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EMPOWERING LEARNERS THROUGH PAPERLESS CLASSROOMS

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ABSTRACT

The quality of an educational system can be assessed by the effectiveness of the learning outcome embodied in that system. This objective can be achieved through the implementation of paperless classrooms which is essentially a process of self-reflection, research and critical evaluation for teachers as well as learners in their immediate classroom environment. The teachers are empowered by a critical self-evaluation of their current teaching practice through an analysis of the learning outcome achieved in their classrooms. Consequently, the learners are empowered or benefitted from the modified behaviour of the teacher to achieve better learning outcome in future. The digitalization of education and educational resources brought about by the rapid technological development necessitated this new paradigm of learning. This study has two parts. The first part explains the concept of paperless classroom and second part vindicates how both teachers and learners are empowered by this mode of teaching and learning.

Keywords: Paperless Classrooms, empower, teachers, learners, teaching practice.

Introduction

Paperless classroom is a revolutionary concept advocated by numerous educational experts today. It can be considered as a natural outcome of the digitalization of education and educational resources necessitated by the rapid technological development of our times. Paperless classrooms provide students with an opportunity to promote and develop their electronic skills and help them to improve their engagement and motivation in their learning activities.Paperless classrooms are considered to be eco-friendly because they help to conserve nature by saving trees from which paper is made. As teachers migrate gradually into the new zone of educational technology, paperless classrooms will continue to redefine innovative teaching methodologies.

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The concept of paperless Classrooms

Paperless classrooms are constituted of teachers and students who use only laptops, iPads or other digital devices as an alternative to textbooks and notebooks in the classrooms. All exchange of information, tests, assignments, exams and grading are also done electronically. This total dependence on electronic devices is ensured by keeping textbooks and note-books away from the class. The students are required to bring their personal laptops or iPads to school and use it throughout the day for all their academic activities. (Arney, Jones & Wolf, 2012). In short, the use of textbooks and notebooks are not allowed in the classrooms. All classroom activities are carried out electronically.

The paperless classroom is primarily intended to promote and develop the electronic skills of the students and to prepare them for the practical world outside school (De Bonis& De Bonis, 2011). Another important consideration for implementing paperless classroom is the environmental concern. Paperless classrooms are considered to be eco-friendly because it helps to conserve nature by saving trees from which paper is made. To sum up, the demands for a comprehensive shift to an electronic mode of instruction has become an inevitability of the social realities today.

Research has indicated that younger students were found to be more positive about using iPads and laptops than older students. Similarly, boys are more positive than girls in the use of technology (Ferguson, 2017). Therefore Grigoryan&Babayan (2015) believe that the teacher's epistemology of knowledge is conditioned by his competence to provide appropriate technological instruction to the students. The idea of paperless classrooms emanated from the fact that life outside the school has become more and more dependent on technology and many offices now transact their business in the paperless mode.

The Implications of adopting paperless classrooms

Many educators believe that the paperless mode of education promotes a more efficient and organized classroom while preparing students for the practical world outside classroom walls. Before introducing technology, it is vital that educators are knowledgeable and comfortable with administering all the web tools to be used in the classrooms. The first step in creating a paperless classroom is making available the necessary digital devices and adequate internet bandwidth. The second step is using a Learning Management Solutions (LMS) or creating a Classroom Websites (edudemic, 2014).   Many higher educational institutions in Oman make effective use of technology in their instructional activities in the classrooms. Most teachers are comfortable in applying the possibilities of technology in their instructional activities. However, in many higher educational institutions across Oman, all the assessments and

evaluations are still paper based. Students rarely take online examinations for the purpose of assessment except in IT courses.

Implementing a paperless classroom is not a simple task. It is necessary to take into account all the aspects of the teaching and learning activity including the practical issues of infrastructure and the availability of technically trained and qualified teachers. Even after satisfying all these conditions there can be unseen areas which need to be addressed. The researchers asked three qualitative questions to the teachers who implemented the system.

- What are the reasons for implementing paperless classrooms?
- What are the advantages of paperless classrooms?
- What are the challenges of paperless classrooms?

Their answers of the respondents are given below as it offers some practical insights into implications of implementing paperless class rooms.

All the respondents in the survey said that paperless classroom is extremely important in preparing students for the future. Learning in a paperless classroom is perceived by the teachers as a means of preparing students for the future world and for the job market. The digital skills that the students acquire in the classes help students to develop real- life skills such as self-learning, information gathering, and collaboration with peer learners. Furthermore, such learning activity becomes a real training ground for students to prepare themselves for their future life and career. This is due to the fact that many business establishments nowadays give priority to telecommuting, teamwork in information gathering and implementation of projects as part of the emerging corporate culture. The focus of work culture has undergone sea change in many successful business establishments with the implementation of e-business. As a result, the new corporate culture gives more importance to faster achievement of targets and timely implementation of projects than the physical presence of the employee in the workplace.

The second question about the efficiency of learning, most teachers said that learning in the paperless classroom was more efficient in two ways. First, it was more efficient in terms of time and accessibility to knowledge and skill advancement because of flexibility in learning activity aided by the effective use of technology. Secondly, the acquire knowledge and skills can be stored and retrieved efficiently by proper organization of information in a single portable digital device. Once the technological aspect of learning infrastructure such as the digital device and the uninterrupted access to internet is ensured, learning is possible in any place and at any time.   Therefore, paperless classroom is an effective answer to the limitations of time and space (locational restriction) encountered in traditional learning activity that insisted on the presence of the learner at a specific location. The pedagogical rationale that emerged from the teachers' perception is that the students' have become more

autonomous and technology enabled them to take a more active and meaningful role in the learning process which ultimately contributed to the enjoyment of learning.

The researchers also pointed out certain problems. They highlighted four primary categories such as Distraction and discipline problems, Information Overload, Technological Problems and Underdeveloped Skills. Talking about underdeveloped skills, the researchers further pointed out that the students' social skills were in retreat. As online space becomes a more significant place for interaction, social skills are reduced accordingly and social anxiety rises. Similarly, the skill of reading from books and the skill of writing on paper were also seriously affected by the continuous use of digital media. The findings from this study are relevant for anyone who is interested in paperless classrooms because it highlights the practical issues in a realistic manner. Though there are many advantages, the disadvantage of underdeveloped social skills, lack of reading and writing skills can adversely affect the learners.

Empowering learners

In a paperless classroom, all academic activities are essentially digitalized because textbooks and note books are not allowed in the classroom. All examinations, quizzes and assessments and grading are implemented in the in paperless mode. Although, paperless classroom has not become a reality in Oman, students often exhibit some of the essential characteristic of paperless classrooms. An observational analysis of students' behavior patterns revealed that many undergraduate students of Dhofar University unconsciously practice some of the basic concepts paperless classrooms. A specific case in context is the unexpected use of a digital text book of English Language in an engineering class. When many male students of the class said they do not have the text book, they were asked to get a photocopy of the particular unit. One of them immediately asked the teacher why don't you use LCD projector and display the lesson for the whole class. He knew that a soft copy of the book was stored in the class room computer which was mainly used for the class listening activity. This was an eye-opener to the EFL/ESL teacher. On that day, the reading activity class was conducted in the class by using the digital version of the textbook. The whole class enjoyed the fresh experience of looking on the screen in an English reading activity class instead of using their textbooks.

According to De Bonis (2011) there are several advantages for the paperless classrooms. First of all, it can offer improved efficiency the learning experience. This efficiency is achieved in terms of time and accessibility to materials especially through internet and the proper organization of materials that contain relevant information. In addition, the technology improved communication between students and teachers can enhance the learning experience and provide transparency and effectiveness of assessment and grading. De Bonis (2011) also enumerates other advantages such as facilitation of asynchronous learning that can help students in developing the virtual environment skills and competencies they will need later in

their life. Moreover, Students can work together to share ideas and submit their homework online while teachers can find everything in one location which will make their work comfortable, easy and flexible. Finally, the traditional paper dependent learning experience can be replaced with a more efficient exchange of information and feedback in virtual space along with the electronic storage and maintenance of grade files. The primary requirement for paperless classroom is to own a laptop, iPad or any digital device that can access internet and download and use different applications.

An important argument against digitalization of teaching learning methodology is that new technologies are expensive and everyone may not be able afford it. Some researchers have pointed out that the predominant preoccupation of the learners with their digital devices has resulted in a serious lack of social skills among many learners.Talking about underdeveloped social skills, many researchers further pointed out that when online space becomes a more significant place for interaction, social anxiety rises due to reduced human interaction. Similarly, the skill of reading from books and the skill of writing on paper were also seriously affected by the continuous use of digital media. Excessive exposure to digital screen can cause damage to the eyes and lack of writing skills can seriously hamper the dexterity of hands in addition to an over dependence on digital devices.

Most of the above charges are successfully countered by the votaries of paperless classrooms. Many researchers agree that group assignments provide opportunities for human interactions in real as well as virtual space for all the learners. Moreover, project work offers opportunities for building up human relations among learners with a common goal and objective. Similarly, the lack of reading from books and writing on paper can be promoted outside the classroom context. These habits can be consciously cultivated at a personal level and sometimes enhanced by social necessities of human interaction outside the academic realm.

Conclusion

In Short, paperless classrooms provide students with an opportunity to promote and develop their electronic skills and help them to improve their engagement and motivation in their learning activities. It prepares them adequately for the practical world outside school. Another important consideration for implementing paperless classroom is the environmental concern. Paperless classrooms are considered to be eco-friendly because they help to conserve nature by saving trees from which paper is made. As teachers migrate gradually into the new zone of educational technology, paperless classrooms will continue to redefine innovative teaching methodologies. Effective use of technology and careful implementation of paperless classrooms can create boundless possibilities for future education. Although the students of Dhofar University do not have much information about paperless classrooms,

unconsciously, they practice many important concepts of this theory through the innovative use of the digital devices at their disposal. A vast majority of students in colleges and universities own and use iPads and smart phones nowadays. The new technology invariably makes its way into the classroom in an attempt to improve the learning experience (Melhuish&Falloon, 2010). As a result, the proper application of technology can ultimately create a paperless classroom.

Finally, a paperless classroom results from the successful integration of technology in the classroom that eliminates all purposes of paper and pen. Students will be able to access their lessons, homework and grades solely through the internet or the school network (Google Sites).The digital skills that the students acquire in the classes help students to develop real-life skills such as self-learning, information gathering, and collaboration with peer learners. Furthermore, such learning activity becomes a real training ground for students to prepare themselves for their future life and career. This is due to the fact that many business establishments nowadays give priority to telecommuting, teamwork in information gathering and implementation of projects as part of the emerging corporate culture.

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