

# Innovation Technology in Education, Impact on student performance

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## Abstract

*There are many different ways of looking technology influence in Education there are advancements and disadvantage.*

*Technology promotes independent learning in students the internet is a treasure trove of information. Preparation of students for the future from the way technological advancements are ongoing, it is obvious that the future will be digital and technology-focused.*

*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.*

*The future of various technologies for both professional and educational use, coupled with some viable research fields, is examined. Teachers create an exciting way to educate students when the only tools for teaching are limitation to books, a blackboard or whiteboard, and a chalk or markers, innovation in technology encourages development of new teaching methods.*

*Some of the advantage and disadvantage of technology in education is the lack of interests in study because everything is now accessible online or through data saved in a computer or mobile devices or the overloud information that students have nowadays. Makes students vulnerable to potential pitfalls while computers prove to be an invaluable educational tool?*

*The main objective of the article is to examine technologies as well as explore the evolution of the usage from personal utilization to the educational tools as well as examine the critical educational applications for which these are utilized. Necessary research is analyzed and examined.*

**Keywords:** technology, education, students, methods, innovation, learning.

## **INTRODUCTION**

Several new technologies for communication have arisen in the recent years, which have been primarily intended for both recreation and personal use. However, these technologies have made them viable options for knowledge-based and education learning applications. The technologies that are given discussed in this paper include podcasts, blogs, instant messaging, live video chats, wikis, student portals, and simulation applications. A discussion of different technologies as well as their usages, the underlying cognitive psychology and educational theories, and also education application, as well as knowledge management, are scrutinized.

For a long period, the medium applied in education has remained constant as well as traditional: the tested and true techniques like flipcharts, chalk, whiteboards, overhead projectors, and blackboards. The application of different computing technologies has led to the usage of web portals, emails, and PowerPoint. There have been many research papers done concerning the usage of the technology within a class, coupled with work on correlated parts of online learning as well as e-learning. The application of the technologies in education has been studied in many types of research, and there is enormous work on both online and web learning. Particularly, some of these technologies are very useful within class work and they have been applied in a very innovative style. These technologies of certain interest are those who are regarded as conversation technologies that make it possible to create as well as share a wide range of information. The other term which is applied for describing these technologies is constructivist learning tools that are focused on end-users when developing or creating their content. The urge to use these technologies originates from the distinct pedagogical advantages gained. Also, they stem from the need to stay up to date with the strength of modern students. The modern students are different from what the old education systems were intended to teach, and today's students can be referred to as the digital natives. On the other hand, numerous educators can be termed as immigrants to the digital world. The other way to perceive this is to look at the past educational methods as print-based, while the modern platform can be termed as digitally-based (Collins & Halverson, 2018).

The main objective is to examine these technologies as well as explore the evolution of the usage from personal utilization to the educational tools as well as examine the critical educational applications for which these are utilized. Necessary research is analyzed and examined. The future of various technologies for both professional and educational use, coupled with some viable research fields, is examined.

### **Constructivist Learning Tools and Conversational Technologies**

The idea of the conversational technologies is not quite new, as entails numerous systems which have been largely utilized for quite some time, including video conferencing, discussion forums as well as emails. Among the critical concepts of the conversation technology and is that the markets are conversations and knowledge is usually developed and shared using a dialogue of questions and answers (Tondeur et al., 2017). Some studies which are related to this kind of conversational knowledge management advocate abstraction and aggregation of the information usually helps in creating information. Other features on the conversation knowledge management comprise the fact that it is fairly fast, stored numerous locations, and does not require complex technologies to be achieved.

The conversation technologies entail numerous software and systems, the majority of which are quite familiar like, web pages, audio streaming, video streaming, emails, wikis, weblogs, and instant messaging. These technologies are a bit new and have grown many users and are beginning to be recognized as viable education tools.

It is not likely that there would be numerous college learners who are not familiar with the utilization of IM. Enabling real-time and interactive communications with some instant responses, the instant messenger is conversational in that; it makes it possible for communication and chats among groups and individuals. The most popular instant messaging platforms include Yahoo message and MSN messenger. With IM, people can communicate or chat in real-time. IM has been accepted as a way of communication in the business environment and today (Marzilli et al., 2014). It has been tested and studied as a tool for education. The key characteristics of IM include its capability and synchronous nature for supporting phone-like and chats interaction. Where real-time interactions facilitate rapid communications to happen.

The blogs were created as a way for expressive people to post some online records of themselves. Complete with photos and posts, these blogs were an online diary or narrative of an individual with opinions, events, and stories. While its initial usage was purely for personal use, recently, their efficiency as an educational tool has been discovered together with its utilization as an extension of learning logs that are developed online. The aspect of learning logs has been using before the arrival of the weblog. The concept of this is to allow people to document their learning and also to perform some key reflection as well as self-analysis (Papadakis, 2016). The utilization of a learning journal and a log is correlated to action research learning methods as well as the attempts to relate the past knowledge and the newly learned information. The blogs are an extension of learning journals and logs because they are electronic and can easily be made available. The utilization of weblogs as tools for education provides the advantages of increased sharing of information, enhanced instructors review and monitoring as well as simplified information publication. The utilization of blogs has been expanding, and the number is always increasing. The growth in this field is predicted to increase in the future.

Wiki technology has emerged. This technology allows for enhanced partnership compared to the Weblogs. Whereas the main emphasis of weblogs is creating a number of pages as well as documents mainly be one person, the wiki's strength is the capability for various interested users and readers to express their ideas online, modify the work published by other people, send or receive concepts as well as post different links to related websites and resources. Due to this, Wikis took an extra step to allow greater interactivity and collaboration. Wikis have a value for educational goals, and their usage has begun to be incorporated into several higher learning institutions courses (Fidalgo-Blanco, Sein-Echaluce & García-Peñalvo, 2014).

A podcast is usually iPod and broadcast combined, but it does not necessarily need an iPod and broadcasts information to the end-users. The podcasts are digital files that are downloadable to the user as per their subscription. An instructor can create a podcast for the students. On the other hand, the students can create an assignment as a podcast file. Education is a field where the podcast's power has been greatly utilized. As some higher learning institutions, the various courses are being provided in podcasts.

## **Covid-19 and the evolvement of online learning**

The Covid-19 pandemic has particularly hit the education sector, and learning activities all over the world have been disrupted with over 1.53 billion students out of school after worldwide school closures. The pandemic has impacted 87.6% of the total enrolled learners around the world (Anguiano et al., 2020). Even though other life-threatening needs like healthiness, water, and hygiene have received serious concerns. They have been retorted to instructive requirements cannot be overlooked since they as well have a similarly disadvantageous effect if not unaddressed. Since learners are required to continue with their education while at home, various issues such as monitoring of students' learning process, examinations, online interactions or group learning, data and privacy issues, and access to educational material have been a challenge to teachers, learners, as well as parents. The government should provide a consistent, equal, and uniform platform that should be used by teachers and learners in a particular country.

Many governments around the world have encouraged teachers and learners to conduct their learning process online. This step is a bit challenging, especially to the learners from poverty-stricken homes since they cannot afford the necessary gadgets to log in and take part in online class proceedings, especially after the worst economic situation witnessed during the Covid-19 crisis. Other learners are not conversant with the platforms being used to conduct the classes, such as WhatsApp and Telegram. Monitoring the learner's instructive process is hard since there is no prescribed plan or methodology for doing or assessing homework. Interacting online with other learners during group learning is quite challenging not only for the students but also for their teachers. Some learners are required to get additional educational course materials from their parents, which is challenging since most of them are not used to it. There are higher possibilities that students will not adhere to exam regulations when taking exams from home. Therefore, it is hard to administer examinations when students are at home because they will not concentrate or follow the necessary guidelines.

### **The aim of the study**

1. To know the effectiveness of online learning of students' perspectives in Albanian higher education
2. To highlight the challenges and obstacles of online learning faced by higher education students and professors.

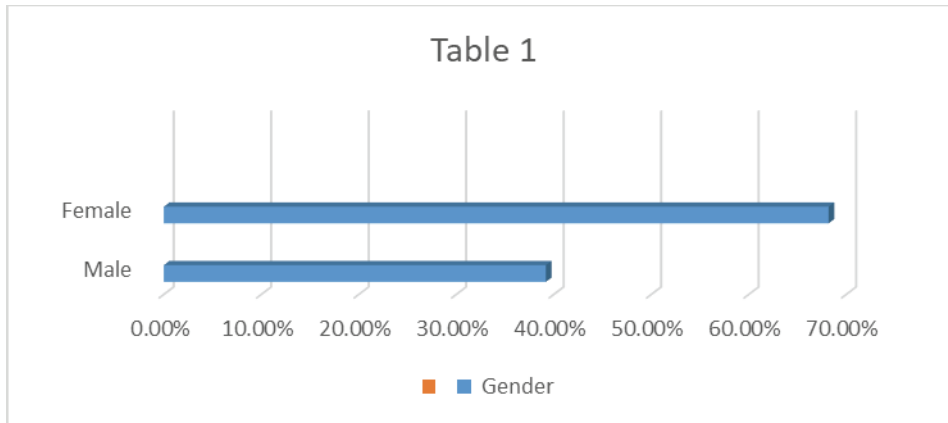
### **Sample**

The key purpose of this research study was to find the general attitudes of Albanian higher education students towards compulsory digital and distance learning university courses amid Coronavirus (COVID-19).

The sample of the study included 100 higher education students: 61 female and 39 male participants. All the students participated in the survey had attend online courses or included those who finished their last year virtually.

**Data Analysis:**

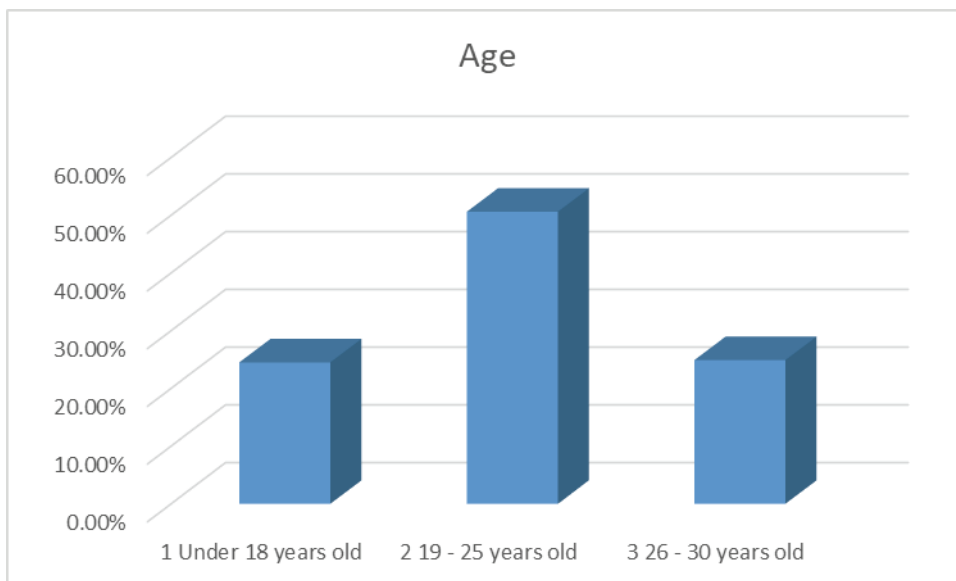
Table 1	Gender
Male	39
Female	61



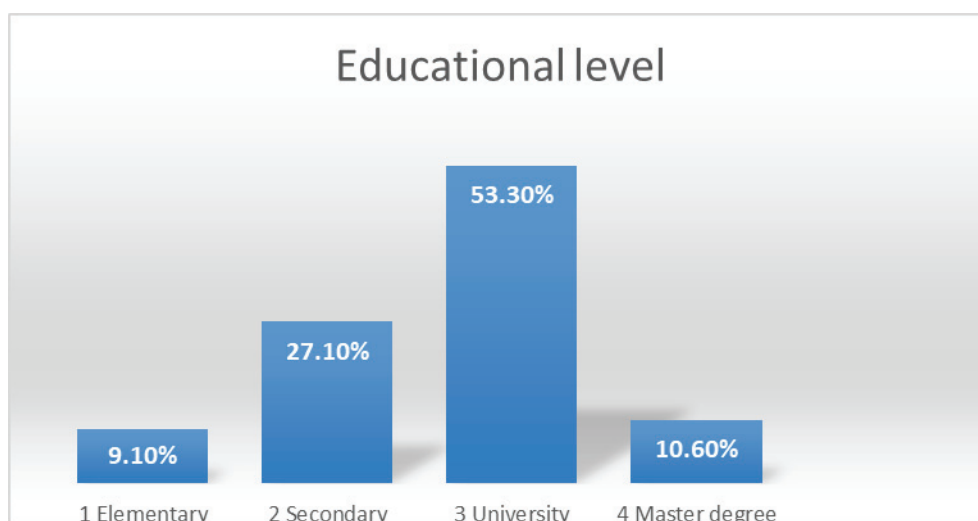
From the data collected by the study sample result 39.2% of respondents are male and 60.8% of respondents are female.

Table 2	Age
1 Under 18 years old	24.50%
2 19 - 25 years old	50.60%
3 26 - 30 years old	24.90%

From the data regarding the age of the respondents it results that 24.5% of the respondents are under 18 years old, 50.6% are 19-25 years old, and 24.9% are 26-30 years old.



<b>Table 3</b>	<b>Educational level</b>
1 Elementary	9.10%
2 Secondary	27.10%
3 University	53.20%
4 Master degree	10.60%



From the data regarding the educational level of the respondents, it results that 9.1% of its respondents have 8 years of education, 27.1% with secondary education, 53.3% with education university and 10.6% with postgraduate education.

<b>Attitudes</b>	<b>No</b>
What is your opinion on conventional learning?	Agree 55 Somewhat Agree 13 Disagree 32
Do you have the necessary equipment as pc/compute or internet access?	Agree 45 Somewhat Agree 15 Disagree 40
Which of the tools you know batter?	Blog 60 Wikis 70 Podcast 60 Emails 90 Web 80 Office 90 Statistical programs 60
What is your opinion online learning?	Agree 15 Somewhat Agree 23 Disagree 62
Are you comfortable communicating electronically?	Agree 70 Somewhat Agree 15 Disagree 15
It is easy to complete group projects/assignments digitally?	Agree 43 Somewhat Agree 23

	Disagree	44
Face-to-face contact with the instructor is necessary for learning?	Agree	48
	Somewhat Agree	12
	Disagree	40
University courses can be completed effectively through internet?	Agree	43
	Somewhat Agree	35
	Disagree	22
Online learning is more motivating than Conventional learning?	Agree	33
	Somewhat Agree	23
	Disagree	44
Conventional learning is more motivating than Online learning?	Agree	45
	Somewhat Agree	15
	Disagree	40
How do you rate your experience during covid19 online courses?	Positive	45
	Negative	55
Will you consider to take courses or online programs in the future?	Yes	43
	No	57

## Discussion

## Conclusion

The education's face to face, classroom, hybrid, or online, is shifting, and it is essential for instructors to stay up-to-date with many possibilities as well as opportunities that are in the market. From the survey is evident from the student point of view that shifting from conventional learning to online didn't had a good impact on them, 45% of students didn't have the adequate equipment or internet access this made the online learning impossible.

In this paper, some technologies are conversational technologies because of their collaborative and interactive characteristic, and coupled with their educational applications, advantages as well as their abilities. Generally, the tools discoursed here belong to a class popularly known to as the conversational technologies. The technologies emphasize group learning, student interaction, as well as collaboration compared to traditional classroom methods. These technologies are fit towards the educational environments or courses where the major prominence is usually on the communication of the student, where the learners access the best technology and creativity and output is highly encouraged. In cases where coursework is based on the lectures or is more inclined to the factual information delivery, these technological tools might have limited usability. The application which might be accommodating in this scenario might be for the communication which is to be stretched outside the classroom, via the utilization of instant messaging or for additional resources that are to be disseminated as podcasts. Due to the fact, every tool has its features and right usages; it is the responsibility of the educator to choose the ones which are most suitable to a certain task and course. The IM, which learners use for personal communication, has penetrated to the business environment and in education, as well, due to its strength in informational communications, which are performed in real-time. There are different results concerning the usage of IM within the sector of education; some people claim that it beneficial to them, but there are numerous limitations too.

The government needs to order companies that are concerned with providing home-based network access to advance the speed of network fourfold. The government should as well prepare self-study sets and take them to the learners from poor backgrounds, who cannot access better communication amenities as well as those who have been cut from the facility. Having locally designed apps that can be accessed by every student despite their status, could be the best option to help facilitate online interactions between students and teachers. Over sixteen million learners can benefit from such apps, together with the physically impaired. After establishing such apps or platforms, the government should focus on how best to keep these platforms safe from fraudsters. Many scammers might arise, making it difficult for students, parents, and teachers to differentiate the genuine from scam apps.

Institutions should ensure that they communicate with parents and interact with learners within the stipulated school hours, communicate via school channels, emails, and avoid sharing personal information. Education from home is different, not like learning or teaching in a classroom. Therefore, teachers should try finding quiet rooms or areas when teaching, administering exams, and broadcasting lessons or creating recordings. They should also consider their backgrounds to avoid distracting learning processes. Every school should keep on following guidelines stated in “Data Protection and Toolkit for Schools” when handling private data from learners and parents and should be careful not to share any personal details (this includes passwords and usernames) with multiple individuals (Department of Education, 2020). They should also give learners access to the school data in the safest way possible.

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## Questionnaire

Thanking you for your precious time reading this questionnaire, I would be very grateful if, after reading this questionnaire, you could complete it: circle your answer. I also guarantee you that its completion does not require more than 5 minutes and that the data you will serve will remain absolutely confidential. Thank you!

1	Your gender?	1 Male 2 Female
2	Your age?	1- Under 18 years old 2 -19 - 25 years old 3 -26 - 30 years old
3	Your educational level?	1 Elementary 2 Secondary 3 University 4 Master degree
4	What is your opinion on conventional learning?	Agree Somewhat Agree Disagree
5	Which of the tools you know batter?	Blog Wikis Podcast Emails Web Office Statistical programs
6	Do you have the necessary equipment as pc/compute or internet access	Agree Somewhat Agree Disagree
7	What is your opinion online learning?	Agree Somewhat Agree Disagree
8	Are you comfortable communicating electronically?	Agree Somewhat Agree Disagree
9	It is easy to complete group projects/assignments digitally?	Agree Somewhat Agree

		Disagree
10	Face-to-face contact with the instructor is necessary for learning?	Agree Somewhat Agree Disagree
11	University courses can be completed effectively through internet?	Agree Somewhat Agree Disagree
12	Online learning is more motivating than Conventional learning?	Agree Somewhat Agree Disagree
13	Conventional learning is more motivating than Online learning?	Agree Somewhat Agree Disagree
14	How do you rate your experience during covide19 online courses?	Agree Somewhat Agree Disagree
15	Will you consider to take courses or online programs in the future?	Yes No