EUROPEAN JOURNAL OF BIOMEDICAL
AND PHARMACEUTICAL SCIENCES

STRENGTHS AND LIMITATIONS OF DIGITAL CURRICULUM

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INTRODUCTION

Digital curriculum is quickly evolving in this century. It poses as a solution to a lot of teaching issues faced across the world since we are now teaching Gen Z students. It is the most vague catchphrase in the field of education.

A digital curriculum is an online teaching tool that empowers the teachers. It helps them by either providing them with pre-made lessons, resources and materials or helps them to provide a platform where they can use their own lessons and various resources.

One of the best tool for effective educational system is technology. In order to have a deeper, more effective and long lasting learning impact, this systematic approach designs, implements and evaluates the teaching- learning process, using specific purposes, new methods of psychology and communication sciences and also human and non-human resources.[1]

In order to achieve this, they should be familiar with newest technologies as well.

Educational technology should be integrated such that it meets many educational goals such as independent learning, self directed learning, collaborative learning and providing immediate feedbacks and assessment of learning.[2]

Digital curriculum is provided by developers. They provide digital curriculum with a learning management system, pre-made lesson plans, printable worksheets, ready-made presentations, automatic assignments and a whole lot more.

Different curriculums are designed for different groups of students. For example, for middle school students, curriculum is specialized on career readiness.

Most of the digital curricula comes with

- Lecture materials
- Online activities
- Automatic grading
- Student progress tracking
- Assessment
- Printable materials
- Data reporting and lots more.

Successful curriculum initiative can be had by allowing tech leaders to liaise with education experts thereby creating a synergistic workflow.

Points to consider when transforming towards digital curriculum:

1. Proper space and instrument for the group of students. Previously one would place a computer in the middle of a classroom where the students can follow the instructor working on it. But now students have to be at centre, and the other digital opportunities that allow the students to find and create should be placed around them.
2. The schools should be equipped with necessary infrastructure. This requires proper internet facility, instruments, wireless broadcasting etc.
3. Proper curriculum should be formed and the teachers / lecturers should be properly equipped and updated. They should be aware of the new technologies.
4. The teaching community should know how to collaborate technology with Bloom's taxonomy.
5. A digital curriculum must allow for nonlinear learning, differentiated instruction, backward/inverted teaching, aw well as instructional components and ongoing assessment that will bring productivity to the classroom.
6. A new curriculum that must allow for incorporation of innovative instruction such as STEM, PBL, and NETS technology standards should be designed.
7. A digital curriculum must allow the students to be at the center of their education with the teacher

actively facilitating and orchestrating student learning. Such a curriculum gives the students the necessary drive to become actively involved in their learning process.

Strengths of digital curricula

1. Promotes independent learning in students: Although there is a question of credibility in using internet to find information, it can still serve as an educational resource for students. The student can learn themselves without assistance from parents and teachers.
2. Prepares students for the future: It is obvious that future will be digital and technology-focused. Being familiar with using at lease one form of technology at an early age will help them become comfortable using it and eventually develop other skills necessary handle other innovative devices and processes.
3. Has the potential to lower textbook and tuition prices: With resources more accessible and in great abundance, the cost of textbooks is likely to decrease. It is also possible that students may no longer need to buy a textbook, if it is converted into digital format. The actual books can stay in the classroom, while the content is saved on a student's computer.
4. Allows teachers to create an exciting way to educate students : With technology integrated to education, teachers can now incorporate images, videos and other graphics when delivering lessons. Specific websites, apps and programs will also enable teachers to vary how they provide instructions. This creates an exciting learning environment and promotes interest in education in general.
5. Encourages development of new teaching methods: Rather than spend an hour or so talking while the students listen, or have them read an entire chapter in silence, teachers and professors now have the option to use advanced teaching methods, such as podcasts, blogs and social media. When working with a particular group or one-on-one, teachers can take advantage of web conferencing technologies other online communication tools.

Technology also presents universal tools that enable teachers to educate all types of students, including those who are struggling or have special needs. These include voice recognition, text-to-speech converter, translator, volume control, word prediction software and other assistive technologies.

Limitations

1. Some of the technologies require expertise. A study was done to find whether augmented reality (AR) simulation aids or hinders teaching and learning. Like the Multi-user virtual environment (MUVE) interface that underlies internet games, AR is a good medium for immersive collaborative simulation. While the AR simulation were highly engaging, it simultaneously presented unique technological, managerial and cognitive challenges to teaching and learning.[3]
2. Results in lack of interest in studying: Students are likely to develop poor studying habits and a lazy attitude towards education because everything is now accessible online or through data save in a computer or mobile devices. Some of them may even think they can skip school because they can find answers and lessons online.
3. Makes students vulnerable to potential pitfalls: While computers prove to be an invaluable educational tool, it can also be a source of problems. This is especially true for students who lack the skills needed to maximize a device's functionalities. Technical problems and computer malfunctions can cause loss of assignments and other materials, resulting in high levels of stress that students would rather not experience.
4. Negative views on technology: Consumerism has taught us that technologies, from computers to mobile devices, are widely viewed as tools to entertain rather than educate. Textbooks, on the other hand, are seen as tools for learning. So, between a tablet and a textbook, students are likely to gravitate towards learning when reading a book, while they are likely to use a tablet to play games or spend time on social media.
5. Raise instructional challenges: For professors and teachers to stay abreast with technology, they may need to be retrained. Those who have been teaching all their lives using traditional methods may not be very susceptible to the changes being applied. They may even see it as a threat to their job security and shun technology altogether. In fact, a majority of teachers believe that constant use of digital technology is affecting a student's attention span and his ability to persevere when a challenging task is thrown his way. Although such belief is subjective, scholars, experts and teachers all agree that technology has changed the way students learn.
6. Can diminish overall value of in-person education: Although research on online learning did not establish a direct link to how personal interaction affects a student's performance, data gathered did show that those who enrolled in online courses have higher chances of failing, dropping out of classes, and are less likely to benefit from them. This may have something to do with the fact that lessons delivered online or through digital resources lack the face-to-face interaction between teacher and student that provides a more personal experience.
7. Access To Inappropriate Content :The biggest concern when it comes to the use of technology in schools is how easy pornographic, violent, and other inappropriate materials can be accessed and viewed. This could cause big problems if the material is shared with other students while in the classroom.
8. A Major Distraction: Attentiveness drops drastically in the classroom when students have their cell

phones or other technologies out. The focus shifts from their teacher and education, to whatever they are looking at, playing, or doing on their phones.

CONCLUSION

Integrating technology in education has its advantages and disadvantages, but proper implementation might help keep the drawbacks to a minimum. Better planning is essential.

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