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THE DEVELOPMENT OF A BLENDED LEARNING MANAGEMENT DIGITAL PLATFORM ON ENTREPRENEURSHIP AND VENTURES IN EDUCATION FOR GRADUATE LEARNER

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Abstract

The objectives of this research were to 1) design and create, test, use and evaluate a blended learning management digital platform on Entrepreneurship and Ventures in Education and 2) recommend the evaluated blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner. The sample group consisted of 26 graduate students in the Master of Education program at the Rajamangala University of Technology Rattanakosin. Ten experts in ICT systems and educational innovation helped evaluate the constructed blended learning management digital platform. The obtained results indicated: 1) the prototype of a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners uses a database life cycle development process. The experiment with the operational system for graduate learning involves learning via educational technology with a simple implementation. The participating students have a highest level of satisfaction with the system prototype, and 2) This system has a structure consisting of a website, lecturer and student database, knowledge record, knowledge assessment, discussion board, knowledgebase, download documents, related case studies, and pictures and videos of various activities. Therefore, it can be concluded that research and development of a blended learning management digital platform on Entrepreneurship and Ventures in Education produce a desirable performance for graduate learners.

Keywords: Blended Learning, Learning Management System, Digital Platform, Education, Graduate Learner

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Introduction

Information and Communication Technology or ICT is a valuable tool for the national development to progress. It is also very relevant to people's way of life in modern society. All societies have changed and adapted to becoming an e-Society completely. Hence, ICT has become necessary for every operation in various departments. Organizations developing and implementing appropriate ICT systems help executives and operators receive accurate and timely information. As a result, the decision-making in planning the organization's operations is more efficient and solving problems is possible on time. There are able to compete for advantage and efficiently develop services to customers (Laudon & Laudon, 2018). Therefore, studying how to apply the appropriate ICT system for the organization is essential. The practical application of ICT to make timely decisions requires concrete management planning. Including various strategies in systematic management so that the organization achieves its objectives and has continuous development and sustainable growth (Panjarattanakorn et al., 2023). The role of higher education institutions is to understand the changes and learn new ways to keep up with modern Thai and international technology in education management (Demir et al., 2023) with the introduction of modern management and management techniques. They are applied to educational administration in institutions for maximum academic efficiency and effectiveness (Garbin et al., 2022).

The Ministry of Higher Education, Science, Research and Innovation has encouraged the use of ICT to develop and apply to enable learners to learn and develop to a higher level of knowledge. This is in line with the government's policy according to the 20-year national strategy 2017-2036, and under the ICT Master Plan 3 (ICT Master Plan 3) in Higher Education Act 2019 and more educational platforms due to the global connection of information, it is a new avenue for education. People use this main road as a path to intellectual treasures and to develop new learning styles (Phakamach et al., 2022). Therefore, the Ministry has established policies and standards to encourage educational institutions and agencies to implement the policy to promote the development of ICT for education. Teacher, educational personnel and learners have developed the ability to use educational platforms to benefit teaching and learning. In this regards, educational institutions at all levels require an effective ICT management system for educational innovation development as a standard system for improving the quality of education at all levels (Panjarattanakorn & Phakamach, 2020; Heart et al., 2022).

Teaching in the era of transformational change (Education Disruption) has a variety of teaching and learning management models that are used to promote and solve educational management problems in various fields, especially in the situation of the post-pandemic (Ismaili, 2021; Oyelude, 2022; Heart et al., 2022). Teaching and learning management must align with the new learning paradigm to enable learners to seek knowledge on their own. Especially the ability to fully use innovation and educational technology in pursuing knowledge (Wang et al., 2021). The principles under the Higher Education Act 2019 show that thinking process skills are still essential and must be encouraged for learners because thinking is an intrinsic factor influencing a person's actions and expressions. People with high thinking abilities will be able to solve problems at case. Therefore, the development of thinking ability is an integral part of the development of learners to live happily in a changing society (Gioiosa & Kinkela, 2022). Blended learning (BL) is a learning management model and method combining face-to-face (F2F) and online or digital learning. By leveraging the benefits of F2F learning and online learning, we create more flexible and dynamic learning experiences. Creating defined learning situations or activities through quick perception and action to achieve the actual development of skills or competencies (Viebig, 2022).

The blended learning refers to a flexible approach to education which operates on both regular classrooms setting or F2F, online learning setting and asynchronous setting by using Learning

Management System (LMS). BL also known as technology-mediated instruction, web-enhanced instruction, or mixed-mode instruction, is an approach to education that combines online educational materials and opportunities for interaction online with physical place-based classroom methods. (Nayar & Koul, 2020; Onah et al., 2022). BL often includes software that automatically collects student data and measures academic progress, providing teachers, learners and parents detailed learners' data. Often, tests are automatically scored, providing instantaneous feedback. Learner logins and work times are also measured to ensure accountability. Universities with blended learning programs may also choose to reallocate resources to boost learner achievement outcomes. In a BL model, learners have the option to choose their favorable study settings and learning resources. This allows for increased flexibility in scheduling, location, and learning styles. learners can attend classes on campus, join remotely from a different location, or even switch between in-person and online participation as needed. However, in order to maximize the effectiveness of the learning management strategy for the learners, the role of the teacher is therefore an important part in creating participation and learning options to encourage learners to achieve the desired learning outcomes which integrate educational technology in teaching and learning method. Implementation of next normal BL not only increases motivation of learners, but also offers deployment of adaptive learning platforms where students can perform self-directed learning from anywhere and anytime (Ayob et al., 2023; Raksakul et al., 2023).

Entrepreneurship and Ventures in Education is a core course in the Master of Education program at the Rajamangala University of Technology Rattanakosin; many institutes provide teaching and learning at the graduate level and are compulsory courses for modern educational administrators. This course will study the issues concerning: concepts of entrepreneurship and business ventures in education; characteristics and necessary skills for educational business entrepreneurs, evaluating entrepreneurial opportunities, developing educational business; identified roles and responsibilities of investors in educational ventures; educational business planning, and operations in online education business management, and strategic education business management; ethics of educational business entrepreneurship, critical issues in educational business management in the digital education era. This is because they focus on developing entrepreneurship and building a digital education business to be more quality and modern (Phakamach et al., 2021). Most of the learning takes place in a regular classroom, creating severe obstacles to student learning if there is no good source of support for the use of modern management techniques and operating systems to build an educational platform. It is worthwhile considering using learning materials on web applications, a teaching and learning process management system that connects learners with teachers and learners with learners. It provides digital learning materials and teaching materials with instructors acting as trainers (Adele et al., 2023) and are inspirers by designing experiential proactivity activities that correspond to the course content (Huang & Lai, 2020), which is a self-paced learning model that supports knowledge management in a given course, helping to solve problems and obstacles that arise in students' learning. In particular, graduate teaching and learning focus on creating learning challenges in order to create new knowledge to appear with quality (Ayob et al., 2023).

Based on this idea, the researcher is interested in developing a blended learning management digital platform on entrepreneurship and ventures in education for graduate learners. The research objectives include: 1) to design and create, test, use and evaluate a blended learning management digital platform on entrepreneurship and ventures in education and 2) to recommend the evaluated blended learning management digital platform on entrepreneurship and ventures in education for graduate learner. This system will change the learning process by using the learning management system platform to support teaching and learning activities to be a complete learning organization. This design and development present educational

innovations with specific dimensions: 1) electronic learning media; 2) a knowledge management support system, i.e., knowledge repository, knowledge record, chat board, and a knowledge assessment form; 3) a database of lecturers and students as well as academic services; 4) online electronic bulletin boards to exchange learning; and 5) linkage with universities (e-MIS). The prototype will be a model of a learning management system using software and services. as well as assessing the efficiency and satisfaction of the learners and performance improvements are based on expert feedback. The model system is suitable for serving graduate learners. It can be used to respond to the needs of learners and contribute to learning about the effective management of Entrepreneurship and Ventures in Education.

Literature Review

Blended Learning

Blended Learning (BL) is one of the most frequently used approaches related to the application of Information and Communications Technology (ICT) in education (Nayar & Koul, 2020; Panjarattanakorn et al., 2023). In its simplest definition, BL aims to combine F2F and online settings, resulting in better learning engagement and flexible learning experiences, with rich settings way further the use of a simple online content repository to support the face-to-face classes (Ayob et al., 2023). Educational researchers and practitioners have used different terms to refer to the blended learning approach, including hybrid learning, dual-mode instruction, blended pedagogies, HyFlex learning, multimodal learning and flipped learning (Onah et al., 2022; Raksakul et al., 2023; Hermita et al., 2024).

Educational researchers and practitioners have pointed out that designing BL experiences could be complex, as several features need to be considered, including the quality of learning experiences, learning instruction, learning technologies/tools and applied pedagogies (Gómez et al., 2023). Therefore, they have focused on investigating different BL perspectives since 2010 (Onah et al., 2022). The COVID-19 pandemic has further highlighted the challenges associated with BL. Specifically, international universities and schools worldwide had to take several actions with respect to health regulations, such as reducing classroom sizes (Wang et al., 2021). Therefore, they combined online and offline learning to maintain their courses for both on-campus and off-campus experiences. In this context, several teachers raised concerns about implementing BL experiences, such as the lack of infrastructure and competencies to do so, calling for further investigation in this regard. Several international organizations, such as UNESCO and ILO, claimed that teacher professional development for online and blended learning is one of the priorities for building resilient education systems for the future (Oyelude, 2022). Based on the background above, it is seen that there is still room for discussion of designing and implementing effective BL. Researchers have suggested that conducting literature reviews can help identify challenges and solutions in a given domain (Onah et al., 2022; Raksakul et al., 2023; Hermita et al., 2024).

Research Conceptual Framework

Research concepts can be formulated from the literature review and related research process design. The goal is to create a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner, as shown in Figure 1.

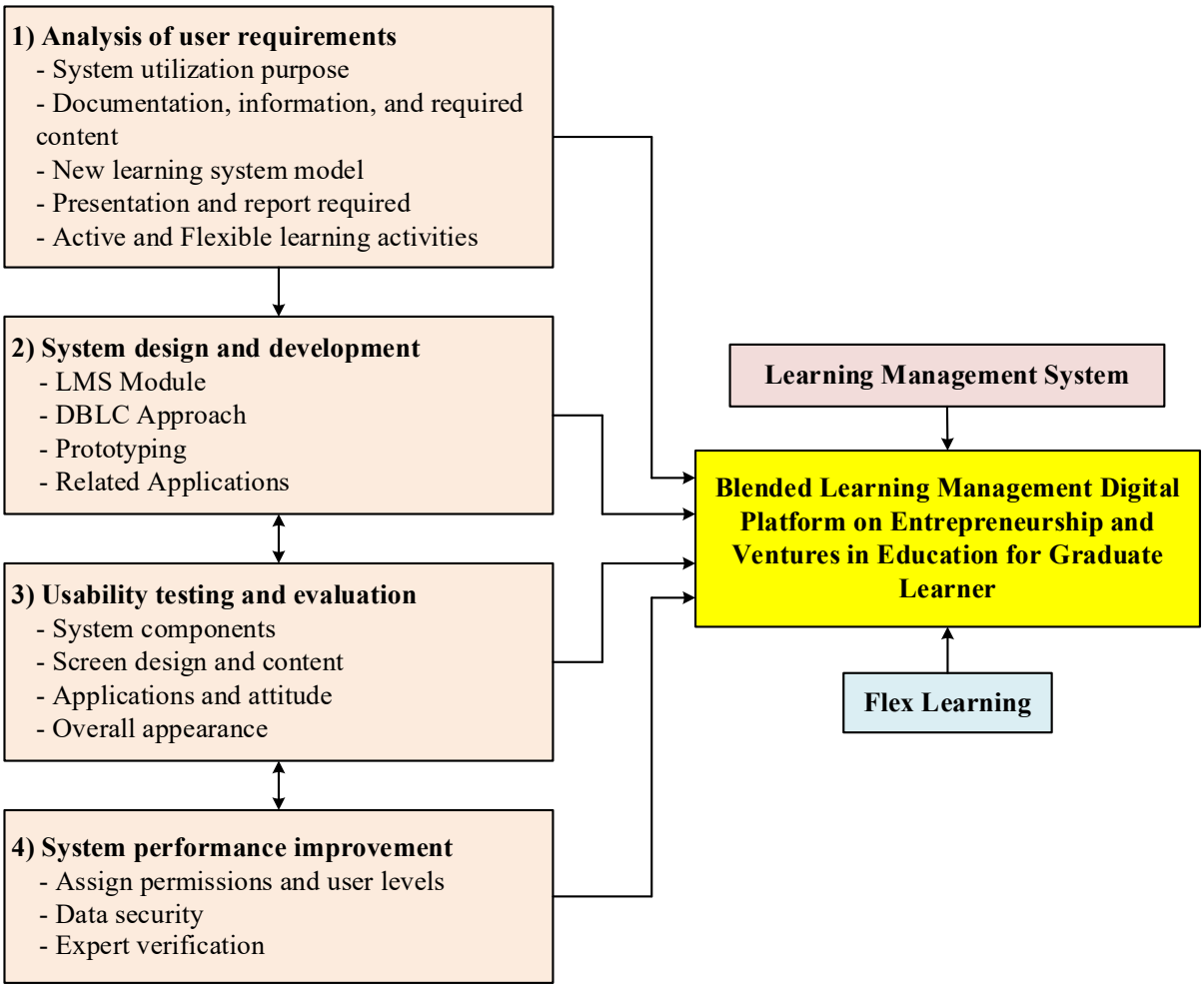

Figure 1 Research conceptual framework

Research Methodology

Population and Sample

The population used in this research were graduate learners of the Master of Education program. Department of Education Administration and Strategies, Rattanakosin International College of Creative Entrepreneurship, Rajamangala University of Technology Rattanakosin, Enrolled in Entrepreneurship and Ventures in Education (EAS 6308) in the third semester of the academic year 2023, there are 26 students because the total study population is small and requires data based on the opinions of all learners. Therefore, the panel used a method of selecting the entire population by defining it as a sample. The target group would be 10 experts in ICT systems and educational innovation.

Research Instruments

The research tools consisted of (1) a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner and (2) the tools used for data collection were:

1) Quality assessment form (for experts) in ICT systems and educational innovations is a 5-level rating scale that assesses the efficiency of the system in terms of system components, design and development, as well as usability.

2) The student satisfaction assessment form is a 5-level rating scale that assesses the suitability of the system in terms of system components, screen design and content, as well as usability and attitude.

3) Structured interview form for interviewing students' use of the system on issues of (1) knowledge and implementation, (2) behavior and response, (3) participation, (4) results of use, and (5) problems and suggestions.

Procedures for Conducting Research

This research is research and development. The research method consisted of four steps:
1) Analysis of user requirements, which is the study and analysis of user needs for both faculty and students.
2) System design and development, by using learning management system and programs related to the development of online teaching materials. This entails designing a case study related to the course, including a preliminary test.
3) Usability testing and evaluation, platform quality and suitability checks by ICT and educational innovation experts 10 people. This is a 3-month trial phase, and satisfaction is tested by students enrolled in the EAS 6308 course.
4) System performance improvement, by taking the test and evaluation results obtained from Step 3 for confirmation and improving the performance of the blended learning management digital platform on Entrepreneurship and Ventures in Education to be effective for graduate learner.

The process of creating tools used in teaching and learning management includes: 1) Studying the curriculum/course and analyzing the content of the Entrepreneurship and Ventures in Education (EAS 6308) course at the graduate level; 2) Defining the learning objectives to determine the scope of content in each unit including challenging learning activities accordingly; 3) Determine the format for presenting content by collaborating academic seminars in accordance with the learning management approach that promotes the solution of challenging problems in 5 steps. 4) Write a flowchart of the learning management platform to define internal communication channels for convenience; 5) Design the storyboard according to a hierarchical structure based on proactive knowledge management techniques; 6) Develop the platform layout using LMS tool box and related computer programs; 7) Conduct trial to revise the platform; and 8) Evaluate the quality and satisfaction of the platform.

Experiment and Data Collection

The experimental model and the data collection were set as follows.
The preparation of the experiment includes:
1) ask for permission for the data collection and test the system by collecting data and testing the system in the third semester of the academic year 2023.
2) prepare the developed prototype and put it on the Dr.Darunee Learning Center, send the data to the server, and test its use.
3) prepare the location and the computer, and schedule the experiment by testing the operating system in the content of educational platform development.

Experiment: Take a system prototype that has been evaluated by an expert and test it for performance evaluation according to the following format.
1) One to One Testing: an experiment with three students who have taken this course before selected on the basis of high, medium and low grades based on their average grades in the past semester. Using a simple random sampling method, test the system to find defects and then use it to improve and fix it with the value $E_1/E_2 = 61.26/62.84$,
2) Small Group Testing: Testing Experiment with nine students who have taken this course before by selecting students with high, medium and low grades based on the average of the course scores in the past semester as criteria. Using a simple random sampling method, test the system to find bugs and use them to improve $E_1/E_2 = 71.68/72.55$.
3) Field Testing, including:
3.1) Bring the system to students for a one-month workshop experiment by selecting a sample group of 26 students and organizing a pretesting knowledge meeting. The meeting is carried

out in the following order: (1) Pretest by having students test from the achievement test of 40 items, (2) let learners study by using a blended learning management digital platform on Entrepreneurship and Ventures in Education for the graduate learner, (3) allow learners to do exercises from the system ten items per learning unit, and (4) then post-test by having learners test from the achievement test of 40 items and evaluate the overall efficiency of E_1/E_2 with a value of E_1/E_2 = 81.98/ 83.14, respectively.

3.2) Interview a sample group of students, who use it regularly it, about their use.

3.3) Analyze the results of the interview summarized in an essay manner and improve the system to be suitable and complete.

Data Analysis

The data obtained in the research process were analyzed in the following order:

1) Analysis of user requirements: summarized in an essay to illustrate the details that consist of (a) the purpose of using the system, (b) the required documents, information and content, (c) the format of the new system, (d) presentation and required report (e) the activities of Blended-Based Learning, and (f) practical activities.

2) System design and development: by ten experts in ICT systems and innovations for education administration, summarized in an essay format to illustrate the details, which consist of (a) LMS Module, (b) DBLC Approach, (c) Prototyping, and (d) related applications.

3) Usability testing and evaluation: Assessment of the efficiency of the prototype system by experts and based on the satisfaction by 26 students using a 5-level rating scale.

The research at this stage will apply the process in steps 1 and 2 by assessing the effectiveness and satisfaction of use. The information in step 2 can adjust the process as appropriate. There is a practical test. as well as study according to the prescribed format to obtain a system that is suitable for blended learning management digital platform on entrepreneurship and ventures in education for graduate learner.

The study population at this stage can be divided into two groups as follows:

Group 1: the target group is 10 ICT experts and educational innovations.

Group 2: the sample group consisted of 26 students in Entrepreneurship and Ventures in Education (EAS 6308) course at Rajamangala University of Technology Rattanakosin.

The tool used to collect the data is an unstructured interview form to test its effectiveness. Problems and obstacles, as well as corrective guidelines. Data collection can be divided according to the study population as follows: Group 1: workshops and interviews and Group 2: was a workshop facilitation and participant observation.

The questionnaire consisted of a checklist of questions. Text form and a 5-level estimation scale, with the questionnaire having three parts with details as follows:

Part 1: Information about the respondents.

Part 2: Opinions on using a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner. Will be an analysis to determine the efficiency and satisfaction of the system's users.

Part 3: Suggestions and guidelines for developing a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners.

Creation and verification of the questionnaire tools draft will be submitted to experts to verify content validity and the appropriateness of language and wording. Then the next step is to test the reliability of the questionnaire using Cronbach's Alpha Coefficient formula. The reliability of the whole questionnaire was .957.

The data were then analyzed by statistical methods using a ready-made computer program. to find the efficiency and satisfaction of using a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner and present a statistical model for assessing efficiency and user satisfaction as follows:

Data analysis of group 1: Bring the data to analyze and synthesize in order to find ways to improve and develop the system. Also, recommend the correct usage according to the prescribed format so that users can use it effectively.
Data analysis of group 2: Part 1: Information that is the status of the respondents analyzed by frequency distribution and percentage. Part 2: Information about opinions on using a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners. It is approximate scale data and is analyzed by calculating the mean and standard deviation. Part 3: Information on recommendations and guidelines for developing a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners, which is text-based information. Use content analysis to obtain recommendations and development guidelines.
The mean was obtained from the estimation scale questionnaire data from the data analysis in group 2 and was compared with the criteria.
4) System performance improvement: The research at this stage will apply the results of the 3rd step to improve a practical learning management system combined with blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner. Next, conduct interviews with five experts in ICT systems and educational innovations using a non-structured interview, focused interview method verification for opinions and suggestions. Then apply the examination results to improve the system's performance and complete the learning requirements according to the teacher's council's compulsory course criteria.

Research Results

Results of Analysis User Requirements

The results of analysis of user requirements to use data to design and build a practical combined with blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners. Users have commented on their needs in critical areas, including: (a) It must be a system that can be used to support teaching and learning in a given course; (b) The system must support the process of teaching and learn with complete support functions; (c) the system should provide operating parts that are consistent with the course content; (d) the system should have relevant practical learning and case studies to enhance knowledge and understanding; and (e) the system designed and built must be able to operate according to the schedule. designated classes
Guidelines for developing a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learners and recommendations. One should study the information related to academic Entrepreneurship and Ventures in Education before teaching management. Then, the system development method should be chosen according to the standard model. DBLC has the proper research and development process to achieve an operational learning system combined with case study learning on Entrepreneurship and Ventures in Education. That responds to the complete knowledge management model in the course.

System Design and Development Results

System design and development will use the DBLC standard method to make the system efficient. The key steps are (1) System Analysis, (2) System Design, (3) System Implementation, (4) System Installation, (5) System Operation and Evaluation, and (6) System Maintenance and Evolution, resulting in a learning management system for the course. An example of a prototype system is shown in Figure 2-6, respectively.

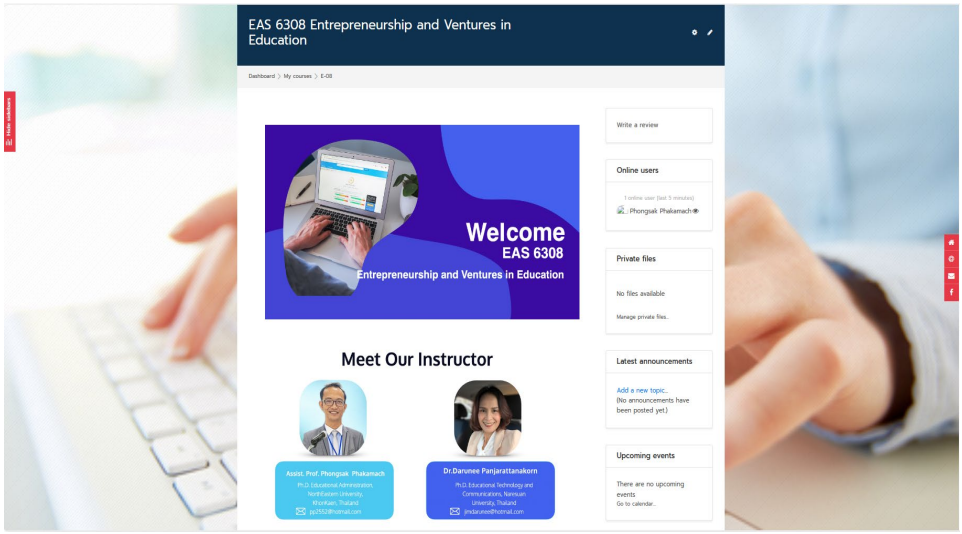

Figure 2 Blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner

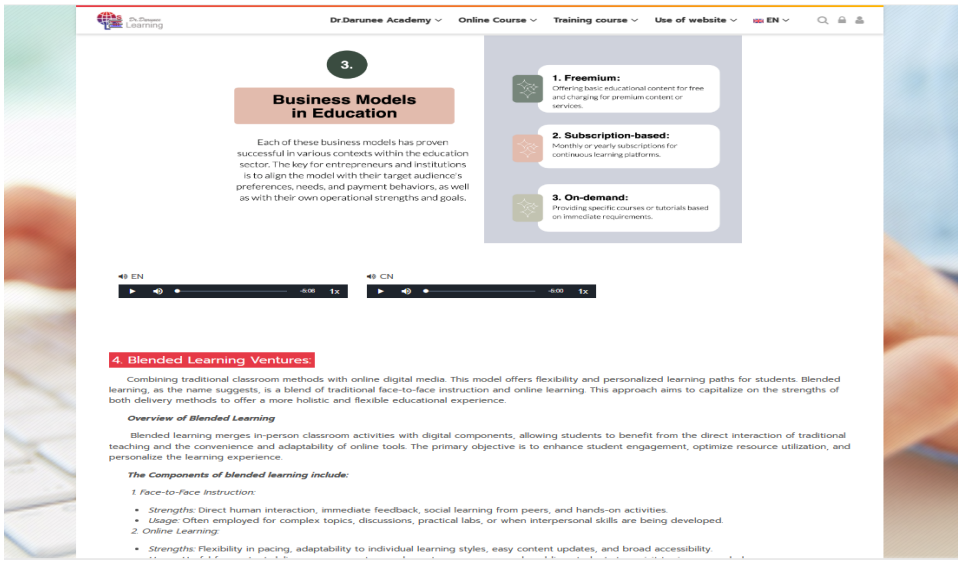

Figure 3 Example of teaching materials

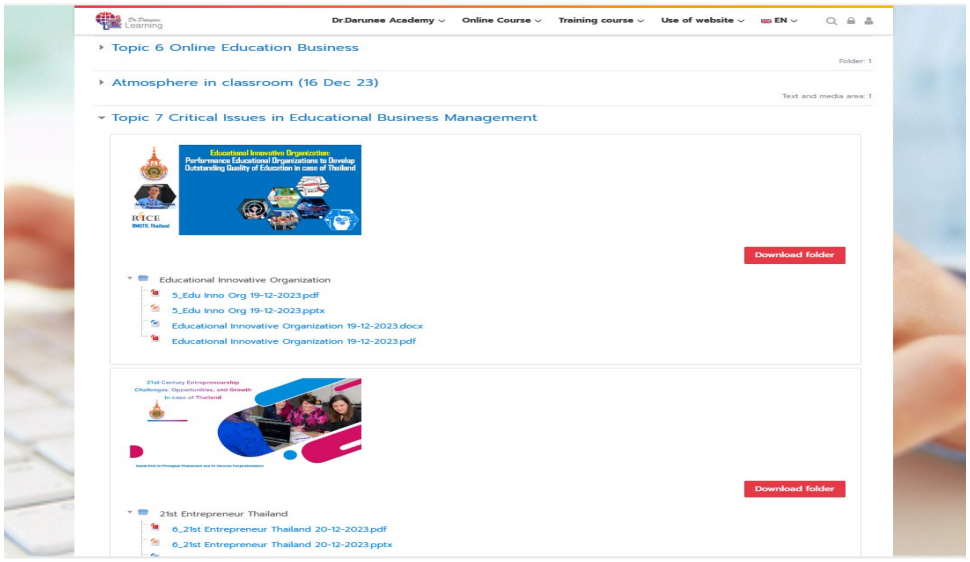

Figure 4 Example of practice creating online courses

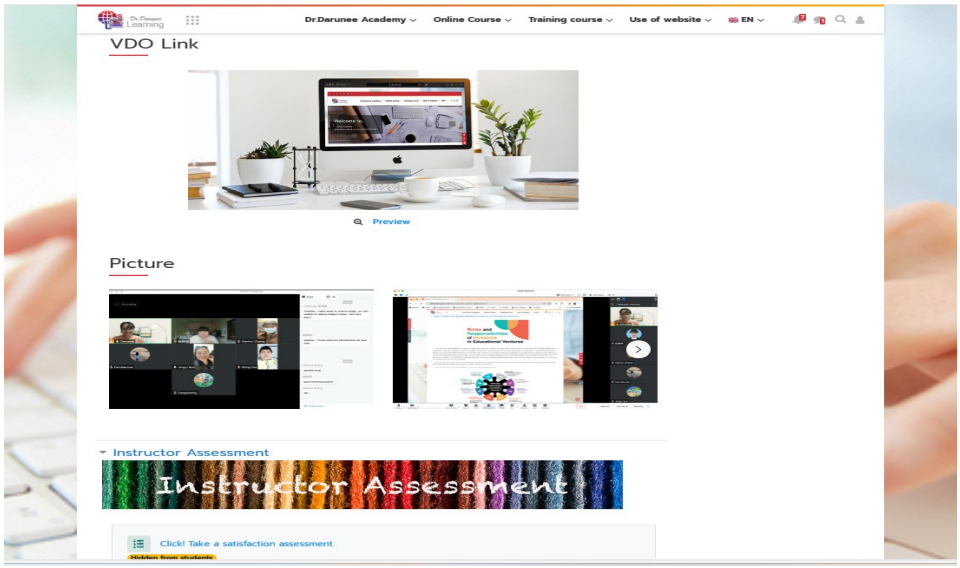

Figure 5 Example of tools used in online teaching

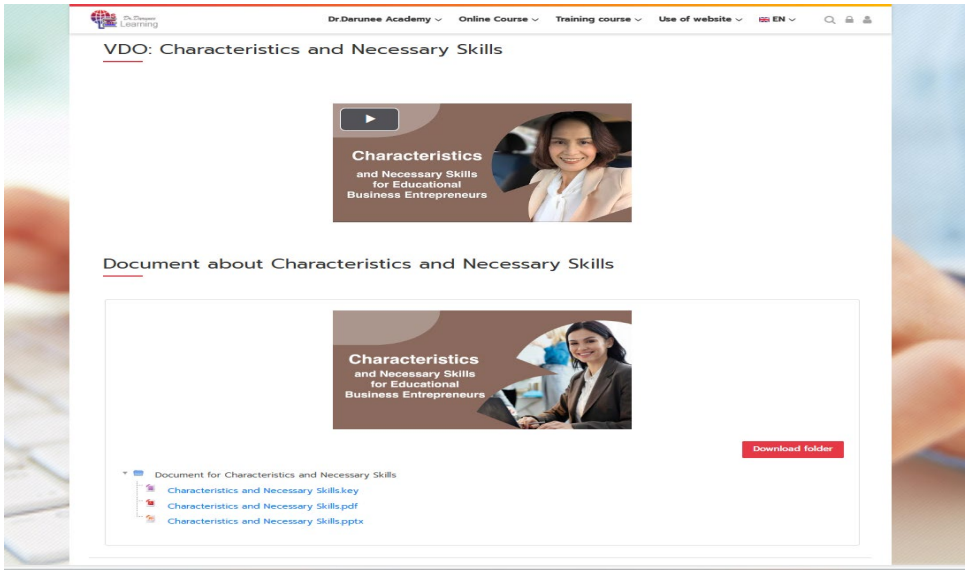

Figure 6 Best practice building challenges in education business

Useability Testing and Evaluation Results

The results of the test and trial of a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner with students enrolled in EAS 6308 course in the third semester of the academic year 2023 by quality assessment by experts and the satisfaction assessment by students showed the following.

1) The results of evaluating the effectiveness of a platform developed based on the opinions of 10 experts, as shown in Table 1.

Table 1 Results of efficacy assessment by experts

Topics and Assessment Items		$\bar{x}$	S.D.	Interpreting
System components	1) Website and applications	4.25	0.55	Highest
	2) Record knowledge	4.20	0.65	High
	3) Measuring and evaluating knowledge	3.89	0.55	High
	4) Discussion board	4.23	0.55	Highest
	5) Knowledge repository	4.07	0.50	High

	6) Learning activities	4.22	0.65	Highest
	7) Pictures of various activities	4.07	0.65	High
Design and development	8) Content and consistency	4.43	0.55	Highest
	9) Format and font size	4.14	0.45	High
	10) Font color and background	4.06	0.50	High
	11) Visual and sound effects	4.17	0.65	High
	12) Multimedia system	3.73	0.55	High
	13) Instructions and manuals	3.82	0.65	High
	14) Overall screen	4.41	0.55	Highest
	15) Design process	4.34	0.50	Highest
Usability	16) Membership system	4.33	0.45	Highest
	17) Back-end system	4.18	0.45	High
	18) Link section	4.23	0.65	Highest
	19) Interaction section	4.39	0.45	Highest
	20) Search system	4.05	0.65	High
	21) How to use it for the purpose	4.46	0.55	Highest
	22) Flexible practice in the course	4.18	0.55	High
	Total	**4.17**	**0.55**	**High**

From Table 1, shows system performance evaluation by experts in three areas: system components, screen design and content, and usability. It was found that the system's overall quality was at a high level in all aspects ($\bar{x}$ = 4.17). When considering each aspect, it was found that as for the components of the system, 7 items, the overall picture was at a high level ($\bar{x}$ = 4.13), arranged in order of averages from highest to lowest in 3 sequences: (1) website and applications, (2) discussion board, and (3) learning activities, respectively, with the highest level, is the website. In terms of screen and content design, 8 items were overall at a high ($\bar{x}$ = 4.12), arranged in order of averages from highest to lowest in 3 sequences: (1) content and consistency, (2) overall screen, and (3) design process accordingly sequence, with the highest level on the overall screen as a whole. As for the usability aspect of the 7 items, the overall picture was high ($\bar{x}$ = 4.27). The mean was sorted from highest to lowest in 3 orders, namely (1) how to use it for the purpose, (2) the membership system, and (3) the interaction section. Respectively, with the highest level in terms of how to use it for the purpose.

2) The results of the satisfaction assessment of the use of the model of a platform developed according to the opinions of 26 students are shown as follows.

Table 2 Results of the satisfaction assessment by students

Topics and Assessment Items		$\bar{x}$	**S.D.**	**Interpreting**
System components	1) Website and applications	4.43	0.67	Highest
	2) Record knowledge	4.24	0.55	Highest
	3) Measuring and evaluating knowledge	4.20	0.74	High
	4) Discussion board	4.26	0.58	Highest
	5) Knowledge repository	4.09	0.55	High
	6) Learning activities	4.36	0.66	Highest
	7) Pictures of various activities	4.30	0.61	Highest
Screen design and content	8) Content and consistency	4.41	0.61	Highest
	9) Format and font size	4.28	0.58	Highest
	10) Font color and background	4.22	0.60	High
	11) Visual and sound effects	4.13	0.72	High
	12) Multimedia system	4.19	0.65	High
	13) Instructions and manuals	4.10	0.63	High

	14) Overall screen	4.38	0.66	Highest
	15) Screen design process	4.33	0.58	Highest
Usability and attitude	16) Membership system	4.03	0.73	High
	17) Back-end and search system	3.96	0.65	High
	18) Link and interaction section	4.25	0.60	Highest
	19) How to use it for the purpose	4.16	0.68	High
	20) Practice in the course	4.42	0.70	Highest
	21) Cognition of learning activities	4.44	0.68	Highest
	22) Implementation for education administrators	4.32	0.64	Highest
	Total	**4.28**	**0.67**	**Highest**

Table 2, shows student satisfaction with using the system in three areas: system components, screen design and content, and usability. It was found that the overall system satisfaction was at a highest level in all aspects ($\bar{x}$ = 4.28). When considering three aspects, it was found that for 7 items of the system, the overall picture was at a high level ($\bar{x}$ = 4.26). The averages were sorted from least to most significant in 3 orders: (1) website and applications, (2) learning activities, and (3) pictures of various activities, respectively, with the highest level on the website. In terms of Screen Design and Content, 8 items, the overall picture was at a high level ($\bar{x}$ = 4.25), arranged in 3 descending orders of average values: (1) content and consistency, (2) instructions and manuals, and (3) overall screen, respectively, with the highest level of content and consistency. As for the usage aspect, 7 items, the overall picture was also high ($\bar{x}$ = 4.33). The mean was sorted from highest to lowest in 3 orders, namely (1) cognition of learning activities, (2) practice in the course, and (3) implementation for education administrators respectively, with the highest level in terms of cognition of learning activities.

3.3) The results of the interviews about student' opinions towards the model of a platform developed included 5 issues, as follows:

(1) Knowledge and implementation found that students have a learning management system suitable for teaching and learning styles at the graduate level for issues related to Entrepreneurship and Ventures in Education. As well as the ability to apply knowledge to become an educational business entrepreneur in the digital era, including future research design.

(2) Behavior and response were found that students use the interaction section with the instructor and between learners together; that they practice this in the course (as group discussion, one-on-one discussion, brainstorming, doing exercises and presentation of assignments); they can use a search system and link sections related to the course, and record knowledge for exchanging and sharing knowledge. The students can also develop themselves. Moreover, they also gained experience in designing strategies for developing entrepreneurship and building education businesses in the digital era, as well as developing educational innovations.

(3) Participation found that the system can motivate students to use it to create an atmosphere of exchange and transfer knowledge in social media, participatory operations, and blended-based learning. It also helps students practice design and development skills and strategies for building a modern educational platform.

(4) The utilization results showed that students were satisfied with the system by applying their knowledge and skills of entrepreneurship and in building other members' educational businesses. It also helped build learning skills in effective educational business entrepreneurship in the digital era.

(5) Problems and suggestions found students want a system to customize the screen by themselves to be more beautiful, as well as more attractive. When accessing this course, as

with other social networks, practice sessions should be timed appropriately for both learning theory and practice in the course.

System Performance Improvement Results

The research team synthesized the results of testing and trials of the system from the expert quality assessment and student satisfaction assessment to improve the system's efficiency. Then, five experts in ICT systems and education innovation were interviewed for a definitive review. Experts continue to provide feedback and suggestions for further improvements in system performance by developing interactive digital content. Online interactions include other techniques and methods for further improvement of academic achievement.

In summary results, designing and creating, testing, using and evaluating a prototype of the blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner found that the system developed according to the methods presented here can be assured of sufficient quality for effective implementation of this system in teaching and learning at the graduate level.

Conclusion and Discussion

Research and development methods for a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner consisted of 4 steps: 1) Analysis of user requirements, 2) Design and development of systems, 3) Usability testing and evaluation, and 4) System performance Improvement. Design and development result in a system with important characteristics, such as a system that can actually be used for teaching and learning in the course. The system must support the teaching and learning process with complete support functions, provide operating sections consistent with the course content, and have practical learning and relevant case studies to enhance knowledge and understanding. In addition, the system must be able to operate according to the specified schedule and should use a Content Management System to make the system perfect.

Design and development of a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner. A standard ICT development process should be used to develop a learning system. It determines clear procedures and practices to obtain a system that can fully respond to learning management in a given course or content.

An analysis of the study analyzing the efficiency and satisfaction of using a blended learning management digital platform on Entrepreneurship and Ventures in Education for graduate learner yield these results:

1) The efficiency of using the system from experts' opinions was a high level ($\bar{x}$ = 4.17), indicating that the developed system could be used as a tool for teaching in the course. This system can be used as effective learning and implementation tool in the EAS 6308 course. It can also support teaching and learning about Entrepreneurship and Ventures in Education.

2) Overall satisfaction from the students' opinions of using the system was a highest level ($\bar{x}$ = 4.28), indicating that the students who used this system had a satisfactory level of satisfaction because this system can respond well to the management of learning about Entrepreneurship and Ventures in Education.

Developed system prototype the researcher has applied the conceptual framework for research and development from the ideas of Onofrei & Ferry (2020), Phakamach et al. (2022), Heart et al. (2022), and Viebig (2022) to design the following steps: (1) course content analysis; (2) system design by ordering content, classify subject subjects according to learning principles, assign learning activities, determine the relevant research resources, creating a virtual learning room, and knowledge processing respectively; (3) the development of the system based on the principles of 4Is: Information, Interactive, Individual, and Immediate Feedback; (4) the use of

the system for teaching and learning based on the communication channels provided; and (5) testing for the efficiency of the system is mainly based on the opinions of students.

The evaluation results by experts found that the developed system is suitable for a high level. It shows that the developed prototype system has this quality and that it can be used in practice because the researcher develops the lessons systematically from the study and analysis of the data using the ADDIE process, which experts have reviewed. After that, the data are tested with the sample to evaluate the efficacy and to apply the results for improvement. It is a method of conducting media production according to research and development (R&D) and relying on trials and modifications to be as complete as possible. That is consistent with the research work of Phakamach et al. (2021); Heart et al. (2022); Ayob et al. (2023); and Hermita et al. (2024). However, to get a good model and make students understand the subject matter more, some aspects of multimedia and graphics system design should be improved related to the operation. This is required to make the system more complete and provide more educational options.

3) The satisfaction assessment results by students found that the developed system showed highest satisfaction. It shows that students can learn about Entrepreneurship and Ventures in Education. The system can support learning management very well. That is consistent with the research by Wang et al. (2021); Warren et al. (2021); Phakamach et al. (2021); and Chandan et al. (2022) that found that developing a sound model system requires at least four elements: i. data source and content, ii, support resources; iii, discussion boards; iv, online learning activities; and that case studies help learners understand, which can be used to create a virtual learning model. (Viebig, 2022; Gómez et al., 2023). Therefore, the prototype system has all the elements that can be used as a system to support learning management in this course.

4) The results of confirmation of the system used by experts from group interviews found that the blended learning management platform can be a support system for teaching and learning at the graduate level. It can enable students to gain theoretical knowledge and practice learning experiences in the study. Therefore, it can be confirmed that the system's efficiency was developed from the international elements and procedures for developing a quality learning management system (Heart et al., 2022; Hermita et al., 2024).

Suggestions for Applying the Research Results

Implementation and development of this learning management system to be more effective requires: 1) A learning support system requires a qualified development team, such as lecturers, educators, educational psychologists, programmers, and educational innovation and technology designers in order for it to be appropriate and efficient; 2) For the learning management process to be fast and cost-effective, there should be literacy training using browser programs or applications before the learning process begins promote understanding the correct method. This can solve problems that arise during self-study; 3) Appropriate details should be added to the course, such as the website, related case studies, and the interaction section in order to provide in-depth practical training for learners and to promote broader learning; and 4) The development of online learning systems should use appropriate and consistent fonts, graphics, sounds and multimedia. To make situational learning and processing possible effectively and efficiently.

Suggestions for Further Research

1) This learning management system should be developed to use more elements as standard learning materials. It will provide insights to improve learning styles to be more effective.

2) There should be research and development of digital platforms based on blended learning models that can make online learners feel more positive and imaginative by developing multimedia that attracts the attention of online learners.

3) There should be more research and development of learning management systems or models in other subjects to increase modern learning resources for the further development of higher education in Thailand.

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