DIGITAL LEARNING NOW AND IN THE FUTURE

Whereas the COVID-19 pandemic has completely disrupted life as we know it, one of the greatest impacts has been the way we communicate. With family and friends, for business purposes and in this case, the way we learn. The pandemic has acutely highlighted the need for flexible learning that leverages technology, but it is important to remember that digital learning is still in its infancy, especially in comparison to the more traditional physical classroom environment. This is an important factor for consideration when implementing digital learning strategies.

As it is relatively new, digital learning has many teething problems, but it also holds a world of opportunity and operates on the assumption that digital learning will enhance learning in the future.

Whereas people often think of 'online' learning as an activity that takes place over the internet, or that it is 'digital' learning, without any physical intervention – the term is broader and more encompassing than these limited definitions. The opportunities to implement digital learning, and particularly EdTech, are massive and have a lot of momentum at the moment, as evidenced by some of the spend recently to implement digital learning.

Building awareness of the advantages and possibilities of digital learning is the gateway to implementation at scale. Digital learning needs to be seen as a complement which is used at appropriate times during the learning process, and not as a replacement for all learning guides and resources.

Opportunities and Advantages of Digital Learning

New technologies and new ways of doing things present certain challenges, opportunities and advantages. These challenges and opportunities can be focused specifically on the technologies, or they can be more generic and related to education as a whole.

The research conducted by BluLever Education identified two 'types' of opportunities or advantages that digital learning presents, namely: learning and business.

From a learning perspective there are several elements that can improve the way we learn and teach, including personalisation or differentiation, rapid reinforcement or feedback, self-paced learning, time available to achieve mastery, more and different opportunities to practise, greater exposure, increased levels of autonomy or self-management for the learner, greater variety of content, and more timely learning. There is much to be gained, and great opportunities pedagogically when we introduce digital learning.

From the business perspective, the potential advantages of digital learning are: reduced costs, greater reach, increased efficiency, increased safety, consistent quality, and increased data from learning.
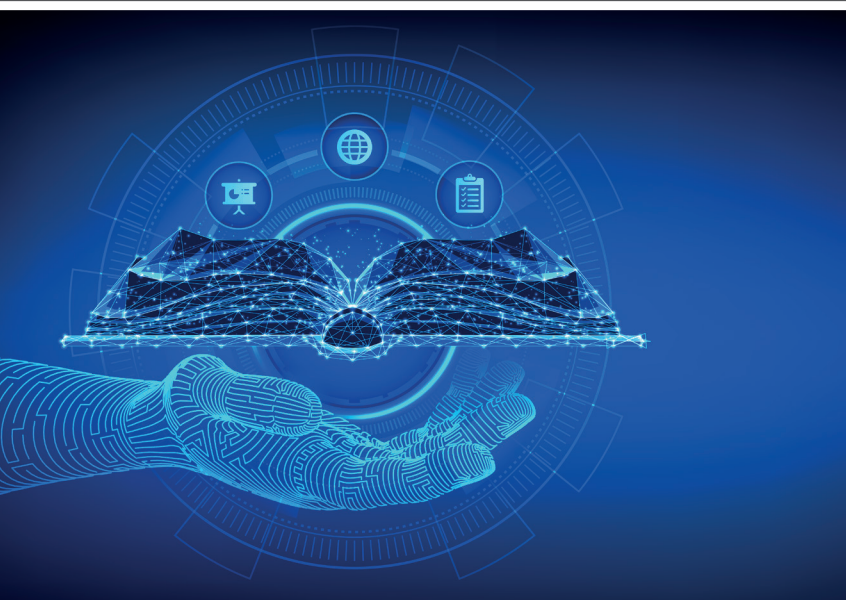
WHAT IS DIGITAL LEARNING?

Digital learning refers to all technology enabled learning (TEL). This includes education technology (EdTech), and any other form of learning that uses technology. Online learning, learning management systems (LMSs), virtual reality (VR), augmented reality (AR) and simulators are all forms of digital learning - to name a few. The term 'digital learning' is an all-encompassing term to simply reflect learning that is being enhanced through digital technology in any way.

THE ARTISAN 4.0 INSIGHT SERIES

BluLever Education

Challenges of Digital Learning

Overall, digital learning offers huge advantages, resulting in a lot of excitement. However, there are significant challenges in implementing digital learning.

The first of these is **lack of buy-in** in that there is often an attitude and mindset that online education is inferior to the traditional brick and mortar version. This lack of buy-in holds back demand for digital learning, and willingness to implement it.

A very common challenge that many people face is the **lack of infrastructure**. The most common examples of this are devices, data, reliable access to electricity and network coverage (cost, speed and reach), data security, a lack of physical environments conducive to digital learning, and a lack of supporting infrastructure.

Not only should we change our **awareness**, but we need to change our attitude towards digital learning. We found that there is often a deep sense of fear and a lack of confidence in accepting and applying digital learning. People are often more afraid of failure than excited by the opportunities for success, and this needs to change in order to successfully implement digital learning. We need to move away from the notion that teachers or educators will be replaced by technology, which **drives fear**, and rather build an understanding of the possibility of educators leveraging technology to enhance our success.

From a regulatory perspective, the **accreditation** process is a massive barrier to innovation and acceptance. This issue is compounded by the fact that we mostly don't know how to measure quality in this space yet and are more afraid of failure than the opportunity of success. We need to think about different ways to accredit and be flexible, possibly thinking about it in two dimensions: accreditation for institutions who offer digital learning, and separately for digital platforms.

The ability to **marshal resources** is a key barrier to unlocking systemic change. Digital learning can be expensive to implement and requires cooperation from several different stakeholder groups.

Finally, the last major challenge that came through in the research is the **lack of skills**. This filters throughout the value chain and ecosystem. Skill gaps identified include: digital implementation, decision making, digital literacy, digital pedagogy, M&E skills, creating better learning environments, educators with industry skills and knowledge, and a general lack of confidence. Potentially the biggest limitation for widespread use of digital learning is a supply of skilled, confident and willing educators. Perhaps we need to change our style of education when it comes to digital learning, with a shift from expert-led teaching to facilitation.

It is worth noting that while the COVID-19 pandemic has pushed us to leverage technology in ways we never imagined, it has also potentially put off a whole generation of learners who have had to sit through hours of poorly designed and badly implemented Zoom classes and lectures, while being told this is the height of digital learning.

When we consider implementing digital learning tools, it is crucial to break down the learning journey and figure out how technology can enhance, complement and supplement learning, and not try to substitute it as a like-for-like experience. It's key that we understand where digital learning best fits in the learning process, and how to apply it.

Furthermore, we need to ensure that form follows function. We cannot just replace physical learning with digital solutions, we need to fix the offline issues at the same time as adding technology. The strategy of simply switching to new technology for a broken system will not work, and will carry through the same problems.

Opportunities for Artisan Training

All of this being said, there are many opportunities within the artisan training space to start applying what we already know about digital learning. A real issue in South Africa is a lack of certification or documentation, yet through micro-credentialing we will be able to recognise skills that people already have as well as enable people to build a portfolio of evidence that can stack up into a qualification.

In order for an apprentice to qualify they need to create a portfolio of evidence, and through platforms which aggregate short work opportunities from multiple employers (in a very disaggregated market), apprentices can more easily find opportunities and add them to their portfolios. In addition, there are many elements of the apprenticeship journey that can start to become digitised, such as logbooks. We just need to think about it as a journey enhanced by digital tools, and not one single experience.

Through technology we are able to better leverage mentorship relationships, which are a rare commodity in the apprenticeship space. This will break down the barriers that young apprentices have when securing a mentor.

We need to start to leverage technologies that have been tried and tested in training in other industries and bring them across to the artisan space. We have to cherry-pick established technologies that are now cheaper and more accessible and adjust them to fit the artisan ecosystem.

If we are to take digital learning seriously within the vocational education space, we need to first create awareness throughout the ecosystem. We then need to build relevant and practical guides and frameworks for implementation.

COVID-19 has increased the need to leverage digital learning, and whilst there are many hurdles to overcome, the opportunity to improve education and increase efficiency is tenfold. By getting started, and through trial and error, we can start to change the way we teach vocational skills and create artisans that are ready to take on the 4th Industrial Revolution.

CONTACT US:

Tel: +27 11 247 4700
E-Mail: info@ewseta.org.za
www.ewseta.org.za

Find Us On:

EW SETA

**ENERGY AND WATER SECTOR
EDUCATION AND TRAINING AUTHORITY**