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ADOPTION OF DIGITAL TECHNOLOGY IN EDUCATION TRANSFORMING PEDAGOGICAL STYLE

***Annotation.** The article deals with the concern, that the adoption of digital technologies in the educational sphere, is changing the pedagogical style or it hardly affects it. Researches of various authors in the past has been taken into consideration in the literature. A quantitative, descriptive analysis for the same has been analyzed and results were put forth to ascertain if, it is a fact that the adoption of digital technologies in education has changed the pedagogical style.*

***Keywords:** Digital technology, Education, Pedagogical, Teachers, Students*

ABSTRACT

This article shows efficiency of digital technologies in higher educational sector. Showcasing how effective is the adoption of digital technologies in higher education and how these digital tools are transforming the pedagogical style entirely or just to some fraction if not all. Technology and digital tools cannot survive in higher education industry if they are not blended together in a simple way transforming education with digital means whilst using teacher's support. In accordance to the traditional guidelines and educational requirements, the education sectors utilization of digital technologies in this sphere is incomplete unless, the digital education tools and teacher's contribution towards the students learning and development capabilities are not ascertained or determined. The article engages to the sector by outlining some of the theoretical aspects as well as offers recommended suggestions for effectively integrating digital technologies into teaching and learning which causes no concern about any diverse impact on the pedagogical style of teaching. The implementation of digital technologies in higher educational activities in (Latvia) itself proves the educational institutions are preparing their students for digitally learned workforce of the future. Digital learning itself comprises of a wide variety of programs and instructional methods, which has evolved into a new model of education with aspects like renewed infrastructure, professional teachers and subject developments, syllabus modification, digital textbooks, white boards, doc cams, projectors, software's and applications like Moodle, Panopto and Visible Body as well as digital libraries. The integration of information and communication technology (ICT) in education has opened a broad new way for the students to access huge amount of information available over internet and also from various digital libraries. The 21st century today demands an educational structure which caters to the demands and skills of the new generation in this digital age.

INTRODUCTION

The European Union's mission 2030 is to have professionals who are well versed in the field of digital economy as well as education. However, this alone is not the aim of EU alone but on a global level every country is striving towards digital literacy. Therefore, in order to achieve this, it is equally important to have an improved and improvised educational system if not all then at least at higher educational level. However, not to mention kids now a days are well versed with technology from a very tender age and incorporating such digital literacy levels at all spheres of educational sector such as primary, secondary, higher secondary and graduate level would eventually prepare a base for the students from the beginning (Makarova, 2018).

Digital technologies are basically considered as chargers of the lives of 21st century citizens. Educators and course designers have understood the incremental educational as well as training and

instructional potential of these digital technologies and have constantly been finding ways to harness it effectively. This particular article focuses on theoretical aspects that can be utilized towards properly harnessing the potential of digital technologies in education that eventually the end user that is, students are able to grasp without feeling the loss of the contemporary style of learning or loss in understanding (Makarova, 2018). It, further also focuses that the pedagogical style is being affected or not whilst the teachers or the trainers get along to use them in their daily life.

The increased stress on the use of digital technologies as a mode of instruction or teaching in educational institutions has left the teachers in a jiffy to understand whether the pedagogical style or approach or the digital tools are the reasons for student's performance. without even evaluating as to how beneficial digital technologies are for their students. To overcome this factor as to how analyze and evaluate the students, the teachers have to often try new things or experiment with the style or approach of teaching or training. In the heist to compensate the digital technologies equally with their skills the teachers have always been considered as the first end recipient and a medium of technology deliverers into education. As, they have to train themselves first with these technologies and then simultaneously apply their pedagogical styles in collaboration with the technology to instruct the students and make sure they happen to understand, learn and perform with the same. It is not hidden fact that education has come a long way and so has teaching by embracing, adopting to new technologies, concepts and methods such as from type writers to computers and from notebook writings to Learning Management Software type of platforms.

According to (Akbar, 2016) it is very crucial to ascertain the impact of the new technologies on the students and their response in adapting to or with it. The teachers have a job of understanding the learner's capabilities and accordingly utilize the digital tools to the style of teaching. It is never a good way to force the technology on the learner and in the meantime completely overlooking the pedagogical style that the learner was or is used to. There is however, a constant argument that if the students are not exposed to new digital tools how will they learn! However, it can be answered in many ways that the students entire aim is to get educated via the means of digital tools and whilst doing so he/she needs to get educated with the digital tools itself. However, it is not necessary to infuse whatever technologies available into the form of teaching and if the contemporary pedagogical style is much easier, faster, and simpler for the students it should not be pressed under by the load of digital technologies by the teachers or the institutions. As widely as it is argued that digital technologies in education poses new challenges for both teachers as well as students, the fact can never be overlooked these digital technologies have been widespread popular and continue with its form.

As per (Makarova, 2018), the author debates that the role of digitalization is to make sure the quality of education is improved and not diminished. However, having said that the technology is growing faster and every month, year or decade we see a huge change in the entire concept and methods. For example, a decade ago DVD's were used for educational files and videos, now they can be streamed online because of the faster quality of internet. Cell phones have come into a major role play where most of the information are available on the go and fingertip and apparently cellphones are also advancing every year in terms of technology. It is therefore very interesting to note the use of technology is done in order to raise the education quality and standard however with technologies getting older fast and new technologies or version taking over the old makes it practically impossible for the teachers or the organizations to stick to one form or mode of digital technology for a longer period of time and thus often seen that due to financial lacking many organizations still run the same old model or version of technologies which are now regarded as outdated and the students are forced to learn via same old principles thus creating a rift and compelling the educator or teacher or trainers continuously to change their pedagogical style as per the technologies changes and adoption into the education industry.

According to (Akbar, 2016), the digital technology in the higher education sector has progressed very fast and is being well anchored. Despite the complications these digital tools might tag along with them, they have still managed to create a great space for themselves in the education sector. During the current "Pandemic Covid-19" almost all the educational institutions were forced to go "ONLINE". Platforms, like Moodle, Talent type LMS (learning management Software)

became more popular and so did the video conferencing platforms like ZOOM or WEBEX meetings GOOGLE Meet and so on. Again, an instant change and the teachers were expected to learn from it as soon as possible since they have to teach the students in return and guide them. The teachers again have to mold their styles according to the online meets and take exams and quiz and test and even graduate defence presentation during these times. Here, again making the teachers switch the styles and switch it fast. Having, said this is only possible since the educators and learners were aware of these digital technologies in some way or the other, since online education is already very old and prominent, platforms like SKYPE were used before for long distance meets and software's like Panopto, were already used to record lectures which can be viewed later and Learning Management Software (LSM) like Moodle have made the transition easier if not complicated and tiresome.

The debate is about how efficiently the teachers can merge their pedagogical style with the changing technology (Lazar, 202). This balancing of pedagogical style with the technologies has always been a challenge for the teachers. However, as stated above it is very necessary to understand which digital technology merges well with the pedagogical style and how can the teacher maximize the acquired knowledge from it. This is also helpful when it comes to the understanding of the impact of external and brokering parameters that behave on the objective of acquiring digital means in the process of learning among students in higher education. There is one more factor in this sector and that is personal liking. For example, different students and teachers prefer different digital technologies accordingly and as per their grasping capability what they find best for them. Even the opinion on these digital technological tools differs from higher education students and teachers to primary or secondary grade levels as obviously the need and patterns are different.

Therefore, it is really important that the features of the digital technologies being adopted are unanimously supported and accepted by all the learning and the teaching pupils (Lazar, 202). To understand this various researchers have adopted different number of models and theories on the Acceptance of Information Technologies which is (IT), The Theory of Reasoned Action (TRA), The very popular Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Decomposed Theory of Planned Behavior (DTPB), Uses and Gratifications Theory (UGT), Unified Theory of Acceptance and Use of Technology (UTAUT), Innovation Diffusion Theory (IDT), Expectation-Confirmation Theory (ECT) and others.

MATERIALS AND METHODS

As per the author the reason why digital learning is gaining its popularity is because it caters an exclusive component that is the ability to personalize learning process through possible custom creation of learning channels for the learner. The structuring of multiple learning channels is not necessarily having to do with a learner in isolation, but rather a visible collaboration as well as giving an opportunity to the learner for constructing their own understanding and knowledge. The channel designed should facilitate a learner to maneuver through the online course materials in a such a way that it suffices its needs and at the same time promotes social interaction and in sharing of knowledge and individual experience.

For the modern day education, special training of staff is a must, because if the staff or teachers are trained they can further harness all the potential from the digital technologies adopted by the organization, school, college etc. On the basis of the skills as well as the understanding of the tutor's capabilities, the digital technologies are infused into the educational sector gradually. As mentioned above the digital technology is designed in a way that it corresponds the contemporary or traditional pedagogical style. Usually, it is seen that, in the case of open education, the teacher not only imparts the education by interpreting the information and knowledge in a much understandable manner and pattern, but also personally foresee the activity of the students to grasp this information. The teacher's role is not only limited to make the student understand the information but also to answer questions in real time arising by the curiosity or understanding. The digital learning model is designed in somewhere close in consideration with open style teaching and a graphical representation that will enable the learner to see their progress, while through the same

graphical interface the teacher can monitor the statistical progress of an individual learner or an entire group as shown in figure 1, below:

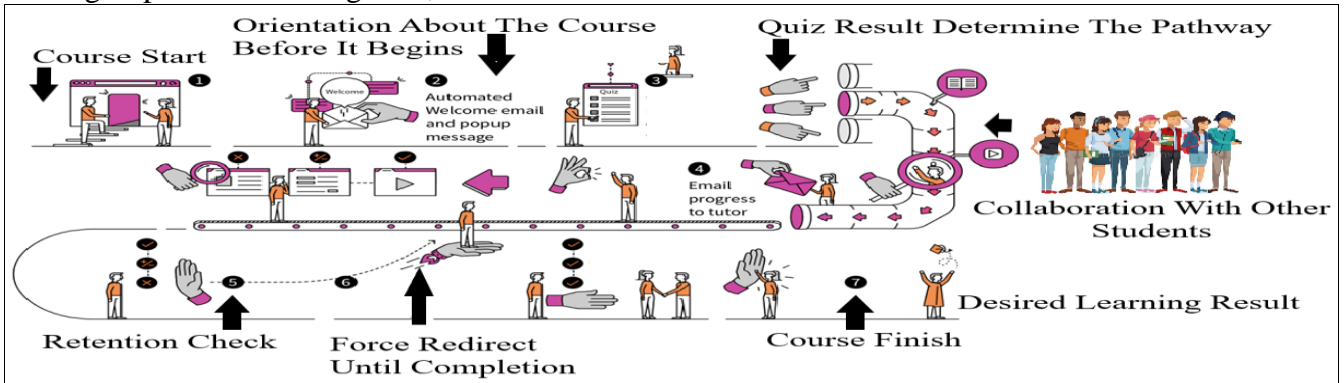


Fig.1. A digital teaching & learning path map (Whitmer, 2016)

RESULTS

The analysis of the research experiment on the impact of digital technologies affecting the pedagogical style was carried out in the process of questioning, interviews, and observations during class periods, seminars and examinations. Furthermore, it was also analyzed on context of Learning and understanding outcomes and examining the main ability growth. To analyze the impact of the adoption of digital technology on the pedagogical style, a questionnaire specifically designed according to theme was prepared and distributed to number of 228 students enrolled in the higher education sector of the college. Further, interview was conducted with 2 teachers engaged in the designing of courses and teaching them. The analysis of the information gathered states that the majority of students find that prominent digital tools adopted are complicated and would prefer it to be changed to its simplest form. As Moodle is the main form of digital tool/ technology in the college, where the authors research was carried out students reported that it is too complex for them to understand. Further, teachers interview revealed that the adoption of digital technologies has hugely impacted their pedagogical style as they need to be constantly trained and learned with the latest versions or tools being incorporated in education. This was not the case before since teachers were only concerned with teaching but, now they have to design course, monitor performances, learn the digital technologies and teach the same to the students and use it to teach them at the same time (fig 2).

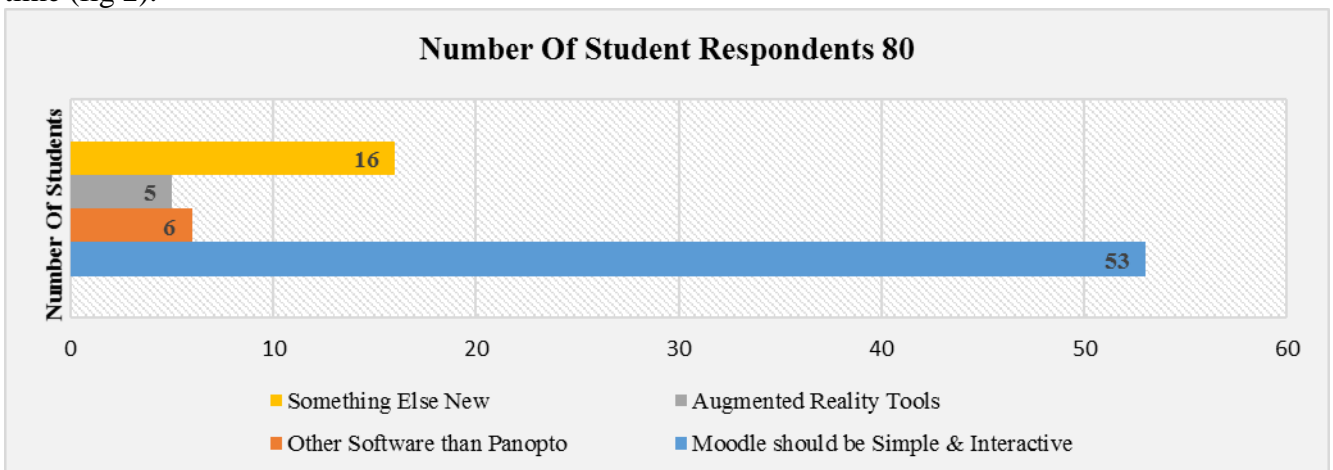


Fig 2. Students perspective on what changes they feel is necessary in the current Digital Learning Tools & Practices

CONCLUSION & RECOMMENDATIONS

The adopting of “Digital Technologies” in education does impact the pedagogical style as the tutor or teacher is compelled to constantly change to various new technologies and adapt to them accordingly. Further, adoption of digital technologies is a costly affair. Not every educational institution is in the financial capacity to adopt it as technology keeps changing and upgradation of the Digital tools and devices is mandatory to facilitate new generation software’s and programs. Also it can be concluded that there is “No Replacement for Teachers”. As per the student’s

perspectives and the analysis done it is very clear that students in demand the need and presence of a personal touch.

In recommendation the author suggest that in the heist of implementing new technologies the organizations often tend to forget that the real outcome is education. As the analysis reveal that students almost 53% find the current course design difficult to understand wants it to be changed. Therefore, the college must reorganize its academic staff and understand if proper training is being provided to them so that they can design the course and materials in a more interactive, understanding and adaptable way.

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