

THE IMPORTANCE OF TECHNOLOGICAL MEANS IN THE MODERN EDUCATION SYSTEM

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ANNOTATION: The evidence in this paper shows that technology has a positive effect on student learning expectations and outcomes. Evidence also shows that technology integration is becoming more common in public and private schools. Technology integration is shown to be effective in all age groups and is also shown to be helpful for students with special learning needs.

KEY WORDS: technology, education system, learning styles, auditory, visual, kinesthetic and reading/writing learners.

Nowadays, humanity cannot imagine their life without electrical appliances or technologies since it has being used all parts and spheres of life. Electrical tools can be used effectively in education system too. Children are interested in visual aids according to their learning characteristics. Because, visual learners can learn efficiently by watching the pictures or videos. Kinesthetic or tactile learners are good at participating role plays and touching the things that they are going to learn while auditory learners are good at learning by listening and they are good at differentiating voice and tone. Moreover, visual learners are better able to retain information when it's presented to them in a graphic depiction, such as arrows, charts, diagrams, symbols, and more. Similar to how designers use visual hierarchy to emphasize specific design elements, visual learners thrive with clear pictures of information hierarchy and auditory learners sometimes referred to as "aural" learners, auditory learners prefer listening to information that is presented to them vocally. These learners work well in group settings where vocal collaboration is present and may enjoy reading aloud to themselves, too.

Reading & Writing - focusing on the written word, reading and writing learners succeed with written information on worksheets, presentations, and other text-heavy resources. These learners are note-takers and perform strongly when they can reference written text. Kinesthetic learners taking a physically active role, kinesthetic learners are hands-on and thrive when engaging all of their senses during course work. These learners tend to work well in scientific studies due to the hands-on lab component of the course.

According to Prensky, (2008) technology can improve teaching and learning process through different ways, for instance: with greater enthusiasm by learners, enriched communication skills, assessable to learners of all levels and capabilities, excellent research tool, good assessment tools, better preparation of students for education. Computer science is a domain that always has grand expectations when it comes to producing positive outcomes and hence it faces immense pressure to adapt and evolve regularly. In the Computer science program, it is a teacher's responsibility to motivate students to identify different resources, research centers, and databases for infotainment applications. In lesson planning, teachers should use a wide range of audio videos aids and help students in order to determine themselves the skills, knowledge, and sources which are required for the completion of the learning process. A teacher should integrate sources and research skills in proper lessons for students that are based on practical labs, projects, and assignments because it is essential for the students of computer science to clarify the theoretical concepts of computer science through practical implementation. Practical skills can help learners to create the capabilities required for the present globalization. Melhuish, and Falloon, (2010) stated that to keep up with the rapid developments (e.g., development of cloud-based computing supports, M-learning), the citizens of information-age societies are expected to possess certain qualities. critical thinking, problem-solving ability, collaborating with others, communicative ability, ability to make use of different technological tools, the courage to strike novel ideas, and the determination to give rise to diversity in different learning situations. According to Alves, Schmidt, Carthcat, and Hostins, (2015), technology provides a wide spectrum to learn and possesses an enormous power to alter traditional pedagogical environments. [1.17]

Technology has been a growing force in education, business, and private life of humans. According to Laferrière Hamel and Searson (2013), the technology used in the area of education is a blend of procedures and various tools that work together and portray the growing needs for ICT. According to Kim and Kim (2017), students find the use of technology particularly helpful when it relates directly to their course. or when they are learning about abstract concepts. However, integrating technology into classrooms for reaching new goals related to education often challenges teachers with potential difficulties because of the limited policy and pedagogical support (Kumbargoudar, 2013). According to Chen et al. (2009), incorporating technology and making it part of the educational environment is one of the foremost responsibilities of educators and instructors. Vanderlinde and Van Braak, (2011) articulated three main directions to bring novelty into the education system 1) to make use of the content that can be acclimatized 2) to integrate different teaching skills 3) to get rid of age-old concepts. The modern requirement to question the insights has been stressed by many scholars. The authors emphasized that cognizance from the people who are the users of new technological tools is important for forecasting the efficiency of incorporation in educational setups. Not only this but the educators' perceptions and insights towards creativity should be observed. Clark et al. (2013) drew the conclusion that incorporating creative technological tools in the educational setups automatically calls for the educators to learn new skills and practices related to it. Karsenti et al. (2013) stated that it has been identified that numerous educators and instructors only use the technological tools to present the material in a digital form and barely focus its intellectually nurturing approach. Karsenti and Fievez, (2013) survey showed that prior to the experimental program 70.2% of teachers had never or very rarely' used any kind of technological tool. It also showed that 14.5% had used ICT in the class 'sometimes' and 15.2% regularly used technological tools in class. The abovementioned facts bring to light the importance of equipping the teachers with effective methods with which they can add technological tools into their teaching routine.

Technology has a positive impact on student learning. Technology causes students to be more engaged; thus, students often retain more information. Because of the arrival of new technologies rapidly occurring globally, technology is relevant to the students. Technology provides meaningful learning experiences. Technology also provides hands-on learning opportunities that can be integrated into all school curricular areas, including mathematics, 3 reading, science, and social studies as well as other academic subjects. It gives students opportunities to collaborate with their peers resulting in learning from each other. These factors combined can lead to a positive impact on student learning and motivation.

Another reason technology is a factor improving learning is the fact that technology is becoming such an integral part of our everyday world. Most jobs today require some type of technology use. Also, students and adults are using technology on a daily basis to communicate, get information in multiple ways. The prevalent daily use of technology in people's lives overall makes the use of technology very relevant to the students and provides a connection that will greatly benefit student learning. Using computers and the internet has become an integral part of our daily lives. Therefore, one of the greatest vehicles for the 21st century is using technology for effective and permanent learning. The internet affects peoples' lives by increasing communication, expanding educational services, and increasing quality along with personal interaction. The internet is being used as a source for teaching material. Providing information and communication technologies for teaching and learning will have some advantages. First, the students will play a more active role, which will help them retain more information. Next, follow-up discussions will contain more detail where students will become more independent. Last, the students will easily process new student-based educational material and their skills will increase.

Technology is capable of unlocking keys of learning with all students. This includes students with special learning needs. The Etiwanda School District in California has implemented a technology integration program district wide. Teachers received technology training and then began integrating technology into general education lessons on a daily basis. This program also included a practical technology support plan for teachers working with students with special needs. This plan enabled teachers to help these students by weaving technology resources into instruction in meaningful ways. [2.9] All in all, the effective use of digital learning tools in classrooms can increase student engagement, help teachers improve their lesson plans, and facilitate personalized learning. It also helps students build essential 21st-century skills.

REFERENCES:

1. Qurat-ul Ain, Muhammad Aleem, Arshad Islam, Muhammad Azhar Iqbal. A Review of Technological Tools in Teaching and Learning Computer Science. Article in Eurasia Journal of Mathematics, Science and Technology Education · May 2019 DOI: 10.29333/ejmste/109611. <https://www.researchgate.net/publication/333335199>
2. Kevin C. Costley, Ph.D. Associate Professor of Curriculum & Instruction Arkansas Tech University kcostley@atu.edu, The Positive Effects of Technology on Teaching and Student Learning, October 30, 2014
3. Rajapova Malika, ISSN: 2249-7137 Vol. 11, Issue 3, March 2021 Impact Factor: SJIF 2021 = 7.492 ACADEMICIA: An International Multidisciplinary Research Journal <https://saarj.com> ACADEMICIA
4. Rajapova M. A. The usage of cognitive metaphor and allegory in discourse. “Экономика и социум” №1 (80) ч 1ю 2021ю www.iupr.ru
5. Açıklan, M. (2009). Pre-service elementary teachers' beliefs about use of the Internet in the social studies classroom. European Journal of Teacher Education, 32(3), 305-320. doi:10.1080/02619760802553030
6. Baytak, A., Tarman, B., & Ayas, C. (2011). Experiencing technology integration in education: children's perceptions. International Electronic Journal of Elementary Education, 3(2), 139-151.