it clear how the school had supported him in acquiring social skills.

> I really noticed it last year when I went on a trip with my son. I was watching from a distance ... his being, his interactions with other people, whether they were adult or college kids. Certain adults would come to both of us and tell us what they thought of his emotional maturity… of how he handled things. He understands, you could sense, other people find him quite engaging.

Teachers play a critical part in the development of leadership skills in school. One example represents many similar responses from the interviews. Michael's parents said this about one of his teachers. "I think she made a huge difference in him . . . She really admires him and thinks he's done really well in his leadership position at school. I think she probably was always there to encourage him." Namita talked about her teachers in this way. "There is a very, very close interaction between the teachers and the students, so naturally the teachers right from the very small years, they start noticing some specific characteristics of the students."

Parents also provide critical modeling for the growth of emotional intelligence; Sonia and Namita provide examples that reflect the responses from the students. Sonia says this about her parents, followed by a telling remark from her mother. "With my parents . . . I am very free with them; there is no pressure like they don't have any career in mind for me. They let me do a lot of things." Her mother in a separate interview revealed, "Actually with my daughter, I feel I am more a student than a mother so I am learning many things about how to live. In the process maybe I am influencing her too. I don't say . . . you do this or that." Namita said this about her mother.

> I think the biggest person to have an influence was my mother. She actually taught me how to face situations the way she does and I have been inspired a lot by that, the way she faces the difficult situations with a smile

on her face. She might be facing problems at work or at home, she never lets them intermingle and she faces situations courageously.

What Gabrielle said about her brother, "He is my best friend," Michael spoke of his sister, "We're best friends, I think that she's helped me grow the most. And I think it's important to have someone like that in your life." Raj also talked about how important his relationship was with his brother. "He has supported me in so many ways." Erik's parents, like many of the parents, mentioned the family and community and their positive influence on the development of emotional intelligence in young people.

> The family, as a community, is expandable. So here in this community, we have the feeling of a big family. We mean that everybody has to contribute his part and nobody is perfect. So they (young people) can collect different things from many different people of their own choice in the end and this was also a big support to them in many, many ways… emotional, spiritual.

What stands out from this section is the level of coherence in these programs for the development of emotional intelligence. In the responses, parents are for the most part open to exploring and learning from their children, and the young people are able to reflect and be open to being influenced by their teachers, siblings, parents and friends.

The Mental Domain of Intelligence
The Natural Role of the Mental Domain: A Pattern Emerges

Taken together, the significant influencers chosen by the interviewees in the development of their mental intelligence, i.e., 1) the encouragement and "space" to love learning, be curious and follow a passion; 2) being respected and honored as an individual; thinking and learning for oneself; 3) being given choices, trust and responsibility for learning; 4) having learning be experiential, embodied and relevant to ones life, and 5) knowing the context in which learning is taking place, viewed within a framework of influencers, *the school, its philosophical and pedagogical approaches, parents, families, teachers, and friends*, present a specifically powerful image of the development of mental intelligence in integral education. The *natural* role of the mental domain is revealed. The growth of mental acumen is equated with trusting the human being in his/her *natural* quest of learning. Loving learning, curiosity and passion are *natural* to the human being. There is a recognition that the purpose of education is to provide an environment in which the inherent attributes of the individual can *naturally* grow and take root. If the context is known and the learning is relevant, the learner can also be at choice and responsible for her/his education.

The inferences from these interpretations are valuable when considered from an ontological perspective. The reality is–humans have a *natural* love of learning and curiosity that only requires room to express and grow; children can be responsible and trusted with their own education. Who we are as human beings at the most fundamental level are *natural* learners. Epistemologically, these

interpretations offer an essential shift away from current educational practices. They suggest the *natural* aspects of learning - learning belongs to the individual. A response from Alan's parents as they saw how caught up they had been in their own expectations and historical conversations about academics.

> Seeing and hearing many other students who maybe did not follow the highest academic track. I have relaxed and said, you know what… it's okay. I'm not going to go that way. I'm going to take it at my son's pace and not put stress on him... although we would have to hold back... [Laughs] Both our backgrounds of ... the academic and you've got to.... It literally took me just the last year to back off and say he is going to take it at his pace.

Defining "Mental"

This section contains illustrations of interviewees' answers to the question of how they experienced the development of their mental intelligence. What follows are words and concepts of what interviewees offered as definers of the mental domain. "Aptitude, thoughts, knowledge, what goes on inside your head that has a direct relationship to your actions; memory, ability to think, to decide…judgment . . . the linear thinking patterns that we go through to solve problems and to approach learning. The mental synthesize the information you learn in different ways, i.e., physically doing something or by learning it emotionally, like learning what it feels like. The mental influences the physical and spiritual. It's the mind and the capacity to draw conclusions, discriminate and communicate."

Defining "Mental Intelligence"

Mental is distinguished as, "of or relating to the intellect or the mind, occurring or experienced in the mind (Agnes, 2001, p.900), the thinking and perceiving part of consciousness, reason, the ideological" (p. 916). Concepts that have been used to describe the mental include: the reflective, creative, conceptual, cognitive, contextual, analytical, and comprehension. Intelligence is the faculty that provides us with an ability to transfer and apply our acumen from one situation to another. It is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience (Agnes, 2001, p. 742). Mental Intelligence (MI) is an awareness of our different capacities to think, e.g., reason, inquire, perceive, analyze and envision, etc., and to extrapolate from our mental engagement to make sense of emerging complex ideas and events as our world ever changes. Mental Intelligence is expressed as a high level of plasticity, i.e., flexibility, ease of engagement, exhibited in the way ideas are interconnected. MI reflects an ability to bring context (meaning) to conversations as well as content, (information).

Major Themes in the Mental Domain

The interviewees found a number of learning experiences to be supportive of the development of their mental intelligence within the framework of the

school and its philosophical and pedagogical approach, parents, families, teachers and friends. Within that overriding category, 1) the encouragement and 'space' to love learning, be curious and follow a passion; 2) be respected and honored as an individual and think and learn for oneself; 3) be given choices, trust and responsibility for learning; 4) have learning be experiential, embodied and relevant to ones life, and 5) knowing the context in which learning is taking place, were chosen as significant to the development of the mental intelligence. Below are examples from the interviews that give evidence to the way these learning experiences impacted the interviewees.

The school's philosophical and pedagogical approach has a strong impact on the development of mental intelligence. Gabrielle gives a picture of her school. "They focus on building everyone up from where they are academically. Here they separate you by the book that you're in. It's not just like the smart people and the stupid people. Everyone's together and there aren't any stupid people." Gabrielle's parents acknowledge the strength of her program in developing the mental: "This is where the school comes in. Academically they really are excellent and we find that very exciting to have that combination of respecting the young person, giving her choices, and maintaining academic rigor." Namita speaks similarly of her academic program. "Here, the education has a very high standard, they lay a lot of emphasis on material knowledge - your mental development, toughness, aptitude and approach is noticed, and it is worked upon."

Also teachers provide strong examples in the development of the mental intelligence. Sonia, Michael, Karen and Raj add representative comments about this theme. Sonia took part in many discussions with teachers and students; "through that we can develop our mental abilities, because the relationship between the teacher and the students is like friends, and they encourage us to dialogue, even at our house. Michael commented about the open mindedness of teachers. "The more open-minded the teacher is, the more when you read in the class you think different things, and you are confident thinking those different things. I think when you teach confidence you do better mentally because in your head you know you have learned the subject for yourself." Karen added, because of the relationships with teachers, "You can talk to them without a problem."

Raj appreciated the way the teachers taught at his school." The teachers are always helping me to find new ways to remember through practical experiences and using something connected with what we are learning. Teachers tell jokes, which made us remember more. I learned sometimes through laughter and games." The following paragraphs supply multiple examples of the way students are supported in developing their mental intelligence. Each area of the major themes has reflections from some of the interviewees.

Theme 1: Students are given the encouragement and 'space' to love learning, be curious and follow a passion.

Each interviewee commented about his or her program and the degree of focus on the natural eagerness of children to learn. Gabrielle's parents remarked how important it was for their daughter that her curiosity "not be squashed." They experienced with this integral approach to learning, "when they're little you can't

keep them away from learning." Her father remembered what school had been like for him as a young boy. "Love of learning was squashed in me from the time I was in elementary school. If you made a mistake you were humiliated in class so you learned to hate learning. Here our daughter loves to learn." Karen's parents agreed. Her school "promoted love of learning. This school made learning fun . . . kids wanted to learn and inquire . . . they can then leave the school and learn on their own because they are interested." Karen's own experience validated these comments. "The teachers and everybody wanted us to ask questions and get interested in researching something on our own. Here, nobody pushes you to get this grade." Each of these integral programs related to students with the intention to have them discover their own relationship with learning. Curiosity, inquiry, fun, desire, learning on one's own and coherency are some of the learning experiences that emerged from speaking to the participants.

Theme 2: The individual is respected and honored and thinks and learns for oneself.

The parents had illuminating comments in this area. Alan's parents responded.

> They are taught from the grade school and through high school to think critically and to think outside the box and to question. They don't just accept facts and learn to regurgitate them. The school discourages it. They don't want them to just regurgitate. Everything is almost from scratch. You can see it in the amount of work they do and the whole approach of creating their lessons.

Erik and Raj's parents added similar impressions from their schools. They spoke about "free will" and a "child's ability to think for him/herself, discover and be challenged." They also distinguished between a "ready made" program from other school programs and one that the students needed to design for themselves to promote being responsible for their own learning. The curriculum of their schools included the student in the plan.

Raj's parents expressed "how happy their son was at the school because he was being educated as an individual to take decisions and think for himself." Relevancy, ownership, eagerness, free will, happiness and being related to as an individual are experiences noted by some of the parents in support of the development of their child's mental intelligence. It is interesting that these experiences are *not* particularly emphasized in our current educational models as helpful in increasing mental acuity.

Theme 3: There is choice, trust and responsibility for ones learning.

Erik stayed in his school because he "found that I learned a lot. You choose what you want to do, how you want to do it, but at the same time you had examinations." Michael appreciated the amount of choice he was given in his school. "The more choices you give students the more successful they are going

to be in what they're doing." Gabrielle had chosen to do advanced work at her school and she recognized the amount of support her teachers gave her for being responsible for this choice. "So if you choose to challenge yourself mentally the teachers/ school are very supportive of it. They will back it up."

Their parents were impressed with their children and the responsibility they took for their education. Erik's parents credited his education for his trustworthiness. "He studied for exams with his friend and they made the commitment to do this every day and they did so, it's incredible. I would never have done this." Gabrielle's parents valued the way the "high school set levels of competency and expectations which allowed the child to move from one level to the next at their pace."

Theme 4: Learning is experiential, embodied and relevant to one's life.

The schools via their curricula create multiple opportunities to have students experience what they are learning from numerous points of view, even ones with which they might not agree. Alan and his parents spoke to the lengthy projects that high school students take on in his school to deeply delve into topics and use multiple learning modalities to accomplish it. This was evident in most of the schools where students were given increased levels of projects as they matured. Alan commented, "I feel personally that I do better with hands-on stuff. Things where I am personally involved I do better. The project I did last year had a big impact on me in developing my mental capabilities. I had to interview other people and pretty much soak up everything I could learn about the subject."

Alan's parents noticed that their son can "listen to a class and if it's one that is interesting, he'll speak about it in such depth and remember details because they're taught to do that. That is an aspect that we appreciate." Raj felt very positive about the way his school supported him learning and remembering 'through activities,' "when you do something you remember it more ...through experiences." Amy provided a very clear example of experiential learning through looking at multiple sides of a controversial issue.

> We're having government class where we're talking about different wars and one thing we did was we each chose a war and we were supposed to look at it from the side of who lost essentially. And, basically retell it from their perspective ... what it was like for them... A different way of looking at things... well, things are usually told from the perspective of the victors … things get left out...It opens your mind to a lot of other realities.

Theme 5: The context for learning is known

These integral schools were clear in their commitment to provide integrated experiences of learning. Students talked about their classes and the care taken to have what was being presented in lessons relate to the student's life and learning style. Teaching 'why' supports students in making 'learning' connections that are sustainable. Both Raj and Karen talked similarly about their programs and how they supported students thinking problems through on their own, having to see how what they were doing fit into their thought process. In trigonometry, Raj used to solve the problems by his own ways. His teachers were supportive of him

discovering his way of develop his own capacity to think. The teacher accepted that there were many ways to solve a problem and were interested in Raj enjoying the process of figuring it out for himself. Karen said, "It's really beneficial to learn the reasoning behind it first before just learning how to punch it in on the calculator. You'd figure it out on your own. And I like that because I like to know why I did what I did." Karen's parents also observed that "the school was good with allowing people to make mistakes. They don't tell you how to do the problems. That's how you become an innovator. We've never had to ask her to do her homework. It's something inside of her."

Namita's program, unlike most of the other schools, stressed regular competitions to support students in being successful in highly sought after academic environments. Students were encouraged from a very young age to learn how to compete as a natural way of learning. Namita connected learning with competition. "Right from the beginning we were always taught like this, that whatever you are doing you're doing it to compete, compete against some better individuals. All the students here, they go to college."

Research Collaboration

Six educators (researchers, scientists, philosophers), Edgar Morin (2001), John Heron (1996), Howard Gardner (2000), Fritjof Capra (1996), Umberto Maturana and Francisco Varela (1992), each furnish distinct ideas to the understanding of mental intelligence. Morin (2001) speaking from his deep commitment to education and its future ability to successfully address the complexities of our world, designated the 'activation of general intelligence... with the free exercise of . . . curiosity" (p.32), as a significant focal point for twenty-first century educators. In addition to the statements captured earlier in Theme 1, a few parents add validity to Morin's contribution to education. Gabrielle's parents noted the way the school prepared her developing her own attitude of discovery.

> The students get an attitude of finding things out themselves. The teachers show them different ways to find it early on. They start off with these little projects where they go and they do a little digging and they get a little answer. Then it just gets bigger and bigger and bigger and the next thing you know, they're digging out really substantial stuff.

Amy's parents also commented on her school's commitment to have the students "love learning and internalize it."

Heron (1996) provides clarification of the mental domain through his 'propositional knowing' as it is "formulated by intellectual statements, both verbal and numeric [and] organized with logic and evidence" (p. 33). Gardner's Multiple Intelligence Model (Chapman, 2005) has equivalent intelligence types, the linguistic, i.e. words and language and the logical-mathematical, i.e. logic and numbers. Sonia's responses corroborate with Heron and Gardner, and reflect other students when she shared,

> The point in math is not just knowing, like knowing calculus or trigonometry or something. I feel it is more important that we learn to

> apply the logic to real life. You are allowed to go at your own pace. So, whatever we learn, it gets in and stays.

She recounted an anecdote of how she had applied reason in a fight with a friend and she was able to "logically look and try to see the fight from a different perspective." She saw how in most disagreements "people think that the other person is wholly wrong and they are wholly right. As we grow older, we should be able to look at it objectively."

Capra (1996) in his living systems theory proposes that mental activity is the organizer of living organisms, environments and matter on all levels of life, "mind is not a thing but a process–the very process of life" (p. 172). Erik's and Gabrielle's statements give support to Capra's proposition. Erik's perspective was the more mental we become, the more we see the possibility of what can happen to us." Gabrielle saw the mental as a "synthesizer of the information because you can learn it in different ways by physically doing something or by learning it emotionally, like learning what it feels like."

Maturana and Varela (1992) highlight language as an essential creative component of our mental process because we *bring forth our world* in conversation and relationship with other people. Their usage of language (in bringing forth our world) is differentiated from that of Heron's verbal and Gardner's linguistic by separating the functional proficiency of the verbal/linguistic and the ontological framework offered by Maturana and Varela. Gabrielle gives a clear example from her program that accentuates the use of language in a dialogue and what the school is *bringing forth* in the way the dialogue is structured to acknowledge the importance of thinking in a teenager. Her statement represents the philosophy of the integral schools in the way they encourage students to speak their points of view. Her school practiced Socratic dialogue.

> When I was in seventh grade it was really nice to have the teacher ask you about what's currently going on that is really important socially. When they ask you what your opinion is, it makes you feel really important and valid. This cool teacher, smart adult is asking me how I feel about this. I'm important. I think it's very important to ask the kids what they think, get them to talk with each other, get them to listen and go, oh may be that person knows something.

The Spiritual Domain of Intelligence

The Contextual Role of the Spiritual Domain: A Pattern Emerges

When the five major themes that most influenced the development of the spiritual intelligence are connected and viewed as a complete set within an environment provided by the influencers, i.e., *the school, its philosophical and pedagogical approaches, parents, families, teachers and friends*, it highlights the magnitude of contribution integral education can make to creating an integral, global worldview. These themes: 1) being able to see oneself in relation to a larger world; 2) feeling connected to oneself, others and nature; 3) learning and participating in practices that allow a person to know his/her inner experiences

and at the same time congruency in life; 4) being able to have conversations about spiritual insights and experiences; and 5) understanding and honoring the world's religions, and the distinction between spirituality and religion, all point to the *contextual* nature of the spiritual domain. There is a weaving together of the individual with him or herself, the individual and the collective, the inner and outer, the silent and expressive, the abstract and practical and the spiritual with the religious.

Interviewees pointed to this contextual nature of the spiritual in various ways. When asked, how does the school environment contribute to her spiritual domain? Gabrielle's parents replied, "They acknowledge it." Karen's parents said, "The human spirit is alive here," Namita's family added, "It's in our up bringing actually. The spiritual self we come from... We do believe in the spiritual self and we give a lot of importance to it. So we did not have to make an effort, it comes naturally to us." Alan spoke about his upcoming Vision Quest as part of his senior year. "I'll be spending three days, out by myself in the wilderness. I'll do it while fasting. It'll be really an opportunity you know, to find myself…" His mother and father commented, about the teacher's role in the development of the spiritual intelligence at his school. "The teachers are educated to relate to the children through their higher self. They work hard to see the children in that spiritual place . . . allowing children to become themselves . . . giving them room to grow up and find themselves rather than trying to be someone they are not." Michael saw his experiences with one of his teachers as providing him with a powerful 'spiritual' foundation,

> I think she is one of the teachers that truly don't judge you…she just looks beneath. When I'm with her, I feel like no matter what I say, she'll honor it, and not judge me for it. I think that's rare in school. Even though teachers put out the persona that they're not going to judge you, but you know they are. And we know each other well enough now that we know, like I know her spirituality, and she knows maybe if I don't have much, she knows the little bit that I have.

The ontological inferences from the interviewees' responses are significant. Reality takes on an inclusive nature, a both/and quality as opposed to the either/or dualism that has been engrained in our current educational reality, that we so often take for granted as 'the way it is.' Epistemologically, knowledge is acknowledged for its crystalline quality. Its many facets clearly display the whole and the parts–in relationship with one another. Analysis and synthesis and the subjective and objective brought together yield knowledge and understanding and an opening for wisdom to appear. Erik's parents spoke to this very clearly.

> Everybody has a different idea about spirituality. Spirituality for us is the aim of life. We just do respect people and all living things. We like to stay in nature and learn from the nature god. We remember from our childhoods, that our parents were people who said... this is Turkish, this is an Italian, and we are German. Here nobody does that. We are all one here.

Defining "Spiritual"

Interviewees contributed thoughtful and insightful understanding in the spiritual realm. Below are some of the research participants' responses to the question, "What is the *spiritual?"* Representative words, phases and concepts are, "spirituality is more of an internal experience of God and religion is more of an external experience of God," "spirituality is something each one carries around with him/her," "your essence, or the deepest–not your personality or your ego, just the deepest part of you . . . your connection to everything else . . . it's just that invisible essence that's in everyone, that's considered the divine part of you, the God part of you." "An understanding of who you are in a bigger context . . . the substance of all of life," "you get in touch with yourself and I see Spirit." "The spiritual is much more a kind of a sense of oneness and wholeness and the dogma is like the separating." One student spoke to her experience of the spiritual in her life.

> I think it means a divine essence. It is a time when you de-link yourself from all that is around you, all the material tensions that you have, as a being, completely cut off yourself from all this and you have a time where you are only yourself. There is a state of mental peace...that is when you go spiritual; maybe something like divinity gets into you.

Defining "Spiritual Intelligence"

Spiritual is defined as "of breathing; of the spirit or the soul as distinguished from the body or material matters; pertaining to life or animating principle; consciousness; sacred" (Agnes, 2001, p.1382). Intelligence is the faculty that provides us with an ability to transfer and apply our acumen from one situation to another. It is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience (p. 742). Spiritual intelligence (SI) is an awareness of an animating energy or vitality that gives existence to all sentient beings and life forms. (SI) manifests in the experience of interconnections among people, animals, plants, nature, as in the earth's pulsations, energetic fields, etc. Spiritual intelligence acknowledges that there is some power or energy that extends beyond that of human beings and can be called by many different names, e.g., higher power, life force, energy field, sacred, life's mysteries, breathe of life, divine, spirit, god, God, etc.

Major Themes in the Spiritual Domain

The themes that emerged as the most significant influencers in the development of spiritual intelligence are presented below. Each section is accompanied by pertinent and representative examples from the interviewees.

> *Theme 1: Being educated in ways that spirituality could show up in their lives, i.e., seeing oneself in relation to a larger world, feeling connected to oneself, others and nature.*

Amy, Namita and their parents offer illustrative thoughts in this area. Amy talked about being in nature and its calming and clarifying influence on her mind. She also more often "noticed things that in every day life she might just have walked by." Namita's experience of nature was that "it reminded humans of their limitations." She felt "the role of nature was helping us realize the presence of the Almighty." Their parents acknowledged the school 'community' for its "spiritual energy, meditation and exercises that bring energy to the body and their own sense of spirituality, "I see 'spirit' in every living thing."

Theme 2: Learning and participating in practices that brought them in touch with themselves, through internal experiences, i.e., meditation, yoga, exercises, self-reflection, journaling, silent time, connection with a higher power, etc.

Each of these integral programs provided different ways to support their students in relating to their internal experiences. Erik's meditations "cool him down and help him think more on his own." Amy's program provided "moments of silence before a lot of the classes which pretty much lets people sort of unwind . . . or gather their energy and get ready to concentrate." They also had meditative time every morning where they either spent time being silent, chanting, doing yoga or energizing exercises. At Karen's school students went to a grove to reflect and be quiet. She felt her school allowed the students "time to think, work things out and practice observing without judgment. It's really hard to do . . . thoughts, and judgments get in the way all the time." Sonia's program provides many opportunities for silent, quiet times. Namita felt her school put "a lot of emphasis on the spiritual development. In fact it has been taken as one of the most important objectives of the school." They had regular special assemblies "with music and meditation . . . those are the moments when we get a state of complete mental peace."

Theme 3: Experiencing congruency throughout life.

Many of the schools create a community environment which gives students more opportunities to relate what they are learning to their own families/community and what it takes to have effective relationships with many different kinds of people. Sonia mentioned that her school is "oriented on the spiritual side. Our aim here is to develop every aspect of our being." Her parents felt that their community had achieved a common bond, a deep connection because they were "connected in the neighborhood." Gabrielle's parents felt it was "important to have community with like-minded souls. It changes when it becomes a communal thing versus an individual thing." They were referring to the power of a group of people to generate a community environment in which people can be connected and in communication with one another. Amy commented about what it was like for her in her community because all aspects of the community and school are interconnected.

> Growing up in a spiritual community…basically all aspects of your life are connected. It is a worldwide community of people committed to higher consciousness, peace of mind, service and inner happiness. The essence is

> right here and pretty much it's… everywhere. It is just how people relate to each other... it's hard to separate school and the community.

Theme 4: Having conversations about spiritual insights and experiences

Sonia acknowledged her parents for keeping her focused in the area of spirituality. "Because they were also focused, I was naturally oriented towards this kind of thinking and speculating about it. We have lot of discussions at home at the dinner table." Amy was grateful for the school because many of the teachers were available to answer questions about spirituality. "We'd bring up something we were wondering about and our teacher would answer our questions, which was nice. It helped us understand really what we're practicing here." Amy's parents noticed their daughter's openness. "One of the qualities of our daughter that we like about her is that she's quite open to experiences that are more on a different level of consciousness. She takes that quite naturally. I think its part of understanding." Gabrielle's parents reflected what many of the parents said about their way of relating to religion and spirituality.

> We talk to our children about beliefs that other people have. Some people believe this, some people believe that. These are Catholics, these are Protestants and these are Muslims and these are Jews and what they believe. We talk about this and then they often times tell us what they believe. We keep telling this to all the kids, just be open to your experience and everything will be all right.

Theme 5: Understanding and honoring the world's religions and learning the distinction between spirituality and religion.

What is noteworthy about these programs is their commitment to providing experiences in which students can learn about multiple ways of expressing ones relationship with a higher source or power, and encouraging interactive dialogue to further the understanding among different points of view. The schools researched each had their unique approach to educating about the world's religions and distinguished the spiritual from the religious. Raj expressed his beliefs this way. "Spiritual is to me something like believing in God, not a specific religion, just belief in God." His parents complimented his school for the way it related to the religions and to spirituality. "The school is communally sensitive, so unlike many other schools here in India, what they do is they never force anybody to pray. So it can be Christians, Muslims, Hindus, lots of different beliefs, to put them together is very difficult, so this is the right approach." Michael's school also is very conscious of the religions that people have and it does not exclude anyone. "We used to do skits about the different holidays. So Christmas, Hanukah, Diwalii, Kwanza, etc., we actually experience the different types of religious holidays and practices. Amy had an insightful addition to this theme. "I'm not saying that ours is right, it's just what I know. The thing with our religion here is that we believe that there are different ways of doing it. We call them different paths. But none is better than the other."

Conception

Each set of parents had their own story to tell about the way their child came into the world. Told from their own personal experiences, the following stories provide a perceptive window into the quality of spiritual intelligence in these particular families. Because of the nature of the theme, these responses are anonymous.

> (M) She was out there and I felt that. When she came along, I was the happiest person in the world. She was definitely cherished before she even showed up. I was very much in love with her dad and it was a wonderful coming together. We wanted her from the get-go.
>
> (F) I remember when we went to get the pregnancy test, we did this little test and if it formed this little donut shape in there, it was positive. We got the little donut and we were excited. My wife got her camera and took a picture of it. That's our child's first picture, the little donut.
>
> (F) I didn't ever have any desire for a child. And I've been here 35 years, and the early years were as a monk. But then when we got together, we started talking about a child, and I remember we talked about a particular kind of child, a 'yogi.' So it really was in one way really disruptive, but it didn't feel wrong, it didn't feel bad. The feeling was that it was right.
>
> (M) Well, he was born with it (presence). That's it. This is exactly the way I wanted him to turn out. I had a picture in my mind of a little boy. It's him.
>
> (M) Right from the time of conception, consciousness is there. Having a child is like opening the windows of your room. When I look back, so I feel, yes I couldn't have a better daughter.
>
> (F) Regarding having children... I think we understood that's what we wanted. Our son came right soon after we got married. (M) This is hard to say, but somewhere inside me I knew that there were three children coming. (F) In some sense, to me it always seems to be spiritual.... And now looking back, there's just a sense that they all were supposed to be here.
>
> (F) In some sense, to me it always seems to be spiritual.... And now looking back, there's just a sense that they all were supposed to be here.
>
> Yes, we wanted two and we planned. We planned and dreamed lot of things. Our child is really free. And it was really a time of trust and faith for us. It worked out very well, it just felt like it was meant to work out.

How does intelligence show up in the spiritual domain? In response to this question, Diana Whitney (1995) in her exploration of spirituality as an organizing principle has provided rich distinctions that further echo those of the interviewees. She invites people to relate to spirituality through four different interpretations; as *energy, meaning, sacred* and *epistemology*, which when taken together contribute a powerful context for this aspect of our intelligence to manifest.

Danah Zohar and Ian Marshall (2001) have also delineated spiritual intelligence (SQ) in their book of the same name, and brought further validation and distinction to what the research participants have experienced about this contextual quality of intelligence. SQ is focused on how we understand the deeper meaning, purpose and values in life and the inquiry we engage in to discover ourselves in these areas. Spiritual Intelligence is what gives awareness to our integrity and the experience of wholeness. Some of their choices are very similar to Whitney's and to those characterizing emotional intelligence offered by Goleman (1995), e.g., compassion, self-awareness, and positive use of adversity. When viewed within the specific context, spiritual or emotional, several of their selections could be applicable to both domains.

Zohar and Marshall (2001) distinguish 12 attributes, which they use to define 'spiritual intelligence.' Their explanations of these elements are as follows:

1) *self-awareness*–knowing what I believe in, value, and what deeply motivates me;
2) *vision and value led*–acting from principles and deep beliefs, and living accordingly;
3) *positive use of adversity*- learning and growing from mistakes, setbacks, and suffering;
4) h*olistic*–seeing larger patterns, relationships, and connections; having a sense of belonging*;*
5) *ability to reframe*–standing back from a situation/problem and seeing the bigger picture; seeing problems in a wider context;
6) c*ompassion*–having the quality of "feeling-with" and deep empathy;
7) *celebration of diversity*–regarding other people for their differences, not despite them;
8) *field-independent*–standing against the crowd and having one's own conviction;
9) *ask fundamental "why" questions*–needing to understand things and get to the bottom of them;
10) *spontaneity*–living in and being responsive to the moment;
11) a *sense of vocation*–feeling called upon to serve, to give something back;
12) *humility*–having the sense of being a player in a larger drama, of one's true place in the world

In the spiritual domain, *energy* is the life force energy; the animating or vital energy giving life to physical organisms, a sense of aliveness and vibrancy of spirit. It is interesting to note that energy, as an animating force, was also seen as a significant influencer in developing the intelligence in the physical domain. *Meaning* is the quest humans have to make sense of their lives; their shared vision, values, relationships and appreciation; the engagement of the whole self; mind, body and spirit in life (Whitney, 1995*).* Zohar and Marshall (2001) use *vision* and *value led*–acting from principles and deep beliefs and living accordingly as another way of expressing this aspect of spiritual intelligence. Michael presents a vivid example of his meaning making and values.

> My best friend is going through a very hard time in his life, now. And so one time, he stood up in our school meeting, (a reflective time for students to be thoughtful and/or share what they are feeling/thinking,) and said how much his friends have meant to him. It made everything worthwhile.
>
> [Interviewer]: Is there something spiritual about that?
>
> Yeah....in front of so many people... something so personal, too. I just realized that the school meetings have affected me. I think that I never thought about spirituality before and then talking about it I think maybe I am a spiritual person and I am finding that out. Before I came in, to the interview I don't think I could define spirituality, and I probably still can't but I just know more, I didn't learn more, I just had it in me coming out.

The *sacred* is seen in the respect and reverence for all life; biodiversity as a sacred trust; the connectedness of all forms of life and energy; a deep reverence for relationships (Whitney, 1995). The *holistic,* as characterized by Zohar and Marshall (2001), adds another dimension to the theme of interconnectivity in life. The holistic is an ability to see larger patterns, relationships, and connections; having a sense of belonging.

Alan's parents noticed this quality in their son at an early age and Alan experiences this connection during his times in nature. He feels being in nature, being alone, is a spiritual experience, "being completely quiet, in a quiet environment with yourself." His parents remembered what their son was like as a younger child. Their son would walk home from school engaging with nature. "He loved animals and dogs. He couldn't explain it. He just knew that somewhere in there he felt very hurt if they were hurt, and connected with them. He has a reverence for life."

Erik made the connection between body consciousness and the spirit as well as the emotions. "Body awareness has a lot to do with spirituality because you get in touch with your self. They work together in a sense. So if you are physically up, then you just feel great and it definitely has an influence on your emotions and how you see life.

Spirit as *epistemology* is revealed through multiple and diverse ways of knowing, cooperation and an opening to the many expressions of spirit (Whitney, 1995). Zohar and Marshall (2001) add *celebration of diversity*–regarding other

people for their differences, not despite them. Namita, her parents and Raj spoke about the schools and their honoring of the world's religions and multiple ways of knowing. Namita pointed out that her school does not "focus on any religion, they believe religion is one. We focus on those aspects that are common to all religions. Here there are songs and dances that honor all religions". Her parents added, "The school organizes functions so we can teach the children tolerance of all religion, i.e., our World Parliament. It is a world peace-prayer ceremony. Karmaniye Wadikar Asthe Maaf Sukdaas Chale, Karo Karo." That means do your duty towards God, whatever you are, whether you are a sweeper or a student, etc., do it to your best of ability and then results will follow."

Raj demonstrated his way of making meaning regarding science and spirituality. "From the day I started studying science. I began to support more of science's interpretation of life, yet I believe that God creates all of us, so there is something spiritual also, so I connect these two." Michael demonstrated his understanding of multiple ways of knowing and understanding the self in his response to the question about what it was like for him to be interviewed. He said his eyes were opened up "to the whole of what shapes me, and mentally what I am, and physically who I am." He used the questions "to think about many different ways of thinking about other things."

Zohar and Marshall (2001) characterizes the *Ability to Reframe, i.e.* standing back from a situation/problem and seeing the bigger picture; seeing problems in a wider context, as an indicator of intelligence in the spiritual domain. Amy's program presents multiple points of view so students learn how to reframe situations and take different perspectives. She gave an example regarding war.

> A lot of times you look at it and you can't really see a real reason why there was a war. It just kind of got that way gradually. A building up of tensions and it sort of opens your mind to a lot of other realities. Like with the Iraq War you know, they are not all bad. But they don't know us and we don't know them ... like there's not enough people in the world who learn about that and are able to place themselves in somebody else's position and be able to look at it from their eyes and like their reality. That's one thing that wars do. They try to dehumanize the enemy. It's okay to kill them because they don't have real feelings.

Being field-independent, i.e. standing against the crowd and having one's own conviction; and *asking fundamental "why" questions,* i.e. needing to understand things and get to the bottom of them, (Zohar & Marshall, 2001) are exemplified by Gabrielle and Namita in their interviews. Gabrielle was a Christian until she was about ten because as she said, "it was the culture I was raised in." At that point she began to think, "There are other things . . . and I became an agnostic. I was not going to say that anything is right or wrong because everything has just as much likelihood."

Namita at the end of her interview wanted me to hear her experience of "a child's mind." She felt very deeply that "a child's mind is very delicate. Especially during these teenage years, the school and the family should pay a little

more attention to understanding the child by looking at things from the child's point of view." Her statement was validated by these interviews, from the point of view that these teenagers had a great deal to say that is worth listening to, and the "delicate" she refers to is not weak. She is pointing to the plasticity of the mind during the educational molding process and its requirement for meaningful exchanges with adults.

The Integral Domain of Intelligence

Defining "Integral"

This section opens with one student, Amy, giving a representative description of her sense of the integral nature of her school. She draws a picture of the school. "We don't just concentrate on mental capacity. It's not the most important thing. We go into town and we do service projects. We have music. We have a lot more opportunities to learn people skills and be confident in our learning." She referred to their focus on education for life, as the other schools emphasize also. Namita, Gabrielle and Karen speak to their experience of the integration of the physical, emotional, mental and spiritual in their programs. "The school focuses on the overall development." "It's all connected. I mean, everything is connected." "They intertwine and they affect each other." "They all work together."

What follows are excerpts from five of the parents' interviews as they answered the question regarding the integration of the domains of intelligence in their schools. The holistic nature of the philosophical underpinnings of the programs is clearly recognized, from educating the whole child, the whole faculty, the whole family and the whole community inside of a "whole" curriculum, which encourages a holistic way of creating meaning for oneself. Namita parents said the training in their daughter's school "is not training of the child alone, it's the training of the entire family . . . how parent's behaviors can have a positive or negative impact on the children." Michael's parents commented that it was "the whole big picture. We looked at the school as a whole. And we see our child as a whole. We were pleased that the kids don't come out cookie-cutter . . . they come out a leader. We see a well-rounded, confident individual that comes out of that school."

Erik's parents feel that "the education benefits all, the young and old." Education is done together. "We do it together and we all benefit. We have learned a lot from our children. We frequently reflect on how we are living our life or what's happening with our children. We are very grateful and thankful to the schools here." Raj's parents were able to see how the school supported him in relating the emotional, physical, spiritual, mental domains. "We saw how connected they were for him. We were really impressed because he was not restricted and nothing was forced on him. He was just bubbling with energy the whole time." Gabrielle's parents have seen the integrative style in which she has been educated.

> Our daughter is getting her own meaning and not depending so much on it being given to her from some source. In fact she surprises us because she is so intelligent and what she derives from whatever it is we're talking

about at the time. Throughout it all we have discerned a deepening of perspective. We're talking about reflection. That's very exciting to see that.

Defining "Integral Intelligence"

Integral is defined as "necessary for completeness; essential; whole or complete; made up of parts forming a whole; a whole" (Agnes, 2001, p.742) and comprehensive, inclusive, balanced (Wilber, 2003). Intelligence is "an awareness and ability to discern, perceive, understand, acquire and retain knowledge and learn from experience (Agnes, 2001, p. 742). It is the faculty that provides us with an ability to transfer and apply our understanding from one situation to another. Integral intelligence is an ability to grasp an event, situation, or concept assuming a panoramic view, to see something in its wholeness, within a systemic context. Individuals demonstrating an integral intelligence acknowledge multiple domains and expressions of intelligence, and develop and integrate them. The composite picture of an integrally educated individual, derived from the interviewees' responses and highlighted in the next chapter, offers an excellent model of integral intelligence.

This dissertation has focused on the integral quality of education that purposefully develops and acknowledges the interconnectivity of thoughts, feelings, senses, sensations, actions and spirit in learning experiences, i.e., the purposeful education *for* integral intelligence. This chapter has been filled with examples that illustrate the holistic nature of these nine programs. Interviewees have made abundant comments about their experiences of their schools and the multilayered integrative qualities available.

Research Collaboration

Chapter 1 introduced the integral worldview with the philosophical contributions from various sources including Gebser, Sri Aurobindo, Beck, and Wilber, e.g., and pointed to the interrelatedness that connects all life forms, multiple viewpoints, integrative learning experiences, etc. Also presented in Chapter 2 were the theories and findings of integral researchers and educators, who embrace the notions of individual consciousness and experience, family and community education, social, global and planetary awareness as fundamental to integral approaches to education. There is much agreement that the intent of these programs is the development of the spiritual, physical, cognitive/mental, emotional, social and aesthetic domains of humans inside of a child-centered context. "The net result is a student who has wisdom…by learning how to learn and integrate the modern aim of world knowledge with the ancient aim of self-knowledge" (Ghose, n.d. [a] p. 1). Because of the 'integral' focus of this dissertation, research collaboration for integral intelligence can be found in many chapters, and in particular in Chapters 1, 2, 7, and 8.

Conclusion

This chapter has reflected each domain of intelligence with the responses of the students and their parents, accompanied by analysis and interpretations plus insights from scholars specializing in the physical, emotional, mental, spiritual and integral intelligences. What has been contributed from the people in this study is insightful and filled with living examples of an integral viewpoint. Employing a holistic approach to the analysis of the data, - focusing on the whole - integral education (Lieblich, Tuval-Mashiach, & Zilber, 1998), key themes have emerged that have exciting implications to areas of major interest to educators, scientists, philosophers, psychologists, etc.

Chapter 7 continues to build on these key themes and features ideas concerning integral education and its contribution to 1) shifting paradigms and philosophical frameworks; 2) reinventing the self; 3) the evolution of consciousness; 4) identity creation and 5) facilitating transformative learning. Because this research is highlighting the integral experience, this way of viewing the data is requisite. For the purposes of this study, a holistic dimension has been used to create a composite picture of an integrally educated student taken from the data of the nine interviewed seniors, their parents and educators. This composite can be found in the section addressing identity creation–an invitation to entertain possible identity creation for the future.

In the next two chapters, the interviewees' combined responses have been translated into understanding that has a significant contribution to make to the field of education. Patterns that appeared from the initial analysis of the data reveal simple yet profound revelations concerning the roles each domain of intelligence assumes in integral education: The *Fundamental* role provided by the physical domain; the *Relational* role supplied by the emotional domain; the *Natural* role revealed in the mental area; and the *Contextual* role played by the spiritual realm. These roles will be more fully explored in the following chapters.

It is only when you are constantly learning that you find truth, god or love; and you cannot inquire, observe, learn, you cannot be deeply aware, if you are afraid. So the foundation of education –is to eradicate, inwardly as well as outwardly, this fear that destroys human thought, human relationship and love.
Krishnamurti, 1964b, p.11

Chapter 7: Integral Education and its Contributions

This chapter continues the analysis and interpretations process from Chapter 6 by presenting five featured ideas–integral education and its contribution to: 1) changing paradigms and philosophical frameworks; 2) reinventing the self; 3) the evolution of consciousness; 4) identity creation; and 5) facilitating transformative learning. The contents of this section are what naturally emerged during the research process. A composite picture, e.g., Polkinghorne's (1988) "understandable composite," a 'portrait' of an integrally educated individual synthesized from the data, can be found inside the portion focusing on identity creation. These themes add credence to the integral approach to education and highlight its potential to transform education as we know it. They also begin the process of laying the foundation for a systemic, integral model of education described in Chapter 9.

Changing Paradigms and Philosophical Frameworks

Paradigms

Our paradigms organize our way of being in the world. A worldview or paradigm is an "overarching framework that organizes our whole approach to being in the world" (Heron & Reason, 1997, p. 1). With regard to worldviews and the influence they exert on education, that is to say, if they 'organize our whole approach to being in the world,' it is imperative that we take a perspective that allows us to see clearly how a particular paradigm impacts our educational framework. Our education creates the relationship we have with people, our reality and lives; what and how we know, what kind of reality we experience, how we 'be' in the world, our values . . . literally everything.

An example of this paradigmatic influence in education is the traditional theories of intelligence which have defined what it means to be smart or intelligent. New studies in the area of brain-mind-intelligence collaborate with the findings of this research from integral education. They found 1) environmental conditions and messages provided to children; 2) the kind of support and relationships developed between caregivers, educators and children; and 3) provision for matching learning styles with teaching strategies for maximum individual development, all impacted the students by actually changing the body, brain, and intelligence (Hine, 2002). As noted in Chapter 6, studies from Diamond revealing the plasticity of the brain, and Feuerstein, demonstrating the modifiability of intelligence, (as cited in Dickinson, 1988) both point to a significant change in our ways of thinking.

Oftentimes we forget that our paradigms are learned interpretations that have become cultural agreements about the way to be, what's real, the nature of

knowledge and knowing, values and relationship. As stated in Chapter 1 concerning the value of the constructivistic lens, interpretations often need to be reevaluated and redefined to reveal meaning making that reflects new knowledge and understanding, like Diamond's and Feuerstein's work. They need a light shone on them to reveal their grip on us. The interview responses of the research participants have contributed a spotlight to this dialogue.

From this research of integral education, one particularly significant insight surfaced that could potentially transform education as we know it–the notion that perhaps ontological intelligence precedes epistemological intelligence. Addressing the integral aspects of being and reality, i.e., the physical, emotional and spiritual as well as the mental, as an educational foundation, could greatly shift the paradigm in which we gain knowledge. The integral worldview offers a perspective that prepares individuals for the level of complexity, chaos and change existing in today's world.

Philosophical Frameworks

An inquiry began in the first chapter regarding how a systemic, integral education might impact the philosophical frameworks: a) ontology (the nature of being; the nature of reality), b) epistemology (the theory of the nature, sources and limits of knowledge; how we know what we know), c) axiology (what people value), and d) our relational context; (how we relate to one another). The findings from the research interviews, the observations of and participation with the various integral education programs all give a deeper understanding of how these frameworks can be influenced by an integral and systemic approach to education. What follows is a look at the philosophical frameworks through the lens of integral education. The research participants' designated significant learning experiences are employed to illustrate a potential effect the integral approach could have on what is ultimately valued in education.

Ontology.

Ontology is the study of the nature of being, i.e., one's essential nature, the nature of reality. When reviewing the significant learning experiences of the research participants, all appear to contribute in some way to the quality of being and experience of reality of the students. For the purposes of this dialogue, only one example from each intelligence domain will be used. The learning experiences chosen to include are: from the physical, "*somatic consciousness, being 'present' in the body,"* from the emotional, "*safety, belonging, relationship, love,"* from the mental, *"respected and honored as an individual and think and learn for oneself,*" and from the spiritual, *"learning and participating in practices that brought them in touch with themselves, through internal experiences."* The response to the question, "what is one of the ontological contribution from the integral educational approach," could be, a person who is 'being' in, that is to say, consciously inhabiting their physical body and whose reality is felt as safe, connected to and loved by others, belonging, respected, and who is encouraged to think and learn for him/herself, and know and honor her/his internal experiences.

This description points to a distinctly different quality of being and experience of reality.

Epistemology.

Epistemology is the study of the nature, sources and limits of knowledge; how we know what we know. The significant learning experiences provided by the interviewees have an important impact on the nature, sources and limits of knowledge and offer additional insights into how we know. To continue this dialogue, again only one illustration from each intelligence domain will be cited. The learning experiences incorporated are, from the physical, *"the connection of the physical aspects of a person with the physical world and nature,"* from the emotional, *"being known and self expressed,"* from the mental, *the encouragement and 'space' to love learning, be curious and follow a passion,"* and from the spiritual, *"understanding and honoring the world's religions and learning the distinction between spirituality and religion."*

This research has been exploring the multiple ways that individuals know. The integral viewpoint offers valuable input to our current epistemology, which so greatly influences our educational philosophy and consequently our world today. Our example from the physical area*, "relating the physical aspects of a person to the physical world and nature"* embeds the interconnection deeply into the cellular memory of the body and creates safety in the individual's experience of the world because it is 'known' as closely related. In this case, knowledge is personal, experiential and embodied as both a differentiation and unification of internal and external experiences. The opportunity to know that all of life is connected is available. To know this and learn inside of that knowledge invites people to adopt a planetary perspective.

From the emotional area, the experience of' "*being known and self expressed"* affects how we know what we know. Learning inside of a context of being known and self-expressed validates and includes the learner in the learning process. The 'knower' is acknowledged as essential to the known. Knowledge is gained in a conscious manner as it is relevant to the learner. If one is known and self-expressed while learning, there is a natural confidence of self as learner from the onset. From the mental realm, "*the encouragement and 'space' to love learning, be curious and follow a passion"* greatly colors the sources, nature and limits of knowledge and how we know. Loving learning, with passion and curiosity, opens the body and mind to all knowledge, including new, unforeseen possibilities. How one knows inside of this framework is with an ability to question, not know and a willingness to be uncertain and flexible. Loving learning generates an ongoing co-creative relationship with our epistemology.

From the spiritual, *"understanding and honoring the world's religions and learning the distinction between spirituality and religion"* adds an essential dimension to our ways of knowing. The spiritual relates to the spirit, the 'breath' of life, animating principle or life force, which can include energy, meaning making, the experience of the sacred and the multiple ways of knowing and expressing spirit. As an epistemological framework, being able to appreciate the distinction between the spiritual and the religious and at the same time understand

and honor the world's religions opens up a possibility for more clarity about oneself and the connection one has to the energy, life force and sacred nature of life and the depth of relationships throughout the universe. This way of knowing grounds the individual in her/her personal, revered relationship with life and at the same time honors religious beliefs that have been shared in families and cultures for centuries.

Integral education cultivates the spiritual nature of people and includes an appreciation for the beliefs of the world's religions and their sources, how they are translated and manifested in one's life expression and invites a freedom to choose to participate or not. The framework of wholeness, i.e., the integration of the physical, emotional, mental, and spiritual intelligences reflects the crystalline quality of the learner and the learned.

Axiology.

To continue the inquiry with the exploration of axiology, i.e., what people value and the development of values, the responses given by the research participants highlight how the integral education viewpoint supports a high quality of principles. One example will be taken from each domain of their stated significant learning experiences; from the physical, "*healthy habits/nutrition,"* from the emotional, "*serving,"* from the mental, *"being given choices, trust and responsibility for one's learning,"* and from the spiritual, *"having conversations about spiritual insights and experiences."*

Within the integral educational viewpoint, values are planted early with regard to one's relationship with the physical body and its importance to learning and one's relationship with oneself. *'Healthy habits,*' i.e., eating, exercise and relating to one's body with respect are incorporated in most programs. Food is often related to as a kind of energy and its ingestion is known to influence the emotional, spiritual and mental intelligence as well as the physical. From the emotional domain, *serving* others is part of the integral educational experience and instills values that include others, particularly those that are less fortunate. Students spend time on a regular basis contributing themselves to others and learning first hand what it means to be in service to others. The service reinforces the sense of connection people have with one another and expands our consciousness of who we consider ourselves to be.

The learning experiences from the mental domain, "*being given choices, trust and responsibility for ones learning"* present many opportunities to develop values in students. This learning experience from the interviewees could be the most influential when considering values creation–as these students experience being valued as the creators of their lives. They are acknowledged as having the ability to make choices, be trusted and responsible for their own learning experiences. This appreciation builds a strong foundation on which to expand choice making, trust and responsibility throughout their education and experience being served by being trusted.

From the spiritual area, *"having conversations about spiritual insights and experiences"* supports students in expressing their personal, revered experiences in a safe environment. There is a value in having authentic conversations about

what matters to students within or without a religious context. It can validate that all human beings have questions, experiences, confusion and inexplicable happenings pertaining to our belonging or lack of belonging that deserve attention and respect. To have a place to take 'spirit' type expressions confirms the value of those kinds of conversations. The values being created in this environment are the most fundamental to what it means to be human, from valuing the body to valuing one's choices, trustworthiness and meaningful experiences.

Relational Context.

The last framework to address is our relational context, i.e., how we relate to one another. The learning experiences of the research interviewees help us see the ways an integral education can expand our experience of relatedness. For the purpose of this particular area, "*the significant influencers"* that were repeatedly chosen in each domain of intelligence, i.e., the relationship the research participants had with their *teachers, parents, families and friends*, will be highlighted because of their relevance. The philosophies of the integral programs also center on relationship, which utilize "*mentoring*, *intergenerational connection"* and "*a respect for the relationship students have with themselves, others, nature and the larger world*." Fostering relationship is seen by integral education as foundational for learning, i.e., the quality of one's learning is correlated with the relationship one has first with oneself and then with the parents, teachers and other students.

As noted from the previous dialogues regarding ontology, epistemology and axiology - being, knowing and valuing are also rooted in relatedness. These programs strive to be places of unconditional acceptance and safe environments in which to experiment and have a deep connection with one's spirit. Students have a knowing, affectionate relationship with their teachers, often publicly acknowledged and demonstrated. The agreed upon reality and conduct in that reality is caring relationships, between parents, students and teachers, teachers and students, students among themselves, are created here. Community meetings, relationship courses and sessions are built into many of the programs to provide learning and practice in generating and managing relationships, including young people of all ages and parents.

The way many of these programs have been structured to teach relationship skills, including conflict resolution, from an early age, has greatly influenced the relationship students have with their peers, children of different ages and beliefs, and their teachers and parents. The teens interviewed had open, communicative relationships with their parents. There still existed disagreement and misunderstanding from time to time, yet the way they were handled utilized skills learned in school. Students also had ongoing relationships with older and younger children because the integral programs recognized the necessity of fostering intergenerational understanding and appreciation.

Reinventing the Self

There are many respected and intelligent people representing divergent viewpoints, ranging from science, business, medicine, education, spiritual

communities, the arts, etc., that have been saying for some time that our collective cultural story needs reinventing, e.g., , Houston (2000); Chopra, (2005); Laszlo (2005); Swimme & Berry (2005); Berry (1999); Goleman (1995, 2003); H. Smith (2001); Maturana (1998, 1999); Senge, et al., (2004); O'Sullivan (n.d); Pert, et al., (2005); Pearce (2002); Mander (1978, 2001); Clark (1997); Miller (2000), Mitchell (2004); Miller (2006); Ray (1996); Hock (1999); Wilber (2000, 2003); Eisler (2002); Montuori & Conti (1993); Montuori & Purser (1999); and Morin (2001, 2002).

Our current culture is no longer served by our historical ontology, epistemology, axiology and relational context. The integral worldview embodied through a systemic, integral educational approach can provide a consciously created cultural narrative that is capable of representing our current world–by bringing forth a new philosophical context. The integral worldview is not only a way of knowing and thinking; it is also a way of being, behaving, valuing and relating. The understanding and expression of the integral worldview promotes "a transdisciplinary perspective that emphasize[s] the intrinsic order and interdependence of the world in all its manifestations" (Banathy, 1996, p. 1). Each of the nine integral programs highlighted in this dissertation and the people interviewed have a significant contribution to make to this new context, i.e., to our ways of knowing, being, valuing, relating and ultimately to understanding and wisdom.

Thomas Berry (1999), one of our recognized sages, is a historian and custodian of the wisdom of cultures and religions, from both the Eastern and Western traditions. At the same time, he has a depth of understanding of and appreciation for science and its ability to inform us from many different angles. His call to us at this time comes from his deep concern for our natural world and the relationship all of us have with our ecology and cosmology. He declares,

> We need to reinvent the human at the species level because the issues we are concerned with seem to be beyond the competence of our present cultural traditions either individually or collectively. What is needed is something beyond existing traditions to bring us back to the most fundamental aspect of the human: giving shape to ourselves. (as cited in Swimme & Berry, 2005, p. 578)

Berry, from the wisdom of his octogenarian perspective, sees the necessity of societal reinvention, not only because of the lack in our existing traditions, but also because of the inseparability of who we are with the quality of future we are capable of bringing forth.

> Our own future is inseparable from the future of the larger community that brought us into being and sustains us in every expression of our human quality of life...emotional, aesthetic, intellectual, sense of divine, as well as in our physical nourishment. (as cited in Swimme & Berry, 2005, p. 580)

Berry is joined by others whose voices give strong resonance and resolve to their commitment to a cultural transformation. Jean Houston (2000), an integral

scholar; psychologist, philosopher and spiritual activist, says we can no longer wait to reinvent a story to equip us to live in a world that today is no longer served by former ways of knowing and being. O'Sullivan (n.d.), professor emeritus of transformative learning, represents that perspective as he points to our fractured cosmology, i.e., "our loss of a coherent conception of ourselves, our universe, our relation to one another and our world" (p. 7). He envisions integral education as a way of shifting our consciousness to a planetary context. Clark (1997), another advocate of the integral approach to education, critiques the current established educational structure as not being equipped to cope with the speed and complexity of the major changes taking place in the world today. He, like O'Sullivan (n.d.), Miller (2000) and Miller (2006), also sees the systemic, integral perspective as needed to encompass and educate for the multiple purposes of education, within individual, relational, communal, global and planetary contexts.

Morin (2001, 2002), another esteemed elder voice of philosophical wisdom, has contributed his knowledge of complexity, culture and paradigm creation to the reconstructing of education for the future. He understood that our current paradigms of "fragmentation, disjunction, separateness, which are reflected multidimensionally, make it impossible to grasp that which is woven together" (p. 38). We require a "paradigmatic change in the way we organize knowledge" (p. 29), "we need a paradigm compatible with complex knowledge to crystallize and take root," (p. 28). He distinguished a paradigm as the promotion and selection of master concepts of intelligibility to be integrated into a sociocultural discourse. This dissertation advocating integral education has explored possible master or essential concepts of intelligibility with the intent to offer a new paradigm for education that serves the depth of complexity in a world whose boundaries extend far beyond its parameters. We are in a world that is, as Morin defined it, "complex, multidimensional, planetary, global, transnational and polydisciplinary" (p. 29).

Morin's views in the domain of complex thought parallel much of the foundational philosophy of integral education. The "complex is that which is woven together," (p. 34). What has been missing that is now being revealed is a paradigm that can truly embody the level of complexity that exists today–a *complexity paradigm.* This complexity paradigm creates an interdependent tissue that weaves together and binds unity and multiplicity (Morin, 2001), the interior and exterior, the individual and collective, and the cultural and social (Wilber, 2000). The manner in which paradigms initiate and take root is through individuals as they experience, sense, learn, know, think, converse and act. Paradigms are interiorized and culturally inscribed, most often through education (Morin, 2001).

An integral education provides 'master concepts' that inscribe a different quality of interiorized paradigm; one that reinterprets and expands the idea of "culture" by interconnecting unity and multiplicity, exterior and interior, individual and collective, social and cultural and local and global. Integrality in education promotes identities that are whole at many levels of human expression from individual to planetary. This research has validated that attention on the ontological quality of education, meaning the development and integration of the

physical, emotional, mental and spiritual intelligences, provides a foundational interwoven and resilient individual 'network. This is an individual's personal, organic network made up of 'energetic fibers' from the physical, emotional, mental and spiritual intelligences, which connect with all other individual and collective networks.

The Evolution of Consciousness

The theme of consciousness and its relationship to education is a crucial topic to entertain as the threads of this integral education research query are being woven together. This section defines consciousness and entertains the question, 'what does educating in a systemic, integral manner contribute to the development of consciousness? My purpose here is to look at what has been revealed in this inquiry into the nine integral educational programs and the lives of their interviewee- representatives and offer responses to what impact they have on increasing consciousness.

Defining Consciousness

This presentation of ideas connecting integral education and the evolution of consciousness starts with some meanings given to consciousness by various researchers into the field. "Consciousness begins with awareness . . . a self-reflection . . . awareness creates intention that impacts the physical world and along with attention provides for knowing and creating" (Mitchell, 2005). "Consciousness is a process that involves our awareness of ourselves and the world, including our thoughts, feelings, sensations, identity and worldviews" Schlitz, 2005, p. xl). "The process whereby a mind is imbued with a reference we call self, and is said to know of its own existence and of the existence of objects around it . . . as a presence [it] is always there" (Damasio, 2003, p. 184). "The simple crystalline reality that undergirds all experience–consciousness," (Combs, 1996, p. 275).

Consciousness Manifests through the Physical, Emotional, Mental, Spiritual

This awareness and presence is expressed through the various domains of intelligence, uniquely as the physical, the emotional or the mental. The spiritual is the creator of consciousness (Combs, 1996). The mind is the subjective experience of consciousness and the body is the objective experience of consciousness (Chopra, 2005, p. 206). The emotions are the body's communication channel, i.e., the conduit between subjective and objective experience of consciousness. Our mental, emotional and physical intelligences coordinate together to bring greater awareness to our inner states of being, body sensations and the vast network of communication throughout the body. They can synchronize to bring greater presence to our experience of the outer world as well, i.e. the connections we have to one another, nature and all other life forms. McCraty, Atkinson & Tomasino (2001) have found that,

> Consciousness is impacted by the degree of mental and emotional coherence experienced. When they are out-of-phase, overall

> awareness is reduced. Conversely, when they are in-phase, awareness is expanded. This interaction affects us on a number of levels: Vision, listening abilities, reaction times, mental clarity, feeling states and sensitivities are all influenced by the mind and emotions integrating and coordinating. (pp. 51-52)

There is much to say about consciousness and these initial paragraphs are meant only to provide some cogent examples of the inseparability of the four domains of intelligence, the emotional, physical, spiritual and mental, and consciousness. Many others have been presented in previous chapters.

Theoretical Models of Consciousness

There are four theoretical models that merit inclusion at this juncture. They each provide a way of relating to consciousness that supports the inquiry about integral education and its impact on the evolution of consciousness. Kegan (1994) delineates levels of thinking that represent qualities of consciousness. First level thinking has a single-point focus on what is immediately present; second level thinking focuses awareness of the self and one's own needs; third level thinking includes awareness of one's self in relation to others and fourth level thinking expands the awareness to include a worldview that is systemic and complex, i.e., a consciousness that is aware of itself at the level of system (pp. 94-95). Wilber (2000) has invented a powerful context for engaging with consciousness. His quadrant model includes the levels, i.e., matter, body, mind, soul, and spirit and the facets, intentional (interior-individual), behavioral (exterior-individual), cultural (interior-collective), and social (exterior-collective). This model brings the integral mindset to consciousness and contributes an all-encompassing view with which to engage the findings of this research.

Combs (1996) proposes three levels of organization of our experiential lives that further our understanding of consciousness. He has incorporated prior work done by Tart, Gebser, and Guenther in his levels (p. 257). The first level is *states of mind,* which contain feelings, emotions, moods, etc., the second is *states of consciousness,* which comprise experiential conditions such as dreams, ordinary awareness, meditation, etc, and the third is *structures of consciousness*, i.e. how the world is experienced and understood by human beings. The mental, physical or the integral are examples of consciousness structures (pp. 257-264).

Beck (2002), through his Spiral Dynamics interpretation of the evolution of consciousness as eight spiraling and dynamic stages, points to the integral and holonic quality of the development of consciousness. Each phase represents 1) the prior 'living layer,' 2) the increased levels of complexity in both our external and internal worlds, and 3) the breakdown and reorganization that is inherent in life's dynamics. The spiral starts with 1) instinctive/ survivalistic values and moves through 2) magical/animistic, 3) impulsive/ egocentric, 4) purposeful/ authoritarian, 5) achievist/strategic, 6) communitarian/ egalitarian, 7) integrative, and finally to 8) holistic (p.1). This explanation brings clarity to how consciousness has evolved throughout history inside of cultural, religious, social

and economic influences. How we educate has a great deal to do with where individuals and cultures find themselves on the spiral.

Claire Graves introduced the theoretical framework of Spiral Dynamics and offered this thinking about how to relate to the transformations in our consciousness.

> The psychology of the mature human being is an unfolding, emergent, oscillating, spiraling process, marked by progressive subordination of older, lower-order behavior systems to newer, higher-order systems as man's existential problems change. (as cited in Beck, 2002, p.1)

Consciousness: What Has Been and What Could Be

As we proceed to explore consciousness and integral education, it is useful to revisit Chapter 1, to the section on Collective Denial, as it points to the apparent lack of consciousness existing today, focusing mostly on the United States. Much of that chapter seriously questions the approach that most American educational institutions have chosen to address this lack of awareness. There is much agreement from educators that what has been developed as an educational purpose and accompanying curriculum is not necessarily directed toward student consciousness or an integral experience of life, i.e., Senge et al. (2000, 2004); O'Sullivan (n.d.); Miller (1991, 2000); Miller (2001, 2006); Clark (1991, 1997); and Marshall (2005) .

An integral education is purposefully designed to focus attention on the students' awareness of themselves, through an approach that attends to the development of the physical, emotional, mental and spiritual domains. This self-awareness, through self reflective exercises, practices and conversations, naturally grows an ability to attend to the surrounding world. There is much correlation between integral education and its stated purpose with Kegan's fourth level of thinking, Wilber's four-quadrant model that integrates levels and facets of consciousness, Combs' states of mind, stages and structures of consciousness and Beck's spiral directed toward the integrative and holistic stages of human development. As demonstrated in Chapter 6, the interviewees provided an abundance of examples of how their consciousness has been developed through their engagement with the integral educational approach.

One example of the impact these programs have had on their students, their community and the way they think and act toward one another, came from an observation a parent made about how accessing an awareness through the body shifts the consciousness of the student *AND* the community in which the education is taking place. She remarked,

> I saw that they love to move and be together by moving their bodies and experimenting [with] things. They [would] see that actually their body is the same as their friend's body and there is no difference and that it is the same matter. This is very interesting to see that they understand this. They could be able to respect the others as themselves.

She then made a second observation, relating the consciousness in the students' bodies to the resulting consciousness in the community.

> I have to add that around here, there was never an incidence of violence, never mistakes or hurting each other. I never have experienced that in all these 13 years we are here. There is even no talk about it that they would like to hurt someone. They were able to respect the others as themselves.

Although this particular integral program emphasized this depth of engagement with the physical body throughout a student's education, i.e., from three years of age to 18, the integral educational programs included in this dissertation accentuate experiences that bring consciousness to their students through many avenues, i.e., mental, spiritual, emotional as well as the physical domain. There are equally powerful examples of how consciousness is impacted by integral education in Chapter 6, found within each domain of intelligence; some examples given deal with war, media literacy, service, relationships and community ecological contributions.

Consciousness and Identity

Consciousness and identity are inextricably intertwined. They seem to arise together and constantly reflect one another; the quality of awareness influences the identity as awareness brings an ability to observe, discern and make choices regarding with what one prefers to identify. "There is a different view of the world - a different view of the self and of others–a *different worldview* . . . as consciousness evolves*"* (Wilber, 2000, p. 132). One's identity can likewise influence the quality of consciousness one can attain.

Identity Creation

The following section explores identity and what integral education can bring to the development of a 'self.' Sri Atmananda gives a clear example of how what we identify with can keep us in a fixed point of view and prevent us from assuming a more flexible worldview.

> If you don't know what your standpoint is you can never hope to know the reality of things. I say, you don't know what your standpoint is, you say: 'I am fat, I am thin, I walk, I sit, I move,' and so forth. In this way you identify yourself with the physical body. If you say: 'I feel, I see, I touch something,' and such, you identify yourself with your senses. And, when you say: 'I think, I feel' and so on, you identify yourself with the constantly changing mind. For that reason you are never conscious of what your actual standpoint is. Therefore, it is absolutely necessary to know what you are and what your standpoint is, if you want to arrive at the right knowing, or to put it another way, to see the right perspective. ...You will discover that the I-principle (the true unchanging Self) is continuously present in each of the three states. (as cited in Nair, 2002, p. 5)

Sonia, one of the students, provided an observation that exemplified this. "I feel that the people with whom you move around, you tend to become like them, like you gather a lot from them, so it's important to be in good company."

Identity is "the characteristics and qualities of a person, considered collectively and regarded as essential to that person's self-awareness; the condition or fact of being a specific person; individuality" (Agnes, 2001, p. 708). Identity can be a conscious or unconscious creation. It can be purposeful and its development is impacted by many different, sometimes competing forces. Identity is formed to a great degree from influences from parents, families, friends, teachers, media and life experiences, etc. What we identify with is greatly persuaded by the education we receive and the environment in which that education is carried out.

There is much discussed about the kind of identity people, particularly young people, have developed in the United States (Mander, 2001; Elgin 2004; Swimme, 2005). This statement and concern does not include all people, young or old and it is a generalization from what is most public. The media, i.e., TV, movies, advertising, music, symbols, books, magazines and other entertainment sources and their representatives, i.e., models, movies, television, music 'stars,' give birth to and perpetuate archetypical identities rooted in a material and consumer world. The 'selves' we create in this medium oftentimes are without our conscious discernment. These identities are continually stored in our collective unconscious as the 'right or accepted way to be.' Without some educational inquiry and intervention, young people grow up with a deep imprint about the 'way to be,' based on something akin to a cultural tornado that sweeps through and before people notice, they have assumed fabricated values without much conscious awareness. Stephanie Pace Marshall (2005), an internationally known educator, shares her experiences in this discourse.

> The nature and quality of our children's minds will shape who they become, and who they become will shape our world. Unfortunately, the world now being mapped into the minds our children is one of scarcity, fragmentation, competition, and winning. Our current story conceives learning as a mechanistic, prescribed, and easily measured commodity ...This narrative could not be more wrong. (p.12)

David Marshak (1997), an integral education professor adds,

> Those of us who live within the technological culture have grown far more powerful than we are wise and compassionate, far more identified with our separation from each other, from our habitat and from spirit than with our connections to each other, to the Earth, and to what we experience as "God." (p. 1)

The development of the mental, emotional, spiritual and physical intelligences in an integral environment has a profound impact on the creation of an identity. As noted in the results of the research interviews, participants participated in learning experiences that supported them in the development of their physical, emotional, mental and spiritual intelligences and ones that clearly expressed the identity formulated in the process. The following is a composite picture, i.e., 'a portrait' (Polkinghorne, 1988) of an integrally educated person.

This is a synthesis of the responses given by the research participants, which came from their integral educational experiences. The pronoun 'I' was placed in front of each set of responses. It speaks powerfully of the integral educational approach and its impact on the shaping of a possible identity.

Composite Picture: Integrally Educated Individual

> I am able to see myself in relation to a larger world and feel connected to myself, others and nature. I am learning and participating in practices that put me in touch with myself, i.e., meditation, yoga, exercises, self-reflection, journaling, silent time. I experience my physical body as connected to the physical world and nature. I am 'present' in my body, feel centered and aware of my energy and the energy of others around me. I am engaged in discovering habits that support my health and well being, e.g. good nutrition, etc.
>
> I feel safe, loved and related to others, and have a sense of belonging. I feel respected, honored, known and self expressed as an individual, and think and learn for myself. I love to learn, be curious and follow my passions in life. I am trusted, given choices about my life and responsibility for my learning. Learning for me is experiential, embodied and relevant to my life. I experience congruency throughout my life.
>
> I have an understanding of and honor the world's religions. I have learned the difference between spirituality and religion and engage in dialogues that support my spiritual insights and experiences, as well as my religions beliefs.
>
> My school, parents, family, teachers and friends support me in developing myself as an integrated human being, i.e., my physical, mental, emotional and spiritual intelligences are increasing and integrating.

Facilitating Transformative Learning

Integral education creates an environment in which transformative learning can occur. Transformative learning is the kind of learning that shifts the definition or locus of the self, from content; i.e., a position, a fixed point of view, to context; i.e., not having to have a position, an ability to hold multiple points of view, a systemic or integral worldview (Elias, 1997). Education that is transformative creates an opening for people to shift who they consider themselves to *'be,'* from identifying one's self as a point of view, a story, a personality, an ego, or a body, to recognizing one's self as context, as a 'clearing', in which a different order of thought, feeling, conversation or action, etc. can take place. The individual's capacities 'reach beyond' any narrowly personal and individual perspective (Wilber, 1986, p. 72). One is able to create new meaning structures and shift worldviews (Mezirow, 2000). Transformative learning challenges what we know and frees us from distorted notions of the world and

who we think we are (Merriam & Caffarella, 1998). Transformative learning generates an environment in which our consciousness can dramatically shift (Boyd, 1989), and one in which our minds, bodies, feelings, spirits and subsequent actions can permanently alter (O'Sullivan, n.d.).

A systemic, integral approach to education contains the elements to transform learning and consciousness. A system is an integrated whole whose essential properties arise from the relationship between its parts which are interconnected and interdependent (Capra, 1996). An integral approach to education incorporates the development and integration of the mental, emotional, physical and spiritual intelligences throughout an individual's learning process (Ghose, n.d. [a], 1990). To think systemically means putting things into a context and establishing the nature of the relationships (Capra, 1996). To think integrally means to nurture the development of the whole person (Miller, 1991) and be comprehensive, inclusive and balanced in the process (Wilber, 2003). The systemic, integral worldview is emerging as a response to the evolutionary and at times revolutionary advances in a multitude of disciplines. It contributes a transdisciplinary and panoramic quality to our epistemology and a new understanding of the nature of reality, values and relationships.

From this vantage point, the educational process is viewed as a dynamic, integral system. The interconnectedness and interdependency of the stages of human development from conception to graduation are viewed through the lens of the physical, emotional, spiritual and mental intelligences and their integration. Systems philosophy brings forth a reorientation of thought and worldview (Banathy, 1996), and paired with an integral worldview provides educational approaches that transform.

The transformative learning frameworks from both Jack Mezirow (1997, 2000) and Edmond O'Sullivan (n.d.) and contributions from Neuman (1996) and Boyd & Meyers (1988) emphasize aspects of transformative pedagogy that are demonstrated in integral educational programs.

O'Sullivan (n.d.) identified five themes that he found to be fundamental to transformative learning.

1) The relationship/connection that humans have with the natural world; consciousness of the environment;
2) World citizenship; peace, equality, conscious world citizens, interconnectedness, interdependency, narratives of inclusion;
3) Integral curriculum; integral development–from the personal to the planetary, contextual-holistic vs. content-informational;
4) An experience of belonging: community, a place, roots;
5) A sense of the sacred: integrative dimension of experience, awe, respect for life, connections to the spirit (pp. 1-6).

Mezirow (2000) has also specified ten elements that provide a potent foundation for transformative learning.

1) A sense of safety, openness, trust; egalitarian, nonjudgmental and non-competitive environment;

2) A learner centered approach;
3) Critical reflection and explorations of alternative personal perspectives;
4) Affective learning, emotions and feelings discussed;
5) Solitude, self dialogue;
6) Handling disagreement, confronting rather than avoiding;
7) Experiential learning;
8) Acknowledging many ways of knowing and learning; multiple intelligences;
9) Questioning our assumptions, beliefs;
10) The use of rational discourse, dialogue (p. 312).

Neuman (1996) expands the acknowledgment of the importance of feelings and emotions to the transformative aspects of learning experiences. Boyd and Meyers (1988), in promoting transformative learning, include supporting students to recognize their "spirit"–a knowing or a truth that resides in them (p. 282).

The nine featured approaches to integral education in this dissertation have transformative worldviews. What follows is an indication of what transformational distinctions these integral educational programs are contributing to the transformative learning discourse and their parallels to the theoretical frameworks put forth by O'Sullivan, Mezirow, Neuman, Boyd, and Meyers, etc.

Transformative Curricula

In the schools which follow the philosophical and educational guidance of Sri Aurobindo in Auroville, The Awareness through the Body program transforms the students' relationship with their physical self, and at the same time, their emotional, spiritual, and mental self through engagement with their body's awareness. Also, the practice of Integral Yoga, which develops and integrates the physical, emotional/vital, mental and spiritual/psychic as ways of knowing and being in the world, is found in both the philosophical fiber of the course work and the practices within the schools. The Sri Atmananda schools express transformative learning through their approach in which the 'Living Teacher' enters the child's world with unconditional support. The results are an unprecedented love of learning, spirit of play, self discovery and creative energy exhibited by the students.

The Quaker Schools contribute a unique way of promoting relationship with spirit, the value of silence and reflection, the power of listening and a cross disciplinary program called, The Examined Life. These ways of educating transform the relationship students have with themselves and their spiritual, physical, emotional and mental life. Krishnamurti's schools have a deep respect for the contemplative practices and utilize specific classes and practices that inspire interconnectedness with self and others, e.g., Relationship Classes, Human Development Courses, Community Meetings and intergenerational partnerships. They provide transformative environments for students, parents and teachers.

Montessori's curriculum offers extensive interdisciplinary modules which focus the student's awareness on an interrelated world. The Vision Quest and Hero's Journey, which link the inner and outer qualities, Responsible Parenting,

Cosmic Education, (connecting science and the sacred), trusting the knowing of the child, and accentuating the interconnectivity of and reverence for all life, can transform the students' relationship with life and themselves. Steiner's Waldorf schools offer transformative learning experiences in the way the entire curriculum is coordinated with human development. Subject content mirrors personal experience, developmental stages mirror the evolution of human consciousness and learning themes honor and reflect the learner's inner development. Embodied knowledge, student generated lessons and Eurythmy, (the body in movement) all contain ingredients for the transformation of the identity of the student.

Yogananda's Living Wisdom schools utilize an Education for Life for parents, teachers and students that can transform the way in which everyone relates to education. The curriculum is named Adventure, Service and Self-Discovery, which contains many opportunities for travel, exploration, service and identity building. The All School Production includes everyone in the school and presents transformative learning experiences in self-expression, interdisciplinary connections and intergenerational relationships. CMS, inspired by Gandhi and the Baha'i faith, hosts 17 conferences each year which introduce their World Parliament for world peace to local and international groups. CMS acknowledges and honors the world's religions through The Dance of the World's Religions at these conferences and throughout the school's curriculum. World peace is a major thrust of the school's purpose and vision, and the founders, teachers, parents and students invite others to transform the way they relate to people of all religions and cultures.

Mezirow's goal for education is "to help the individual become a more autonomous thinker by learning to negotiate his or her own values, meanings, and purpose rather than uncritically acting on those of others"(1997, p. 11). For O'Sullivan (n.d.), transformative learning involves experiencing a deep, structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and permanently alters our way of being in the world (p. 7). These nine programs provide ample demonstrations of these expressions of transformative learning.

Comparative Tables

What follows are four displays of the correlations found between the integral education interviewees' responses and the transformative learning foundations of Mezirow (2000), O'Sullivan (n.d.), Neuman (1996), and Boyd and Meyers (1988). Each table represents one domain of intelligences to identify the many congruencies.

Table 2 *Physical Domain*

Integral Education Research Participants Responses: Physical Domain	Mezirow: Transformative Learning Foundations	O'Sullivan: Transformative Learning Foundations
The connection of the physical aspects of a person with the physical world and nature	Experiential learning; A sense of safety, openness, trust; Acknowledging many ways of knowing and learning; multiple intelligences	The relationship/connection that humans have with the natural world; consciousness of the environment; An experience of belonging: community, a place, roots; A sense of the sacred: integrative dimension of experience, awe, respect for life, connections to the spirit
Somatic consciousness; being 'present' in the body	Experiential learning; A learner centered approach; Affective learning, emotions and feelings discussed; Acknowledging many ways of knowing and learning; multiple intelligences	An experience of belonging: community, a place, roots
Centeredness	Experiential learning	An experience of belonging, a place, roots
Energy	Experiential learning	An experience of belonging, a place, roots
Healthy habits/nutrition	Questioning our assumptions, beliefs; Experiential learning	An experience of belonging: community, a place, roots
The school, its philosophical and pedagogical approaches, parents, families, teachers, friends	A sense of safety, openness, trust; egalitarian, nonjudgmental and non competitive environment; Questioning our assumptions, beliefs; Experiential learning; Affective learning, emotions and feelings discussed; Acknowledging many ways of knowing and learning; multiple intelligence	An experience of belonging: community, a place, roots; The relationship/connection that humans have with the natural world; consciousness of the environment

Table 3 *Emotional Domain*

Integral Education Research Participants Responses: Emotional Domain	Mezirow: Transformative Learning Foundations	O'Sullivan: Transformative Learning Foundations	Neuman Transformative Learning Foundations
Being known and self expressed	Acknowledging many ways of knowing and learning; multiple intelligences; Critical reflection and explorations of alternative personal perspectives; Experiential learning; Affective learning, emotions and feelings discussed	Narratives of inclusion; An experience of belonging: community, a place, roots	The Importance of feelings and emotions
Being responsible	Questioning our assumptions, beliefs; Acknowledging many ways of knowing and learning; multiple intelligences; Critical reflection and explorations of alternative personal perspectives; Handling disagreement, confronting rather than avoiding	Narratives of inclusion; An experience of belonging: community, a place, roots	The Importance of feelings and emotions
Serving	Experiential learning Acknowledging many ways of knowing and learning; Questioning our assumptions, beliefs	Narratives of inclusion; An experience of belonging: community, a place, roots	The Importance of feelings and emotions
Mentoring	Experiential learning Acknowledging many ways of knowing and learning	Narratives of inclusion, belonging	The Importance of feelings and emotions
Safety; love belonging; relationship	Experiential learning; A sense of safety, openness, trust egalitarian, nonjudgmental and non competitive environment	Narratives of inclusion; An experience of belonging: roots, community, place	The Importance of feelings and emotions

Table 4 *Mental Domain*

Integral Education Research Participants Responses: Mental Domain	Mezirow: Transformative Learning Foundations	O'Sullivan: Transformative Learning Foundations
Being given choices, trust and responsibility for one's learning	Questioning our assumptions, beliefs; Acknowledging many ways of knowing and learning; multiple intelligences; Experiential learning A sense of safety, openness, trust; egalitarian, nonjudgmental and non competitive environment	Narratives of inclusion; An experience of belonging: community, a place, roots; ; Integral curriculum; integral development
Knowing the context in which learning is taking place	A learner centered approach Experiential learning	Integral curriculum; integral development
The encouragement and 'space' to love learning, be curious and follow a passion	Questioning our assumptions, beliefs; Acknowledging many ways of knowing and learning; multiple intelligences; A learner centered approach Experiential learning	A sense of the sacred: integrative dimension of experience, awe, respect for life, connections to the spirit; Integral curriculum; integral development
Be respected and honored as an individual, and think and learn for oneself	Questioning our assumptions, beliefs; Acknowledging many ways of knowing and learning; multiple intelligences; A learner centered approach	Narratives of inclusion An experience of belonging: integrative dimension of experience, respect for life, community, a place, roots
Having learning be experiential, embodied and relevant to ones life	Acknowledging many ways of knowing and learning; multiple intelligences; Experiential learning A learner centered approach	Integral curriculum; integral development; An experience of belonging:
The school and its philosophical and pedagogical approach, parents, families, teachers, friends	The use of rational discourse, dialogue; A sense of safety, openness, trust; egalitarian, nonjudgmental and non competitive environment	Integral curriculum; integral development from the personal to the planetary contextual-holistic vs. content-information; roots

Table 5 *Spiritual Domain*

Integral Education Research Participants Responses: Spiritual Domain	Mezirow: Transformative Learning Foundations	O'Sullivan: Transformative Learning Foundations	Boyd and Meyers Transformative Learning Foundations
Being educated in ways spirituality could show up in their lives	Solitude, self dialogue; Critical reflection and explorations of alternative personal perspectives	A sense of the sacred: integrative dimension of experience, awe, respect for life, connections to the spirit	Recognize their "spirit" –a knowing or a truth that resides in them
Learning and participating in practices that brought them in touch with themselves	Critical reflection and explorations of alternative personal perspectives; many ways of knowing; Solitude, self dialogue	An experience of belonging: community, a place, roots; A sense of the sacred: integrative dimension of experience, awe, respect for life, connections to the spirit	Recognize their "spirit" –a knowing or a truth that resides in them
Experiencing congruency throughout one's life	Experiential learning Acknowledging many ways of knowing and learning; multiple intelligences	An experience of belonging: community, a place, roots; Integral curriculum; integral development	Recognize their "spirit" –a knowing or a truth that resides in them
Having conversations about spiritual insights and experiences	Critical reflection and explorations of alternative personal perspectives; The use of rational discourse, dialogue; Questioning our assumptions, beliefs	An experience of belonging: community, a place, roots A sense of the sacred; integrative dimension of experience, awe, respect for life, connections to the spirit	Recognize their "spirit" –a knowing or a truth that resides in them
Understanding and honoring the world's religions and learning the distinction between spirituality and religion	Questioning our assumptions, beliefs; Acknowledging many ways of knowing and learning; multiple intelligences	World citizenship; peace, equality, conscious world citizens, narratives of inclusion; inter-connectedness, interdependency,	Recognize their "spirit" –a knowing or a truth that resides in them

Conclusion

This chapter further analyzed and interpreted the responses of the research participants by featuring five emergent ideas. The findings point to a compelling influence integral education can have in: 1) changing paradigms and philosophical frameworks; 2) reinventing the self; 3) the evolution of consciousness; 4) identity creation and 5) facilitating transformative learning. A 'portrait,' i.e., a synthesized picture from all the research students, was presented to clarify the characteristics of a person educated within an integral approach.

The nature of each of the intelligence domains was inferred from the categories of 'significant influencers' responses, i.e., the *fundamental* role of the physical, the *relational* role of the emotional, the *natural* role of the mental and the *contextual* role of the spiritual domain. The next chapter builds on these analyses and interpretations, and integrates the new sciences and their discoveries, which add further depth to the understanding of integrality.

Objects are separate but knowledge unites them…knowledge does not connect one object with another, but on the contrary destroys the separateness and absorbs them into itself.
Sri Atmananda, as cited in Nair, 1992, p. 1

Chapter 8: An Integral Network: A Convergence of Essential Views–Scientists, Philosophers, Educators, Students, and Parents

The formation of this chapter emerged from the inquiry into integral education. The structure and content revealed themselves during the exploration of the integral worldview and educational approaches, and in the findings from this research. This chapter introduces the most recent contextual contributions from scholars, educators and scientists and utilizes the integral worldview as a magnifying glass through which to clearly see each field of intelligence. The crystal is used as a metaphor once again as this chapter's intent is to join many facets of intelligence in a way that harmonizes their internal arrangement, i.e., the research participant's narratives, with the outside surfaces and connections, that is to say, the various educators and scholars' research, knowledge, and understanding. The convergence of scientists, educators, philosophers, parents and students, around the four domains of intelligence and their integration, creates an opening in which to see newly. The most significant result of linking together these advocates of integral intelligibility is the possibilities they generate together. Taken as a whole, they are foundational to bringing forth an integral worldview.

Connecting the Integral Network

The Body as a Field of Communication and Meaning Making

The philosopher, David Michael Levin (2005), offers a valuable framework for exploring our current understanding of the intelligence of the physical domain, which fundamentally impacts all the others. He traces the immense shifts in the historical conception of the body, from mechanistic and analytical to organic and integral. These paradigm shifts, from the body rational to anatomical to physiological to biochemical, i.e., cells and molecules, to psychosomatical to psychoneuroimmunological to the present psychoneuroendocrinological, i.e., the body of experienced meaning, point to the radically new ways we have begun thinking of the body. The psychosomatic broke through the ontology of distinct minds and bodies and the psychoneuroendocrinological has made visible a body of extraordinary subtle distinctions, functions and processes.

> This dynamic, synergistic body is seen as a system functioning in a larger system, a multifactoral network of causes and effects in which effects can become causes. This body cannot be represented as a 'substance.' It has become necessary to represent it, rather, as a system of organized processes intercommunicating and functioning at different levels of differentiation and integration. (p. 100)

Levin (2005) continues, "Our bodies are biologically organized and ordered for social interaction and communication. Communication networks extend [ing] within, through and beyond the visible organism. The body is a discursive formation" (p. 94). It is inherently shaped by evolving interpretations and representations with which it

interacts, as body and environment are in continuous interaction and interdependence. These assumptions and interpretations are impermanent and can be reassessed and reinterpreted. This also recognizes the hermeneutic aspects of our physical nature as we interact with our world. "As social processes interact and communicate with the body's biological nature, they shape and transform it. The human body is more than an evolutionary biological entity . . . it is an ongoing achievement of socialization and acculturation" (p. 93). What happens with our body . . . in health or disease happens in "an environment conditioned not only by the forces of nature, but occur rather in a field of communication–a world of social, cultural and historical influences and meanings" (p. 100).

The body is "a body of meaningful experiences, a body of significant intelligence, inherently informed about itself, a body the very nature of which can be profoundly changed by virtue of each [person's] sensitivity and embodied awareness, and his/her own skillfulness in articulating the body's carried meanings" (p. 102).

Physical Intelligence: Scientists, Educators, Philosophers, Students, and Parents Converge

Connecting Levin's context to the responses of this research's participants and the scholars exploring physical intelligence in Chapter 6 further illuminates our journey into the intelligence of the physical domain. The areas found by the interviewees to be the most influential in developing their physical intelligence were; 1) the connection of the physical aspects of a person with the physical world and nature; 2) being 'present' in the body, somatic consciousness; 3) centeredness; 4) energy; 5) healthy habits/ nutrition; and 6) significant contributing influencers, i.e., the school, its philosophical and pedagogical approach, parents, families, teachers, friends. All add further credence to Levin's premise. The integral education programs provide, in varying degrees, experiences in having an intimate and appreciative relationship with the body and learning its intelligent, interconnective and communicative abilities. Their programs aim to have a student fine tune sensibilities to his/her own body, its apparent *and* subtle communications and the meaning generated from its experiences in an integrative social and cultural milieu.

Griffin's (1995) embodied knowing, Gardner's (2000a) bodily-kinesthetic intelligence, Heron's (1996) experiential knowing and energy presence, Hanna's (1993) proprioceptive, internal experiencing of the physical self and Olds' (1992) body as a context for knowing, all strengthen the framework for physical intelligence proposed by Levin. In addition, Johnson (1987) adds further confirmation when he states, "Meaning making is grounded in our bodily experience, which works its way up to abstract meanings and patterns of inference . . . [it] is never merely a matter of abstract conceptualizations and propositional judgments" (p. xix).

From the above synthesis in the physical domain, the nature of the field of communication in an integral milieu becomes transparent. As this communication and meaning-making take place, the various areas of the brain: the instinctual, i.e., physical, sensory-motor, reflexive; the limbic, i.e., emotional, the feeling, relational, interconnective; the neocortex, the verbal-intellectual, awareness, curiosity and the prefrontal cortex, empathy, compassion, love and understanding, are activated and neural connections are being made (Pearce, 2002). These brain regions reflect the evolutionary changes in our consciousness through the continuous meanings we make.

Exploring the Physical and its Relationship to the Mental and Emotional

As a segue to exploring the domains of the emotional and mental, it is valuable to highlight the research that is currently being carried out in the psychosomatic network (Pert, 1999; Pert, Dreher, & Huff, 2005; Lipton, 2005; Chopra, 2005). These scientists are uncovering many layers of interconnectivity between the physical, emotional and mental areas. Their findings point to the biochemical connection between the mind and body in the form of neuropeptides–our bodies are "flooded by our cognitions and emotions" (the mind) (Pert, Dreher, & Huff, 2005, p. 61), as "neuropeptides are present on cells in tissues throughout the body" (p. 63). Emotions come from the cellular level of the body and act like communication bridges between the body and mind. The neuropeptides flow *throughout t*he brain and body, which allows for extensive bodymind informational exchange. "Cells are listening to one another and participating in the same conversation" (Chopra, 2005, p. 206). Chopra continues,

> When you think a thought, you make a molecule...thoughts, feelings, emotions and desires translate into a flux of neuropeptides in the brain...What science is discovering is that we have a thinking body...we have a bodymind simultaneously everywhere. (as cited in Hocking, Haskell & Linds, 2001, p. 104)

Cells interact constantly, opening to perceived growth, i.e., love, and closing to perceived threat, i.e., fear, etc., (Lipton, 2005).

The work of these scientists is showing that emotional expression or repression has a direct influence on our psychosomatic functioning. "Primary emotions such as anger, sadness, grief, fear, joy, are essential elements of the repertoire of human experience, and each emotion serves adaptive psychobiological and evolutionary functions" (Pert, Dreher, & Huff, 2005, p.70) and "states [such as] 'hopelessness' and 'joy' have specific energetic and molecular correlates; the organismic experience of each state . . . appears to be translated on both levels, simultaneously and indivisibly" (p.78). Emotions have specific energetic and molecular correlates. When individuals have access to their emotions and the understanding and freedom to appropriately express them, they are at the same time creating; 1) a healthy body, i.e., the immune system and system integrity, etc., 2) emotional equilibrium, 3) a coherent identity and 4) a new level of consciousness.

Another equally essential transitional facet to the further understanding of the interconnections of the physical, emotional and mental is the research done in the area of neurocardiology. J Andrew Armour, physician and professor, has expanded upon the explorations started in the 1960s and 1970s by Cannon and the Laceys. He firmly established the heart as "a sensory organ and a sophisticated information encoding and processing center, with an extensive intrinsic nervous system sufficiently sophisticated to qualify as a *heart brain* (Armour, n.d., p.1). The heart has wide spread neural cells like the brain and has direct connections with the emotional and mental structures of the brain. Its communications with the brain can significantly affect how we observe and behave in the world, i.e., information processing, perceptions, emotions and health, etc. The heart's cardiac nervous system is now seen as a complex, self-organized system that maintains a continuous two-way dialogue with the brain and the rest of the body (McCraty, Atkinson, & Tomasino, 2001).

In addition, the heart has other attributes that contribute to its multidimensional functions and relationships throughout the body, brain, emotions and energy surrounding the body. It operates like an endocrine gland that produces hormones that modulate and influence the emotional and mental system and balance the sympathetic and para-sympathetic nervous systems, which affect all areas (Cantin & Genest, 1986). The heart's pulsations create an electromagnetic field that surrounds the body from a distance of twelve to twenty-five feet outward and encompasses power waves such as radio and light waves have. This electromagnetic field of the heart is identical to the field that surrounds the earth as well (Pearce, 2002). The heart's electromagnetic field is believed to act as a central synchronizing signal within the body, an important carrier of emotional information, and a key mediator of energetic interactions between people.

HeartMath Institute is an organization whose purpose is to continue scientific study of the heart and provide people with practical access to its intelligence. Their research is showing that the key to the successful integration of the mind and emotions lies in increasing coherence, i.e., the ordered, harmonious function in both systems, and having them synchronize with one another (McCraty, Atkinson, & Tomasino, 2001). This research has now provided a solid neurophysiological basis for the connection of the heart and our emotional-cognitive life.

Exploring the Emotional and its Relationship to the Physical and Mental

Goleman (2003), in his most recent explorations of emotions, has joined with spiritual leaders and noted neuroscientists, psychologists, educators and philosophers in studying the affective area, people such as Paul Ekman, Francisco L. Varela, The Dalai Lama, Jon Kabat-Zinn, Richard J. Davidson, Alan Wallace, Mark Greenberg, the Venerable Somchai Kusalacitto, to name a few participants. Their collaboration gives us exciting new ways of viewing the interconnectivity of the body and emotional expression as they shed light on the basic dynamics of emotions and how they show up in the body. Following work done by neuropsychologist, Marian Diamond (as cited in Dickinson, 1988), this group is also pointing to a quality of plasticity inherent in the body, and in particular, the brain (neuroplasticity), which can learn through various ways, i.e., environment, experience and practices, such as meditation, concentration, yoga, etc., to cultivate constructive emotions, change behaviors and ways of thinking. "The brain and the nervous system generate new cells as learning or repeated experiences dictate" (Goleman, p. 334). "The circuitry for emotion and cognition are intertwined" (p. 159).

Antonio Damasio (2003), neuroscientist and physician, also offers some useful distinctions regarding the affective domain. Emotions are the feedback our body gives us about our internal environment just as our sensory, i.e., visual and auditory feedback furnish us with information about our external environment. Sensory feedback is cognitive representation of the external world while emotions are cognitive representations of body states. Both enter the brain by patterns of nerve cell activation. Emotions play a pivotal yet widely misunderstood role in the way in which we conceive and experience our reality. Damasio differentiates emotions and feelings, defining the former as the public, socially shared expressions and the latter, as the private, subjective phenomena. In general, throughout this dissertation, the emotional has consistently presumed feelings. Our emotional milieu is rich with historically paved neural pathways that inform what and how we experience our lives, what we actually see and how we

ultimately interpret an image, an experience or a conversation. When human beings can acknowledge and distinguish the emotional feedback they receive, i.e., have conscious perception, they can also influence the quality of discernment in their responses and how they are stored as cognitive representations, i.e. cellular and energetic memory. Damasio stresses the support emotions can provide us in our rational thinking and decision making.

Emotional Intelligence: Scientists, Educators, Philosophers, Students and Parents Converge

The knowledge from these scientists, psychologists, physicians and spiritual leaders brings a depth of understanding to the findings from the research participants and the categories of emotional intelligence presented by Goleman (1995, 1998), i.e., self-awareness, self-regulation, empathy, motivation and social skills and the correlating classifications of Mayer, Salovey and Caruso (2000) and Gardner (2000b). The findings from the interviews with representative seniors and their parents indicated that for the affective domain; 1) major influencers, i.e., the school, its philosophical and pedagogical approaches, teachers, parents, families, friends; 2) safety, belonging, relationship, love; 3) being known and self expressed; 4) serving; 5) being responsible and 6) mentoring were significant in supporting them in developing their emotional intelligence.

To further understand the impact the integral educational environment and curriculum had on the students through the six designated areas, it is valuable to incorporate what the aforementioned scientists, psychologists, physicians, educators and spiritual leaders have revealed. Combining these findings with the six interviewee-designated support areas yields a powerful mosaic with regard to the quality of their: 1) emotional life; awareness, understanding and expression of emotions and feeling states; 2) emotional 'communication' throughout their cellular and energetic networks; 3) environments, experiences and practices that create constructive emotions, changes behaviors and ways of thinking; 4) attentiveness to emotional feedback and using it to connect to their internal environment, and 5) awareness of the heart and its integral qualities. These programs, as seen in the interviewees' responses in Chapter 6, contribute significantly to the development of emotional intelligence. There is a high degree of interconnectivity between the experiences of the research participants, the integral educational environments and what scientists, educators and spiritual leaders, psychologists and physicians have discovered about the emotional intelligence expressed in life.

Exploring the Mental and its Relationship to the Physical and Emotional

The integral aspect becomes even more evident as this research continues to explore each domain of intelligence in light of recent scientific and educational insights. In looking now into the mental domain of intelligence, it is clear that it is impossible to separate it distinctly from the physical and emotional given what has been presented in the preceding sections. The model of the triune brain presented by Paul MacLean, (as cited in Pearce, 2002), provides further interconnective tissue and clarification of the evolution of the brain as it adapted to the needs for physical, emotional and mental intelligence. Our sensorimotor, reflexive, physical brain; our limbic, emotional-cognitive brain; and our neocortex, verbal-intellectual brain, all represent an emergent quality of

intelligence. With each successive expansion, the past, present and future are registered in our awareness, as each "preceding and emerging [brain] modifies the other to some extent" (Pearce, 2002, p. 29). It is imperative that each expression fully grow so that subsequent functions can integrate them into their service and modulate them, as in a holarchic relationship. The neural structures of the sensorimotor, instinctual brain, associated with the physical body, provide a rich heritage of survival and maintenance instincts. The emotional-cognitive brain, associated with the affective domain, provides the seat for relationships and memory. These ultimately connect with the neocortex, which unites our systems for thought, feeling and action (Pearce, 2002).

A source of leading edge research in the investigation of the mind is the Mind and Life Institute, which for a number of years has convened an ongoing conversation series among spiritual leaders and noted scientists, neuroscientists, psychologists, educators and philosophers exploring many aspects of spiritual and human nature, consciousness and intelligence. The exchanges, cited above, with Goleman (2003) around the emotional domain, are another example of these dialogues. *Investigating the Mind* is the name of the series of conversations held in 2003, 2004, and 2005 exploring the interfaces between mind, brain and body, within the field of 'biobehavioral' sciences, i.e., the intersecting of neuroscience, cognitive science, psychology and biomedicine. The workings of the human mind are being studied from many different angles, e.g., motivation, attention, intention, cognitive control, emotion and mental imagery. "Attention has sometimes been referred to as the 'gateway to consciousness' while cognitive control is defined as the ability to act or think in accord with intention" (Engle, 2005, p. 2).

When we are conscious of our thoughts, we are aware of images–visual, verbal, tactile, etc. Whereas objects populate the external world, images inhabit the internal world. These explorations are providing meaningful knowledge and understanding that help clarify the differences being made by an integral educational approach. Integral education emphasizes students being conscious of those images and their impact on beliefs, choices and actions and being aware of the interpretations given to objects in the external world.

One example of research contributing to this multidisciplinary dialogue is the work accomplished by collaborators Earl K. Miller from MIT and Jonathan D. Cohen from Princeton (Miller & Cohen, 2001). As neuroscientists, their explorations are uncovering aspects of the brain that relate to more complex thinking and behaviors. Their research of the prefrontal cortex (PFC) in particular, with its interconnectivity of brain systems, points to its convergent role in the synthesis of diverse information needed for complex behavior. "The PFC is critical in situations when the mappings between sensory inputs, thoughts, and actions either are weakly established relative to other existing ones or are rapidly changing" (p. 169), or when multiple responses are required. "In the real world, cognitive control is highly dynamic. People move from one task to the next, and new goals replace old ones . . . [this] mechanism of control that we have proposed . . . is highly flexible" (p. 186). This is another reference to neuroplasticity. "One of the critical features for a system of cognitive control is the requirement that it have access to diverse information about both the internal state of the system and the external state of the world. The PFC is anatomically well situated to meet this requirement" (p. 175).

This research represents a very small sample of what is available in understanding the brain and mental domain and their interrelationship with the physical and emotional.

It accentuates the possibilities for learning how the brain, particular the prefrontal cortex, can support the acquisition of complex, integrative thinking and behavior that are being called for in the twenty-first century. It also invites further engagement in how an integral educational curriculum could, through meditation, concentration, attention and intention, and the purposeful development of the emotional, physical, spiritual, and mental intelligences, enhance the plasticity of the brain, body, cognitive and affective domains. Miller and Cohen's studies represent one of the contributions that neuroscientists are making to the quality of human experience. Within multidisciplinary forums, such as the Mind and Life series, these new sciences are expanding their horizons to include human experience and concerns in their scientific inquiries.

It is a significant paradigm shift that the sciences are now taking part in unifying and reconnecting the self . . . the "cognizing self." In *The Embodied Mind,* Francisco Varela, Evan Thompson and Eleanor Rosch (1997) commit to build a bridge between the mind in science and the mind in experience. They invite an appreciation between cognitive science and human experience with the intent "to foster transformative possibilities of human experience in a scientific culture" (p. xix). Drawing on the Buddhist contemplative tradition, the authors use its meditative 'attention to experience' as rich material with which to weave an integral tapestry with cognitive science. Their 'enactive' approach introduces *embodied action* to reestablish the interdependency of perception, cognition and experience in the world. "Cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and sensorimotor capacities are themselves embedded in a more encompassing, biological, psychological and cultural context" (p. 173). As the scientists in this section have validated, there is no 'representational' world independent of our perceptual, cognitive and experiential capacities . . . internal–external . . . a Mobius loop.

Mental Intelligence: Scientists, Educators, Philosophers, Students and Parents Converge

As I combine the responses from the research participants with the theoretical contributions of educators and researchers from the mental domain in Chapter 6, and connect them with the new understandings from the neurosciences, it is interesting to speculate how many meaningful intersections there might be. The complexity of the integral approach is immense, as the number of convergences appears countless. For the purposes of this 'convergence' section, I will include only a few examples.

In response to what learning experiences supported them in the development of their mental intelligence, the research participants said: 1) the school and its pedagogical and philosophical approach, parents, families, teachers, friends; 2) the encouragement and 'space' to love learning, be curious and follow a passion; 3) respect and honor as an individual, thinking and learning for oneself; 4) being given choices, trust and responsibility for ones learning; 5) experiential, embodied and relevant learning and 6) knowing the context of the learning. These responses reflect the ontological aspect of learning, which complement Morin's (2001) advocacy for curiosity, Maturana's and Varela's (1992) language that brings *forth our world* and Capra's (1996) living systems view that mental activity *organizes organisms and processes life.* The language that is bringing forth our world in the integral educational environment is a: a) love of learning, b) curiosity, c) following a passion, d) respect and honor as an individual, e) thinking and learning for oneself; f) being given choices, trust and responsibility for ones learning; g)

experiential, embodied and relevant learning, all which have exponential influence in their expression. The meaning being made is subjective, personal and relevant to one's life. The system, rather than being closed and predetermined, is open, receptive, interactive and organic. The quality of the organizing and processing in this living system and the 'world' being brought forth are distinctly different than that in an orderly mechanized environment.

As stated above regarding the development of the brain, the neural structures are formulated in a way that each area of the brain is influenced by and included in the growth of the preceding area. If the sensorimotor-instinctual part of the brain has developed with groundedness and security, then the emotional-cognitive brain expands with a quality of relationship and memory that is 'grounded and secure.' From a very early age, these students from integral programs experienced curiosity, love of relevant, embodied learning, passion, respect, trust, choice and thinking for themselves, to name a few of their responses. I suggest that the way the brain is actually growing in these students is different than in other environments, and that the neural connections made form an integrated platform on which new learning is seen through a more integrated lens. Imagine a matrix of multiple, interwoven threads, representing emotional, spiritual, mental or physical experiences, that provide an integral foundation for the next set of experiences that are interwoven threads of physical, emotional, mental or spiritual occurrences. Thus the neural connections that ultimately link with the neocortex unite our systems for thinking, sensing, acting and relating to life in a uniquely integral way. This emphasis on the integral perspective would fundamentally shift the way in which propositional, i.e., linguistic, numeric and logical knowing would be taught and learned. It would be taught and learned inside of the context of curiosity, love of relevant, embodied learning, passion, respect, trust, choice and thinking for one's self, etc.

Lastly, Engle's (2005) contribution regarding attention and intention seems to correlate with the interviewees' responses. He referred to attention as the 'gateway to consciousness.' I speculate that the quality of awareness in someone whose attention is on learning through curiosity, love, passion, respect, trust, choice, embodied and contextual learning and thinking for one's self, is unobstructed and directed toward encompassing all of life. Their intention is more directed toward an integral worldview. Many of this section's speculations have also been addressed in Chapters 6 and 7.

Exploring the Spiritual and its Relationship to the Physical, Mental and Emotional

A way to further integrate understanding of the spiritual domain through a scientific perspective has been paved by neuroscientists MacLean (as cited in Pearce, 2002) and Damasio (2003); philosopher, psychologist, and physicist Zohar (Zohar & Marshall, 2001); and psychiatrist and philosopher Marshall (Zohar & Marshall, 2001). The neuroscientists, Miller and Cohen (2001), and philosophers and scientists, Zohar and Marshall (2001) have considered the pre frontal cortex and its connection to "higher human virtues' and possibly providing a connective function between the body, heart, brain, human energy field and spirit, particularly in its later stages of development after mid adolescence. Zohar and Marshall (2001) point to a neural basis of higher order unitive intelligence, i.e., neurons oscillating together. As humans make meaning, new neural pathways create a vibratory energy in the brain and body whose oscillations cause nearby neurons to resonate, much like a tuning fork works. These oscillations can also

impact other people. “They are a unifying source of psychic energy running through all our disparate mental experience” (p. 159).

Zohar and Marshall (2001) introduce the experiments of neuroscientists, Persinger and Ramachandran, who while exploring the temporal lobes, came upon ‘spiritual-like experiences’ in their research participants and in themselves. When the temporal lobes are stimulated with magnetic field activity, they have singled out different kinds of ‘mystical experiences.’ These lobes are closely associated with the limbic system, the connection with the emotions, which accentuates the spiritual experience (pp. 92-93).

There are a number of individuals and organizations that are committed to revealing the interconnectedness of science and spirituality. Edgar Mitchell, one of the Apollo astronauts and founder of the Institute of Noetic Sciences spoke to this linkage. “We are explorers and the most compelling frontier of our time is human consciousness. Our quest is the integration of science and spirituality, a vision that reminds us of our connections to the inner self, to each other, and to the Earth” (as cited in Schlitz et al., 2005, p. ixv). HeartMath’s experience with thousands of people over the last decade has led them to speak of the wisdom of the heart...it “links us to a higher intelligence through an intuitive domain where spirit and humanness merge” (Childre, Martin & Beech, 1999, p. xvii).

Spiritual Intelligence: Scientists, Educators, Philosophers, Students and Parents Converge

The different facets of knowledge in the spiritual domain, 1) what the aforementioned scientists and educators have contributed from their studies, 2) what participants in this research inquiry found to be vital in supporting the development of their spiritual intelligence and 3) the benchmarking work of Whitney (1995) and Zohar and Marshall (2001), when brought together allow us to see the multiple sides of spirituality and how it might be cultivated in an integral educational curriculum. The areas highlighted by the interviewees:

1) Being educated in ways that spirituality could show up in their lives, i.e., seeing oneself in relation to a larger world, feeling connected to oneself, others and nature;

2) Learning and participating in practices that brought them in touch with themselves, i.e., meditation, yoga, exercises, self-reflection, journaling, silent time, connection with a higher power etc;

3) Experiencing congruency throughout their life;

4) Having conversations about spiritual insights and experiences;

5) Understanding and honoring the world’s religions and learning the distinction between spirituality and religion;

6) Significant contributing influencers, i.e., the school, its philosophical and pedagogical approach, parents, families, teachers, and friends.

All of these–paired with Whitney's (1995) 1) energy; 2) meaning; 3) sacred; 4) epistemology and Zohar's and Marshall's (2001) 1) vision and value led; 2) positive use of adversity; 3) holistic; 4) field-independent; 5) ask "why" questions; 6) spontaneity; 7) a sense of vocation and 8) humility–provide essential material to contrast and contribute to designing an integral educational curriculum. Themes such as life's meaning making and how it is approached and supported in education; how to cultivate practices that bring someone closer to their own expression of spirit without it necessarily being interpreted as religious and using integral methods to coalesce life experiences, are essential aspects to developing an integral worldview. Education of the twenty-first century requires a depth of thinking that includes 1) supporting people in having a sense of relatedness to all life forms, i.e., people, animals, plants and 2) learning what impact that has on them in different environments, i.e., the individual, relational, familial, communal, national, global and planetary.

A look at integral facets follows. The work of educators, scientists, scholars, philosophers and theoreticians interconnect with the findings of the research participants. In completing this section and crossing to the next, it is fitting to quote an' integral' biochemist who through her scientific practice opened her own recognition of spirit.

> The quality of bodymind education that can awaken our potential for wholeness are those that rouse emotion and generate spirit ...which could be defined in terms once used by Rollo May, 'Spirit is that which gives vivacity, energy, liveliness, courage and ardor to life.' (Pert et al., 2005, p.78)

Integral Intelligence: Scientists, Educators, Philosophers, Students and Parents Converge

The preceding sections have been woven together and provide a powerful framework for integral intelligence. The scientists, educators and philosophers whose views are shown in this section are known for their integral points of view. They also represent many cited scholars, i.e., Miller (2000, 2001); Marshall (2005); Miller (2006); Clark (1997); Senge (2000, 2004); etc. throughout this dissertation whose philosophy support the integral educational pathway. The scientists: molecular biochemist Rupert Sheldrake (2004), quantum physicist David Bohm (1985), and systems philosopher, Ervin Laszlo (1987, 2002) along with Sri Aurobindo (Ghose, 1972, 1990, 1992); Wilber (2000, 2003) and Ray (1996), converge with the research participants in their engagement with the integral perspective.

Sheldrake's (2004) work in the area of morphic fields is a significant contribution to integral thinking. 'Morphic fields' are patterns that appear with the creation of new biological forms and continue to repeat themselves, reinforcing the form and strengthening the field. He points to an electromagnetic network that seems to operate outside of our ordinary conception of space/time and stretches beyond. He suggests in his research that human brains and nervous systems are connected via these fields and the sharing of learning, emotions, thoughts, etc., is possible among people and learning among animals. Laszlo (1987) calls these 'psi' fields and his hypothesis advocates that the development of consciousness and human growth, i.e., higher order thinking, contributes to these fields and their influence.

As a quantum physicist, Bohm (1985), like Sheldrake and Laszlo, pointed to the 'intelligence' in the universe, which he called 'quantum potential.' Bohm was the

ultimate integral thinker as he advocated the 'implicate order' which said "that everything is enfolded into everything else" (p.12) through "an incredibly complex community of coded messages" (as cited in Palmer, 1998, p. 97). "The content of consciousness of each human being is evidently an enfoldment of the totality of existence, physical and mental, internal and external" (Bohm, 1985, p. 21). His education as a physicist of quantum reality informed him that in order to bring about a different reality people would need to use "a mode of thinking that start[s] from the most encompassing possible whole and goes down to the parts as sub-wholes in a way appropriate to the actual nature of things" (p. 25). This would require a different quality of thinking–an integral thinking, quantum thinking..

Whereas Bohm used 'enfold,' a folding inward to represent the scientist's way of explaining the 'implicate order' of the universe, i.e., the absolutely interconnected whole, Sri Aurobindo, as a spiritual philosopher, used the words 'involution' to describe what he believed to be the source of evolution.

> Before there could be any evolution, there must be an involution of the Divine. …'involution' - from the very beginning the highest order of the cosmos, the divine spark, is rolled up and hidden in the stuff of matter itself and is latent in all life....Evolution is nothing but the progressive unfolding of Spirit out of the density of material consciousness… (as cited in Combs, 1996, p. 147)

He too was acknowledging the inherent 'intelligence' and ultimate integration of the universe.

Gebser's idea of *The Ever Present Origin*, sparked by "the original spiritual impulse of life," (as cited in Combs, 1996, p. 92), resonates with the unfolding Spirit of Sri Aurobindo and the enfolded quantum potential of Bohm. The 'Origin' is ever present with no beginning. "It is ever-originating–an achievement of full integration and continuous renewal" (as cited in Combs, 1996, p. 92). Gebser wrote in the mid twentieth century that the world is attempting to give birth to a new consciousness and that people need to let go of the dominant mental structures, by going beyond current rational thought. He named this shift 'integral consciousness,' "a large scale shift to a new and more holistic structure of experience, a fluid perspective that is not rooted in a perspectival ego" (as cited in Coombs, 1996, pp. 114-115).

Wilber (2000), like Gebser, roots his integral philosophy in the perennial philosophy, "the core of the world's great wisdom traditions," (pp. 31-32) in metaphysics, ethics and psychology. "It maintains that reality is a Great Holarchy of being and consciousness, reaching from matter to life to mind to Spirit . . . Spirit transcends all" (pp. 32-34). The integral thread here is the acknowledgment that human development and consciousness evolve from matter to a "Divine Reality" that is universal. Wilber, like Gebser and Sri Aurobindo, stressed that the attachment humans have to the material world and to their identity in that world keeps them disintegrated with themselves and separate from others. Both Sheldrake and Laszlo refer in their 'morphic' and 'psi' fields respectively, to a universe of non-local and non-material intelligence. These fundamental understandings of the workings of the universe were shared in various ways by the founders of the integral education programs researched for this dissertation.

This idea of an integral quality of intelligence has now gained acceptance in the organizational learning community as seen by ideas expressed by Senge, et al., (2004) in his latest collaborative book. “Then when people took turns speaking, I could almost feel a sort of field coming into existence, something that gathered up everyone and ...gradually revealed itself as the deeper generative source” (p.109) . “Presencing opens and connects you with a larger, underlying field that goes beyond what exists now and opens up this great power and beauty” (p. 113).

Paul Ray (1996), an American sociologist and researcher, has revealed what looks to be a beginning of an integral culture in the United States, which he identified as *Cultural Creatives.* Through thousands of interviews, he found that people were engaged in what he termed, a "spiritualization of modernism." He declared, “It is a spiritualization of modernity that most enlivens and fertilizes a postmodern synthesis, rather than a sterile postmodernism.” He predicted from his research that our current culture will transform into an integral culture, evolving into new forms of expression. Ray acknowledges his thinking is likened to that of Gebser in that people are drawn to the perennial philosophy, that ‘ever-present Origin’ that recognizes the spirit interwoven throughout all of life.

Many references have been made to the contribution made to integral education by the participants in this research. For the purposes of this convergence of thought, i.e. scientist, philosopher, educator, student and parent, the research interviews and program observations validate the notion of the intelligence and wisdom that exists throughout the universe and in every human being. One of the more striking deep-seated philosophical practices of these integral programs is the acknowledgement of the innate intelligence and spirit of the human being from the beginning of life.

These integrally educated students have been developed inside much of the wisdom and practices found in the perennial philosophy. These programs reflect its particular view of the nature of reality that: 1) the physical reality is not all there is, that underneath it is a sacred world, of spirit or Spirit, consciousness, etc.; 2) we humans experience this other realm in a deeper part of ourselves; 3) we are capable of knowing this realm through study, attention and awareness; 4) knowing this inner spirit realm is the highest goal of human existence, serving both ourselves and humankind and 5) we human beings are immature in our development of consciousness and we can begin practices that will allow us to expand our sense of self (Walsh, 2005, p. 295). David Marshak (1997) in his Common Vision highlights the common visions of the educational philosophies of Rudolph Steiner, Sri Aurobindo and the Sufi master, Hazrat Inayat Khan. “Finally, their common vision describes the true self within each of us as the spiritual being. This true self is a spark of divinity that seeks to emerge into consciousness, for such an emergence is the next step in the evolution of our species” (p. 205).

Walsh (2005) points to seven practices from *all* the world’s religions that can awaken us to our true identity. They are 1) redirecting motivation, 2) transforming emotions, 3) living ethically, 4) developing attention or concentration, 5) refining awareness, 6) cultivating wisdom and 7) expressing these in service. All seven followed are what he says cultivates love. These practices are viewed as part of an essential transformative curriculum (pp. 295-96). In reviewing the finding from this research, these practices, although not yet fully elaborated in all programs, have been identified as important to their curriculum.

At this juncture, the 'portrait of the integrally educated individual, the composite from the interview data, presents an illuminating representation. It is clear that many aspects of these practices are evident in this composite picture.

Composite Picture: Integrally Educated Individual

> I am able to see myself in relation to a larger world and feel connected to myself, others and nature. I am learning and participating in practices that put me in touch with myself, i.e., meditation, yoga, exercises, self-reflection, journaling, silent time. I experience my physical body as connected to the physical world and nature. I am 'present' in my body, feel centered and aware of my energy and the energy of others around me. I am engaged in discovering habits that support my health and well being, e.g. good nutrition, etc.
>
> I feel safe, loved and related to others, and have a sense of belonging. I feel respected, honored, known and self expressed as an individual, and think and learn for myself. I love to learn, be curious and follow my passions in life. I am trusted, given choices about my life and responsibility for my learning. Learning for me is experiential, embodied and relevant to my life. I experience congruency throughout my life.
>
> I have an understanding of and honor the world's religions. I have learned the difference between spirituality and religion and engage in dialogues that support my spiritual insights and experiences, as well as my religions beliefs.
>
> My school, parents, family, teachers and friends support me in developing myself as an integrated human being, i.e., my physical, mental, emotional and spiritual intelligences are increasing and integrating.

Laszlo (2005) spoke at a recent conference about the contrasting evolutionary development between technology and spirit. Like Sri Aurobindo, he pointed out that we have not evolved spiritually to the degree we have technologically and this represents, from his viewpoint, a spiritual crisis. We need to "upgrade" and "update" our consciousness by way of a spiritual revolution. He called for a new expression of humanity through "a world of inter-disciplinary, integral thinking." Laszlo (2005) acknowledged the current paradigm–the shift in science, also recognized throughout this dissertation, which is in the process of taking us from "a mechanistic universe to a meaningful world where all things are connected and evolve coherently." He invited as all to be aware of the current bifurcation in society and its implications to our future. At the crucial 'tipping point' of society this shift can change the thinking and the behavior of a critical mass in society, moving us from a trajectory leading to deepening crisis and chaos, toward sustainability, solidarity, and peaceful co-evolution. (conference)

Laszlo echoes Bohm (1985) who said, "To make a 'world' takes more than one person and therefore the collective representation is the key. It is not enough merely for one person to change his representation . . . the real change is the change of collective representations" (p. 60).

The Essence of Integral

When we think of intelligence we inherently think of epistemology, the study or theory of the nature, sources and limits of knowledge. What can we know, how do we know, what defines knowing, how do we know what we know, are the kinds of questions asked that open up new insights into the ways in which human beings know and learn. These are also the kinds of questions the asking of which has given rise to our education for centuries. Ontology is the study of the nature of reality, being and existence. Questions like what is real, what is the nature of the being of human beings, what is the nature of reality and what is most basic are some of the queries of ontology. These are questions that have been asked for centuries by philosophers yet have not seemingly penetrated the existing paradigm of education.

Ontology is the appropriate context for education, particularly an integral education, as it addresses the 'place' from which the engagement with education comes, the 'beingness' of the potential knower. By developing and integrating the physical, emotional, mental and spiritual intelligences, education provides a foundation for an integral way of being and an integral reality and existence in which an integral quality of learning can take place.

Allan Combs (1996) synthesizes the work of many intelligence theorists, e.g., Perry, Kohlberg, and Piaget, and presents a definition of intelligence that contributes to this premise. He declared, "Intelligence is the outcome of a gradual construction of systems for interpreting and understanding reality, systems that gain power and flexibility as they mature and mutually interact" (p. 268). The physical, emotional, mental and spiritual represent systems for interpreting and understanding reality that gain power and flexibility as they develop and integrate. They also can be systems for *creating* a particular quality of reality as demonstrated by the research participants' learning experiences. This reality - this way of being - is integral.

Inevitably an inquiry into integrality, with an educational and worldview lens, reveals the current condition, the future vision and the gap between them. As Roof (2003) in Chapter 1 recognized, inside the integral perspective, the dynamic tensions, i.e., the gap between what is and what could be, can be viewed as partners in co creating a new consciousness. This 'gap' is our current breakdown and its reorganization will bring forth our breakthrough that will operate at a higher order systems and consciousness level, and generate sustainability, solidarity and peaceful co-evolution.

Our world today requires a different kind of human being: one who can think, create, imagine and act, with flexibility, adaptability and resiliency, in an extremely complex world; one whose spirit is vital and engaged and whose body is vibrant and healthy; one who can feel deeply and 'be present' to life, i.e., be aware in the moment and know how to move with and coordinate action in a highly diverse and accelerated world. The 'self' that is being called for today is one that Varela, in dialogue with the authors of Presence, spoke insightfully to:

> One that is not a stable, solid entity...in coping with continually changing circumstances, the self is constantly updating itself or renewing itself...it is like the constant reframing of yourself into what seems to be more real in each emerging moment...the paradox of being more real means to be much more virtual and therefore less substantial and less determined...a life of wisdom

> consists of being constantly engaged in that letting go. (as cited in Senge et al. 2004, pp. 100-101)

"Through transformative practices...we can share the most fundamental tendencies of the world's unfoldment–to expand, create, and give rise to more conscious forms of life. Like evolution itself, we can bring forth new possibilities for growth, new worlds for further explorations" (Leonard & Murphy, as cited in Schlitz, 2005, p.xlv). Hock (1999) captures in words the experience that brings closure to this 'conversation.'

> We are not helpless victims in the grasp of some supernatural force. We were active participants in the creation of our present consciousness. From that consciousness we created our present internal model of reality. From that internal model we created our present concepts of organization. With those organizations we created our present society. We did it. All of us. We know that we must do better. We know that we can do better. We know it must be done together. And we know that 'together' must transcend all present boundaries and allow self-organization at every scale, from the smallest form of life to the living earth itself. It is not a journey. It is an odyssey. It will take time. It will require great respect for the past, vast understanding and tolerance of the present and even greater belief and trust in the future. It calls out to the best in us, one and all. (p.174)

Conclusion

From the explorations of the physical, emotional, mental and spiritual intelligences and their integration, using multiple perspectives in the preceding sections, another quality of intelligence has emerged. It is the kind of knowledge and understanding that comes with seeing parts and wholes and their holonic relationship. An example of this integral view comes from Chapter 1 and Fuller's three-fold understanding of the circle, 1) the inside, 2) the distinction 'circle' and 3) the outside of the circle and its relationship to the observer, When related, the research participants' findings and the contributions made by scientists, philosophers, educators and spiritual leaders, point to a new perception that illuminates the original roles these four intelligences; the physical, emotional, mental and spiritual, together play in the creation of our reality, i.e., the *fundamental, relational, natural* and *contextual* experiences of being.

Chapter 9: Systemic, Integral Education

Where the Mind is without Fear

Where the mind is without fear and the head is held high
Where knowledge is free
Where the world has not been broken up into fragments
By narrow domestic walls
Where words come out from the depth of truth
Where tireless striving stretches its arms towards perfection
Where the clear stream of reason has not lost its way
Into the dreary desert sand of dead habit
Where the mind is led forward by thee
Into ever-widening thought and action
Into that heaven of freedom...

Rabindranath Tagore, n.d., p. 1

Systemic Integral Education Model

This model is presented to complete Tagore's profound ode to true education above. What follows is a presentation of a systemic, integral model for education, which includes parents, educators, children of all ages, families, community members, etc. The intention of the model is to transform the way we think about education; how it is defined and brought to life.

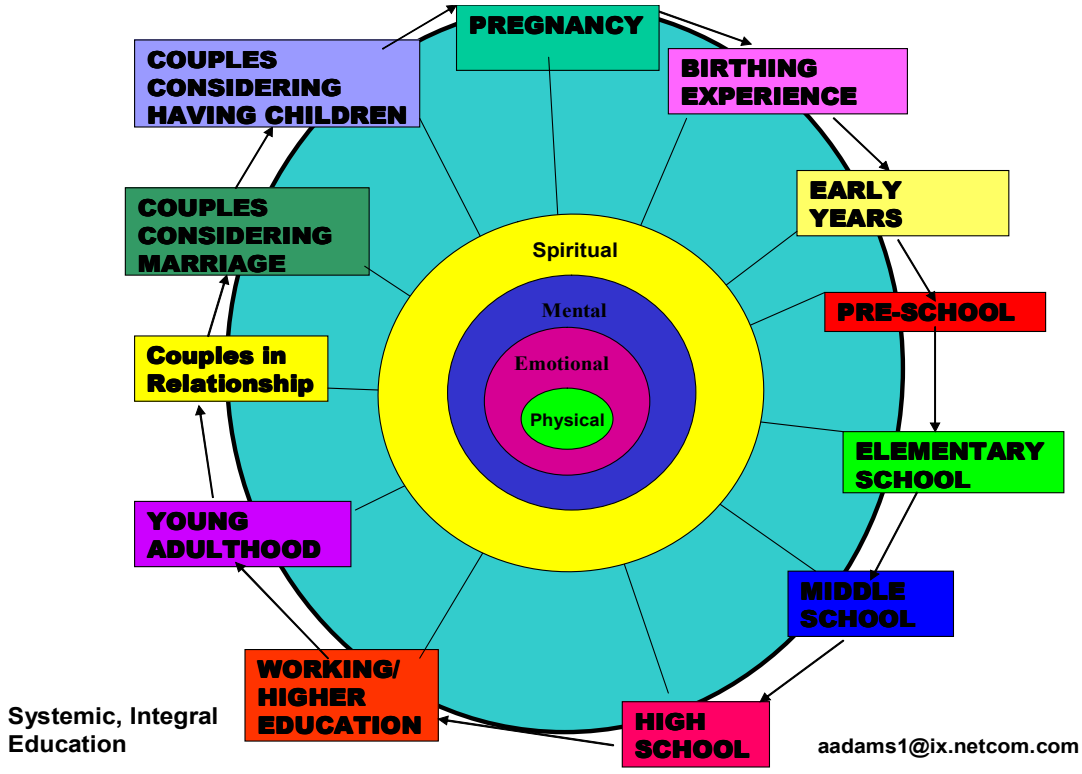

Figure 1

The above diagram represents a model for education that is *systemic,* i.e., spans from a child's conception to his/her graduation from school, and is *integral,* i.e., develops and integrates the physical, emotional, mental and spiritual intelligences throughout the stages of growth and development. The time span beyond high school is included because these phases of work/higher education and young adulthood play such a crucial role in the quality of connection between couples considering long-term association, possible marriage and family planning and child raising.

This systemic, integral education is found in a campus-like environment that provides facilities for each of the stages. Education is viewed as a life long learning journey. The facilities needed to provide for couples, school students, babies, pregnant mothers and their partners, toddlers, elders, etc, are co-located. The schools and other programs are close to one another to provide intergenerational relationships and support. The campus is a learning community and epitomizes a living system that is dynamic and co created by its members. People of all ages, i.e., young people, couples, children, students, parents, elders, teachers, community members, etc., come to the campus for education; classes, workshops, access to experts, resources, e.g., books, tapes, experiential practices. They are assisted in learning more about what education, learning experiences, practices and knowledge are essential in developing and integrating their mental, spiritual, emotional and physical intelligences. Whatever they are addressing in their current stage of growth is supported by an integral educational approach.

Philosophical Framework

The philosophy of integral education is taught and employed throughout the campus. People are engaged in an inquiry about how to think from and with an integral worldview. From the research study of nine integral education programs (Adams, 2006), the participants imparted valuable knowledge concerning the learning experiences found most supportive of the development of their mental, physical, spiritual and emotional intelligences. The following is a synthesis of their contributions and provides a framework for the design of a systemic, integral educational experience:

- The schools, parents, families, teachers, friends and community support individuals in educating themselves as integrated human beings, i.e., the physical, mental, emotional and spiritual intelligences are developed and integrated.

- People are able to experience themselves in relation to a larger world and feel connected to themselves, others and nature. They learn and participate in practices that put them in touch with themselves, i.e., self-reflection, journaling, silent time, meditation, yoga, exercises etc. They experience their physical body as connected to the physical world and nature. They are 'present' in their body, feel centered and aware of their energy and the energy of others around them. They are engaged in discovering habits that support their health and well-being, i.e. good nutrition.

- People feel safe, loved and related to others, and have a sense of belonging. They feel respected, honored, known and self expressed as individuals. They think and learn for themselves. They love to learn, are

curious and follow their passions in life. Individuals are trusted, given choices about their life and responsibility for their learning. Learning is experiential, embodied and relevant to their lives. People serve and mentor others. There is congruency in their lives.

- People have an understanding of and honor the world's religions. They have learned the difference between spirituality and religion and engage in dialogues that support their spiritual insights and experiences, as well as their religions beliefs.

Throughout each stage of development, these principles are available for each person to relate to in a personal way–with which to make his or her own meaning. They are not rules or dogma. They are guidelines for exploring what it takes to invent a learning community with an integral worldview.

Relationship: The Foundation for an Integral Worldview

Throughout school, age appropriate courses are offered to learn about creating healthy relationships, both with oneself and others, i.e., groups and community. These courses correlate with other classes that address group dynamics, human development, responsible parenting, identity creation, as well as academic subject matter. The practices for good communication and dialogue are begun at an early age and are interwoven throughout the curriculum in appropriate contexts. Time is set aside regularly for young people to learn about silence, reflection, contemplation and self observation. The relationship they have with themselves is primary to all others.

Young adults considering committed relationships and/or marriage have courses, resources and practices available to them to support them in approaching a long-term partnership from an integral worldview. They can learn many important distinctions of intimacy, sexual experience and expression, compassion, listening, speaking, dialogue, having difficult conversation, handling disagreements, etc, that allow them to experience their ability to *create* relationship with others, of the same and opposite sex.

The systemic, integral education process engages couples in an essential inquiry regarding having a family; how to think about having a family from a view that incorporates the emotional, spiritual, mental and physical intelligences. The inclusion of these aspects supports the quality of choices made because the person involved in the choosing is also active in an integral lifestyle inquiry. Pregnancy and birthing inside the integral point of view regard the phenomenon as a whole, i.e., a complex, dynamic process. Expert advice in prenatal and perinatal experiences and care is available to families in this integral model of education. Many experts have voiced how important this time is to a perspective mother, father, baby and family members. The integral philosophy is extremely important during this time because everything that is happening is happening inside of a complex, living system; all participants require understanding, support, attention, love, etc., and coordination. There is a level of consciousness that is available throughout this time that can integrate the emotional, physical, mental, and spiritual intelligences and utilize their integration to create a powerful environment in which to receive the gift of life. This experience of wholeness provides a unique 'energy'

that opens people up to their ability to create new life in a manner consistent with the unique experience it is, and to share that wholeness and creativity with others around them.

Integral Education

In an integral milieu, children are known to have a quality of wisdom. They are related to with respect, honor and listened to; their voices are heard and supported in developing. From the beginning of life, human beings are recognized as having passions, curiosity and love of learning, and can be trusted to discover what their unique path of education will be. Education is viewed as education for life for parents, teachers, students and includes all the intelligences; emotional, mental, physical, spiritual. The curriculum is designed so each area is fully explored and interwoven with the others. There is no hierarchy of intelligence in the integral approach.

Throughout the curriculum, there is recognition of the significant contributing influencers to a student's growth and development, i.e., the school's philosophical and pedagogical approaches, parents, families, teachers and friends. These influences are an integral part of the program and are incorporated in the student's educational program.

Physical Intelligence

Physical intelligence is seen as *fundamental* to a systemic, integral education experience. There is an acknowledgement of the integral relationship between biology (earth), chemistry (foods, substances) and physics (energy) at the core of this approach to education. There is groundedness, centeredness, consciousness and connection with the natural elements. Some of the characteristics of the development of the physical intelligence incorporate: 1) time spent in nature exploring the connections humans have with nature, plants and animals, 2) attention paid to healthy eating habits and learning the impact different foods have on the functioning of the body and 3) centeredness, body and energy awareness and 'presence.' In addition to a well coordinated physical education program, this systemic, integral model of education offers experiences in learning awareness through the body which provide an incremental and experiential relationship with one's body throughout the first 18years of life. Movement, drama, art and music are interwoven in the curriculum affording 'embodied' learning and supporting students with the connection between the physical body and the mental, emotional and spiritual areas.

Emotional Intelligence

The emotional domain plays a *relational* role in the integral educational programs. Connections are seen throughout. People are in community; they are in communication, with themselves and each other; they are caring and cared for; they are learning the skills to remain in community and communication, i.e., conflict resolution, dialogue, and mediation. Focus is placed on the experiences of: safety, belonging, relationship, love, being known, self-expression, responsibility, serving and mentoring others to support the development of emotional intelligence for everyone related to the programs, i.e. students, teachers, parents, related personnel. Teachers and parents are educated to be compassionate of students in their emotional development and are engaged in their own emotional self-discovery. The schools have age appropriate

opportunities to learn about relationship and community building, health and human development, responsible parenting, dialogue, self-expression through play, drama, music and academic courses as well. Programs are designed to give students opportunities for travel, exploration, service and mentoring to mature an integral worldview. The curriculum coordinates with the development of the students.

Examples of these could be community service projects, individual explorations in areas of interest that require student generated initiative and resourcefulness, camping trips or dramatic/ musical production that include everyone in the school and offer transformative learning experiences in self-expression, interdisciplinary connections and intergenerational relationships

Mental Intelligence

The *natural* role of the mental domain is respected in the integral curriculum. Mental intelligence is known to expand in an environment in which students are encouraged to love learning, be curious and follow their passion. When the learner is respected, trusted and honored as an individual and educated to think and learn for him/herself, given choices and responsibility for what is studied, the *natural* quality of learning is activated. Students exposed to curriculum that is experiential and relevant can embody the content and the context. The growth of mental acumen is equated with trusting the human being in his/her natural quest of learning.

There is a recognition that the purpose of education is to provide an environment in which the inherent attributes of the individual can naturally grow and take root. Human consciousness is recognized as an essential theme in the growth of mental intelligence. Learning content honors and reflects the learner's inner development. The development of the mental domain utilizes an eclectic approach by bringing together material appropriate for multiple ways of knowing.

Spiritual Intelligence

The spiritual domain plays a *contextual* role in an integral education. It gives a sense of congruency to life. Students are educated in ways that their sense of 'spirit' can show up in their lives, i.e., seeing themselves in relation to a larger world, feeling connected to themselves, others and nature. The holistic approach provides practices to support individuals getting more related to themselves through internal experiences such as contemplation, self-reflection, journaling, silent time, meditation, yoga, exercises, etc. The integral curriculum includes understanding and honoring the world's religions, learning the distinction between spirituality and religion and having clarifying conversations that bring people together and promote interfaith inclusion as opposed to exclusion and derisiveness.

Because the distinction between spirituality and religion is clearly made and accepted in an integral educational setting, everyone is engaged in an examination of his/her life and uncovering the meaning being made through the educational process. The value of silence and reflection is seen not as 'religious,' toward a belief, but toward an essential discovery–the relationship each person has with her/his own human spirit and that spirit or life force that surrounds us. Key to developing an integral point of view is seeing the connection of science and spirituality–to experience the awe in both expressions of 'spirit.'

Integral Intelligence

Extensive interdisciplinary modules that focus the student's awareness on the interconnectivity of and reverence for all life are interwoven throughout the integral educational curriculum. World peace, cooperation, coordination and understanding are major goals of an integral worldview. Integral education programs focus attention on hosting events and activities that educate people to transform the way different religious, cultural, ethnic, or socioeconomic groups relate with one another.

Integral practices that develop and integrate the physical, emotional, mental and spiritual intelligences as ways of knowing and being in the world are found in the philosophical fiber of the course work, pedagogical observances and actions taken in the schools. There is a weaving together of the individual with him or herself, the individual and the collective, the inner and outer, the silent and expressive, the abstract and practical and the spiritual with the religious.

Integral Practices

There are many integral practices to include in an integral curriculum. Two examples of practices found to be supportive of integrating the physical, emotional, mental and spiritual intelligences are yoga (Gates & Kennison, 2000; Kramer, 1980) and Network Spinal Analysis (NSA) (Epstein, 1994) which would be valuable as part of an integral curriculum. These are just two examples and an explanation of how they influence the development of integral behaviors can be found in Appendix E.

Conclusion

It is not the aim of this document to provide a comprehensive curriculum for an integral education. What is being proposed is the combining of many different approaches to match the requirements of a perspective integral educational community. These are examples that have proved successful in researched schools. One of the important criteria for being an integral education approach is that it is inclusive of the circumstances, audience and context for which it is being created. It is co created by its community. Students, parents, teachers, and friends co create an educational program that allows the uniqueness of each student to grow and express.

The integral programs utilized in this research offer substantial examples of excellence in education. Each approach to holism in education has many unique qualities to contribute to a systemic, integral model of education. In closing, let us acknowledge Sri Atmananda and his son, Sri K. Padmanabha Menon, for reinterpreting his work for education, Krishnamurti, Yogananda and J. Donald Walters for his thorough interpretation of Yogananda's gifts to education, Maria Montessori, George Fox, Sri Aurobindo and The Mother, Jagdish and Bharti Gandhi who brought the spirit of Mahatma Gandhi and the world's religions to their schools and Rudolf Steiner, for the depth of their commitment to education, children and the world community. And to the people who have deeply known the integral experience and have reinterpreted it in a way that we all can benefit by it. Thank you.

Every one of us is a grain of sand–a grain of sand on the beach amounts to nothing, but a grain of sand in the clockwork of eternity can transform eternity.
Jean Gebser, as cited in Feuerstein, 1989, p. 1

Chapter 10: Conclusion: Summary, Concerns, Recommendations for Future Research, and Reflections

The final chapter to this exploration is particularly vital as it provides a last reflection of the crystalline characteristics of integral education; its many facets as revealed throughout this dissertation. The intent of this section is to summarize the research learning so the many qualities of integral education can be captured with thoroughness and clarity. Incorporated in this chapter is a section addressing possible concerns for this systemic, integral model of education. Recommendations for future research and reflections of the research journey complete the chapter.

Gebser's quote above provokes thoughts about the possibility of education– educating the person, that potential 'grain of sand' in the clockwork of eternity transforming eternity. Educating *for* our holistic natures allows each recipient to see his/her unique integral self and what contribution s/he has to make to the 'clockwork of eternity' that will transform it. This dissertation has been dedicated to discovering how the integral approach to education has supported its participants in expanding their own intelligence by developing and integrating its most fundamental aspects, i.e., the physical, emotional, mental and spiritual.

The theme of an integral education that leads to an integral worldview is for me an imperative for the twenty-first century on many different fronts; the educational, social, cultural, ecological, economical, national, global, etc. Susan Cannon (2000), in her study using Cultural Creatives as a specific research population, identified in Ray's (1996) research, emphasized the importance of opening a path for these individuals, who she saw indications of being "seed bearers of a potential integral culture," by "purposefully tapping, organizing and directing their dynamic vision" (p. 360). This dissertation is one response to that "purposefully tapping, organizing and directing," by acknowledging, distinguishing and learning from the integral pedagogical approaches that are specifically providing experiences that educate *for* wholeness in a human being. Wholeness does not mean perfection. It means "becoming more real by acknowledging the whole of who I am" (Palmer, 1998, p. 13).

Summary

This research journey began inquiring about what learning contributes to integral ways of viewing the world. Nine exemplary programs of integral education were explored and through the narratives and experiences of representative high school seniors, their parents and educators, and my first hand observations and understanding of the programs, their contributions to educating *for* an integral worldview became very apparent. Chapter 4 described these schools in detail to give an experiential sense of each unique setting. Chapter 3 detailed the research methodology, which served so well in showcasing the interviewees, educators and programs. The participants' narratives were replete with examples of how these students, with their parents' and teachers' support

over many years, had experienced the development and integration of their physical, emotional, mental and spiritual intelligences. Chapter 6 presented representative examples of the quality of expression from the interviewees as they revealed patterns and themes found in each of the four designated domains of intelligence and their integration. Employing a qualitative and narrative context for this study opened the door to one of the more exciting outcomes of this study–the extent of the contribution these students have to make to the study of integral education.

The research question was posed with the belief that the responses to that query from representative students, their parents and educators from integral educational programs would greatly expand the understanding of integral education and its contribution to a new model of education; one that is both *systemic;* spanning from a person's conception to their graduation from school, and *integral;* the spiritual, emotional, physical, and mental intelligences are developed and integrated. Chapters 1 and 2 furnished an extensive foundation for the understanding of the historical, philosophical and research background for this study.

Based on the findings of this thesis, these research participants have added significantly to an integral model for education. These researchees have brought praxis validating the thinking and research of scholars, scientists, educators, spiritual teachers and philosophers. Chapters 6, 7 and 8 join together these diverse points of view, in different contexts, to present an illustration of what results from the convergence of multiple perspectives from multiple age, ethnic, cultural, economic, religious, social, scientific, educational, etc., persuasions. What is offered is an extended theoretical understanding and framework for integral education.

Chapter 5 was composed to provide a deeper foundation for understanding a holistic approach to research that has far reaching implications to an integral model for education. The data collection and analysis process of this research represented an integrally generated inquiry process. It was achieved by creating an intimate relationship with the interview and observational information, which began a progression that transformed the information as it passed through stages of knowledge and understanding to a place of wisdom. Wisdom is a quality of 'seeing' and relating to life that reflects an ability to synthesize its disparate aspects. Wisdom mirrors wholeness–as it reveals all sides.

The interviewees have helped craft an original viewpoint of integral education that could have a far-reaching impact on its theory and practices. Chapter 9 introduces the systemic integral model of education, based on my vision of the future of education and the results of this research. This model is designed to initiate a paradigmatic shift in our relationship with education. In this model, education is seen as a circular continuum, and for a soon-to-be-conceived human being, starts with the integral nature of the relationship and conversations of those conceiving adults. Education acknowledges the essential quality of the spiritual, emotional, physical and mental intelligences, their development and integration, at every phase of human progression.

Chapter 7 evolved out of the emergent quality of the research. Based on the patterns and themes from the interviewees, the contributions of an integral education came clearly to the forefront. The narratives of the students and their parents highlighted *five* specific areas that an integral education significantly influences. What interviewees said and what scholars of transformative education (Mezirow, 2000; O'Sullivan, n.d.;

Neuman, 1996; Boyd & Meyers, 1988) described regarding *transformative learning and practices* were highly correlated (Comparative Tables 2-5). The quality of *identity creation,* as a result of an integral education, appeared throughout the findings. This chapter proposes a composite picture of an integrally educated individual from the collective responses to the questions in each of the four domains of intelligence. Individuals educated inside of an integral worldview are secure in the knowledge of themselves as the creator of their life. Inherent in being a creator of one's life is also the knowledge that life, as life is dynamic, requires continual inventing and reinventing. One other contribution of the integral education is the ability to engage in *reinventing the self.*

Chapter 7 contains two other areas that this research validates regarding the positive effect integral education has on the *expansion of consciousness* and one's ability to distinguish and *change paradigms and philosophical frameworks.* From the interactions with the students, their parents and educators, an awareness of the 'self' and the world around that 'self' is engrained in the curriculum. That quality of consciousness - the being aware of one's own presence, is magnified in the integral program. Consciousness develops and manifests in the essential domains of human concerns; the mental, emotional, physical and the spiritual. The narratives of the interviewees correspond to what some scholars have theorized about the evolution of consciousness. Kegan's (1994) fourth level thinking, an awareness viewing the world in a more systemic and complex manner, showed up in various accounts. Wilber's (2000) AQAL model bringing awareness to the interior and exterior and the individual and collective aspects of experience had many confirmations from the researchees. Combs's (1996) work in consciousness, distinguishing states of mind, and states and structures of consciousness is well represented in the interviews, as well as Beck's (2002) spiraling notion of developing consciousness. What this suggests for future consideration and research is to more deeply explore the integral model as a vehicle to educate *for* co creating and co evolving together utilizing the wisdom taken from the participants and resources of this study as a foundation.

In this dissertation there was much to learn about *paradigms and philosophical frameworks* and how one might go about changing them. To contribute a shift in a paradigm that can have a lasting impact on education was one of the stated purposes of this inquiry. The following is one of the more powerful examples of the wisdom 'gifted' from these integral programs. That intelligence plays an epistemological role in our education is a universally accepted premise. The idea that intelligence plays an ontological role as well represents a transformation in the purpose of education. Acknowledging the importance of an ontological framework for education shifts its primary intention and attention from *knowing* to *being.* If accepted, this expanded interpretation qualitatively alters how we relate to education. Emphasis transfers from *knowing* first, to *being* first–recognizing that who one is *being* in the process of *knowing* is senior to what one *knows* in the process of *being.* What is suggested in this thinking is that including the nature of being and reality at the beginning of the process of knowing would substantially alter the quality of knowing occurring. An example might be that when one brings a sense of wholeness and integration to one's learning, the learning would occur inside of a worldview that is capable of generating a paradigm of *both/and* rather than *either/or.* That worldview would provide a very different learning context than that of dichotomizing competition, i.e., you or me.

Both the philosophical and pragmatic aspects of education represent the beginning of our relationship with reality and our essential nature. The qualities of intelligence revealed in this study address this and offer vital insights to the way we educate. What this research indicates is: 1) our physical intelligence is *fundamental* to our experience of life, 2) our emotional intelligence plays a significant *relational* role, 3) our mental intelligence is a *natural* reflection of our humanness, and 4) our spiritual intelligence provides a *contextual* role in our education and our lives. These four expressions of intelligence are ontological pillars of education.

When our physical intelligence is recognized for its *fundamental* contribution to our lives, we honor its wisdom and relate to our bodies with the respect and partnership due an essential contributor. When our emotional intelligence is seen as our *relational* bridge making multiple connections continually, what is to be known becomes animated, vital and more easily embodied. When our mental intelligence is seen as a *natural* expression of being human, the knowledge to be gained is encouraged in its *natural* discovery and trust that is inherent in the learning process. When the environment in which education occurs is informed by our spiritual intelligence, i.e. seeing oneself in relation to a larger world, feeling connected to oneself, others and nature, the knowing taking place would, *from the very beginning*, be a different order of knowing. Individuals would *know* inside of a connection with self, others and nature. Our future education can attend to a curriculum and practices that ensure these pillars remain strong.

Systemic, Integral Education Model: Concerns

The integral approach to education, as an integral approach to anything, requires a commitment to be inclusive on many different levels. For the individual, it embraces the 'whole;' the emotional, physical, mental/cognitive, spiritual, social, etc., domains of what it means to be a human being. For the group, it takes into account racial, ethnic, economic, social, educational, religious, etc., aspects of what it means to be a member of a society/culture. For the relationship between humans and nature, which contains animals and plants, it includes ecology, cosmology, science, natural resources, etc. For the world, it emphasizes a viewpoint that recognizes all the constituents and actively participates in ways to incorporate the view of the world as a *whole,* including the views of the individual, group and the relationship between humans and nature. One of the major characteristics of the integral worldview is continually being willing to 'look from' how do the parts, which are wholes themselves, interconnect and relate inside of a 'whole.' Also, staying open to the question of how do we interrelate with one another, and how can we create a world in which disparate views can be heard and honored for their individual commitments to their 'part ness' and at the same time their relationship with and contribution to the whole. It is a readiness to engage in this inquiry that is paramount in expanding an integral worldview.

The level of comprehensiveness described above has not yet been addressed, in any area of our society. The difficulties with this are what Wilber (2000), with his work on the 'levels of consciousness' and Ray (1996), with his studies of the Cultural Creatives, have alluded to in their writings. The collective level of consciousness is not yet sufficient to support this degree of integrality. This is the challenge of bringing into existence a systemic, integral model for education. No one has yet introduced a systemic, integral model for education that suggests defining 'education' begins *before* a child is even conceived–*in the relationship and conversations of the people who are considering*

a lifetime commitment and raising children. This relationship and these conversations are committed to uncovering what it means to raise a child inside of an integral worldview–one in which their emotional, spiritual, physical and mental intelligences are seen as essential to develop and integrate from the very beginning of life.

This proposal has the possibility of providing a powerful beginning to what it means to be educated and what it means to be a human being. An integral worldview is needed to be able to see the system in which education takes place, and also to be able to recognize the leverage points for a powerful intervention within the system, i.e., how integral practices could make lasting differences in the choices parents, children, families and schools make at any given time.

There are numerous potential problems in this approach, as it requires not only a consciousness that is committed to its fulfillment, but also daily practices, behavioral modeling, decisions, actions, conversations, attitudes, etc. that represent an integral worldview. Those who attempt this model will be pioneers breaking new ground for an integral world. They will be people whose commitment to establish a foundation for a successful model of education is larger than their considerations and challenges. As Conti (2002) and Yihong (2002) found in their research, the adults using an approach that encompasses the 'whole,' model ways of 'being' in the world that are representative of an integral philosophy; a choice in the way they live their lives. Their behaviors, actions, etc., literally lead the way for others. The integral approach calls for people to reassess their own beliefs, habits, automatic 'ways of being', prejudices, etc., and confront the aspects of themselves that hold tight to the remnants in themselves of fragmentation, reductionism, individualism, control, domination, excess competition and so forth.

Wilber (2006) offers an expression of the integral thinker in his introductory remarks to Visser's biography, Ken Wilber: Thought as Passion. "Everybody is right. More specifically, everybody–including me–has some important pieces of the truth, and all of those pieces need to be honored, cherished, and included in a more gracious, spacious, and compassionate embrace" (p. 1). The integral worldview calls upon us to be different people. Many people do not want to be different people. They do not want to shift the way they view the world. They are not willing to entertain a more holistic perspective of the world at this time. Their reaction is one requiring acceptance and not resistance, coercion or invalidation.

Referring back to the worldviews that have influenced education in Chapter 1, the Traditional and Modern perspectives in particular have supported the working of a highly industrialized world and for many, it is not easy to visualize what a world might be like with an integral viewpoint being shared by most people. There is little history validating that point of view, and little evidence to demonstrate its efficacy. There are people and families who have spent their lives aimed at being successful in a modern world, maintaining a traditional mindset, and have no awareness of or interest in shifting the way they think.

Also, noted earlier in the section assessing education in Chapter 2, the way teaching and teachers are viewed, i.e., qualifications, respect and remuneration, requires a paradigm shift. This can also be seen as a barrier to this type of educational approach because teachers are such a fundamental mainstay for its success, and the way they have been viewed in the past is so engrained in our collective consciousness (Williams, 2001). The nine educational programs used in this study are examples of successful expressions

of integral education. They were designed, for the most part, in well-supported communities of like-minded and committed people. They have parents, teachers, students and community members who are crystal clear about the benefits to the individual, community, society, nation and the world, of educating young people to be integral in the way they learn, think and interact.

Some may see this model as an attempt to create a 'perfect' system, which could be rigid and full of compliance measures. Nothing could be further from the vision. Integral education cannot be forced and it does not fit a specific formula. It is an approach that necessitates engagement from everyone and an implementation that addresses multiple intelligences, styles of learning and integral philosophy and practices.

Another potential caution for this approach is the amount of quality coordination and communication necessary to connect all the constituents and provide sufficient instructive experiences for people to feel capable of continually generating an integral approach to education. The model requires a sustained vision of a future that is unfamiliar to most of the planet's population. This integral way of educating, although for some has been in existence for many decades, is for most a very different description of education. The nine programs researched for this thesis have some of the model's features in place, from pre- school to high school.

This particular model has never been in place. It is speculative and encompasses a level of inclusion previously untried. Auroville, the experimental village of 2000 people in India, is most likely the closest in vision, and it does not have some aspects of this systemic, integral model in existence as yet. It will require much dialogue, deep and generous listening and speaking, patience, persistence and enrollment of many diverse groups of people. It entails a thorough, well designed, logical and inspiring enrollment plan to aid people in having a more direct experience of what is available to them as a result of an integral education. It is an audacious vision and seems to offer the widest definition of a possibility for an exciting future that I have encountered as yet.

Recommendations for Future Research

1) A follow up study of the students and parents in 3 to 5 years to distinguish the physical, emotional, mental and spiritual intelligences and how they show up in the future of the young adults' and parents' lives.
2) Expand the research population and interview students and/or parents and educators, together or separately, in multicultural groups, to see if their experiences are similar, or if they differ, how they differ.
3) Include more schools that fit the criteria of integral schools worldwide and conduct a more specific comparison of how each domain of intelligence is taught and what outcomes result from the different ways the pedagogy is interpreted.
4) A comparative study of all graduates from the currently researched integral programs over a specific period of time to determine how each approach contributes to the successful adaptation to adult life in the four domains of intelligences; physical, emotional, mental, spiritual and their integration.
5) Repeat the current research and use public school seniors, their parents and educators as the research population and compare the findings.
6) A longitudinal study over 18 years which follows individuals born and raised inside of a systemic, integral educational model and highlights the ontological,

epistemological, axiological, and relational qualities that are developed within the physical, emotional, mental and spiritual domains and their integration.

7) An integral educational forum, akin to the work described in this dissertation in Chapter 7, with scientists, educators, philosophers, spiritual leaders, students and parents, inquiring together about how an integral education would address the further creation of an integral culture worldwide.
8) Inquire into how these integral educational programs influence the actual development of the brain.
9) Study the correlation between 1) loving to learn, 2) being at choice, 3) thinking for oneself, 4) being trusted, 5) being known or 6) self expressed 7) following a passion or 8) a combination of these experiences and the quality of integral intelligence exhibited as measured by agreed upon methods.
10) A study about the implications of aspects of the integral programs that might benefit by improvements or changes.

Reflections

> *The desert returns you to yourself.*
> *It is a time for beginnings, or endings.*
> *In the desert . . . Time becomes space.*
> *Solitude pulls you to the heart of the universe.*
> *The mind, clean, honed and crystalline, shimmers in cool starlight.*
> *It is a time of seeing . . .*
> *In the clarity of the desert night you can see . . .*
>
> Olds, 1992, p. 3

A number of years ago I spent 10 days in the desert. Most of the time I was alone, three of the days were fasting and the last night was spent awake, opening to the final wisdom gifted to me by the 'spirit' of the desert. I had carved out time from a very busy schedule of international travel, corporate consulting and making what I considered to be a difference in life. It felt like I was being called to a destiny appointment at that time in my life. I am grateful for having kept that appointment; this dissertation is a result of that experience.

The last day of the vision quest, people came back to a central camp and circled around a fire to witness and be witnessed as the "self s/he had returned to."
I was the last to share. I was sobbing. My body, having spent 10 days in introspection and solitude, lying on the earth and having made 'best friends' with the desert's life forms– tiny multicolored flowers, birds and creatures, was in an energetic resonance with them all.

The desert's message to me was clear, *arrow-like* clear. Education, from the *educere,* meaning to lead or bring out, is not "bringing out;" is not honoring the natural intelligence of human beings. Instead, it is "stuffing in." On some special level of knowing, my experience informed me that education is a promise to everyone to provide an environment in which the unique gifts of each individual are recognized, nurtured, and expressed.

My experience that day was this promise is not being kept. I felt profound sadness and knew then that I would honor this experience in a way that was my unique

contribution to make. That was the beginning of an inquiry that led me to this research of integral education as a model for education and a personal vehicle to integrate my own life. A quote from the book*, Presence,* speaks to this experience. "When you see what you're here for, the world begins to mirror your purpose in a magical way. It's almost as if you suddenly find yourself in a play that was written expressly for you" (Senge, et al., 2004, p. 114).

One of the lessons I have been learning is how to authentically inquire. As stated in the first chapter, I was not educated to inquire. Inquiry is an art and requires practice. Inquiring is questioning, observing, opening to dialogue, not knowing, doubting and mistaking, all skills that I had not exercised very well during my earlier education. Inquiring is allowing 'not knowing' long enough to have what is being inquired about show up–the space is clear enough without that 'knowing' to crowd it, so what is 'unknown' can surface. This took a rearrangement of my self at a very basic level, a '*cellular*' level.

This journey into integrality has taken me into my own domains of intelligence; the physical, emotional, mental and spiritual, as a test case for what was to come. I have been personally engaged in the question, 'What supports the development of the spiritual, emotional, physical, and mental intelligences in my life?' I began to know through being engaged myself–I knew what was being studied as *subject* rather than object. In each area I have discovered what allows me to experience that sense of my own integrity and wholeness and to be sensitive to cues–sometimes it is cautioning and other times it is encouraging.

Each area of intelligence has its own practices that I have either expanded from earlier observances or revealed during this most incredible passage. I have assumed my personal version of integral yoga that includes all the domains of intelligence and different practices that 1) open the emotions, spirit, mind and body to life's 'breathing,' a presence to life, and 2) stretch the mind to wrap around integral concepts of complexity, systems thinking, new diverse sciences, inspiring human experiences, education, chaos, etc. Yoga, meditation, hiking, physical exercise and explorations, sessions with spiritual teachers, Tantric yoga study, NSA (network spinal analysis) and NEC (neural emotional component) experiences, body work, silent retreats, yoga retreats, doctoral classes, engagements with many wise teachers, conferences, leadership programs, dialogue groups and business consulting have been my network of support during these last years of study and research.

For me, writing this dissertation has been my 'microcosm,' reflecting the 'macrocosm' of the research theme, systemic, integral education. I was also a research participant undergoing my own systemic, integral educational process. Grappling with the critical distinctions of this research, e.g., integral and holistic, has opened a new level of consciousness in me, which will support me in expanding this vision of systemic, integral education.

Along with inquiry, the most striking learning from the research came from an interaction with colleagues. I didn't notice the extent of my expectations going into this study. I noticed I had some disappointment when a participant did not 'fit' my expectations early in the interview stage. I was very fortunate to have this conversation early in my research. My wise colleagues questioned, "Why not shift your disappointment into wonder?" Wonder is being open to the unexpected, not knowing,

having curiosity and welcoming surprise and amazement. Disappointment means to fail to satisfy the hopes or expectations; a looking for as due, proper, or necessary; to look for as likely to occur, a presumption. I realized that wasn't research, and I was committed to discovery and allowing the participants to contribute to me. That was a turning point. I shifted my perspective and created a safe space for people to fully share themselves with me. I found that what they had to share was much more valuable than what I expected.

I was able to experience the gift of people to me in sharing their lives and what mattered most to them. As is evident in Chapter 6 particularly, the participants of this research contributed their insights and thoughtful appraisal of their integral education. They have given a priceless endowment to the future of education.

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Appendix A: Consent Form

California Institute of Integral Studies
Research Study: Development of a Systemic, Integrating Education model
Principal Investigator: Anne Adams

CONSENT TO ACT AS A RESEARCH PARTICIPANT

Purpose and Background:
Anne Adams, a Ph.D. student at the California Institute of Integral Studies in San Francisco, CA, is conducting a study on what influences facilitate the development of integrative attitudes, behaviors and competencies. The purpose of this study is to discover what learning experiences have contributed to the development and integration of the spiritual, emotional, physical, and mental intelligences of representative seniors graduating from integral educational programs.

Procedure
If I agree to participate in the study, I understand that I will be asked to schedule a one to two hour audio/video taped interview with the Principal Investigator, Anne Adams. This interview will be recorded and transcribed for the purpose of understanding, accuracy and study. I may be asked to participate in a follow-up session with other participants at a later time and I will agree if it is convenient for me to do so.

Risks/Discomforts
The interview questions are an invitation to reflect on the experiences of life events, relationships, and learning experiences that supported the development of integral competencies, in the domains of the emotional, spiritual, physical and mental intelligences. If I feel any discomfort during the interview, I will inform the interviewer and we will decide how to proceed. However, I understand that I can end my participation in the study at any time. I understand that if some of my remarks could make it easy for the readers to identify me, I can inform the researcher and ask her to delete or camouflage specific information if I feel that is a problem for me.

Confidentiality
All information I contribute will be held in strict confidence within the limits of the law. The audio/video tapes and transcripts will be identified by numbers and pseudonyms. Only Anne Adams and the transcriber will have access to the tapes and transcripts. The tapes and transcriptions will be kept in a secure place by Anne Adams. At the completion of the research these tapes will be erased, or with my permission, may be used in further related educational research. Other professionals will be seeing the data, and they will not have access to the identity of the participants. No real names will be used in the dissertation or in any reports or publications that may result from this study, unless specifically agreed to by me. My request to omit from the dissertation particular details that I specify to the researcher will be honored.

Benefits

There will be no direct benefit to me in the form of payment or training from participating in this study. However, I understand I may find the process interesting, thought-provoking and valuable to me. The information provided will help educators and learners understand the relationship between educational experiences, relationships and life events and the development of integral competencies in the domains of the mental, physical, emotional and spiritual intelligences.

Questions

I have talked with Anne Adams about this project and have had my questions answered. If I have concerns about my rights as a participant in this research, or I feel that I am at risk I can report them anonymously, if I wish to Frank Echenhofer, Chair, Human Research Review Committee, California Institute of Integral Studies, 1453 Mission Street, San Francisco CA 94103, telephone (415) 575-6100, or to Dr. Susan Cannon, Chair, Dissertation Committee for Anne Adams at the California Institute of Integral Studies, 1453 Mission Street, San Francisco CA 94103, telephone (415) 575-6100.

Consent

I,_____, consent to participate in the study exploring the educational experiences, relationships and life events that facilitate integral competencies in the domains of the mental, physical, emotional and spiritual intelligences, conducted by Anne Adams, a Ph.D. student at the California Institute of Integral Studies. I will be either video or audio taped during the interview according to my choice. I will be given a copy of this consent form to keep. Participation in this study is voluntary. I am free to refuse to participate in this study, or to change my mind later. My decision will have no influence on my relationship with Anne Adams.

Signature Date

_____

Witness Date

Appendix B: Letter to Schools

Dear Administrator:

I am a Ph.D. student at The California Institute of Integral Studies, in San Francisco, California. My concentration is Transformational Learning and Change and my dissertation is researching systemic, integral educational programs. I am researching integral educational programs worldwide and asking the question: 'What learning experiences support the development of the spiritual, emotional, physical, and mental intelligences of representative seniors of integral education programs?' My topic includes discovering the learning experiences, relationships, environments and influences that contribute to seniors having characteristics, behaviors, attitudes and competencies that are integral.

I am writing to you for permission to spend time observing your educational program and interacting with students and educators. Also, I am asking you to support me in locating a graduating senior, whom you feel represents your program, and who would be willing to be interviewed by me, on video or audio tape according to their choice, as well as his/her parents in a separate interaction.

The intention of this research is to have gender balance and participation from diverse cultures and backgrounds. I would like to have a phone conversation with you about this in the next week. Would you please let me know when that might be possible? After we speak, I will be asking you to put me in touch with the student and his or her parents that you feel would be interested in participating and would be representative of your program Please let me know directly via e mail if you are interested in proceeding with this request. I am very excited about this research and would love to meet you, your program, students and faculty in the near future.

Thank you,
Anne Adams

If you have any questions or want any more information regarding this research project, please contact me at aadams1@ix.netcom.com or Susan Cannon, the chair of my dissertation committee, at scannon@columbiarail.com or you can write to us at:

Susan Cannon, Ph.D.
The California Institute of Integral Studies
1453 Mission Street,
San Francisco, CA 94103

Anne Adams, Ph.D.c
479 Winged Foot Road
Half Moon Bay, CA 94019

Appendix C: Interview Questions

For students:

Interview Protocol

Thank you for taking the time to talk with me. I consider the work we are doing together to be very important- I am interested in your experience of your education in a number of different areas.

I am particularly interested in four domains of human expression, ways of knowing and relating to the world; the mental, emotional, physical and spiritual.

I would like to know how you define these areas and what you have to say about each of these areas

- The learning experiences you can recall throughout your life that have contributed to your development, of each of these qualities - the mental, emotional, physical and spiritual.

EMOTIONAL

In your words, what would you say that means to you?

How would you define emotional, the emotional domain?
What adjectives would you use to describe this concept?

How would you describe the education you have received, (for as long as you can remember) about the emotional domain, - the emotions?

When you look back over your life; school, home, community what learning experiences, incidents, situations, have you had that have supported your development in the area of your emotions?

How do you relate to your own feelings, emotions? Can you give me some examples?

In any given day, we all have many different emotions, can you describe some different situations in which you were emotional and how you related to it?

When you are challenged in life, how do you relate to the challenge emotionally?

What did you learn about emotions through school? How would you assess your classes in terms of providing you with knowledge about the emotional domain?

Tell me about the individuals whom you feel have provided you with meaningful learning experiences in the emotional domain? Friends?

Will you describe some?

PHYSICAL

In your words, what would you say that means to you,

How would you define physical,… the physical domain?
What adjectives would you use to describe this concept?

How would you describe the education you have received, (for as long as you can remember) about the physical domain, - the physical?

What learning experiences have you had that have helped develop a sense of your physical body? What have you learned about the physical body?

When you look back over your life; school, home, community, how would you describe the sense you have of your physical self?

What did you learn about your physical self/body through school? How would you assess your classes in terms of providing you with knowledge about the physical domain?

Tell me about the individuals whom you feel have provided you with meaningful learning experiences in the physical domain, about the body, how it works, its chemistry etc.? Friends?

Will you describe some?

What are the kinds of foods that you have eaten throughout your life?
Describe the foods you eat? Meals, breakfast, snacks, etc.
Have there been any changes in your eating habits over the years?

What the activities that you choose to do that use the physical part of yourself?

SPIRITUAL

In your words, what would you say that means to you,

How would you define spiritual, the spiritual domain?
What adjectives would you use to describe this concept?

How would you describe the education you have received, (for as long as you can remember) in the spiritual domain, - the spiritual?

Talk about the learning experiences you have had that you would describe as spiritual– What was present? Can you share some examples?

What learning experiences have you had that have helped developed a sense of a spiritual aspect of you?

When you look back over your life; school, home, community, how would you describe The way your spiritual self has developed? Can you give some examples?

What did you learn about your spiritual self through school? How would you assess your classes in terms of providing you with knowledge about the spiritual domain?

Tell me abut the individuals whom you feel have provided you with meaningful learning experiences in the spiritual domain? Friends, Family, Teachers, Etc.

Can you describe some?

MENTAL

In your words, what would you say that means to you,

How would you define the mental domain?
What adjectives would you use to describe this concept?

What learning experiences have you had that have helped you develop your mental qualities? Share some examples of how you learned in this area…

When you look back over your life; school, home, community, how would you describe: The way your mental capacities were developed

When you think of school and what is taught there, what are your thoughts, opinions, etc., about how the mental intelligence is developed?

Can you give me some examples of this?

Tell me abut the individuals whom you feel have provided you with meaningful learning experiences in the mental domain?

Can you describe some?

Why do you go to this school?

Where do you see yourself in the future?

I ask you to take a moment to reflect on each of these areas once again, the mental, emotional, physical and spiritual, and see if there is anything else you might want to add that you may have thought of during the interview about any of the areas, something that came up about one as you were speaking about another - that you would like to add now?

Do you experience any of these domains as influencing the other domains?

Can you talk about any sense you may have of any or all of these domains; the mental, emotional, physical and spiritual, being connected in any way?

Any other thoughts or observations you would like to acknowledge?

Can you give me feedback about the interview process? How did you experience the process? Anything you would like me to know about your experience of the process?

Descriptive Information:

Name, Age, gender, ethnicity/nationality, background, family origin, where did you grow up

Clarify next steps:

I will have the interviews transcribed.

I will send you a copy of a summary of the interview for you to look over and correct if need be.

Also, I will be summarizing the themes and patterns among all the interviews, and I can send you this summary if you would like it.

Many new ideas, thoughts, insights, etc. may come up after this conversation and I would love to hear from you if you would like to add anything that you might think about in the next few weeks. Please let me know, and I will follow up. (Give them a contact card)

Thank you very much, this has been very helpful to me and I hope you have gotten value from recounting your experiences in these four domains.

Can you say anything about what value you have gotten out of reflecting on these learning experiences?

For the parents:

Interview Protocol

Thank you for taking the time to talk with me. I consider the work we are doing together to be very important- I am interested in your experience of the education of your child in a number of different areas, or domains.

I am particularly interested in four domains of human expression, ways of knowing and relating to the world; the mental, emotional, physical and spiritual.

I would like to know how you define these areas and what you have to say about each of these areas

In your words, what would you say that each of these intelligences means to you,

Mental, Emotional, Physical, Spiritual,

How would you define them? What adjectives would you use to describe these concepts?

We will be focusing on : What are the learning experiences you can recall throughout your child's life that have contributed to his/her development, awareness and expression of each of these intelligences - the mental, emotional, physical and spiritual.

I am going to be asking you what it was like for both of you through different phases of your child's history, starting with the idea of having a child. I would like you to tell me what these stages were like for you, and I will be asking to look from the four different viewpoints, through these different lenses, the physical, emotional, mental and spiritual domains that you described a little while ago.

I would like to hear your description of the conception process of your child.

Describe how you thought about having a child, and share your thought process and what happened during the process of deciding to have a child and how that was for you.

To look from the four different viewpoints, the physical, emotional, mental and spiritual domains

How would you describe the education your child has have received, (for as long as you can remember) about each of the domains, - the mental, physical, emotional and spiritual?

What learning experiences has your child had that have supported the development of his/her mental, physical, emotional and spiritual qualities?

What factors have been favorable to the development, awareness and manifestation of these qualities?

When you look back over your child's life; school, home, community, how would you describe the way his/her mental, physical, emotional and spiritual intelligences have developed?

Can you give me examples and share some stories about this

When you think of school and what is taught there, what are your thoughts, opinions, etc., about the way these areas are addressed there? I.e. the physical, emotional, spiritual, and mental qualities?

Tell me about the individuals whom you feel have provided your child with meaningful learning experiences in the each domain?

Can you describe some?

What are the kinds of foods your son/daughter have eaten throughout his/her life?
Describe the foods he/she eats? Meals, breakfast, snacks, etc.
Have there been any changes in her/his eating habits over the years?

I would ask you to take a moment to reflect on each of these areas once again, the mental, emotional, physical and spiritual, and see if there is anything else you might want to add that you may have thought of during the interview about any of the areas, something that came up about one as you were speaking about another, that you would like to add now?

Do you experience any of these domains as influencing the other domains?

Can you give examples?

Can you talk about any sense you may have of any or all of these domains; the mental, emotional, physical and spiritual, being connected in any way?

Why did you choose this school?

(If you have more than one child and the other child, children, go to another school, what do you notice about the different educational experiences?

Any other thoughts or observations you would like to acknowledge?

Can you give me feedback about the interview process? How did you experience the process? Anything you would like me to know about your experience of the process?

Descriptive Information:

Name, gender, ethnicity/nationality, background, family origin,

Clarify next steps:

I will have the interviews transcribed.

I will send you a copy of a summary of the interview for you to look over and correct if need be.

Also, I will be summarizing the themes and patterns among all the interviews, and I can send you the summary also if you would like.

Many new ideas, thoughts, insights, etc. may come up after this conversation and I would love to hear from you if you would like to add anything that you might think about in the next few weeks. Please let me know, and I will follow up. (Give them a contact card)

Thank you very much, this has been very helpful to me and I hope you have gotten value from recounting your child's experiences in these four domains

Can you say anything about what value you have gotten out of reflecting on these learning experiences?

Appendix D: Coded Interview Example

This appendix contains 1 sample excerpts from the students' interviews, representing the physical intelligence and the integral quality of the school's program through the interviewees' responses. This is a very small sample of the interview transcripts and is included to give a sense of the quality of interview and responses and how their meanings were analyzed and interpreted.

Student 1: Physical Domain
Yellow = First time: Highlighted to notice
Blue = Second time: Distinctions to use
I = Interviewer
S = Student

Interview Transcript	Researcher's analysis comments
I: So I am really interested in your opinion. Thank you very much for saying yes. This is important. So, the four areas that I'm really interested in– are the emotional, the physical, the spiritual, and the mental.	
S: What do you mean by the physical, just sports?	
I: Well it could be sports and it also could be all the work that you have done all these years about the awareness of the body. So it really is the relationship with your body, so it could be anything that you think is physical:	
S: I don't know, they are all characterized on my awareness.	Great insight
I: Yes. Definitely they represent a different kind of an awareness, that's really a great way of putting it.	All physical characterize my awareness
S: I don't know, we had an all round sports program when I was still in the school sports, so we had athletics and then we had gymnastics, there were team sports and we are in 3 month slots. So we did basically everything and we knew that, okay so it's personal interest that I am learning.	Robust program- geared to individual Distinctions–physical domain
I: That's just what happens, but I think what you were mentioning which I think is so important is that teachers, and educators need to look into that, so that they can make that situation that much more like a learning situation	
S: I don't know, they were not many incidences where the teacher had to come in and say, "okay, don't be upset about it". No, I know, like friends, I have talked to them and we talked about sitting it out on the bench and we try to figure out ways where everyone can play and the team just becomes stronger.	Looking out for everyone getting a chance to play Students taking responsibility for playing
I: Yes.	
S: But it's always difficult.	Ack. How it is
I: Particularly if they are competing, if you are just playing a really great game together, it's really nice to make sure that every single person has a chance to play.	
S: Well, it's not really competition, even if you are competing, there are only 5 players for the hard games, the other ones they come in when there are easy games, those	Distinguishing the results of competition, at times, of not talking about it

five that are going in when it is easy, they are not going to be part of the same team.	Being left out of real game
I: Yes! I too noticed it.	
S: Yes. It's not only at the school because outside the school too.	
I: Yes. But the sports teams here, do you consider that being part of your education?	
S: Yes. What do you mean by challenged? Physically.....	
I: It could be physically; it could be emotionally, it could be mentally, anything that you consider to be a challenge. Learning something that you don't know how to do,	
S: I know I guess to go into a new situation is always a bit difficult and in some ways I don't like it, on the other hand, if I don't go beyond that boundary I do not get to see the other parts safe at home So, I guess in a way it's just fun, not at the beginning, just something that has something more to it.	Risk taking, not easy, and gets to go beyond comfort zone
I: How about physical? So when you think of the word physical, I'm just asking you to describe when you use some adjectives, what do you think that means? How would you describe physical?	
S: Mostly, it's used to talk about your physical body. So basically, how you are built and how strong you are and how fast you? How you are built? How your body structure is?	Defining physical Mentioning, structure, build...
I: Yes. That is true, anything else to say about that so far? .	
S: It includes everything that we can see, light .....and touch.	Light, touch
I: Every thing you can see definitely, touch, smell,..	
S: Well, you can smell the rain, for example after it hits the soil,	Subtle distinction in physical sense
I: Would you please describe, over the years, describe the education that you have had that you feel like has really contributed to the development of your physical self.	
S: When I moved here when I was six years old, I was living in Goa before, and there, there was no sports program and I was doing more home schooling; so when I came here and I joined the sports program, I couldn't do anything. So the others, they would run off and I would still be a few laps behind, but I caught on really fast and over the years, but I found that I could catch up.....	Describing experience of coming and joining, the difficulty at first and then the learning, connecting
I: Would you just share with me a little bit about the specifics of your sports program and your physical program? What are some of the things that you did and what did you learn about your body through those?	
S: Well, it's more like that if I look up now, then I can see what happened. But at that time I didn't look at myself, how I was developing, what's happening to me. But I don't know, in football or in anything I learnt, basically everyone has to learn like coordination	Coordination How the body coordinates
I: Would you talk to me a little bit about what you did learn through the body awareness program, over the years?	
S: There was lot of concentration, and it is not so just being able to jump really high, run really fast, it is more finding, I don't know the balance was one and calming yourself down, realizing what you are doing actually, so even if you just	Discovering through the body, Finding out about one's body

plan it or evaluate it, you know to feel your body.	Concentration Balance Calming, centering of self Consciousness, awareness of what you are doing Know how to feel your body
I: That's another way of looking at physical ...there's a whole other sense, which you just said, which is about being aware of the body. Actually being in the body. You know, knowing that you are present in the body.	
S: There is an easy way to put it, I happen to have a knee injury….	
I: You have?	
S: Yes. I broke a bone in my knee. So to fix that, I have to be always aware of my knee. Because I can do exercises but I want to continue my sports. So the only way to do is that constantly be aware of how you are moving.	Being aware of how one moves, having conscious-ness in certain parts of the body
I: Yes. So your knee actually has some kind of sense that you are aware of. You don't want to let it go out, because it might do some thing again. Anything else that you learned in the body awareness?	
S: For the first few years that we did that class, it more like just for fun. I mean, it was just something interesting like to balance a plate.	Fun...and balancing a plate
I: What does that feel like, as a person you know you got this really thin stick and you are actually going to balance this plate? What does that feel like to you, when you do that?	
S: I don't know. It is just like you try and calm yourself down and that plate becomes somehow your center. So you have to try to hold that to bring it around.	Using the plate for centering, coordination, centering, The plate becomes your center Hold your center
I: There is a certain kind of energy you are using at the same time.	
S: I think you are trying to shift your awareness, just to that plate and stick, so you know just to forget distraction and you concentrate.	Distinctions in awareness, concentration, focus
I: Exactly. You can see how the body relates to that, because you have to use the body to be able to do that. Okay, any other activities that you did, you were still doing body awareness and what are they working on with you now?	
S: I'm not doing that class. I took psychology, and a lot of people who do that class don't take psychology. But I think that psychology has a lot to do with being aware of different aspects of the body, just how you relate to the outside. So in a way, I am constantly doing that or trying to, but in a different way.	Different approaches to being with the body, physical, psychological
I: Okay, good.	
S: We brought a lot from Transition school (middle school) to body awareness, before a competition [we learned] just to harness up through your heart beat, so all those little tricks, were brought along with us from Transition.	

One technique: well, basically you can become aware of your heart beat and use it as a marker to control your own nervousness, anxiety or fear. It also allows you to focus your concentration. if you interlock your hands, and let your index fingers touch on the tip you can become aware of your heart beat. Now before a competition this exercise (focusing on this pulsation) can enhance your performance by letting you calm down and focus your energies. We were taught in body awareness class	School provides techniques to support students in: Grounding before competitions Awareness of heartbeat Centering Connecting to the pulsation of the heart to connect consciousness and the body In touch with body energy
I: Are there any other situations that you can think of that really supported you in developing your sense of your physical self? So it might be things like being out in nature, or going camping, or did the school do anything like that where you go out on a camping trip?	
S: Every summer we'd go to Kodaikanal, it's a hill station.	
I: Is that nearby?	Hard Trekking, outdoor
S: 450 Kilometers from here and 2000 meters up.	Group experiences in nature
I: So, it's a climb?	
S: Anyway, they go there by bus and when they come to the reserve forest and they get the permission to there and they can stay there for 2 weeks.	Camping
I: Wow! That's quite an experience.	
S: And that was like 48 or 38 children.	
I: How old was the age range?	
S: The young ones are age 10 to, all people.(all ages) The older ...They can go on their own; they go on treks usually.	Multigenerational Experiences
I: And how was that?	
S: Treks, they push you to your limits sometimes, especially when you get sick and you have to go on and often you just get tired, you are feeling sick and you don't want to go on with but you have to go on.	Resiliency – choice to go through discomfort to trek
I: Yes, it's like accomplishing something that you don't think that you can do, particularly physically. Did you have a lot of strenuous walking and hiking?	Highly physical programs together
S: Yes. The whole group they have two one week treks.	
I: Wow! It sounds like the school is willing to organize one thing is a two week experience in the summer.	
S: It's not the school, it' a group of people and the school just signs you up	
I: I see. Okay. I know, you take day hikes, here too.	
S: Yes! There are two canyons, but they are not so big, I mean you can walk on them.	
I: Anything else that you can think of in terms of what you may have learned about your physical self or the physical intelligence of your body through the school programs, so you had science classes for instance like that.	
S: Most biology that were caught was in T school, because once we came here,(High School) we could choose one of the sciences, I chose chemistry, I mean you get a little biology just being around, but I know that if you are aware of it, it often helps you to increase your potential . So you	Insight into what is missing for him in the biology classes, too much theory not enough what goes on in every day life

can visualize. In Transition with friends and outside, I don't know, they have their syllabus they have to follow with biology and I'm finding its too much focused on the theory.	
I: And not, so much on the practical? Is that what you mean?	
S: There is definitely practical in it but it's not like everyday. Of course you learn about but calories and proteins and all, we use it in everyday life, but it's not based on everyday life.	Looking for relevancy in learning about the body, biology
I: Right. So that would be the contribution you make to the school, to see that if they couldn't make it much easier for us to learn how what's going on, how our action applies to our life.	Education: should be based in every day life
S: That's where I want to try to find out things.	Spoken intention to find out how practical knowledge applies to his life Sought classes out and requested that school teach more relevant classes....psychology and how that impacts his every day life
I: Would you be willing to talk a little bit about like the foods that you eat? Like, what kind of diet do you keep and what's your thought about what you eat	
S: Fish, meat and vegetables, rice, Indian food, noodles, vegetable,	healthy
I: Okay. You feel like you eat in a healthy way. Would you make an assessment of your self that you eat healthy?	
S: I don't think I eat too healthy.	Assessment interesting as he does eat quite healthy foods and every now and then eats 'junk' food, compared to Western diet
I: No? So, you eat snack foods and things like that too?	
S: Well. Every once in a while, I do, it's just that some days you need a change and that day you enjoy it.	
I: Yes. I was curious about what you think.	
S: Yes. Well I was confused like, while I was drinking too much tea with sugar, I mean too much sugar, and then I could feel that it was pushing me down a bit. I didn't feel so well and I stopped that and I have changed.	Having his own awareness of what too much sugar does to his body
I: So you noted too, in your own body, that by drinking tea with too much sugar in it, you could notice that somehow it had that impact on your body?	
S: It's more like, if you drink a lot of tea with sugar, a lot of sugar... then at end of the day for me, I don't feel well. I can't do anything I wanted to.	Applying Awareness through the Body to what he is putting into his mouth...willing to be responsible for how he feels....
I: Yes. You are tired?	
S: Yes. I feel tired and sore.	Too much sugar= tired and sore, not feeling well

	and not being able to do what he wanted to
I: Okay. Have you eating habits changed at all over the years? Or are they pretty consistent?	
S: Pretty consistent.	
I: Any thing else about your physical development, your physical expression?	
S: ...basketball and that's only like three days a week. So the other days, we are also mixed teams....with different people.	People you play with differs every day
I: Yes. Sometimes among teenagers, there might be somebody who either is a good model, for example, you know the way they treat their body	
S: That is such a good idea that you see some people they can say hit the ball really hard and some times they dribble it so long, so you have all these different models and it's not like there's just one.	
I: Right.. So each sports program here really has lots of different people that run it,	
S: I mean its like, for football its Wednesdays and Fridays, so people show up who want to play and they do their warm-up and they are make teams and they play a game.	Physical events are more causal at this school in high school no determined sports teams and structured competitive events
I: So, anybody they wants to play, comes out; but there's nobody kind of running the program? In my mind I was thinking that you go to the sports things and there will be a coach and the coach would kind of …you know things that a coach would do.	
S: We have that. But then again, you know like, most of the year long, we have the basketball team, players in teams, we practice, all the teams mix up, and before tournaments, we split up into our teams and play as a team and then often there is a coach then.	High school introduces choice in sports and mixed teams...relating to people who want to play a game and have many different age groups

Appendix E: Two Examples of Integral Practices

Yoga: A Pathway to Self Transformation

Yoga acknowledges and interconnects the physical, emotional, spiritual and mental aspects of a person. The breath is known as the energy of life, i.e., prana, and serves as a conduit between the four domains as the yogi learns to channel it consciously throughout the body. The body is sending messages continuously during yoga sessions and the mind and emotions are opening and sensitive to these communications. The body is experienced as an energy transformer and through yoga is able to enlarge its capacity to generate energy and extend it throughout the entire psycho-neuro-emotional network. Within this vast network, there are emotional, physical and psychospirtual blocks that are broken thorough as new energy is channeled to these areas.

Yoga brings balance to the practitioner by constantly providing experiences in dynamic tensions, i.e., "control and surrender, stretching and relaxing, channeling energy and letting go" (Kramer, 1980 p. 2). Within this 'dance' of opposing movements, the body resonates and opens to its natural flow of energy. There is also a consciousness of this phenomenon present that highlights the "interplay between transformation and the resistance to change" (Kramer, 1980, p.2). Yoga reminds us of the daily possibility of rigidity and crystallization that accompanies the patterns that form with our habits as we live our lives. They imprint us and live as memories in our cells "in the systems of the body, in the brain, and in thought itself" (Kramer, 1980, p. 3).

To relate to yoga as a practice in self transformation, the yogi learns to listen to and understand the messages the different parts of the body-system are sending and as a result be aware of how these patterns are defining him/her - the way one moves, how one holds the body, what one thinks and even when one thinks (Kramer, 1980). Yoga's contribution to an integral education and an integral worldview is its practices in self transformation. Learning to be an observer of and transformer of ones energy is a life-giving gift. Yoga students learn mindfulness of the way their body, i.e., nerves, glands, spine, circulatory and energy systems, are impacted by living life. They pay attention to how the body can become '"less efficient, slowed down or blocked, less sensitive and less in touch with itself" (Kramer, 1980, p.3) through an unconscious or inefficient use or misuse of energy. They also are able to respond to what they experience by working with the subtle currents of energy moving through the body via its circulatory and nervous systems. The stretching done in postures involves not only muscles and tendons, but very importantly, our nerves, which create flows of energy, i.e. vibratory feelings (Kramer, 1980). Yoga, through this energy flow, vibration, movement and deep connection to the inner regions of ourselves, brings us to a depth of experience of the interconnection of all life, i.e. "the heart of life itself" (p.13).

> Yoga brings opening and movement deep within the very fiber of your being, and expands consciousness, enlarging your capacity for depth of communication. This self-transformation opens you to a more profound relationship with life, and also to an aware participation in the evolutionary process. In the last analysis, these two things are one (p.13).

Every posture and move in yoga brings with it a new awareness and a new shift in attention. With a new physicality comes a new way of thinking. "The central nervous

system informs the cells and the cells inform the central nervous system. Information flows back and forth like the tide. There is no hierarchy, no separation" (Gates & Kenison, p. 230), no moment when someone else says how it is. "Yoga is a dance of the real - a dance with our own truth...which slowly changes the way we see the world" (p. 230).

Network Spinal Analysis

Network Spinal Analysis (NSA), developed by Donald Epstein (1994) works with the energy of the body and reeducates the somatopsychic (body-mind) connection. The purpose of this process is moving energy that had been stored in the body as cellular memory resulting from experiences that have not been fully experienced. Over time, the body walls off this energy and tension with reduced functioning of the muscles, breathe, spine, etc. In this state of protection, we close down, our blood pressure rises; we feel less emotion and live life in the 'reactive' mode. The nerves of the spinal cord connect every cell throughout the body. If this central communication hub is suppressed, it creates tension in the body tissues. This leads the brain to continually produce stress chemicals that inhibit the ability to address the original experienced that was not completed. This 'vicious' cycle also keeps people from feeling a sense of 'wholeness."

With the support of adjustments and entrainments from a trained specialist, the internal communication systems begin to coordinate the body once again and greater body awareness is achieved. The brain reawakens to the spine, which is a main conduit of consciousness, the coordinator of body function, and a proposed location of the subconscious mind. The integrity of the spine impacts the nervous system, which promotes increased neural effectiveness and enhances the body's ability to self-organize. There is a source of new energy and vitality. Our posture, spinal alignment and tension patterns all reflect our emotional reactions to our perceived world.

Appendix F: Websites for Integral Education

Schools

http://www.livingwisdomschool.org/ http://www.livingwisdom.org/

http://www.quaker.org. http://www.mfriends.org/

http://www.oakgroveschool.com http://www.kfa.org/

http://www.cmseducation.org/ http://www.sfwaldorf.org/

http://www.kpmapproach.org/ http://www.avef.org/

http: www.sriaurobindosociety.org.in http://www.auroville.org/

http://schoolofthewoods.org/

Organizations

http://ttfuture.org/services/
http://www.holistic-education.net/
http://theworldcafe.com/
http://www.pathsoflearning.org
http://www.spiraldynamics.net
http://www.newhorizons.org/
http://www.integralworld.net/
http://atlc.org/index.php
http://www.integralevolution.org/civilization.html
http://www.nhe.gurukul.edu/index.html
http://www.wellnessgoods.com/messages.asp
http://agelesslearner.com/
http://www.childspirit.net/
http://www.esalen.org/
http://www.creatinglearningcommunities.org/
http://www.heartmath.org/
http://www.unol.org/rms/
http://www.integralinstitute.org/
http://www.integraleducation.org/child.htm
http://www.integraleducation.org/home.htm http://www.bahai-schools.org/
http://www.noetic.org/
http://www.wiseworldseminars.com/seminars/professional/dlwp.html
http://www.yrec.org