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By Dr. Lester Reid

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I. Introduction

Worldwide, there are concerns amongst adult and higher education institutions regarding online learning disrupting traditional classroom learning (Altun Turker, Baynal, & Turker, 2019). During the evolution of online and distance education learning, Ivy League universities along with many others hesitated to embrace online learning; however, over time prestigious institutions across the world have begun offering courses, professional certificates, and college degrees online Via the learning management systems (Ohliati & Abbas, 2019). State universities, for-profit, not-forprofit and private adult and higher education colleges, and universities have been utilizing learning management systems without hesitation and look forward to new innovative learning management systems that will offer the best education delivery services to adult learners in the online Environment (Ortiz & Green, 2019). The traditional physical classroom settings are declining when compared to online education's increased enrollment, especially owing to the supply and demand for online teaching and learning (Holmes & Prieto-Rodriguez, 2018). Adult learners across the world are exploring and embracing online learning gradually via learning management system platforms (Garrotte & Pettersson, 2011).

Learning management systems were designed to facilitate online learning, and now instructors are embracing and appreciating knowledge sharing in the classroom that is educating and preparing adult learners to complete their college education irrespective of where they are Located (Bell, 2011). Learning management systems are considered to be course management platforms for instructors to design, develop, and prepare their classroom to deliver online education to their students (Walker, 2006). Over four decades, learning management systems have been a significant disruptor to adult and higher education, owing to the demand for the product and its ability to connect and integrate the relationship between instructors and students in a knowledge-sharing online environment (Schoonenboom, 2014).

Colleges and universities across the world have been selective in the type of learning management systems they would adopt and implement to deliver online learning to students nationwide and worldwide (T Nagy, 2016). Costs and product delivery capabilities are some of the things colleges and universities consider to be significant when deciding to invest in learning management systems (Blin & Munro, 2008). Many colleges and universities adopt a certain learning management system that will interface with their technology and provide a smooth experience for teachers and students in the classroom (Matusu, Vojtesek & Dulik, 2012). Adult and higher education institutions value the feedback from their instructors, students, and administrators regarding the effectiveness and value of the learning management system adopted and implemented to deliver eLearning education (Little-Wiles & Naimi, 2018).

II. Background of Study

What we have learned from the past can surely be a guide towards future decision making and the exploration of higher learning through distance education. Distance education has meaningfully changed the way we access higher education and how

Author: e-mail: drlesterreid@gmail.com

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we complete our college education (Daniel, 2017). Moreover, distance education has made it convenient and achievable for anyone within the USA and internationally to acquire and complete their college education, from the convenience of their home, their workplace, or anywhere of their choosing, without being in a physical classroom (Babo & Azevedo, 2012). Who would have guessed that this trend would emerge in the field of higher education? Distance education is providing millions of people the opportunity to be trained and prepared for career opportunities without being restricted to a geographical location (Chen et al. 2018).

History tells us that higher education's purpose is to advance human intelligence for the benefit of socio-economic and the moral growth and development of a citizen and their country (Bone & Agombar, 2011). Higher education institutions emerged many decades ago and have contributed significant value to millions of citizens across the world and still an influence on the human way of life as well as human growth and development today (Garrotte & Pettersson, 2007). A critical technology used in adult and higher education to facilitate and disseminate knowledge sharing and human advancement are learning management systems (Renzi, 2008). Learning management systems have influenced teaching and student learning tremendously and are making it convenient and accessible for adult learners to acquire their college education virtually from anywhere in the world (Fındık-Coşkunçay, et al. 2018). Learning management systems are contributing to increasing student enrollment, transformational teaching, transformative learning, and higher education institutions profitability (Zain et al. 2018).

a) Adult and Higher Education Institutions

For the most part, the teachings and practices at traditional universities were based on religious beliefs. Higher education's focus many decades ago was on the building of man's character and the strengthening of his faith so that he could be a great contributor to society and institutions (Dockery, 2016). Higher education in the United States is different from many other countries and principles. One of the most exclusive physiognomies of higher education in the United States is the decentralization structure. Contrary to many other countries, there is no nationwide system of higher education within the United States of America. The US system is decentralized, whereas college and universities are governed locally and directed within individual state systems (Burkum, 2009).

Early colonial higher education institutions such as Harvard were established to deliver education to those interested in ministry; nonetheless, after the American Revolution, universities began to extend their attention to incorporate education for the ministry, law, and medicine. During the nineteenth century, the mission of higher education transformed drastically to incorporate "applied subjects" such as engineering and agriculture with the development of land-grant colleges after the Morrill Act of 1862 (Cowan, 2011). Traditional practices began changing after that, and opportunities evolved for research to be conducted and used for the advancement of human intelligence and practices. The benefits from land-granting to higher education institutions have enabled the expansion of the dissemination of knowledge and the emergence of professors becoming teachers and scholars (Babo & Azevedo, 2009). Traditional teaching in the classroom emerged and became the trend that affected various areas and departments in a higher education institution, versus the focusing on becoming a minister, lawyer or medical doctor (Brennan & Teichler, 2008).

b) Cost of Education

Over the last decade, we have seen the cost of education skyrocket along with the trend of many colleges and universities that have emerged that are linked to for-profit corporations (Popescu & Ciurlau, 2017). As a result of unethical practices by these colleges and universities, many are closed, and graduates are disappointed to know that their degree is tied to a college or university that no longer exists. Whether it was corporate greed or some other unethical business practices, the costs to graduates are astronomical and are a big blow to higher education, particularly within the United States (Bruce, 2014). Without coming up with innovative and creative ideas, existing colleges and universities would have closed their doors several years ago or could be on the verge of closing their doors in the future due to lack of proper business practices and the execution of business models that have historically contributed greatly to organizational and financial growth. (Hansen, 2015). The mission and goals of colleges and universities are to maximize their intangible and tangible resources and meet the needs of their stakeholders (Dolan & Metcalfe, 2012). In addition, it's important to remember that higher education institutions are working to maintain their existence and are competing amongst themselves to keeps their doors open to the public (Martín, Potočnik & Fras, 2017).

c) Higher Education Dilemma

According to the US Department of Education, within the past two decades hundreds of colleges and universities across the United States were closed due to unethical business practices, which have cost hundreds and thousands of college students tremendously, which in many cases have impaired their drive and passion to further their college education after dedicating so much time, effort and financial resources to complete their college education. The Department of Education stepped in, regulations were implemented by the federal government, and many colleges and universities across the country were audited and forced to return federal

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funds to the Department of Education. Many were forced to close their doors (Phillips, 2016). It is quite evident that public and private universities have been operating as a business. This should not be looked upon as a negative approach that is mitigating higher education institutions challenges and predicament. After all, research, development, and innovation are critical to the mission and goal of any higher education institution (Correll-Hughes, 2012). Furthermore, investing into research and development at higher education institutions contributes tremendously to the growth and development of the US economy and should be sustained as key elements of the business model approach that will bring great value to the higher education institution (Lin, 2016).

d) Higher Education Paradigm Shift

During the past four decades, higher education experienced a paradigm shift and is now moving away from physical classroom learning to distance education or virtual learning (Sadikin et al., 2019). Due to the new trend, many higher education institutions that are not-for-profit and for-profit colleges and universities have emerged and have become the places to acquire higher education. People have realized that it is more convenient to acquire their education at any location of the choosing, but of course, with a hefty cost to them (Denny, 2013). Statistically and evidently, millions of people are overlooking the cost of education and are completing their college education through distance learning (Greener, 2010).

Formulating and executing business and higher education strategies that will improve how higher education institutions identify and mitigate these issues that are impairing their ability to execute their mission and reaching their goals are essential to the expansion and influence of the higher education institution in the community (Barr & McClellan, 2011). Moreover, without focusing on profitability, implementing an effective business strategy and business model will enable higher education institutions to operate in a manner that maximizes their resources and meet their stakeholder's expectation (Schaltegger et al., 2012). Embracing and implementing business model practices should not be looked upon as a negative approach that will mitigate higher education institutions issues, but rather the conduct of leadership must be looked upon as the potential problem that may affect a higher education institution's ability to fulfill its mission and reach its goals (Al-Husseini & Ebeltagi, 2014).

This study explored learning management systems as a positive contribution to adult and higher education institutions economic and financial challenges and its influence on adult learner's decision making and accessibility to acquire their college education. Online learning and learning management systems are interconnected and are the most popular higher education trend that is making it accessible and convenient for adult learners to complete their college education from anywhere in the world (Alhosban, & Ismaile, 2018). Learning management systems have created a paradigm shift and is the game-changer for traditional teaching and learning at Adult and higher education institutions.

III. Problem Statement

It was not known how faculty members, administrators, and students perceive learning management systems as the game-changer for traditional teaching and learning at adult and higher education institutions. There are continuous debates in higher education about whether colleges and universities should embrace online education fully or partially and whether or not online learning is the best practice to deliver quality education (Reese, 2015). Much higher education institutions have been challenged to offer degree programs online based on the trajectory of higher education learning and the vast demands of adult learners (Funieru, & Lazaroiu, 2016). Online education is pushing many higher education institutions to compete to keep their doors open and to meet the needs of adult learners who prefer online learning versus in-class, face-to-face teaching-learning (Hoskins, 2011). This explored phenomenon is affecting colleges and universities globally.

To deliver comprehensive and quality online education, learning management systems are making such experience possible and worth exploring by adult learners and higher education institutions (Yilmaz & Dogancan, 2016). Classroom management and online learning have changed over the years due to the development of learning management systems by technology companies and the adoption LMS by higher education institutions. Despite the continuous debates and challenges higher education is embracing, the need to meet adult learners need already have been facilitated by colleges and universities which have embraced and utilized learning management systems to facilitate online learning (Croitoru & Dinu, 2016). Adult learners have recognized that the convenience and the flexibility of online learning have made it possible for them to complete their education from anywhere in the world without disruption and restriction of their academic journey.

IV. Purpose of the Study

The purpose of the study was to explore how learning management systems influence traditional teaching and learning at adult and higher education institutions. Online learning is the trend to acquire higher education without being in the physical classroom (Fernández Cruz, Egido Gálvez & Carballo Santaolalla, 2016). Many colleges and universities have offered full

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degreed programs online for the sake of meeting the demands and to maintain being competitive to increase their student enrollment and increase their bottom-line (Mouakket & Bettayeb, 2015). How learning management systems influence adult learners' education and future economically and financially is worth exploring.

Many argue that online learning compromises the integrity and value of delivered education and should be utilized minimally or not at all, especially for some degreed programs (Orfanou, Tselios, & Katsanos, 2015). The culture and premise of a university's position may or may not be shaken by the trend of how adult learners are earning their college education (Walker, Lindner, Murphy & Dooley, 2016). The learning management systems that best meet the needs of clients are continuously explored by leadership at colleges and universities (T Nagy, 2016). A review of the literature was explored to capture the perspectives of participants and the findings regarding online learning influence on adult learning and the learning management systems contribution to online learning achievements at colleges and universities globally. Deriving possible solutions for adult learners and higher education needs was worth the exploration and contribution to the body of knowledge.

V. Research Question

The purpose of this empirical study was to explore and understand the perception of faculty members and students regarding learning management systems as a game-changer of traditional teaching and learning at adult and higher education institutions. The research questions guided this explored phenomenon:

R1: How do faculty members perceive learning management systems as the game-changer for traditional teaching and learning at adult and higher education institutions?

R2: How do students perceive learning management systems as the game-changer for traditional teaching and learning at adult and higher education institutions?

R2: How do higher education leadership perceive learning management systems as the game-changer for traditional teaching and learning at adult and higher education institutions?

The research questions explored the participant's feelings, experiences, and perceptions of regarding learning management systems and how it influences students learning in a virtual environment. Capturing qualitative data from each participant is essential to the understanding of how learning management systems influence, how adult learners acquire their college education, and how faculty members and administrators value the adoption and implementation of learning management system platform at their higher education institution (Lieber, & Weisner, 2010).

VI. Literature Review

Faculty members and student's perspective about their experience embracing and using online learning management systems is worth the exploration. Understanding how learning management systems influence traditional and online teaching-learning is essential for leadership, staff, and faculty at higher education institutions and for learning management system developers to focus on continual improvement of the quality services provided to their clients. Smooth and efficient delivery of knowledge and faculty-student engagement in an online teaching-learning setting is the fundamental reasons why higher education institutions invest in learning management systems. Selecting the best learning management system is critical and requires research before purchasing or leasing from learning management systems development companies.

a) Theoretical Foundation

Sternberg's Triarchic Theory of Intelligence (2000) opens the discussion about the three components of intelligence: analytical, creative, and practical. As we explore these three components by looking at how they affect the way we interact with each other, it is important that we address them separately in order to develop a greater understanding, learning, and appreciation for these concepts. Intelligence and effective decision making are critical to the much-expected results we anticipate at the end of our journey.

Analytical intelligence is synonymous with general intelligence and is measured by IQ tests to determine how humans analyze and interpret critical information with a given point in time. With this approach, an individual can look at things, ideas, words, information, and thoughts from a different dimension that is thought-provoking and requires an accurate response. In a society where people are more entertained and are often distracted from acquiring advance knowledge and making critical and strategic decisions, we notice that personal opinion is frequently fed off feelings and emotions. This can, in some cases, lead to a determinate and disadvantage to the lives of many. Without a careful critical thinking approach that contributes to the advancement and betterment of our lives, many may eventually pay the price and reap the results thereafter.

Creative intelligence is about thinking "outside of the box." Whether we have prior knowledge or not, it is imperative that we explore different avenues of learning and later apply the learned knowledge in a manner that will influence us to step out of the norm to make decisions that will work for the greater good of many. With the use of one's ability, personality, and

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intelligence, we can influence change and improvement in how we view and embrace the world we live in amongst each other. Being creative with our intelligence should bring a great benefit to our lives and the lives of others. Our creative intelligence should be seen as a tool to facilitate thoughts, ideas, awareness, and solutions to the challenges and demands in our society (Lundin and Nuldén, 2007).

Practical intelligence has to do with how we acquire and use knowledge through experiences of which we seldom enunciate. In a world of demands on our time and energy, we live through our experiences and make decisions because of them. What we experience in life influences our thought processes, which leads to knowing things from the experiences we embraced and absorbed into the way we live and think. Sometimes we lean toward what we know and overlook the fact that life requires us daily to logically work through challenges and problems that require our immediate attention (Merriam and Associates, 2007). Certainly, practical intelligence is critical when focusing on problem-solving matters requiring critical thinking. This approach may bring a breakthrough for many in the long run. It is imperative to know that not to know can be costly and to know may bring a great benefit or results that are much needed.

They explored concepts and theories covered in this study address the significance of the different types and level of intelligence, culture, and practices that influence our decision making and ability to bring a resolute to the challenges we face on a daily basis in our society. Furthermore, knowledge sharing is critical to our human development and how we relate and embrace each other in our society. The theories highlight the matters that affect our lives each day and teaches us how to embrace them and use for human development and application for the greater good of our lives and others (Merriam and Bierema, 2014). Theories help to understand and appreciate Confucius principles of learning and Clancey's (1995) concerning knowing how to make good interpretations and solve problems versus just relying on our abilities, talents, and education.

Learning management systems enables stakeholders (Faculty and adult learners) to communicate, interact, and experience transformative learning and transformational teaching, especially in an online learning environment. Learning management systems provide the opportunity for (1) analytical intelligence, creative intelligence, and practical intelligence to be manifested and facilitated by adult learners and the instructor, which will increase transformative learning and future application of knowledge in the world of opportunities. When adult learners experience online learning via a learning management system, it is imperative that they recognize the benefits and challenges that will influence their transformative learning and ability to evolve once knowledge is disseminated in the classroom. Adult learners will learn how to think outside of the box and overcome online learning anxiety and embrace the trend of learning and developing intelligently.

b) Learning Management Systems

Learning management systems are course management platforms designed to deliver adult and higher education to adult learners, notwithstanding geographical location. The various eLearning platforms encourage engagement and knowledge sharing between instructors and adult learners asynchronously and synchronously (Castellano, 2014). The learning management system platforms store learning tools and resources which enable adult learners to complete and submit assigned tasks for evaluation and grading by the instructor (Kumari, 2016). Learning management systems are used for eLearning purposes, which enable adult learners to acquire college education face-to-face or through distance learning (Cudanov et al., 2012). eLearning is a global phenomenon which enables adult learners to complete their college education online from anywhere in the world (Smart, 2006). International universities have transformed the way they deliver college education to adult learners by utilizing learning management system platforms which makes the teaching and learning experience smooth and relatively comfortable for instructors and adult learners (Falvo & Johnson, 2007).

c) Blackboard

Blackboard was first introduced to the market in 1989 and dominated the market over a decade, which made it achievable for colleges and universities to embrace with open arms (Bradford et al., 2006). Today, Blackboard is widely used by many colleges and universities across the world, despite facing intense competition with Canvas, Moodle, and D2L (Al-Malki et al., 2015). Blackboard is owned by Blackboard Inc., an American company based in Washington DC. (Bowen, 2012).

According to Loubert (2004), Blackboard functions entirely within the existing Web browser and provides an easy to use the course Web site for which the instructor and adult learners can post their current documents. The setting up of quizzes, exams, and other assignments are relatively comprehensive and feasible for the instructor to complete. From the student's perspective, they appreciate the fact that they can achieve and upload all tasks into Blackboard and later on receive feedback from the instructor and access their grades in the grade book.

According to Metzner et al. (2005), Blackboard's limitation or weakness is the lack of functioning in a web application. The probable solution suggested is the implementation of architecture and assessments of using some software metrics. Students who are enrolled in engineering courses may appreciate the utilization of

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software metrics interfacing with Blackboard architecture. The recommendations made for Blackboard to meet the needs and demands of their customers are: (1) Designing Blackboard as a centralized supporting class with generic functions (2) Defining persistent data requirements, (3) Determining user interface requirement, and (4) Translating recurrent and mechanical tasks into automated knowledge sources.

While Blackboard focuses on sustaining their customers, their rivals are in full gear designing products and features that are revolutionizing the LMS industry and adult and higher education environments (Mbuva, 2014). Blackboard's quick response to the market could put them in a competitive advantage; however, slow to entry with new or improved products and features could cost Blackboard tremendously in the future.

d) Moodle

Moodle, first released in 2002, is quite unique compared to their competitors. The educational and business model behind the design of Moodle came out of a pedagogy-oriented approach (Minovic, 2012). The goal is to create a platform for students to contribute to the educational experience and sustain learning communities (Alwi & Fan, 2010). Moodle is owned by Moodle Communities and can be accessed on mobile apps and other electronic platforms and devices worldwide. Moodle is the preferred learning management system utilized by many universities around the world to manage eLearning activities; since it is considered to be more affordable compared to other learning management systems. Based on its unique features and capabilities, several universities embrace this technology and encourage their faculty members to utilize the platform to manage their classroom learning activities and monitor student's activities and performance (Korte, 2009).

Malganova et al. (2016) show that Moodle LMS resonated with hundreds of students across the world. Universities that used WebCT and Blackboard platforms experienced a smooth transition to Moodle, which was almost complete and operating on a non-commercial basis compared to their rivals (Crawford & Persaud, 2013). Moodle's plugin packages allow universities to achieve full localization in 43 languages. Tier 1 & 2 universities such as Stanford University and Texas A&M University, embrace Moodle with open arms based on the interactivity, flexibility, cooperation, and motivation. (Dawson, 2011). Some of the advantages that Moodle has over its competition is that it is open-source, can combine the creation, reviewing, editing training materials of the instructor and adult learner (Schultz, 2012).

e) Canvas

Canvas learning management system is more intuitive and easier to use for classroom management, teaching, and learning (Marta, 2015). This product has been on the market since 2011 and is widely preferred by community colleges and universities, predominantly within the USA. Canvas is owned by Instructure, an educational technology company based in Salt Lake City, Utah. Instructure is the developer of MOOC, a Canvas network that is dominating the market with open online courses (Emmons et al., 2017). Many community colleges and universities are replacing Blackboard with Canvas based on its advanced capabilities that are meeting the needs of its customers (Romeo et al., 2017).

Stigall (2016) talked about the distinctions that made Canvas highly preferred compared to their rival's Blackboard, Moodle, D2L, and others. The LMS does have similar features as their rivals; however, the way the features are implemented and the availability of features to customers that are fee-based -unavailable on other LMS platforms. Canvas is the solution to Blackboard's web application problem and the advancement to Blackboard. Canvas was built on Ruby on Rails, which is a programming language for modern Web applications. Canvas benefits include reduction of programming time and room for frequent updates and bug fixes, unlike Blackboard's deficiency in these areas of programming and Web application functioning.

While Canvas sustains market interest, their competition may cease to exist or may come up with products that will disturb the LMS industry or adult and higher education environments. Canvas competitor Blackboard is experiencing difficulty competing and is losing a lot of market shares. Canvas is still the most preferred product in the LMS industry (Canvas Commons, 2018). Canvas is considered to be the upgraded version of Backboard with more intuitive capabilities to improve classroom navigation, classroom set-up, course management, faculty-student engagement, and self-direct learning (Little-Wiles & Naimi, 2011).

The learning management systems elaborated on are in this study are the most commonly used learning platforms used at higher education institutions worldwide. These LMS platforms make navigation and accessing learning activities and resources easy for students and faculty members at higher education institutions. These learning management systems have influenced student learning and learning outcome with the aid of faculty involvement and instructions within the learning environment. Furthermore, faculty members find these learning management systems to be user-friendly and intuitive, which makes it easy for them to develop courses and disseminate knowledge, which will influence students learning and faculty-student relationship.

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f) LMS -Faculty Perspective

Faculty members at adult and higher education environments have shared their perspectives regarding the influence of learning management systems on adult learning, classroom management, and engagement. Regardless of the learning management system platforms adopted by higher education institutions, faculty members have contributed their perspectives about which platform influences student learning and adds value to the classroom learning and effectiveness (Nasser, Cherif, & Romanowski, 2011). Studies were conducted to capture faculty member's perception about learning management systems utilization in the classroom to manage learning activities, increase students learning and engagement, and monitor student's activities and performance. Studies have shown a positive correlation of faculty attitude towards learning management systems and the utilization of the platform in their eLearning or online classroom (DeNeui, & Dodge, 2006). Faculty members across the world have embraced learning management systems as a crucial part of their teaching-learning activities in their classroom and have dedicated their time and resources to make the student learning experience interactive and positive (Harijanto & Marisa, 2016).

Little-Wiles (2012) focused on the faculty perspective about learning management systems and how it influences students learning, engagement, and the benefits it brings students online learning experience. The study was conducted at Purdue University in Indianapolis to explore the faculty usage and perceptions of learning management systems. A survey was conducted with four open-ended questions about which they most or least like about learning management systems and what recommendations would they provide to improve how learning management systems accommodate and facilitate online learning. Approximately 39 percent of the 131 participants responded to the survey questions. Over 90 percent of the faculty members who participated in the study used the learning management system to manage their classroom learning activities and resources. Based on the participant's response about their perception of the learning management systems platform used to record students grades and distribution of their class syllabus, 54 percent said that it was extremely important to use, 30 percent said it was very important, 16 percent said it was important, and none said it was not important. Learning management systems utilized were highlighted favored for the flow of knowledge and transformative learning.

Chang (2008) examined faculty perspective of the Blackboard learning management system and their utilization of the learning management system to increase students eLearning experience at a large Midwestern university within the USA. The study was conducted to explore in-depth faculty description of concerns with Blackboard. A web survey was conducted, of which 1208 faculty members received the survey, and only 158 responded. The study shows that faculty members use Blackboard fundamentally for administration purposes of managing their online teaching-learning courses and very few considered pedagogical concerns in Blackboard when teaching their students. The study shows that faculty members embrace learning management systems as a revolutionary way of disseminating knowledge through an online platform that makes it simple to manage their classroom, student engagement, and utilization of various features in Blackboard to enhance learning and future application of knowledge.

According to Wichadee (2015), a learning management system (Moodle) plays a critical role in organizing faculty members course contents at a private university in Thailand. The focus of the study was to explore faculty members attitude towards learning management systems and the utilization of the platform in their classroom. A questionnaire was forwarded to sixty-two faculty members, of which 41 faculty members utilized the learning management system platform in their class while 21 faculty members did not utilize the platform in their classroom. The study shows that faculty members embraced the Moodle platform for the sole purpose of effective classroom management, user-friendliness of the platform, and increase student engagement and performance versus not using the platform to disseminating knowledge to their students. The correlation between faculty attitude towards an LMS platform was positive. The faculty members who participated in the study were 26 males and 36 females who have taught a minimum of ten years and have completed their bachelors' degree. These faculty members who utilized the Moodle learning management system had previously used other LMS systems to teach their online classes.

g) LMS -Students Perspective

Learning how to navigate through an online learning management system platform can be a challenging experience for students, whether or not they have a previous online learning experience. Each learning management system accessibility and capability are different; however, they can enable students to have a positive or negative online learning experience. Understanding how the platform works and where to find content and resources, as well as knowing how to communicate with their professor and classmates is essential to student's effective classroom engagement and participation. Students look for the best online learning experience and, with the help of IT professionals, staff and faculty members, students will be at peace within their mind to know that they will be taught and guided on how to embrace and utilize the higher education institution learning management

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system. Learning management system videos and user guides are great resources that can add value to students learning about how to use and benefit from the higher education institution learning management system adopted to facilitate online learning.

Islam (2015) investigated faculty and student perception regarding the usage of Moodle learning management system and tested the role of each user to determine the satisfaction and continued usage of the platform for teaching-learning purposes at a higher education institution. Data were collected from 170 faculty members and 233 students who are stakeholders at a Finnish university that uses Moodle as an online learning platform. The study captures the utilization of the features in the Moodle platform by faculty members to manage their classroom and student learning activities. The dependence on the platform by each faculty member to deliver quality content and resources was extensive and shows faculty understanding and appreciation of the platform. The study shows that students find the Moodle learning management system to be user-friendly and easy to navigate to access their course materials and engage in the classroom. Despite the instructions given to students to use the platform, students had minimal difficulty accessing and using the platform to complete their assignments and assessments.

The study shows that younger students embraced and appreciated the learning management system more than older students due to their technology savviness. Students perception of the Moodle learning management system is positive and shows a high acceptance and utilization of the platform to learn online versus in the traditional classroom environment. The hypotheses from the study show that the influence of ease of use on satisfaction, confirmation, and perception of usefulness is moderate, such that the effect will be stronger for students. The quantitative approach revealed the results validating students' appreciation and utilization of the Moodle learning management system as a learning platform for effective online and distance learning. In the context of selecting a learning management system for classroom management and online learning, the Finnish university adopted the Moodle platform as one of the best online learning management system to utilize in the hopes that it will increase students learning and engagement.

Gali, Naveh, and Nava (2010) examined students' utilization of Blackboard learning management system and their satisfaction at a higher education institution. Data for 1212 course websites were collected from the learning management system warehouse, student management database, instructor management database, and satisfaction questionnaires. The study concluded that students using a learning management system experienced a high level of satisfaction and low correlation between use and satisfaction. The study provided a comprehensive review of past research that found that student satisfaction with learning management systems is correlated to course content, perceived usefulness, communication quality, knowledge transmission, and previous achievements and computer literacy (Liaw, 2008; Selim, 2007). Other students found that student satisfaction with learning management system usage correlates with the actual use, previous student achievements, and course dropouts (Hong, 2002).

Student perception about learning management systems is significant to effective learning and communications with their instructor and fellow classmates within an online learning environment. Whether a student is self-directed or regulated or not, it is important that students know how to access, navigate, and utilize the online platform to learn and perform successfully within the classroom. The fact that online enrollment and learning has increased significantly over a decade demonstrates that the need for a carefully designed, user-friendly and autonomous learning management system is critical for higher education institutions to adopt and implement (Naveh, Tubin, and Pliskin, 2010).

h) LMS – Administrators and IT Professionals Adoption

Higher education institutions IT and leadership teams will be the key players to research and recommend the best and most cost-effective learning management system to adopt for the sole purpose of meeting the needs of student learning and success in an eLearning environment (Lonn, and Teasley, 2009). The institutional effectiveness of leadership and team over time should gather data collected from students' response regarding their satisfaction with the adoption and implementation of the learning management system selected for online teaching-learning. The findings and results will influence the decision making of whether or not the higher education institution should continue with the selected learning management system adopted and implemented to facilitate online learning.

Ozkan, Koseler, and Baykal (2009) focused on researching, adopting, purchasing, and implementing a new learning management system at a higher education institution for online teaching-learning. Forty-two participants responded to the survey questions and returned for data collection purposes. The results show that before adopting and implementing a learning management system, there are three constraints to consider that are critical to reaching the institution's intended goals for its students. First, learner characteristics are important to understand and concentrate on before purchasing the online delivery platform. In other words, students' attitudes, motivations, beliefs, and confidence must be recognized, especially when enrolled in an autonomous and self-directed learning environment. The environment is expected to

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be designed specifically to meet and facilitate those needs and make the learning experience positive. Secondly, the instructional structure is significant in that multimedia technology, tools, and resources will facilitate and increase students learning and classroom engagement.

The information collected by IT professionals and administrators at a higher education institution is critical to the current, updated, or discontinued learning management system effectiveness in the future. With students and faculty success in the classroom in mind, IT professionals and administrators at the higher education institution have to perform research and compare and contrast the various learning management systems in order to select the best fit for the institution's needs. The feedback from the users of the learning management system can be converted into the knowledge needed to choose a platform that will increase student enrollment, increase student learning, and improve classroom engagement and participation. The smooth flow of knowledge and information with the facilitation of media technology, learning resources, and tools is required for students' success, faculty teaching effectiveness, and the institutions increased bottom-line over time. With the feedback from both faculty members and students, IT professionals and administrators will have the appropriate information needed to make a strategic and financial management decision that will contribute value to the institution's overall success.

To strengthen the validity and reliability of the study, a review of the literature about faculty, students, and leadership perspectives regarding the explored phenomenon was conducted (Neuman, 2000). The participants who participated in the review of novels responded to surveys, self-administered questionnaires and interviews pertaining to learning management systems utilization, online learning, traditional teaching, and higher education institutions contribute to student learning (Patton, 2000). The qualitative and quantitative literature reviewed has contributed value to this study regarding the explored phenomenon. Capturing each participant perspectives regarding the explored phenomenon and answering the research questions will provide solutions and insight that leadership and IT administrators will need to make decisions regarding the selection of learning management systems and its influence on students learning, growth and application of knowledge in the future (Silverman, 2010).

This explored phenomenon addresses the gap in literature regarding learning management systems: the game changer for traditional teaching and learning at adult and higher education institutions and provides a solution that will improve higher education institutions knowledge sharing processes that will influence adult learners' way of effective learning and future application of knowledge and training in their field of study after completing their college education. Learning management systems are critical to adult, and higher education institutions ability to meets the needs of adult learners and improve the institutions bottom-line.

VII. Research Methodology

A qualitative research method case study approach was conducted at a local university in the state of Florida (Dhanda, 2013). The purpose for a qualitative case study approach was to capture the real-life perspectives of full-time faculty members, adjunct faculty members, students and academic deans at a higher education institution in the state of Florida (Yin, 2009). An individual interview was conducted with each participant at agreed-upon locations that were conducive to each participant. The participants agreed to meet on the university campus, at coffee shops, and at local libraries to participate in the individual semi-structured interview (Suri, 2011). Each participant was asked seven qualitative research questions and was assured that their identity would be kept confidential and anonymous. The seven individual interviewed questions that were asked during the interviews were designed to answer the two qualitative research questions regarding the perspectives of each participant regarding the explored phenomenon (Devers, & Frankel, 2000).

Savin-Baden and Major (2013) made clear the importance of participating and capturing the human social feature when running research. When intermingling with participants and conducting observation, it is important to capture the true substance of the experience in real-time and note data that are recent and are a true reproducing of the views and perceptions shared by each participant. Qualitative research is used to reveal trends in thought and views and plunge deeper into the issue (Williams & Moser, 2019). Qualitative data collection methods differ using semi-structured or unstructured methods. Rather interesting is that some shared methods involve focus groups, individual interviews, and participation/observations. These data collection instruments are tools used to capture the qualitative responses from participants who volunteer to participate in the study.

a) Qualitative Research Method

This qualitative case study explored the perspectives of academic leadership, faculty and students at higher education institutions regarding the implementation of learning management systems: the game changer for traditional teaching and learning at adult and higher education institutions to influence adult learners transformative learning and future applicability of knowledge in their field of study. The qualitative case study research collected qualitative data from the participants during an individual interview and non-participative observation at the higher education institutions.

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The qualitative research highlighted two theoretical foundation theories, and how they influence academic leadership knowledge management practices and adult learners transformational learning and future applicability of knowledge in their respective field of study: learning management systems and transformative learning. Furthermore, the significance of this qualitative research was to capture the perspectives and lived experiences of each participant regarding the explored phenomenon and to produce a solution that will influence higher education institutions leadership to improve knowledge sharing processes that will influence adult learners' transformative learning and applicability of knowledge after completing their college education (Nemec, 2012).

b) Case Study Design

Amongst the several methods of qualitative research, the case study is the most prevalent one in fields such as business management and higher education, just to name a few. Yet, as Yin (2012) perceives, the literature on case studies has disposed to the prominence on the methods of data collection and analysis instead of methods of hypothesizing from case studies. Furthermore, partly due to the impact of the landmark methodological works of Savin-Baden & Howell (2013), the importance has been on building theory from case study research. A case study has the conceivability to be individually enduring since there are few theoretical or methodological limitations to constrain a review and each project if finished well, includes some procedure of encounter as latest knowledge and principle arise from the case procedure. The case study includes empirical explorations of single cases that are distinctively exceptional. The work initially benefits the researcher assuming the project, and then when the latest knowledge is pragmatic to exercise, it can have usefulness for others.

The case study was conducted at a local university in the state of Florida. There are over twenty universities in the state of Florida, however, based on the university's location, student population and the utilization of several learning management systems within the past two decades, the university in Florida was chosen for this case study. Capturing the perspectives and experiences of faculty remembers, administrators and students is essential in this qualitative research case study. This case study provides insights to administrators, IT professionals and educators about the significance of learning management systems and how learning management systems influence adult learners transformative learning and future application of knowledge received in the classroom, especially in a virtual or online environment through distance learning. Despite the fact that the case study was conducted at a particular university in the state of Florida, the outcome from the study can be used by adult and higher education institutions to improve adult learners transformative learning, student retention, and performance.

VIII. Data Collection and Analysis

The purpose of the qualitative research case study is to explore and understand how do faculty members, students, and leadership perceive learning management systems as a game-changer of traditional teaching and learning at an adult and higher education institution in the state of Florida (Stake, 1995). The participants in the study were full-time faculty, adjunct faculty, adult learners, and academic deans at a local university in the state of Florida. The participants agreed to participate in the study after being invited to participate in the study. The academic deans of the higher education institution gave permission to conduct the survey on campus on scheduled dates and times agreed upon by each participant (Kvale, 1996). The data collected from each participant were analyzed, interpreted, and discussed in this study. The analysis, interpretation and results from the survey will enable IT professionals and administrators at higher education institutions to embrace, select and utilize and learning management systems that will influence faculty transformational teaching in the classroom and student transformative learning and application of knowledge in their respective field of study (Md. Ali, & Yusof, 2011).

a) Data Collection

Qualitative research explores the words shared by each participant describing their experiences relating to the phenomenon explored (Rossiter, 2008). The participants were asked opened-ended questions during the semi-structured interviews. The purpose of the qualitative research method is to understand the experiences and perspectives of each participant and to analyze and interpret the data collected that will influence the decision making of administrators and IT leaders regarding learning management systems adoption and implementation that will influence adult learners transformative learning and instructor's dissemination of knowledge in the classroom, especially in virtual and online environments (Lichtman, 2013). The qualitative data responses collected from each participant give insights to decision-makers to adopt LMS systems that will influence transformative learning in the classroom, faculty classroom management, faculty teaching and course development (Lincoln, & Tierney, 2004).

b) Data Analysis

Data analysis typically tends to be straightforward since the researcher can relate and distinguish diverse answers provided to similar questions. A thematic analysis was used in this study to capture qualitative data from each participant. Thematic

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analysis is a method for categorizing, exploring, and deciphering patterns of meaning within qualitative data(Savin-Baden, & Howell Major, 2013). Thematic analysis can be used throughout a variety of theoretical frameworks and certainly research exemplars. There are forms of thematic analysis established for use within positivist structures that focus on the significance of coding consistency. The thematic analysis approach used postulates comprehensible and systematic processes for producing themes from qualitative data. This analysis helps us to understand how codes are the nominal elements of analysis that capture the stimulating qualities of the data pertinent to the research question. This approach was used for the constructing of extensions for themes, patterns of connotation, reinforced by a fundamental classifying concept (Savin-Baden, & Howell Major, 2013).

Capturing and analyzing qualitative data is crucial to qualitative research findings, discussions, and recommendations. The traditional approach of analyzing qualitative data collected for themes data by using SPSS or NVIVO software will be used during my study. Coding of qualitative data may be explored during my study to help develop the themes that will be generated from each participant's responses during the interviews conducted. The themes captured will provide insight, solutions, and contribute value to discussions and recommendations that will be elaborated in the study. An NVIVO software was used to analyze the data collected from each participant (Sapsford, & Jupp, 2006). Data collected from the individual interviews and self-administered questionnaires we first coded and then categorized in the NVIVO software before the analysis was conducted (Salana, 2013).

c) Sample

Table 1 shows that a total of 34 participants at the local university volunteered to participate in the study. The participants in the study were: (1) three academic deans and two associate deans (2) Six full-time faculty (3) five adjuncts and (4)18 graduate and undergraduate students. The college deans are white males who worked as college deans over five years and has completed their Ph.Ds. The faculty members worked in their respective fields over ten years have been teaching over five years at higher education institutions. The full-time faculty members completed their Ph.D., and the adjuncts completed their master's degree. Both deans and faculty members worked with learning management systems at their current and previous higher education institutions at an average of five years. The adult learners in the study worked with learning management systems between 1 to 5 years while acquiring their college education.

Each participant was invited to participate in the study via email and face-face at the local university. Each participant was notified that their responses would be confidential and anonymous. They were notified that their responses would be of great value to adult and higher education institutions and the body of knowledge. The participants were invited to participate in a semi-structured interview at locations, dates, and times convenient to their availability. Some of the participants were interviewed at the local university while the others were interviewed at coffee shops, libraries, and restaurants. The participants are from the college of business and the college of education. The number of participants in the study satisfies a qualitative case study approach requirement and the sharing of perspectives regarding the explored phenomenon.

Table 1: Deans, Associate Deans, Faculty and Student Higher Education Background

Participant	Number of Participants	Occupation	Department	Number of years in Higher Education	Number of years using LMS
Dean	Three	Academic Leadership	College of Business	5 to 10	5 to 10
Associate Dean	Two	Academic Leadership	College of Education	5 to 10	5 to 10
Full-time Faculty	Six	Faculty	College of Business	5 to 10	5 to 10
Adjunct Faculty	five	Faculty	College of Education	2 to 5	5 to 10
Student	eighteen	Student	College of Business & College of Education	1 to 5	1 to 5

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IX. Results

Table 2 shows the seven thematic categories were formulated from the seven interview questions that each participant responded to: (1) LMS Utilization (2) LMS Traditional versus Online Learning (3) LMS Student Learning and application (4) LMS Faculty Teaching (5) LMS Student acquiring College Education Online Versus On-Campus (6) LMS Selection and Adoption and (7) LMS Game Changer for Traditional Teaching and Learning, to capture the themes generated during the interviews. Under each thematic category, four themes were generated, which reflects the perspectives and experiences of each participant during the semi-structured interviews. Each participant value the themes generated and believes that each theme is a value-added to any adult and higher education institution performance and effectiveness.

a) LMS -Utilization

Each participant believes that learning management system helps faculty with effective classroom management and dissemination of knowledge. LMS helps with their flexibility to teach and grade student's assessments on a weekly basis. Each participant believes that LMS helps with learning resources accessibility and is convenient for both adult learners and faculty members to communicate, interact, and influence adult learning.

b) LMS -Traditional versus Online Learning

Each participant shared that they had positive experiences using LMS to teach online and in traditional environments. The participants believe that LMS facilitates effective learning in the classroom, especially in the online environment. They believe that LMS enables quality learning in online environments versus traditional learning environments. Furthermore, they believe that LMS is a great interactive tool for students and faculty to communicated and learn from each other.

c) LMS -Student Learning and application

The participants shared that LMS facilitate faculty-student communications in the online and on-campus classroom environments. They shared that LMS improves the faculty-student relationship in the online environment versus on-campus environment. They believe that LMS influence students transformative learning and future application of knowledge. Furthermore, the participants shared that LMS increases student engagement in the classroom, especially in the online environment.

d) LMS -Faculty Teaching

Each participant shared that LMS enables quality teaching on-campus and especially in the online environment. The participants believe that LMS is suitable for knowledge sharing and transformative learning in the online environment. The participants shared that LMS connects students and faculty, which influence adult learners' continuance of taking online courses. Each participant agreed that LMS is great for students who cannot make it on-campus to complete their college education. They believe that LMS is great for distance learning, and it benefits adult learners tremendously.

e) LMS -Student acquiring College Education Online Versus On-Campus

Each participant believes that LMS has influenced how students acquire knowledge and their college degree. They shared that LMS has influenced where adult learners are acquiring a college education. The participants shared that LMS has influenced many adult learners to prefer online learning versus being on-campus. Furthermore, each participant shared that LMS has influenced adult learners to acquire their college education online owing to the convenience of online learning.

f) LMS – Selection, Adoption, and Implementation

Each participant believes that LMS is suitable for learning, and it influences a student's transformative learning, transformational teaching, classroom management, knowledge sharing, and institutional effectiveness. Each participant believes that selecting, adopting, and implementing a user-friendly LMS will contribute great value to student learning, instruction and curriculum development and knowledge sharing within the classroom. Furthermore, each participant shared that LMS will help with their decision making regarding how and where to acquire their college education.

g) LMS -Game Changer for Traditional Teaching and Learning

Each participant believes that LMS changes the way students learn in an online environment and influences student's decisions regarding whether to take classes online or on-campus. The participants believe that LMS changes the way professors teaches, especially in an online environment and that LMS changes the way faculty manage their online and on-campus classroom. Furthermore, each participant believes that LMS is a game-changer for traditional teaching and learning, and LMS should be selected, adapted, and implemented at any adult and higher education institution.

The themes generated shows that each participant shared the same perspective regarding the explored phenomenon. Based on each participant experiences with learning management systems and how it positively influences: transformational teaching, transformative learning, knowledge sharing, classroom management, student enrollment, accessibility to college education, institutional performance, growth, and development. Furthermore, adult and higher

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education institutions can use this study to (1) improve the adult learners-institutional relationship, (2) faculty-student relationship, and (3) institutional effectiveness. The participants shared that once adult and higher education institutions leadership recognize, appreciate and embrace the themes generated, the opportunity for advance human intelligence will emerge and adult learners will have a better perspective of the significance of knowledge acquisition and future application of such, especially in their respective field of study.

Table 2: Deans, Associate Deans, Faculty and Student Thematic Perspective, Learning Management Systems (LMS).

Thematic Category	Theme 1	Theme 2	Theme 3	Theme 4
LMS– Utilization	Classroom management	Flexibility	Convenience	Facilitates learning & learning resources
LMS- Traditional versus Online Learning	Positive experience	Facilitates effective learning	Enables quality learning	Interactive Tool
LMS - Student Learning and application	Facilitate faculty-student communications	Improves faculty-student relationship	Influence students transformative learning	Increase student engagement with each other
LMS - Faculty Teaching	Enables quality teaching	Suitable for knowledge sharing	Connects Students and faculty	Great for distance learning
LMS - Student acquiring College Education Online Versus On-Campus	How adult learners acquire their education	Where adult learners acquire their education	Online education preference	Convenience of acquiring their education
LMS - Selection and Adoption and Implementation	Suitable for learning	Suitable for teaching	Suitable for classroom management	interactive tools
LMS - Game Changer for Traditional Teaching and Learning	Change the way students learn	Influence student's classroom option	change the way professors teach	change the way instructors manage their classroom

X. Discussions and Conclusions

From this study, higher education leaders, faculty, and IT administrators can utilize the results to improve how adult learners acquire their college education and improve institutional effectiveness of meeting the needs of internal and external stakeholders. The review of the literature was conducted to understand the perception of faculty members, students, and leadership about online teaching-learning and the utilization of learning management systems as the game-changer for traditional teaching and learning at adult and higher education institutions. The responses from the participants in each study conducted serve a significant purpose that will contribute to an institution's effectiveness to deliver higher education through learning management system platforms to adult learners from different parts of the country and of the world. The results from the data analyzed will help developers of learning management systems to design platforms that best increase students learning and engagement. Increased student enrollment for eLearning requires careful preparation and design of the classroom by faculty members so that the flow of knowledge will increase students transformative learning and satisfaction. Knowledge sharing is essential in the learning environment; however, without the appropriate tools, resources, and technology incorporated into the classroom, students can find it challenging to learn and perform successfully.

Traditional classroom enrollment has decreased over the years when compared to the increase in student enrollment into online learning environments (Imhof, et al., (2018). Whether students have the option or not to enroll in an online learning environment, colleges and universities have invested in learning management systems to accommodate and facilitate increased student enrollment for eLearning purposes. Leadership at colleges and universities have recognized that to keep their doors open and compete with their rivals; they have to transition from fully in-class traditional teaching-learning to accommodate online teaching learning (Ippakayala, & El-Ocla, 2017). The pressure to make such a transition is so critical that

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even Tier I and II universities are now offering online courses, certificates, and degrees.

Over the last few decades, colleges and universities that were designed to provide mostly or fully online education, have disrupted how and where students acquire higher education. These universities have been the main adopters and implementers of learning management systems so as to capture a large student population and have increased their revenue stream exponentially over a decade as a result. The leadership of these partial and fully online institutions has realized the dynamics of business model effectiveness along with strategic and financial management practices for the purpose of maximizing shareholder wealth. The traditional way of teaching-learning has changed significantly over the years, and with the accommodation of learning management systems, faculty members, students, and higher education institutions have recognized and now appreciate the benefits and required continual investments needed to make sure that higher education learning is not restricted to the face-face, in-class environment. When students are given the option or required to embrace online learning, learning management system platforms are the key technology needed to make student learning and success possible. Students now have options to choose how and where they want to acquire their college education. From the review of the literature and the semi-structured individual interviews conducted, learning management systems are the game changers of traditional teaching and learning at adult and higher education institutions.

References Références Referencias

1. S. J. Daniel, "Making Sense of Flexibility as a Defining Element of Online Learning," World Conference on Online Learning Teaching in the Digital Age, 2017.
2. Daniel, S. J. (2017) "Making Sense of Flexibility as a Defining Element of Online Learning," World Conference on Online Learning Teaching in the Digital Age, 2017.
3. Ohliati, J., & Abbas, B. S. (2019). Measuring Students Satisfaction in Using Learning Management System. International Journal of Emerging Technologies in Learning, 14(4), 180–189. https://doi-org.ezproxy.umuc.edu/10.3991/ijet.v14 i04.9427
4. Altun, T & Baynal, K., & Turker, T. (2019). The Evaluation of Learning Management Systems by Using Fuzzy Ahp, Fuzzy Topics, and an Integrated Method: A Case Study. Turkish Online Journal of Distance Education (TOJDE), 20(2), 195–218
5. Ortiz, S., & Green, M. (2019). Trends and Patterns of Mobile Learning: A Study of Mobile Learning Management System Access. Turkish Online Journal of Distance Education (TOJDE), 20(1), 161–176.
6. Chen, C.-C., Huang, C., Gribbins, M., & Swan, K. (2018). Gamify Online Courses with Tools Built into Your Learning Management System (LMS) to Enhance Self-Determined and Active Learning. Online Learning, 22(3), 41–54.
7. Fındık-Coşkunçay, D., Alkış, N., & Özkan-Yıldırım, S. (2018). A Structural Model for Students' Adoption of Learning Management Systems: An Empirical Investigation in the Higher Education Context. Journal of Educational Technology & Society, 21(2), 13–27.
8. Zain, N. M., Fadil, N. F. M., & Hadi, A. A. (2018). Learning Management System: An Experience and Perception Study from Medical Imaging Lecturers and Scholars in a Private University. International Journal of Interactive Mobile Technologies, 12(7), 174–180.
9. Little-Wiles, J., & Naimi, L. L. (2018). Faculty Perceptions of and Experiences in using the Blackboard Learning Management System. Feature Edition, 2018(4), 13–25.
10. Sadikin, M., Yusuf, R., & Rifai, A. D. (2019). Load balancing clustering on Moodle LMS to overcome the performance issue of the e-learning system. Telkomnika, 17(1), 131–138.
11. Alhosban, F., & Ismaile, S. (2018). Perceived Promoters of and Barriers to Use of a Learning Management System in an Undergraduate Nursing Program. International Journal of Emerging Technologies in Learning, 13(2), 226–233.
12. Holmes, K. A., & Prieto-Rodriguez, E. (2018). Student and Staff Perceptions of a Learning Management System for Blended Learning in Teacher Education. Australian Journal of Teacher Education, 43(3), 21–34.
13. Imhof, C., Bergamin, P., Moser, I., & Holthaus, M. (2018). Implementation of an Adaptive Instructional Design for a Physics Module in a Learning Management System. Proceedings of the IADIS International Conference on Cognition & Exploratory Learning in Digital Age, 69–78.

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