



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH

International Journal of Current Research  
Vol. 12, Issue, 10, pp.14219-14223, October, 2020

DOI: <https://doi.org/10.24941/ijcr.39866.10.2020>

## RESEARCH ARTICLE

### THE USE OF TECHNOLOGY IN THE EASTERN PROVINCE OF SAUDI ARABIA

\*Nehaya Alhamed, EdD

College of Education and Human Services, Department of Leadership, School Counseling, & Sport Management

#### ARTICLE INFO

##### Article History:

Received 19<sup>th</sup> July, 2020

Received in revised form

27<sup>th</sup> August, 2020

Accepted 14<sup>th</sup> September, 2020

Published online 30<sup>th</sup> October, 2020

##### Key Words:

Educational technology, technology in private schools, Web 3.0, tablets, smartphones, laptops in the classroom, and Saudi Arabia.

Copyright © 2020, Nehaya Alhamed. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Nehaya Alhamed. 2020. "The Use of Technology in the Eastern Province of Saudi Arabia", *International Journal of Current Research*, 12, (10), 14219-14223.

#### ABSTRACT

This paper is an analysis of a case study of the use of technology in the Eastern Province of Saudi Arabia. The education sector in Eastern Province of Saudi Arabia has undergone a tremendous change in the adoption of modern technology. Private and public schools have embraced digital processing systems that encourage knowledge construction, active learning, enquiry, and exploration for learners. The digital systems allow for communication and data sharing among teachers and students irrespective of locations. The change is mainly characterized by the use of different kinds of information delivery systems in various learning activities. Technology has been adopted as an important resource, equal to other education resources such as labor, in development of positive learning environments from elementary schools to institutions of higher learning.

#### INTRODUCTION

The rapid adoption of hardware and software technologies makes it necessary for Saudi Arabia to integrate technology in learning and classrooms in order to enhance knowledge in a timely manner. The use of technology in education delivers the benefit of saving on time and space. Besides, the technology places a critical role in supporting learning capabilities of students. Teachers and students are able to take advantage of modern technology such as interactive whiteboards, web 3.0, and cameras among others (Faisal, Ahmad, & Ansari, 2015). In essence, the aim of this revolution is to produce digital literate students so that they can use technology strategically to find and evaluate information, connect and collaborate with others, produce and share original content, and use the Internet and technology tools to achieve many academic, professional, and personal goals.

**Research Problem:** Schools in Saudi Arabia have increased the use of technology to support students and educators in various ways. There are different technologies that include hardware and software technologies that are believed to aid in education. For different reasons, the trend exhibited shows preference of some technologies by teachers and others by students as well as common preference by the two.

**Significance of Research Problem:** Technology has taken the education sector in the eastern Province of Saudi Arabia by storm, boosting the learning potential of learners and empowering educators with class management systems and presentation tools. From pre-schools to institutions of higher learning, a plethora of devices- smartphones, laptops, smart boards, and tablets has open access to a vast amount of information for both teachers and students (Faisal, Ahmad, & Ansari, 2015). The tools have promoted a wider participation in learning and have benefited the students and teachers in numerous ways as explained below.

#### Research Questions

1. Which learning devices do learners prefer?
2. What are the merits and demerits of iPads in classroom?
3. Why do teachers and students prefer iPads over other devices?

#### MATERIALS AND METHODS

The research carried out used closed questionnaire that were distributed to 7<sup>th</sup> grade Social Science teachers from one private school and one public school in Dammam city in the eastern Province of Saudi Arabia. The questionnaire had 6 questions that included "no and yes" answers as well as other closed-ended questions:

\*Corresponding author: Nehaya Alhamed, EdD,

College of Education and Human Services, Department of Leadership, School Counseling, & Sport Management.

- How often do you use each of the following devices in your classroom?
- How often did you perform the following?
- What is the factor that prevents you from integrating more technology into your lessons?

## RESULTS

The respondents in the research acknowledged that the use of tablet computers was helpful in delivering content effectively and efficiently. Most of the respondents came from the private school and admitted that virtually all students have tablet computers that enhancing learning and research. They are able to answer quizzes immediately and post them to a portal for marking. One of the limitations of the use of tablets was lack of adequate Internet access.

## DISCUSSION

Many technologies are changing the landscape of learning, teaching, and creative inquiry. The technologies are growing at a high rate and believed to influence education for the several of decades in the Saudi Arabia and the rest of the world (Faisal, Ahmad, & Ansari, 2015). While public schools have lagged behind in the implementation of the technologies, private schools have adopted them and looking for ways to improve them. Public schools have encountered many challenges such as lack of professional development, opposition to change, and failure to understand the significance of digital literacy (Faisal, Ahmad, & Ansari, 2015). The technologies are discussed in the section below.

**Web 3.0:** Since the beginning of the new millennium, the world has experienced a tremendous proliferation of social media. Definitely, this is as a result of web 3.0 technology that allows users of websites to upload and edit content. Traditionally, content was uploaded by web developers. The ease of content management facilitated by web 3.0 saves institutions the cost of hiring specialist web developers to upload educational materials (Kretschmann, 2015). The educational sector has reason to believe that most seventh graders if not all have access to at least one of the many social media sites. Consequently, teachers join the sites seeking to share information with the student. Students and teachers can form social groups in which they can share information (Jagodič, 2016). For example, teachers can make comments about the performance of students, and different members of the group can give their views on the matter.

**Tablets and Smartphones:** Tablets and smartphones have been used extensively in the classroom as they are highly portable and can contain a lot of data due to their high storage capacity. They can access the Internet on the move so that teachers and students can exchange useful content in a timely manner (Jagodič, 2016). Teachers can post education material online so that students can work on them. Students work on assignments and submit them at any time of the day. These gadgets improve the capability of students to share information through Bluetooth technologies and other apps that facilitate data transfer.

**Laptops:** Laptops have become convenient equipment for learners because of their portability. They are personal computers just like the desktop version of PCs with high

capacity in terms of memory and storage. In addition, they help to save on space and are light to carry around. Laptops allow students to move from one place to another and can easily move to Internet access points to carry out their research (Kretschmann, 2015). For instance, they can move from their hostels to the classrooms and the library with their laptops conveniently. Furthermore, the children's devices move in tandem with the age of users seeking to participate in the learning scope (Kretschmann, 2015). A seventh grader has access to a device with sufficient software applications to conduct successful research as well as solve difficult arithmetic questions.

### Advantages of Technology in Classroom

**Enhancement of Learner Style:** Students have different learning styles because all people are endowed differently. Information technology in education addresses each individual's learning preferences through the use of multimedia. Within a few clicks, a learner is able to access thousands of videos, images, audio, and articles that boost their presentation and improve learner engagement (Jagodič, 2016). For instance, a learner may be learning about early men, and a quick web search returns a tremendous number of articles on the topic, videos, 3D models, and photographs for the topic. Interestingly, there are also numerous articles that show where exactly the people were found and other details such as their migratory routes. Technology supports many approaches to learning including auditory learning, visual learning, and writing through its kinesthetic nature (Jagodič, 2016).

**Classroom Interaction and Management:** Technology helps to improve the management of classrooms because it has the ability to create virtual space. Many schools in Eastern Province have adopted learning management systems that centralize the course in a virtual space. Educators can post media, e-books, quizzes, and other documents. The quizzes are answered quickly and graded by the system (Jagodič, 2016). The assignments given to students by educators are submitted online and the results are displayed in the virtual space. Students are assured of access to the system so that they are not worried about losing assignments or carrying textbooks (Jagodič, 2016). The learning management systems facilitate collaboration, interaction, and communication among students and teachers, offering an opportunity to send chats, messages, wikis, blogs, and messages.

**Improvement of Learning Assessments:** As education in Eastern Province moves away from traditional grading system towards skills-oriented assessment, technology redefines how to determine if learners have reached their learning objectives. Software systems are able to compare various aspects of the content uploaded by a student and provide specific feedback on items such as redundancy irrelevance, and content (Faisal, Ahmad, & Ansari, 2015). The technology allows correct assessment of a learner's competence and gives feedback about the student.

**Ease of Research:** It has been a principle in the field of academia to have research as an involuntary duty. Definitely, this implies that the students and teachers are supposed to undertake tremendous research endeavors.

Through the Internet, teachers and students can gain access to numerous databases that have a lot of information (Faisal, Ahmad & Ansari, 2015). For example, many schools have websites that help communication between teacher and students, and the management. Students can receive important notifications such as new discoveries in a timely manner (Kretschmann, 2015). Students can research on various topics suggested by colleagues and teachers, and respond using the same platform.

**Support for Diversity:** With increased globalization, people have moved to different parts of the globe in search of education. Eastern Province, being well developed in terms of education institutions, has encouraged many people to migrate to the place to obtain higher education. Students from different races, creeds, cultural backgrounds and ethnic groups meet in the same classrooms (Kretschmann, 2015). With the technology, education can communicate with the entire class irrespective of their differences.

**Use of Technology by Seventh-Grade Teachers in Saudi Arabia:** Saudi Arabia is a well-developed nation and has a stable economy. Its economy has developed as a result of oil production and increased tourism. The majority of citizens have the ability to take their children to good schools. Before the nation was well developed, many parents took their children to foreign schools in the United States and Europe for education (Kretschmann, 2015). The national government has focused on improving the education sector by embracing technology among other changes. Children are introduced to information technology at an early age in order to build a foundation for academic success. However, there is a significant difference between public and private schools with respect to the use of technology in education. Many public schools have not adopted technology well because of constraints such as lack of finances, ignorance of school heads, and resistance to change. On the other hand, private schools have embraced technology, and the affluent take their children to private schools because the schools offer quality education.

## Conclusion

Technology in education has been popular in the education sector and students and teacher benefit tremendously. Despite the positive role of technology in education, there are various drawbacks of technology in schools (Alhamed, 2020). For instance, a lot of time and resources are currently being invested into technologies that have yet to be proven to be effective or efficient when compared to more traditional classroom learning contexts.

However, schools can support the use of digital technology in learning by allowing teacher and students to explore new uses of systems and devices and the combination of technologies into novel IT environments. In addition, the teacher can support digital technology by developing their awareness of available technologies and considering carefully how and why they can be used to support learning. Teachers' computer literacy has been identified as a factor that determines their technology use in class.

## REFERENCES

- Alhamed, Nehaya Ali, "The Digital Transition from Textbooks to Tablets in Saudi Arabia" (2020). *UNF Graduate Theses and Dissertations*. 968.
- Faisal, M., Ahmad, A., & Ansari, U. (2015). Information and communication technology in education: Benefits and drawbacks. *International Journal Of Multidisciplinary Approach & Studies*, 2(2), 147-154.
- Jagodič, G. (2016). Using of information communication technology tools by the students. *Management (18544223)*, 11(3), 239-254.
- Kretschmann, R. (2015). Importance of teachers' computer literacy in education. *The Educator*, 72261-277.

## Appendix One

### A Study of Using Technology in Saudi Arabian Classrooms

#### Q1

**How often do you use each of the following devices in your classroom?**

- Answered: 13
- Skipped: 0

Never

Less than once per week

Once per week

3 Times a week

Daily

LCD projector

TV monitor

Scanner

Digital camera

Overhead Projector

0%10%20%30%40%50%60%70%80%90%100%

%30%40%50%60%70%80%90%100%

	Never	Less than once per week	Once per week	3 Times a week	Daily	Total Respondents
LCD projector	23.08% 3	7.69% 1	0.00% 0	7.69% 1	61.54% 8	13
TV monitor	53.85% 7	15.38% 2	0.00% 0	15.38% 2	15.38% 2	13
Scanner	53.85% 7	30.77% 4	7.69% 1	0.00% 0	7.69% 1	13
Digital camera	61.54% 8	38.46% 5	0.00% 0	0.00% 0	0.00% 0	13
Overhead projector	53.85% 7	7.69% 1	23.08% 3	7.69% 1	7.69% 1	13

Q2

How often did you perform the following?

- Answered: 13
- Skipped: 0

At least once per week  
 At least once per month  
 Daily  
 Never use it  
 Use a computer to deliver...  
 Use the Smartboard t...  
 Use the social media in the...  
 Have students use the...  
 Have students use a...  
 Have students create...  
 Have students type papers ...

0%10%20%30%40%50%60%70%80%90%100%

	At least once per week	At least once per month	Daily	Never use it	Total Respondents
Use a computer to deliver instruction to your class	30.77% 4	7.69% 1	53.85% 7	7.69% 1	13
Use the Smartboard to instruct	23.08% 3	15.38% 2	30.77% 4	30.77% 4	13
Use the social media in the classroom	38.46% 5	15.38% 2	7.69% 1	38.46% 5	13
Have students use the Internet as part of their lesson	23.08% 3	23.08% 3	38.46% 5	15.38% 2	13
Have students use a digital/video camera for their projects	7.69% 1	53.85% 7	0.00% 0	38.46% 5	13
Have students create PowerPoint presentations	23.08% 3	38.46% 5	30.77% 4	7.69% 1	13
Have students type papers in Word	15.38% 2	23.08% 3	38.46% 5	23.08% 3	13

Q3

What is the factor that prevents you from integrating more technology into your lessons?

- Answered: 5
- Skipped: 8

Sometimes there are some problems that need help from IT department, and the support usually comes late when the class time is almost over.

11/23/2016 7:42 AM

Lack of internet and technology.

11/23/2016 7:01 AM

Lack of prepared technical classes and technical support

11/23/2016 12:31 AM

The class time

11/23/2016 12:29 AM

No internet connection

11/23/2016 12:17 AM

Q4

Are students allowed to bring their own technology for use in your classroom?

- Answered: 13
- Skipped: 0

Yes

No

0%10%20%30%40%50%60%70%80%90%100%

Answer Choices	Responses
Yes	76.92% 10
No	23.08% 3
Total	13

Q5

How far do you agree with the following statements about the benefits of technology for students?

- Answered: 13
- Skipped: 0

Agree

Disagree

Enables students to...

Creates more confident,...

Helps to develop skill..

0%10%20%30%40%50%60%70%80%90%100%

	Agree	Disagree	Total Respondents
Enables students to access a wealth of additional content	84.62% 11	15.38% 2	13
Creates more confident, engaged and motivated students	100.00% 13	0.00% 0	13
Helps to develop skills that students need in the real world	92.31% 12	7.69% 1	13

Q6

You are a teacher in

- Answered: 13
- Skipped: 0

Private school

Public school

0%10%20%30%40%50%60%70%80%90%100%

Answer Choices	Responses
Private school	76.92% 10
Public school	23.08% 3
Total	13

- responses
- 13 days (11/23/2016 - now)

\*\*\*\*\*