The Way to Millenial Learning

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Abstract: This era is known as the 4.0 industrial revolution era where all sectors are in digital. This millennial age must also be shown in millennial learning to improve the quality of learning. In terms of, the use of technology in the world of education, namely the learning system has changed the conventional pattern learning system or traditional pattern into a modern pattern of Information and Communication Technology (ICT) media. The approach that can be done in millennial learning is the one that can integrate technology and education, namely the Blended Learning Model (BLM). This model combines regular teaching classes and online teaching. The strength of this model is that it can increase interaction between students whenever and wherever.

1 INTRODUCTION

The education, trade, and government sectors are changing due to the development of information and communication technology. At this time the globalization era cannot be denied that along with the development of digital application-based technology, the system of social interaction in society began to erode. Technology is increasingly fast, making it easier for people to do their activities. Today's technological and information developments offer many conveniences. Communities are given supporting facilities in their daily activities. Making it easier for people to move. With easy access to communication, it supports the education world. The application of communication and information technology in the world of education is mandatory. The reason is, now every school and other academic institutions have used technology to support their activities.

Globalization has penetrated the present generation. Globalization also causes a shift in the education world that was initially in the face-to-face system began to lead to online systems. With the inclusion of globalization in the world of education, the interaction between humans has shifted and without denying that it will be lost.

In the era of globalization-based on digital applications in the education world, it will help the course of the learning process and can also improve performance results. The increasing number of technology users in the education world will lead to changes in the learning model. Because it is more effective and efficient, without requiring a lot of time and energy. So that gradually people will prefer an online learning system than conventional (face-to-face) learning.

The development of various learning media is in line with the rapid technological advancements. The technological dynamics are now achieving tremendous acceleration. New technologies including conventional learning have replaced the technology that has been studied a few years ago. The learning model provided in technology for the world of education is considered quite useful. Distance learning between teachers and students who are not in one place or long distance relationships. Moreover, technology also provides many other learning options that can be enjoyed by the public very quickly. Now we are also feeling the ease of learning just by accessing digital applications such as e-journal, e-library and so on.

One learning model that has been applied by several communities is the E-learning model. E-learning is a form of learning model that is facilitated and supported by the use of information and communication technology. The term E-learning is more precisely intended as an effort to make a

transformation of the learning process in schools or colleges into digital forms bridged by internet technology. (Munir, 2009: 169).

In Indonesia, the conventional education system is still widely practiced in the academic community. Especially in the area that is still classified as a rural area. Because overseas country such as France has also used online education services, this is evidence of a shift in the direction of education. Especially now, today that demands significant changes in the world of education. Where education is used as a benchmark in a society. So education is what has broad knowledge to transfer knowledge.

The millennial generation born in the early 1980s to 2000 or can be said as Gen Y. They called the millennial generation because of the generation that lived at the turn of the millennium. Along with the penetration of digital technology into all walks of life. Digital technology that has become a basic need for this generation. In the millennial generation, that is the generation that has been literate in digital technology, where every information is easily accessed via the internet.

However, many people view that there has been a shift in the eastern social values. Because it is more open-minded, it is easy to adopt more modern western social values. It is true. This thing is can be seen clearly in our lives. Many teenagers start to look like westerners, so their social life is increasingly eroded.

Long-distance communication relationships are only connected by the media and the internet. Making close communication or direct communication is increasingly rare. So, the social value that takes place in the communication fades. Teenagers are vulnerable to talking to each other directly they choose to use internet media as a way of communication. If this is done more aggressively, gradually the real world regarding interaction will fade.

2 LITERATURE REVIEW

Definition of Blended Learning

Millennial learning can be done not only by face to face activity but can be carried out in combination between face to face and online learning which is often referred to as Blended Learning. Kaye Throne (2003: 16) in his book entitled "Blended Learning: How to Integrate Online and Traditional Learning" states that:

"Blended learning is the most logical and natural evolution of our learning agenda. It suggests an elegant solution to the challenges of tailoring learning and development to the needs of individuals. It represents an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning. It can be supported and enhanced by using the wisdom and one-to-one contact of personal coaches."

Blended Learning is a logical and natural learning change. It proposes a good change solution to adjust and develop learning according to individual needs. This is demonstrated by the opportunity to integrate innovation and technology provided through online learning with the interaction and participation that occurs in traditional learning. It can be supported by using wisdom and training slowly.

Blended Learning is a mixture of:
1. Multimedia technology
2. Learning video CD ROM
3. Virtual class
4. Email and telephone
5. Animated text and online video

Driscoll (2002) suggests that there are four concepts about Blended Learning, namely:
a. Blended learning is learning that combines various web-based technologies, to achieve educational goals.
b. Blended learning is a combination of various learning approaches (such as behaviorism, constructivism, cognitivism) to produce an optimal learning achievement with or without learning technology.
c. Blended learning is also a combination of many learning technology formats, such as videotape, CD-ROM, web-based training, film) with face-to-face learning.
d. Blended learning combines learning technology with actual work task commands to create a good influence on learning and work.

From these definitions, it can be concluded that millennial learning that is applied through Blended Learning is learning that combines face-to-face learning and online learning with the aim to further improve the quality of learning to achieve instructional goals.

Digital Development Model in the Education Sector

The ICT integration model that can be described as shown below has two dimensions: technology and pedagogy.
1. Technology refers to all information and communication technology (ICT), the technology dimension is a continuum that represents the number of increasingly/diverse use of ICT

2. Pedagogy is the art and science of teaching. The pedagogical dimension is also a continuum and represents changes in teaching practice resulting from the application of ICT.
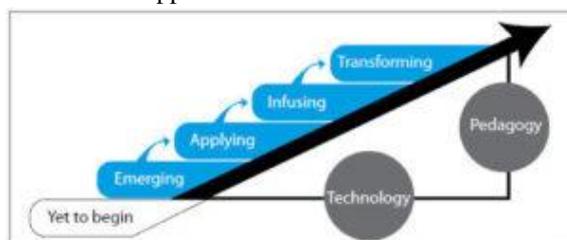

Figure 1: Dimensions of Technology Interaction

In these two dimensions, there are four stages of the integration model of ICT development in the education and school systems. These four stages are continuum stages, which UNESCO termed as Emerging, Applying, Infusing and Transforming.

1. The Emerging Stage is characterized by the use of ICT in the school at the initial stage. In the Emerging stage, classroom practice is still very teacher-centered.
2. The Applying stage is characterized by an understanding of the contribution and efforts to implement ICT in the context of school management and learning. Schools have also tried to adapt the curriculum so that they can use ICT more in various subjects with specific software.
3. The Infusing Stage requires an effort to integrate and incorporate ICT into the curriculum. In this approach, schools have implemented computer-based technology in laboratories, classes, and administration departments. The curriculum begins to combine learning subjects that reflect real-world applications.
4. The Transforming Stage is characterized by the school's efforts to plan and renew its organization more creatively. To conclude, when the transformation stage is achieved, the entire ethos of the institution changes: teachers and other support staff consider ICT as a natural part of their institution's daily life, which has become a center of learning for the community.

Therefore, it can be said that increasingly crowded human mobility and the birth of new technologies, is the background of the birth of a blended learning model as a new innovation in answering the challenges of times.

3 DISCUSSION

In designing Blended Learning, the accuracy of choosing a combination of delivery media both in traditional and online learning settings is important because the focus is optimal learning. Also, Khan stated that blended learning includes a combination of various activities including face to face in class, live e-learning, and independent learning. All of them are a combination of traditional education (guided by the teacher/lecturer), synchronous online learning, asynchronous self-learning and structured learning based on the experience of the learner and mentor (Khan, 2005, p. 202). Howard explained that blended learning is a term introduced by distance learning communities as an effort to utilize synchronous learning activities, such as face-to-face interaction with instructors and collaborative work with peers as an asynchronous learning activity complement that is carried out individually by learning participants (Howard, et al., 2006, p. 1). In essence, blended learning can be said to be a combination of synchronous learning that occurs at the same time and asynchronous learning that happens at different times and places.

Synchronous type of face to face or synchronous face physically coincides at the same time in the same place. Examples are face-to-face learning in class, laboratory research, field trips, class presentations and group discussions, and all other traditional learning methods. The second type is synchronous online), or also called synchronous virtual collaboration such as audio/video conferencing, chatting, live online learning, instant messaging and others (Staley, 2007).

While asynchronous learning is a learning activity that allows different learners to experience the same teaching material at different times and places. Staley classifies asynchronous learning activities into two categories, namely asynchronous collaborative (such as online discussion forums. Mailinglist, e-mail, etc.) and independent asynchronous (such as simulations, online tests, searching material, material in the form of pdf, doc, HTML, video, animation, etc.) (Staley, 2007).

The concept of 4 quadrant learning settings according to Noord cited by Staley (Staley, 2007) and the classification of learning strategies according to Smaldino et al. and the standard of the learning process in the context of the e-learning environment that the author of Horton's (2006) adaptation. Four Learning Settings Quadrants The four-quadrant learning settings are as illustrated in the following diagram (Staley, 2007):
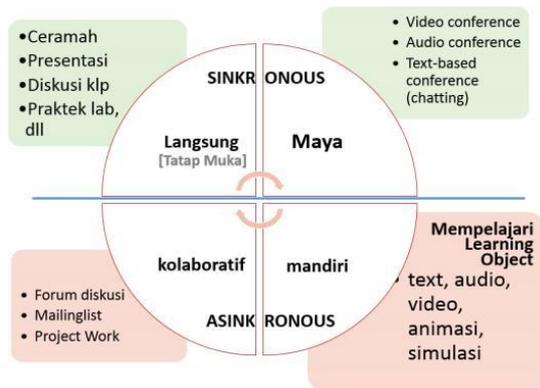
Figure 2: Kuadran Seting Belajar

Based on the diagram, it is clear that there are four quadrant learning settings as follows:

1. Live synchronous; a condition where learning occurs at the same time and place. Judging from the dimensions of place and time at the same time. Learning settings like this happen in traditional education, where between the learning participants and the teacher/lecturer/tutor are in the same place and at the same time, learning in class. Examples of learning methods that occur in this context are lecture, group discussions, laboratory practices, field trips, and others.

2. Virtual synchronous; a condition where learning occurs at the same time (real time) in a different place from one another. In this context, learning occurs in the same time dimension, but the dimensions of space/place are different from each other. Examples of learning methods that arise in this context are presentations, discussions, demonstrations, tutorials and others using technology and communication tools such as teleconference such as video-conference, audio-conference, or maybe chatting (text-based conference).

3. Self-paced Asynchronous; a condition in which learning occurs independently, anytime anywhere by the conditions and speed of their respective learning. In this context, learning occurs without being bound to time and place. Its nature is more open and flexible through independent learning methods. For self-study to happen, the learning participants are facilitated with digital teaching materials known as learning objects in various media formats both based on text, audio, video, animation, simulation, games or a combination of these (hypermedia)

4. Collaborative Asynchronous; a condition where learning occurs anytime and anywhere through

a collaboration between two or more people. Examples of learning methods that arise in this context are discussion methods, tutorials, and question and answer through online discussion forums, problem-solving techniques, and collaborative learning through online assignments..

Besides that, Educators need to continuously improve their knowledge and skills to teach students in the Technological, Pedagogical, and Content Knowledge (TPACK) framework so that they can learn their students effectively, this TPCAK mindset is illustrated in Figure 3.
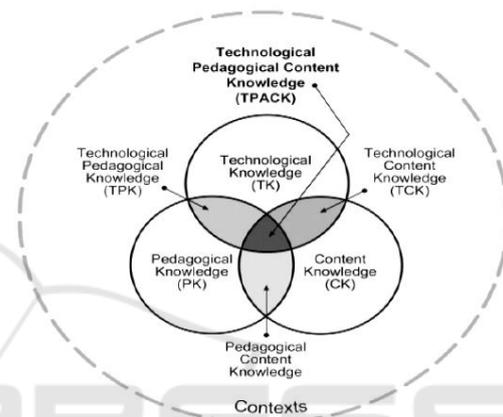

Figure 3: TPCAK mindset

Pedagogical, and Content Knowledge / TPACK (Source: http://tpack.org)

TPACK's framework of thought provides a way to identify the characteristics of the knowledge needed by educators/instructors to integrate technology into its learning, while also being aware of the complexities of knowledge that educators/teachers must have in many aspects. In the middle part of the TPACK framework, it is a combination of three primary forms of knowledge: knowledge of subject matter (describing what subject matter is taught in a particular field, including theories, processes, and practices that are familiar); pedagogic knowledge characterized by strategies and methods used by educators / teachers in the classroom to teach students), and technological knowledge that continues to evolve and flow.

TPACK describes a critical intersection of the three types of knowledge that educators/teachers must possess as a place where active learning can take place. Technology here means how educators/instructors develop their knowledge and technological skills to utilize online learning resources that are available to be included in the learning process of the subjects or courses they

teach. Pedagogy chosen by educators/teachers can vary depending on the class and (students). Content also varies, according to the guidance of each educator/teacher.

4 CONCLUSION

Based on this conceptual discussion, the characteristics of Blended learning are as follows:
1. Learning that combines various ways of delivery, teaching models, learning styles, and various technology-based media.
2. As a combination of direct teaching (face-to-face), independent learning, and independent learning online
3. Learning that is supported by a compelling combination of ways of delivery, methods of teaching and learning styles.
4. Teachers and parents of learning participants have the same important role, teachers as facilitators, and parents as supporters.

Blended learning is a relatively new concept in education where instruction is delivered through a mixture of online and traditional education that is led by instructors or instructors in practice.

The author suggests that instructors, teachers, or lecturers can utilize technology in carrying out teaching and learning activities without losing face to face activities. This can facilitate the implementation of learning and will undoubtedly improve the quality of Indonesian education. The use of technology in learning can be done by utilizing a web-based learning system that is already available such as quipper school, edmodo, office 365 and so on. With his hopes, the quality of Indonesian education can increase from before.

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