

Essential skills to be continually developed among education technology specialists for limited production of educational materials

Dr. Mohamed Fawzy Abd El Hameed

Lecturer, Faculty of Education, Mansoura University, Department of Education Technology

mohamedelataway@yahoo.com

Abstract

Technology has a very big and important role in the educational process, as technology helps in solving many educational problems and helps to achieve the ultimate goal of the learning process, which is continuous improvement in order to reach the degree of student mastery of most skills as well as educational goals. From this point of view, the aim of the study was The main one is to identify the role of the educational technology specialist in the production systems of visual educational materials at the level of limited production. The study also aims to work on increasing the effectiveness of the educational technology specialist in the field of work and raising the professional level of the educational technology specialist and raising the level of the educational process in our educational institutions, and I have used the descriptive approach. The analytical in this research, through which I collected data on the subject of the research from primary sources, which was represented in a questionnaire designed in order to achieve the objectives of the research. Secondary, which was represented in previous studies, periodicals and data from websites The sample size was (131) educational technology specialists.

One of the most important results is that the role of the technology specialist is not limited to guiding teachers towards the use of modern technologies, but rather that this role extends to include many other functions and tasks such as his role in developing students' motivation as well as controlling electronic teaching processes and others, and one of the most important recommendations is to work on gathering interested people Using information and communication technology in the classroom in order to produce visual educational materials that suit the needs of students and are compatible with their abilities, and that the educational technology specialist acts as an effective observer of the progress of the educational process.

Keywords:

Education ,technology ,Specialist

Introduction:

Technological development has helped in many areas until the time comes when the teacher is required to use something other than his voice and gestures to deliver learning content to most educated people, and the teacher finds himself relying on simple materials that can be produced by the teacher or a local facility or to adapt materials that may have been Produced for a different country or even a different subject.

Most learning materials in classrooms are limited to blackboards, chalk, paper, pencil, and textbooks, so it is easy to see the advantages of using visual learning materials in studying, and

how each type of material stimulates certain senses and supports certain types of goals and lessons more than others.

It helps the teacher examine the course content and choose the appropriate way to present information in order to maximize educational processes. Of course, the relative success he will achieve in doing so will depend on the availability of visual educational materials, as visual educational materials examine the applications of technology in practice through questions and indicators. and key measures for integrating technology into the school environment.

The technology specialist in the educational organization is responsible for integrating technology into the school in many ways, such as integrating it into any lesson preparation technology. He helps in improving and facilitating the educational process and practices and ensuring that all measures are available to evaluate effectiveness. He also helps in supporting important educational goals through technology. .

This research provides guidance, ideas, and resources for evaluating the integration of technology into a school or district's instructional and administrative practices. Infusing technology into a school can be a transformative experience, helping to offer the potential to change every aspect of educational operations.

It has been said that technology helps change teacher-student relationships, encourages project-based learning methods, and supports the acquisition of skills such as creative thinking, analysis, and problem solving. However, the most important reason for measurement is to understand that the impact of educational technology specialists on producing visual educational materials effectively at the level Limited production. (Etman, 2006, p. 81)

the study Problem:

The research problem came from several points:

- Observation of our educational reality, with the continuous development of the curriculum.
- The development of techniques for producing visual educational materials, especially at the level of non-quantitative production, that is, limited production.
- The teacher needs to develop teaching aids and audio-visual materials, including still and moving images, to keep pace with this development.

In light of the above, the design must require either educational materials that can be obtained easily or allowing sufficient time to obtain the necessary special materials and supplies. Here, the technology specialist must have practical and scientific skills in order to be able to design visual educational materials effectively, and in light of the above, it is possible Formulate the research problem in the following question:

- What are the skills that the educational technology specialist must continue to develop in order to carry out his role in the field within the system of producing visual educational materials, including still and moving images, to support the educational process and achieve its goals instead of weak material capabilities for production?

Study questions:

- What skills must continue to be developed for educational technology specialists in the workplace?
- What are the technological innovations used in the field of educational technology?

- What is the way to teach an educational technology specialist the modern technological innovations that are useful in his specialty?

Objectives of the study:

- Increasing the effectiveness of educational technology specialists in the field of work.
- Raising the professional level of the educational technology specialist by developing his skills to produce educational materials that the teacher uses in educational situations, or the learner uses through self-learning.
- Raising the level of the educational process in our educational institutions, which rises with the rise in the professional level of educational technology specialists. The system increases with the level of its vocabulary, including the educational technology specialist.

Study methodology:

The study of the skills that must be developed by an educational technology specialist for the limited production of educational materials was based on the descriptive analytical approach, through which I collected data on the research topic from primary sources, which were represented by a questionnaire that I designed in order to achieve the objectives of the study, and secondary sources, which were represented by previous studies, periodicals, and data from Websites and others. Then I analyzed the data in order to obtain generalizable results and recommendations that help provide solutions to decision makers. Therefore, the descriptive approach is the appropriate approach to the research topic.

The limits of the study:

The sample method was relied upon in order to collect information on the topic of the role of the educational technology specialist in visual educational materials production systems at the limited production level. The limits of the research were as follows:

Spatial boundaries: The study took place within the borders of the Arab Republic of Egypt

Time limits: The study was conducted during the 2021/2022 academic year

Human limitations: The study did not rely on educational materials, static or animated images, except those produced by an educational technology specialist.

Results and recommendations

First: the results

The educational technology specialist is considered a key factor in how technology is implemented in educational institutions. When he has the support and strength of the administration, the work succeeds. Otherwise, it is almost impossible. Through my field and theoretical research on the topic of the role of the educational technology specialist in producing visual educational materials at the national level, I reached A set of results, most notably:

1. Despite the lack of funding, which is extremely necessary in order to achieve a learning technology specialist who relies on high-cost devices and electronics, by developing his skills, he can use mobile phones with artificial intelligence in producing limited quantities of educational materials that students need in our educational institutions.
2. The role of the technology specialist is not limited only to directing teachers towards using modern technologies, but rather this role extends to include many other functions and tasks,

such as his role in developing students' motivation as well as controlling electronic teaching processes and others.

3. The use of educational materials is absolutely necessary because it helps facilitate the learning process and also enhances the assistance of students anywhere and anytime without any restrictions.

4. The level of use of technologies in Egypt suffers from many problems and is not in excellent condition due to the presence of some obstacles, the most important of which is the need for large financial support.

5. The level of media use within schools and universities is not at an advanced state, but rather needs to be developed in order to facilitate enhanced learning processes about realistic curricula.

6. The educational technology specialist is one of the most important drivers of the educational process at the present time

Second: Recommendations:

- Bringing together people interested in using ICT in classrooms in order to produce visual educational materials that suit students' needs and abilities

- The educational technology specialist should act as an effective monitor of the progress of the educational process, and use the latest technologies in producing advanced visual educational materials.

When producing educational materials, educational technology specialists must benefit from the previous experiences of developed countries such as Japan.

Educational technology specialists in Egypt must strive to use technological means and methods with high capabilities and advanced capabilities.

- The specialist must strive to constantly research and investigate various fields of study.

- The IT specialist must be patient to change old learning habits and spread new values and advanced learning methods and methods

- The Ministry of Education must raise expectations for the use of ICT and provide evidence of this during the process of teacher training in universities as well as professional development and also when teachers apply to upgrade their qualifications to senior or mentor teacher.

- Educational technology specialists must work to find ways to motivate people to use ICT and report the results to management

References:

eatman , alshahaat saed muhamad (2006): tahdid mahami 'akhisaayiyin tiknuluja altaelim bimadaris altaelim aleami fi daw' almustahdathat altiknulujiat altaelimiya wataqyim 'adayih alwazifii fi madaris muhafazat dimyat , aljameiat almisriat litiknuluja altaelim , almujalad. 16 , s (57-118)

' - 'iibrahim , eabd alhamid safwat (1998):

.'tahlil wazifat taqni altaelimi: dirasatan fi eilm alnafs altanzimii , aljameiat almisriat litiknuluja altaelim , s (135-152).

- 'eatiat , muhamad 'ahmad (2001):

' .°akhisaayiyun tiknuluja altaelim bialmadrasat al'iiliktruniat , almutamar alsanawiu althaamin liljameiat almisriat litiknuluja altaelim - almadrasat al'iiliktruniat , aljameiat almisriat litiknuluja altaelim , jamieat eayn shams - kuliyat albanat , s (257-259).

٦. alnajdi , khalid muhamad muhamad eabd alrahman (2019): faeiliat barnamaj mutabaeat alkitruiat fi tanmiat maharat 'akhisaayiyin tiknulujiat altaelim , jamieat bursaeid - kuliyyat altarbiat alnaweiat , majalat kuliyyat altarbiat alnaweiat. altaelim , si. 9

٧. eali samiati eali muhamad (2004): alkafa'at almihniat li'akhisaayiy tiknulujiat altaelim wadawr barnamaj al'iiedad fi tanmitiha: dirasat tahliliat , 'utruhat dukturah , jamieat alqahirati.

٨. hudhayfat , muhamad shawqi (2016): faeiliat barnamaj alwasayit almutaeadiyat fi tanmiat maharat 'akhisaayiy al'ielam altarbawii wa'atharih fi taeziz aleamaliat altaelimiyyat fi zili altiknulujiat alhadithat , aldirasat alarabiyyat fi altarbiat waeilm alnafs , s. 73 , si. (157-185)

٩. alhadaabi , dawud eabd almalik (2020): 'athar aistikhdam barnamaj hasubiin muqtarih ealaa aiktisab altulaab min qibal mutakhasisi tiknulujiat altaelim limaharat aibtikarat tiknulujiat altaelim , almajalat alarabiyyat lidaman jawdat altaelim aljamieii , jamieat alqahirati. aleulum waltiknulujiyya , almujalad. 3 , s. 45 , s (125-146)

١٠. darwish , 'iiman eabd alfataah (2017): faeiliat biyyat altaealum altafaeulii alshakhsii fi tanmiat maharat albarmajat limutakhasisi tiknulujiat altaelim , majalat albuhtuth fi majalat altarbiat alnaweiat , jamieat alminya - kuliyyat altarbiat alnaweiat , si. 9