



21ST CENTURY TEACHING AND LEARNING: IMPLEMENTATION OF LEARNING MANAGEMENT SYSTEM (LMS) IN EDUCATION

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ABSTRACT

The world-facing rapid growth in technology, particularly in education. In the implementation of the learning management system (LMS) in 21st century, society have proceeded against high intellectual behaviors with cybernated knowledge-based. Modern society requires the education practitioners and the learners to enhance their information communication technology within an e-learning situation where distant learning exist. A learning management system is a medium of teaching-learning for both educators and learners. It provides a bunch of avant-garde technology that support the learning process. There are advantages also disadvantages while using LMS as the core in modern language learning education.

INTRODUCTION

The world has changes society rapidly through the outgrowth of technology. The requirement of today's society becomes the encore of changes. As the intermediary of education, educator plays significant roles to prepare our generation into the future society. Tomorrow society enlarges their different beliefs and cultures.

Language Education is experiencing many changes due the turn of 21st century. Traditional notions of education are expected to give a new, innovative way of thinking on the way we learn, teach, obtain comprehension (Eaton, 2010). The education field may face changing physically, socially, also economically that caused by the process (Kanokpermpoon, 2015). In other words, the way education system was settled and provided in the previous era need to mismatch the current situation. The earlier and present generation might face gap problems, particularly in terms of education and learning (Kanokpermpoon, 2015).

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The technological environment may influence all features in education terms. The form of technological changes has caused an eternal assimilation and socialization process, which ICT plays as a significant key (Gómez and Vicente, 2011). The online environment brought ground-breaking opportunities and resources for the education field (Lund, 2006). According to Hård af Segerstad (2002, in Lund, 2006) finds that computer-based communication shows extension interactional and stylistic matters that make creative and produce variants existing practice.

Alongside the use of technology in education, learning management system drives academic activities more sophisticated. The Learning media system provides an efficient platform for students to access learning materials, attempt online quizzes, and more, at the same time (Poulova, Simonova, and Manenova 2015). It can be assumed that LMS would make educational management, administration, teaching and learning activities efficiently (Macgilchrist, Allert, and Bruch 2020). Some scholar has drawn learning media system to a primary training management system, which after that became platforms for e-learning (Kats, 2010 in Alenzi, 2018).

Together with the integration between education and technology, scholar may create education environment be more cybernated. Some academics bring forward the ideas of digital-based education issues into research articles. That being the case, this paper brings the implementation of learning media system as the issues. The article will be conduct the 21st century education, 21st skills, the e-learning, the information communication and technology concept and the implementation of learning management system on foreign language teaching.

21ST CENTURY EDUCATION

In certain era of time, there was a system that require educators to be extra in preparing the task that go along with the learning activities. Furthermore, the same condition where educators takes place as the main role in learning activities by giving their learners their whole knowledge was less student-centered. The majority system is often more theoretically with the authoritarian style of teaching with inadequate creative, critical thinking, and problem-solving technique. The tradition begin with less attractive speaking and repeatedly writing that taught by the educators (Alismail and McGuire 2015).

Nowadays, the world facing rapid growth in technology particularly in education. The changes brought impact about the way we perceive the past education system. New brilliant method and many varieties of interactive digital learning media are suitable for learners' different learning styles. By then, technology may support the model of 21st century learning by blending the physical and digital arrangement. This is considered as necessary step in creating 21st century learning environment to prepare learners into becoming effective citizens of knowledge-based societies that is Information and communications technology (ICT) driven (Garba, Byabazaire, and Busthami, 2015).

Education practitioners as guide of the knowledge have to master 21st century technology regarding to their pedagogy and subject content. Furthermore, now the teacher roles not as the main resource but change over to the mentor. 21st century teachers became their learners guide not as a knowledgeable person providing learners with entire information (Driscaoll, 2019). Accessing online resources help the practitioner to get lesson plan, improve the content lesson, also learn recently developed techniques and methods of teaching (Bhatti, Ahmad, and Khan 2014). In other hand, the teacher need to step ahead from the screen-ager learners.

21ST CENTURY SKILL

Within the process to enhance the form of education to implement the contrasts technology-based changes, there are several concept that refers to cultivate the learner mentally. The term 21st century skills refer to broad set of knowledge, skills, work habits, and character traits that are critically important for success in today's world (Malik, 2018). To heighten learners, they need to be furnished with the skills to handle the twist of present-day world. Malik (2018) divined his 21st century skill competencies:

- Problem-solving, critical thinking, reasoning, analysis, interpretation and synthesizing information;
- Research skills and practice, intercreative questioning Creativity, curiosity, imagination, innovation, personal expression;
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative;
- Oral or written communication, public speaking;
- Leadership, teamwork, collaboration and cooperation, and global awareness;
- ICT literacy and scientific and environmental literacy;
- Civic, ethical and social justice literacy, multicultural literacy, financial literacy.

In order to cope with demand of 21st century skill, be more applied critical thinking, applying current knowledge regarding the situation, analyzing the information, solving problems, also make brief decision (Sahin, 2009). The 21st century learning skill imputed below (Partnership 21st century skill, 2008 in Sahid, 2009):

- Communication and information skill includes information and media literacy skill which are managing, assessing, analyzing, managing, evaluating and creating knowledge based information inform of variety media, and understanding the use of media in society; communication skill that is managing also understanding and creating oral, written and combination of communication in large context
- Problem solving skill refers to critical thinking that exercising in reasoning arguments, making complex choices, also appreciate interconnection among others; problem identification and derives solution means learners ability to analyze, frame also solve the major problems; intellectual and creativity curiosity that refers to implementing, communicating and developing new ideas to others while staying open minded and responsive for the new and diverse perspective;
- Interpersonal also self-directional skills means that interpersonal and collaboratives skills also demonstrating leadership and teamwork, adapting to varied responsibilities, productively working with colleges, exercising his/her empathy, respecting diverse perspective; self-direction also monitoring their own understanding and learning needs, well allocated appropriate reason transferring leaning from one to another; accountability and also adaptability is remain personal responsibility and flexibility in private space, community and workplace context, setting up high standards and goals for themselves and others, also able to tolerate the ambiguity; social responsibility that can be assumed responsible with their interest from larger community in mind, demonstrating behavior ethics in private, workplace and community areas.

It can be seen that 21st century skill are provided by high ethical behavior education practitioner need to implement in learning process. Our world grow rapidly and changes faster that we already seen before. Through personal high 21st century ethical behavior the modern society are able to face the changes with less incompetence.

Information Communication Technology (ICT)

Information and communications technology (ICT) becomes part of everyday practices in the 21st century, it is important to note that digital immigrant educators implement and try to include technology in routine teaching and learning (Kanookperpoom, 2015). Educator professional competencies impacted by their performance in doing information and communication technology (Shengru Li, Yamaguchi and Takada 2018). The information communication technology gained prominent duty in education industry as the other industries (Phutela and Dwivedi 2019). The use of information communication technology identified as prominent method to raise current quality of education as art of educational reformation. (Shengru Li, Yamaguchi and Takada 2018).

The concept of information communication technology arise as facilities and tools that includes hardware, storage, software, processing, presentation and transmission (Jamly 2017). The concept of information communication technology shown the distant learning with multimedia authoring tools, also sundry types of learning platform, video conferencing tools, also social media platforms (Derbel, 2017). Another explanations of information communication technology refers to tools that handing several set of applications that is used to create, communicate, disseminate and manage the information (Çakici 2016). The concept of ICT lied on student-centred learning rather than the traditional learning method where the educator practitioners take majority place in teaching learning activities. In order to support the idea of brilliant aspect that ICT took place here is most obvious impact in learning (Çakici 2016):

- The potentially adapt quickly for the teaching materials according to certain circumstances, of the learners needs and also their response;
- Information communication technology take into consideration to reach for the trending, daily of current issues that in other explanation as actual or authentic materials on the websites or print out media;
- The high amount of possibilities to integrate many various alternately or basic medias such as picture, audio, and video into one or two forms;
- Educators practitioners might easily to get the learners engagement to be more exciting and less ordinary;
- Information communication technology allowed the learning to be more focus on one aspect in certain lesson.

The obvious impact from ICT might adapt easily, take trending and authentic and actual issues, integrate the basic medias become only one form, easily engage the learners and allowed to focus on one aspect of certain lesson. Moreover, there are lot of cluster of ICT advantages in foreign language learning field according to Çakici (2016):

- The control capacity on teaching presentation, whereas it can be edited unlike the fixed book. On the other sides, ICT can combined visual with listening materials, text with pictures also graphics;
- Creativity and novelty may profitable for teacher for using multiple teaching materials for each lesson, not like with textbook, where all classes learn same topics;
- Feedback through computer-based program may easier teachers' jobs and correcting learners work also sometimes giving the appropriate advices;
- Adaptability may adjust learners individual level and their single needs that can be supported by the teacher through computer-based program.

As educator we might face any difficulties in repetitive textbook. ICT leads us where easy situation in teaching learning into editing the material source to more creative with feedback and adaptable for each level of students.

On the contrary, ICT has also bring several disadvantages when applied in classroom:

- In the implementation of ICT-based the educator practitioners might have face some difficulties encountered integrating the concept into course syllabus and curriculum;
- Also ICT are not able for all learners in all situations and also for every circumstances, and the important the learner have to get considerable training for the success use;
- In the case of classroom management, the unqualified educator practitioner, matching up the technology with the course, and finding the acceptable and reliable teaching learning activities, the total cost of technological equipment, devices, also the maximum classroom capacity need to be concern before applying the ICT-based classroom.

Consequently, is one of good treatment to use ICT in 21st learning as the main core in learning activities. On contrary, the expectation each ICT owns limitation for its use regarding to technological issues and cost issues according to its use. Moreover, it can be seen as the use of ICT made brilliant enhancement on pedagogical aspects.

E-LEARNING

The definition of e-learning interpreted as range of technological utilize by creative and capable educator practitioners to enhance their teaching and learning situation (Chhabra 2012). E-learning may costume traditional learning method to be more motivating, and meaningful for both learners and educators. A medium of computer-based form as multiple media technologies that is supported by internet to improve the qualities of resources and service in teaching and learning activities (Soliman 2014; Waterhouse 2003; European Commison 2001).

The area of e-learning included learning website contain materials and learning programs. Some of them are designed as language learning programs that make available for the education practitioners. In case of the use e-learning, here are five specific types of e-learning according to Soliman (2014):

- Learner-led means that it must require course materials for the learners, and also it provides discussion session through chat and forum related to the course assignment;
- Embedded e-learning drives educators embed any kinds of video and certain web pages to enhance their interest in learning;
- Instructor-led e-learning are made of educators live presentation via real-time video conferencing, screen-sharing, speaking, video or instant message, also whiteboard application;
- Telementored e-learning are amalgamation between the use of technology and distant learning. In short, it able to integrate printed handout with extra guidance in form of video conference, instant chatting and internet based-communication.

Cowie and Sakui (2013) defined e-learning as language teaching and learning based system that using digital bases as smartphones, tablets and computers. In short basically e-learning concluded as term of using technological properties which can be reach by using computer-based.

LEARNING MANAGEMENT SYSTEM

Learning media becomes enthralling when information communication technology in the education terms. Educator practitioner might implement student-centred learning practice by computing the learning materials that includes images and sounds through the integration of ICT (Çakici 2016).

The technology based are implemented in learning activity by the educator that use learning management systems (LMS) in teaching activity. Learning management systems (LMS) are considered to be largely application for education as they enable the representation of phenomena, enhance contemporary study and enable the creation of models and problem-solving applications (Cavus and Alhih, 2014). LMS are expected to be easily entranced anytime and anywhere with web characteristics, that might replace physical classic classroom limitations and greatly provide more functions as administration, content and learner management, and so on (Walker et al., 2016 in Chaw and Tang, 2018). Client service based database that use web environment (Jung and Huh 2019).

Learning media system provides both educators and learners with a bunch of great interaction moments and practical application with collaborative work during the learning process. The efficiency and the limitless interaction with best advance today technology (Oliveira et al. 2016). The advance technology facilitate the achievement of 21st century intention in gaining the concept of ICT literacy and scientific and environmental literacy. A Learning Management System conceives multiple media, with different language, various feature, enabling other possibility of technologies, and presenting information in well-organized structure to actualize the main purpose of learning (Oliviera et al. 2016). There are high quality feature of LMS to aim the purpose of success technology based in learning (Turnbull, Chugh, and Luck 2020):

- Course management that deliver well-timed course material for the learners. Learners also have capacity to contribute the content creation from their personal spaces
- Assessment function along with the support the storage of assessable task, with grades and feedback for the learners.
- Tracking progress facilitate the analytical engagement with the attendance frequency, the total course time, the communication proses, and the downloaded files.
- Gradebook as the assessment information to learners that examine scores, feedback, and learners attendance.
- Communication tools provides asynchronous and synchronous with one-way and two way communication.
- Social connectivity includes the space of discussion, live chats and video conference tools.
- Security and privacy that along with personal authentication, access verification, password integrity controls and intruder detection.
- Omnipresent access provides the easy accessible by many forms of smartphones and other cellular computing devices.

Learning media system provides us the purpose of its users to be able to create the area of well-timed course management, well-structured assessment function, easily tracking our learners learning progress, communication features with synchronous and asynchronous, with great privacy and security and also the easy accessible in many forms of gadget.

Another development of learning media system might adjust their needs from education. Constantly LMS are able to be use in variety of procedures and customized software system with certain instructional aims in particular organization (Srichanyachon 2014). There will be beneficial aspects in order the use of LMS in education according to Srichanyachon (2014):

- Centralized learning means all variety of learning content are able to learner anytime from all location particularly with website access they long for study. Also with multiple accounts they can access the LMS anytime and anywhere;
- Tracking and commentary for increase performance allows both education practitioner and learners to view learning path, track progress, final review of success, also schedule and re-schedule new courses;
- Instantaneous capabilities evaluation means the users allowed to evaluated the taking course while they participating into certain course. They are able to view their performances based on tasks and quizzes that conducted by the educators;
- Upgradable easily go along with the flow of e-learning that provides the users to changes the description, requirement, specification, also the forms based on the recent information. Also, the system can be done while the learning activities take place the situation;
- Simplifying the teaching and learning process means that LMS have room for various component of technical documentation and administration, recording the program in classrooms various learning.

The are several aspects when we assist LMS in our learning system. We have to concern our learning system may be framed three major key factors such as system, organization, and individual (Srichanyachon 2014). The integration between information communication technology with LMS where the more learners have comprehend the ICT's knowledge the less their inability in using LMS.

CONCLUSION

Language learning education changed its component to technology environmental. This is considered as necessary step in creating 21st century learning environment to prepare learners into becoming effective citizens of knowledge-based societies. The 21st century educational system enhance the learning activities into some digital-based form. As teacher or educational practitioners, we need to be step ahead from the screen-ager learners. e-learning concluded as term of using technological properties which can be reach by using computer-based. Then 21st century skill are provided by high ethical behavior education practitioner need to implement in learning process. Our world grow rapidly and changes faster that we already seen before. Through personal high 21st century ethical behavior the modern society are able to face the changes with less incompetence. Learning management systems (LMS) concludes as the innovative products that accommodate the 21st century learning digital-based form in purpose. Learning management system is a medium of teaching learning for both educators and learners. It provides bunch of avant-garde technology to support the learning process. There are advantages also disadvantages while using LMS as the core in modern language learning education. Every media system has its own limitation, but we have to be overcome with other resolution.

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