Improving Critical Thinking by Using Technology in the Learning Process

Kleada Agasi

Kleada AGASI, University of Tirana,
Department of Foreign Languages,
Albania

Abstract

Learning is the process that constructs knowledge and intends the enrichment of pupils with knowledge in the correct form. Learning a foreign language is important because in addition to the fact that gains knowledge, the fact that it is a subject that also requires vocabulary study that can be of different meanings. One of the rubrics of thinking about the^^^^ text meaning in a foreign language is reading session. Reading is an activity that brings a lot of benefits in children improvement. While reading a text it is connected to critical thinking developed skills, on the other hand, it includes a multitude of complex abilities. Teachers aim at improving pupils' results, and technology is the means by which helps accomplishing this aim. Manifesting their competences during lesson hours teachers should gain the competences in order to make pupils more capable and prepared in nowadays technological environments. Furthermore, using technology during lesson hours make the job easier for the teacher and more manageable. Technology often is considered a distraction and may defocus the pupils from the lesson hour but during these lessons pupils feel more involved and wants to participate and contribute actively. There are different means and applications that are considered effective and are of great importance during lesson hours. Some of them are smart boards, projectors, computers, tablets and applications like those on the web or those that can be downloaded. The usage of technology in all its forms can convert boring traditional classrooms in interactive and interesting ones. Based on different styles of learning, fitting to their style accordingly can make easier for pupils to learn. These new means of learning can diversify your learning mode. During technological learning hours there is a higher frequency of collaboration between pupils that makes the process more dynamic. Tasks that can be realized by using technology are of multi-tasking dimension and this can trigger in the pupil the curiosity to learn more from their teachers and peers. In addition to that it can make possible the creation of small groups of pupils where more technologically advanced pupils can help and guide less experienced pupils. The variety of activities of educational technology that is available today offers students a wide range of choices from which they can choose the right ones for their learning needs. It helps develop the right abilities, skills and knowledge in order to develop their knowledge in a certain field. Vital to students' academic success are certain elements interconnected like communication between peers, teachers and parents. Technology usage during lesson hours in your classrooms creates at the same time space for students to have an active role during their learning process. Students can become more competent and responsible to be independent in their learning by giving their impressions and opinions, participating in group work during their learning in smart boards or pc-s or during learning through applications and online classrooms giving each individual space and support to learn and use technological means effectively, creatively without problems while using them and learning from them. Learning through technology can make access to information very easy, faster as a process, and funny ways to practice what is learned. It can bring pupils different information that they have to categorize and select from the broad array of information that often can be not correct and pupils have to work on it and get what's correct. New technological means Technology will undoubtedly continue to evolve, and it's important to adjust your classroom style to align with its advancements. It enables students to explore new subjects and deepen their understanding of difficult concepts, particularly in the process of analysis. By using technology inside and outside the classroom, students can possess the century skills in digitalization and knowledge necessary for future occupations. The purpose of the study is to help develop reading comprehension by using technological aids and to determine some teaching apps and techniques focused on reading comprehension and the stimulation of critical thinking that can be manifested in writing and affects intellectual development of students forming intellectual and cooperative individuals. There are different activities that can be used in order to be effective as a teacher during lesson hours. One activity is creating digital content showed on smart boards related to the knowledge they are learning that is a great way for students to display their individual creativity abilities as well as productive learning. Like any other organized project, the process of creating content is expected to be more effective when pupils are capable to express themselves in ways that highlight and accommodate their personal strengths and learning styles as well as communication type. Pupils already spend most of the time on social media that occupies most of their time and the creative idea of intertwining its use into our classroom lessons that is one of the most innovative methods used in technology, in the classroom through combining students to curriculum, classroom resources, and one another. Incorporating diverse stuff like videos, photos, and audio material in different presentations, slideshows or digital presentations by incorporating music or explanations so using different elements of teaching simultaneously. The usage of slideshows and digital presentations and playing music or a video for background and context while presenting what's meant to learn, or inviting virtual guest speakers to engage with your class via programs designed for conference calls, such as Skype and Google Hangouts are all creative and funny digital ways to affect in engagement with lessons. Learning to encourage and support students working at their own pace and providing with the useful information. In the case a pupil finishes an assignment earlier, rather than being stuck waiting for other pupils to catch up or class to finish, pupils can develop and enhance their learning by visiting a learning digital material and watch videos, playing learning-task-based activities or games, or exploring other digital online activities related to their field of study. There are also other popular, useful, and no-cost tools for teachers searching for new ways to use technology in the classroom like taking digital field trips. Applications like Google Streetview and other similar apps allow pupils to virtually and in interesting way explore parks, forests, and even national and international landmarks from the comfort of your own classroom. Teachers can use also google calendar in order to plan in a scheduled way what can be done by developing a shared online calendar for all classroom pupils through Google Calendar or a similar program for posting important dates and update to recent information. The research method that was used is the quantitative and qualitative research method such as interview with teachers of 9-th grade and 8-th grade in Vore Albania, online and by observing 9-th grade pupils' learning during digital learning classes. The questionnaires were done from students and teachers from different schools with different achievements. Despite the challenges and concerns, it's important to note the benefits of technology in education, including increased collaboration and communication, improved quality of education, and engaging lessons that help spark imagination and a search for knowledge in students. A contribution in this study are these suggestions regarding the applications and techniques that encourage critical thinking and, in particular, apps that will have a result and the various recommendations from teachers who succeeded in teaching in classes with difficulties in reading.

Keywords: *Teaching, critical thinking, guided reading, technique, method*

1. Introduction

The history of the use of technology in teaching dates not too early in time and certainly does not have its origins at the time when computers appeared, at least not formally, but its impact was immediate and very important since it was integrated in a time of pandemic global and with immediate intensity.

The beginnings of the use of technology in teaching begins with an overview of the use of technology as a communication tool and then as a teaching tool in education and how it has changed over time with its development over the years, continuing with the teaching tools that are used. In the 1980s, digital technology first established itself as a means of communication and slowly became an irrevocable tool in education in the United States. The consequences of this change were immediately reflected in schools, most of which were equipped with computers for the ability to use this device and the learning effect. During the 1990s, the expansion of the World Wide Web immediately provided an immediate and powerful impact on what would normally have been high expectations and provided a glimpse of what computers were capable of. conveyed. With the passage of time, technology in education spread excessively, being reflected in the existence of different devices with different functions. There is a large array of devices that can be used as teaching aids in education. These devices range from smart boards, projectors, computers and printers that perform a variety of functions and greatly facilitate the learning process, and moreover, phones are also considered important learning tools that bring innovation to the learning process. . Bringing these diverse devices into focus created innovations and the presentation of new methods in teaching and learning. Over the years there has been an increase in different applications and with different effects further enriching teaching and learning. Over the years, these devices and their use were further perfected. In various countries such as, for example, the United Kingdom during the 2000s its National Curriculum was updated with the aim that Information Communication Technology (ICT) should be included in all offices and learning environments for pupils and students and integrated as element of considerable importance. At the beginning of the millennium, digital-based technology spread more widely in education and extended to many fields of study, focusing not only on the fact of learning to use computers but also on their use in the development of acquired knowledge. from books. An innovation of great importance occurred in the early 2000s and they were interactive whiteboards with different functions and rich activity content. After this innovation, other devices enriched teaching with other effective tools such as portable ones such as computers and laptops of various types to handheld devices that have their beginnings in the 2010s that reflected an even more sophisticated software for teachers, students and educators that would result in improvement of teaching.[1]

Learning technology is an umbrella term that describes communication, information and technological tools used to enhance learning, teaching and assessment. This may include computer-based learning or multimedia materials used to supplement classroom activities. Major categories of learning technology tools include tutorials, simulations, productivity tools, communication tools such as email, google classroom, and other widely used platforms. Tutorials teach new concepts in a structured format where simulations model an experiment or scenario. Productivity tools may include word processors and spreadsheets, although they are not necessarily designed for educational purposes and are used in common places of work.[2]

Learning is an early and fundamental process in the education of a society. Teaching over the years was enriched by the use of digital tools and turned them into a function of the professional and academic development of students.

Teachers include in their teaching a wide range of tools and mainly digital media which made the lesson more varied and interactive. Teachers conceive of teaching through technology as a tool that would help them achieve their teaching and learning goals. The aim of digital teaching according to teachers is to help students to be more responsible for themselves, to serve in their further individual and collaborative skills and to empower students to participate in learning of higher level thinking and the use of knowledge in the social environment, i.e. beyond classroom.[3]

The impact of technology in education is beyond preconceived expectations, it has influenced not only how, where and when students learn, equipping them with the necessary knowledge for every phase of their studies. With the digital educational revolution, students gained learning independence and self-study skills, preparing them for a dynamic digital future. Enabling access to the wide world of online information beyond school hours enables the preparation of students

---

[1] *Class VR, Use of Technology in Education: A Complete Guide. N.n, N.d,*
https://www.classvr.com/blog/use-of-technology-in-education-a-complete-guide/

[2] *Top Hat, glossary, Learning Technology, N.n,n.d,*
https://tophat.com/glossary/l/learning-technology/

[3] *Glossary, Learning Technology,.*
https://tophat.com/glossary/l/learning-technology/

both academically and socially and psychologically, creating creative, critical individuals capable of working in groups. Investing in creating a classroom where technology is used creates in students the desire to value and use it more technology.[4]

The preparation of students using technology aims to go beyond the teaching preparation of basic and supplementary subjects. All this is intended to be realized by the wide range of digital learning devices available to students that prepare them in many directions starting from the individual to the career, preparing them with technical skills to be capable today and in the future. Students are offered many opportunities through technology and one of them is calculations in Excel, the use of Microsoft Word and PowerPoint, but we cannot leave without mentioning coding and programming in a simple way. Preparing them in advance in theory or practice gives them more choices in their future work and skills for jobs that have yet to be created. Over the years, the aforementioned skills may become common requirements in the working force.[5]

2. Technology in Education

With the development of technology, the amount of information became unstoppable and instantaneous from a number of diverse sources. The possibility of accessing information online provides the required information in the field of IT, medicine, history, etc. Information can be contemporary and difficult to find in physical bookstores, all made possible by digital means. Below we present some examples of technological tools with which students can use technology during learning lessons.[6]

The so-called smart board is one of the most effective tools built from a large screen built with many functions and usable for all teaching subjects. They have a number of study uses, on these smart touch screens they can present the lesson of the day and on the other hand they can be connected to other devices to practice with varied exercises, surveys or quizzes. On these smart screens, access to digital libraries is possible very easily, including a wide range of data such as e-books, scientific and non-scientific articles, magazines and diverse content that facilitates the classroom. Another tool is online platforms such as LMS and OER which enable much needed teacher-student communication by facilitating the transfer of information from teacher to student in real time and in the right form. In these platforms can be completed even exercises.[7]

3. Digital Skills Needed to be Developed

The improvement of technology and technological tools has not stopped, being reflected in the labor market and in the various requirements that can be listed in such a way that the development is reflected not only in the educational aspect, but also in other work environments, increasing the standards in many directions. They are exposed to these tools and trained from their simple use, document storage, material processing to processing of photos, videos and various teaching audios. Literacy is also very important in enabling students to navigate digital platforms and use them for studies. An efficient way of teaching is to integrate it into the regular curriculum and during the various activities that take place by increasing online collaboration and their learning improvement. Through technology, in addition to accessing knowledge, it is possible to organize it properly and, moreover, to analyze large amounts of data. On the other hand, teachers must access large amounts of data and process them to use in practice in their work to be productive in their work. During the lessons, the teacher informs the students, guides them and encourages them with management information techniques.[8] Integrating technology into teaching makes it possible to expose students to innovations and different digital platforms. This enables them to be able to adapt to the new rubrics and become flexible in the use of diverse technologies and innovations in new programs. Students have the opportunity to use digital tools to discuss

---

[4] *Intel, The Importance of Technology in Education,N.n, N.d,*

https://www.intel.com/content/www/us/en/education/technology-in-education-for-learning-and-teaching.html

[5] *A 360º Approach to Student Success, Technology in Education,*

https://www.intel.com/content/www/us/en/education/technology-in-education-for-learning-and-teaching.html

[6] *7 Reasons Why Students Need Technology in the Classroom. May 29, 2023*

https://explorance.com/blog/7-reasons-students-need-technology-classroom/

[7] *Use of Technology in Education: A Complete Guide, June 27th 2023,*

https://www.classvr.com/blog/use-of-technology-in-education-a-complete-guide/

[8] *Center for Innovation in Teaching & Learning ,Center for Innovation in Teaching & Learning, N.n, N.d*

https://citl.illinois.edu/citl-101/teaching-learning/resources/classroom-environment/motivating-students

topics teaching and create presentations using a variety of photos, videos, audio and other materials. These are skills that are highly sought after in various enterprises that bring innovative things to work. Another benefit is that they offer a variety of functionalities that create collaborative work in groups of individuals. There are a number of applications that facilitate communication such as Zoom, Microsoft Teams, Slack and Skype that allow students to hold virtual meetings with other students and their teachers. Group work through various applications facilitates work due to the fact that it creates the conditions for cooperation and the fact that most of the work takes place online and help is possible for all members of the group. The ability to work in a group is the most sought-after skill in the workplace. Skills consist of solving problems, i.e. critical thinking, to making important decisions.[9]

During the online learning process, many difficulties emerge and many important skills are developed in the student, such as patience to complete the assigned task, adaptability where the student tries to properly fit the right solutions in the exercises, and a very important part is being creative which is a very good quality in academic growth and necessary to develop in this dynamic digital environment. Since a problem can have many solutions, this makes it possible and helps to practice problem solving through modeling, simulation, etc. Clearly defining what knowledge they possess and what they are expected to learn to solve a problem that can be disciplinary, interdisciplinary or real-world that can be solved by detailed analysis. Through systematic thinking, collaboration, and detailed information, solving complex problems is achieved. By breaking down real world problems into small manageable problems where we can integrate practical solutions and existing procedures. The use during the lessons of different figures, different diagrams and different audio enables a better absorption of the theoretical part of the lesson, enabling solutions in appointed situation.[10]

4. Methodology

The research methodology for gathering information in this research is based on the study of literature and different teaching practices in the 9-year school in Shijak, M. Dollaku, mainly the 8th and 9th grades, as well as interviews with 9-year-old school teachers and assistants who have worked in classrooms with students using technology such as computers, projectors and tablets during developed teaching hours. The teachers were interviewed on the way of developing the lessons by combining technology in teaching and the applications used by the teacher during the lessons with the aim of involving the students, improving their achievements and also their behavior which is expected in the development of critical thinking and increasing problem-solving skills. The study focuses on the current situation as a current analysis to understand how much technology is used in classrooms and how much teachers think about the successful implementation of teaching with technological tools, what difficulties they encounter during teaching. One of the questions developed is related to the use of technology during their lessons?

Based on teacher responses more than 80% of teachers used technology during lessons using audio-visual materials to facilitate teaching. About 20% of the teachers stated that they developed it using didactic tools and digital tools such as the phone, instead of interactive tables. Based on developed observations we noticed that teachers use technology during l^+essons combining it with slightly complicated lessons and this makes it easier for them during lessons and the acquisition of learning and different learning topics. Students feel freer and have greater opportunities for cooperation, lessons become easier and more understandable. Their activation is more frequent and they express great happiness during these lessons. The applications used are many, but we mainly have Microsoft word, Excel, PowerPoint and Google classes.

5. Conclusion

A contribution of this study is the suggestions regarding the use of technology in teaching and various applications that promote critical thinking and respectively guided reading will have a result during this study and various recommendations from teachers who have been successful in teaching in classrooms using technology. Technology in teaching has proven to be very productive in the progress of effective and efficient teaching. Moreover, the use of different applications facilitates learning and makes it more efficient. Student-centered teaching is an extremely important method in the smooth running of the lesson.

---

[9] *Learning.com, Nov 2022, Portland*
https://www.learning.com/blog/important-digital-skills-students/
[10] *7 Reasons Why Students Need Technology in the Classroom. May 29, 2023*
https://explorance.com/blog/7-reasons-students-need-technology-classroom/

Most teachers use technology extensively and know its importance in favor of their teaching. They are more engaged through its use, which affects these students by encouraging them to analyze the content of a text more carefully and in detail. From the questionnaires carried out, it was observed that teachers use different applications and different digital methods adapted depending on the student's capacity and their interests to improve students in critical thinking. In this way, the mindset of creating a learning environment is created where different perspectives of thinking are developed and, in this way, they are developed in different dimensions.

From the conducted interviews, it was found that the teachers understood the importance of using technological tools in order to develop critical thinking and the effect it has on improving learning and the formation of independent and social children, influencing the successful achievement of predetermined competencies. It is expected that in the future we will focus on the step-by-step analysis of the implementation of digital tools in the future. Success in inclusive teaching affects teachers' well-being and makes them more optimistic in using different strategies to improve teaching and learning.

References

A 360º Approach to Student Success, Technology in Education, https://www.intel.com/content/www/us/en/education/technology-in-education-for-learning-and-teaching.html

Glossary, Learning Technology,. https://tophat.com/glossary/l/learning-technology/Intel, The Importance of Technology in Education, N.n, N.d, https://www.intel.com/content/www/us/en/education/technology-in-education-for-learning-and-teaching.html

Learning.com, Nov 2022, Portland https://www.learning.com/blog/important-digital-skills-students/

7 Reasons Why Students Need Technology in the Classroom. May 29, 2023 https://explorance.com/blog/7-reasons-students-need-technology-classroom/

Use of Technology in Education: A Complete Guide, June 27th 2023, https://www.classvr.com/blog/use-of-technology-in-education-a-complete-guide/