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: FROM CONCEPTION TO GRADUATION

A SYSTEMIC, INTEGRAL APPROACH

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.

An Integral Education for an Integral Worldview

Many historical accounts of education and its ideologies contain criticisms by those holding one worldview of those holding a different perspective. 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).

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 change

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. Using Fuller's metaphor, education becomes myopic and focused on what is inside of the inner circle only,

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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 issue 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 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

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)

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

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. Irealize 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.

Research Collaboration

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 the teenager has 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.

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 encourage-ment 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 firsthand 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 wellbeing, 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 religious 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.

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 multifactorial 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 wellbeing, e.g. good nutrition, etc.
>
> I feel safe, loved and related to others, and have a sense of belonging. I feelrespected, 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 religious 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.

ADAMS CONSULTING SERVICES

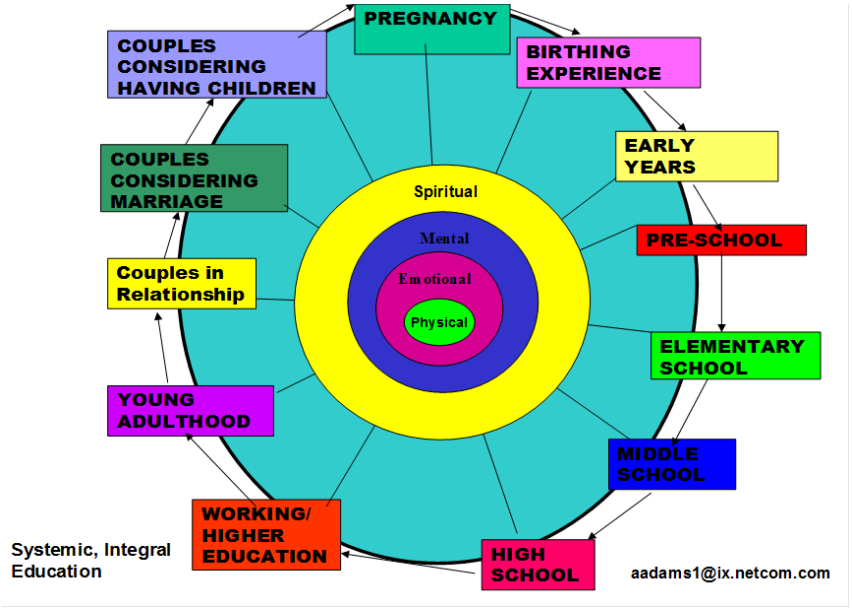
Chapter 9: Systemic, Integral Education

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.



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 lifelong 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 18 years 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.

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 (See - Data Analysis and Interpretations) 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.