DEVELOPMENT OF SITUATIONAL TEACHING AND BLENDED LEARNING INSTRUCTIONAL MODEL TO ENHANCE INSTRUCTIONAL DESIGN SKILLS OF UNDERGRADUATE NORMAL STUDENTS

LIU DANHUA

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Thesis Title Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students

Author Mrs.Liu Danhua

Thesis Committee

..... Chairperson
(Assistant Professor Dr.Nuttamon Punchatree)

..... Committee
(Associate Professor Dr. Areewan Iamsa-ard)

..... Committee
(Associate Professor Dr. Suriya Phankosol)

Accepted by Bansomdejchaopraya Rajabhat Univeristy in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Curriculum and Instruction

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..... President
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(Associate Professor Dr. Chintana Kanjanavisut)

..... Committee
(Associate Professor Dr. Oraphan Butkatunyoo)

..... Committee
(Associate Professor Dr. Methinee Wongwanich Rumpagaporn)

Title	**Development of situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate normal students**
Author	**Liu Danhua**
Program	**Curriculum and Instruction**
Major Advisor	**Assistant Professor Dr.Nuttamon Punchatree**
Co-advisor	**Associate Professor Dr.Areewan Iamsa-ard**
Co-advisor	**Associate Professor Dr.Suriya Phankosol**
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ABSTRACT

The objectives of this research were 1) to examine the factors that affected Instructional design skills of undergraduate Normal students, 2) to develop situational teaching and blended learning instructional model to enhance the instructional design skills of undergraduate Normal students, and 3) to study the results of the situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students. Phases were carried out to answer research

objectives 1, 2, and 3. The population of Phase 1 were 229 undergraduate Normal students and 5 lecturers of the practical training course in semester 1 academic year 2022 from LiShui University. The target group of Phase 2 were 5 experts, and the sample group of Phase 3 were 35 students who enrolled in practical training course of LiShui University. The research instruments were 1) A set of questionnaires for students, and interview for lecturers, 2) A set of questionnaires for conformity instructional model, 3) Lesson plans using situational teaching and blended learning instructional model, and 4) Scoring rubric form. Data analyzed by percentage, mean and standard deviation.

The results revealed the following

1. The factor to enhance the Instructional design skills of undergraduate students were the internal and external factor. There are 3 internal factors mainly included 1) physical factors; 2) psychological factors and communicate and there are 5 external factors mainly included 1) teaching environment; 2) teaching methods; 3) Teaching materials; 4) evaluation; 5) class size.

2. The situational teaching and blended learning instructional model to improve practical ability in practical training course of enhance the instructional design skills of undergraduate Normal students included 5 components: 1) principle and rationale, 2) objectives, 3) contents ,4) method of teaching& materials and 5) evaluation. The model was 100% conformed to utility, feasibility, propriety, and accuracy standards as assessed by 5 specialists.

3. This result after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level).

Keywords: Situational teaching; Blended Learning; Instructional design skills

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Looking back on my doctoral journey, I deeply appreciate the growth and valuable experience I gained. During my PhD studies, I have been exploring a path that

suits me. Through continuous learning and hard practice, I finally found a method suitable for my own development. During this journey, I not only gained professional knowledge, but also learned how to work collaboratively with others and solve difficult problems. These experiences of mine will have a profound impact on my future life and career.

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Liu Danhua

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Chapter 1
Introduction

Rationale

Educational practical training course is a compulsory course of practical teaching for training undergraduate teacher training students. The Ministry of Education of the People's Republic of China "Measures for the Implementation of Practical Sections of Teacher Education Courses", the Department of Education of Zhejiang Province "Cultivation Programme for Teacher Training Students in Ordinary Colleges and Universities of Zhejiang Province", and "Talent Cultivation Programme for Primary School Education Majors in the Lishui University Institute" (2021) have made relevant provisions for guiding and regulating the educational internship and practical training of teacher trainees.

The Education Training Programme for Primary Education Majors issued by the Academic Affairs Office of Lishui University specifies the practical training courses in education (2021), which is a compulsory course for undergraduate teacher training students of Lishui University majoring in Elementary Education, and the course is arranged as a semester of 32 hours and two credit. Educational practical training course is a combination of theory and practice, and the course should follow the following principles: educational practical training course can comprehensively use a variety of teaching methods and means, apply theoretical knowledge to practical problem solving through real scenarios and tasks, cultivate Normal students' problem solving ability, innovation ability and teamwork spirit, reflect on and summarize the process and results of practical activities, and realize students' self-knowledge and Growth. Through the educational practical training courses, undergraduate Normal students are helped to establish a connection between theoretical learning and practical experience, and to acquire good skills in curriculum design to prepare for their future professional development.

Undergraduate Normal students generally have the following problems in instructional design: 1) Lack of ability to analyse instructional design. This is mainly manifested in the lack of grasping the teaching object, teaching objectives and

teaching tasks, and in instructional design, teacher education undergraduates tend to rely too much on generic teaching methods and resources, ignoring the individual differences and needs of students. This brings challenges to students' learning outcomes and personal development (Zhang, 2018). Due to the lack of internship opportunities, many teacher education undergraduates do not have the chance to really touch the actual teaching environment before graduation, making them lack practical experience in instructional design (Meng, 2019). 2) Lack of instructional design implementation ability. It is mainly manifested in the insufficiency of the ability to select and apply teaching methods and teaching media and the ability to evaluate teaching results. Teacher education undergraduates often suffer from the problem of disconnecting theory and practice in teaching design, and they rely too much on textbook knowledge and standardised teaching modes, and they lack in-depth understanding and grasp of the actual teaching environment (Yang, 2019). Teacher education undergraduates often neglect comprehensive evaluation and in-depth reflection on the teaching process in instructional design, making it difficult to identify deficiencies in teaching and improve them (Wang, 2020). The teacher education programme needs to promote creativity and diversified thinking among undergraduate teacher educators to enable them to develop instructional strategies that are adapted to the needs of diverse students (Johnson, 2019).

After a long period of teaching practice, it is found that the instructional design skills of undergraduate Normal students in Lishui University also suffers from the problems mentioned by the above experts and scholars, such as undergraduate Normal students' lack of clarity and measurability in setting teaching objectives, easy to ignore students' individual differences, lack of practical experience, tendency to rely on traditional teaching methods, and less attempts to try out innovative teaching strategies, and the existence of selection and use of evaluation strategies in confusion in the selection and application of evaluation strategies, etc. In response to these problems, the Academic Affairs Office of Lishui University released the personnel training programme for primary education majors to design a more reasonable educational internship and practical training course, to better meet the needs of undergraduate Normal students' skills improvement and to create a more meaningful learning experience for students. (2021)

Li (2018) used situational instruction and blended learning to develop Normal students' curriculum design skills. His research explores how a combination of online learning and hands-on experience allows Normal students to perform course design tasks in authentic educational scenarios. Wen (2019) looked at combining situational instruction and blended learning to enhance teacher candidates' course design skills. She explores the use of online collaborative tools and virtual practice environments to support Normal students in course design in authentic contexts. Ma (2019) focused on using situational instruction and blended learning to enhance teacher candidates' course design skills. He engages teacher candidates in curriculum design practice and self-assessment in simulated teaching scenarios through the use of online simulated classrooms and reflective tools. Ma and Zhen (2021) combined situational instruction with blended learning to enhance teacher candidates' course design skills. She explored the use of online resources and virtual practicum activities to develop teacher candidates' ability to engage in innovative and flexible course design in diverse educational settings. The research of these scholars suggests that situational teaching and blended learning can be effective in enhancing Normal students' curriculum design skills. By combining online learning, hands-on experiences, and simulated teaching scenarios, teacher candidates can exercise and develop their curriculum design skills in real or virtual contexts. This integrative approach can help Normal students better understand curriculum design principles and apply them to real-world teaching.

Research has shown that by applying this instructional model, Normal students have the opportunity to practice curriculum design in real or virtual educational contexts, thereby enhancing their instructional design skills. This integrated approach to teaching and learning stimulates active engagement and creative thinking among Normal students and promotes their understanding and application of curriculum design principles and practices. By combining online learning, practical experience and simulated teaching scenarios, Normal students were able to access diverse learning resources and feedback mechanisms to further strengthen their curriculum design skills and professionalism. (Zhou, 2020)

As the rationale shown above, the author realizes the importance of studying “Development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students”.

Research Questions

1. What are the factors affecting Instructional design skills of undergraduate Normal students?

2. Is Situational teaching and Blended learning Instructional Model to enhance Instructional design skills of undergraduate Normal students appropriate for further implementation and how?

3. What are the results of implementing Situational teaching and Blended learning Instructional Model to enhance Instructional design skills of undergraduate Normal students?

Research Objectives

1. To examine the factors affecting Instructional design skills of undergraduate Normal students.

2. To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

3. To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Research Hypothesis

After implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level).

Scope of the Research

Population and the Sample Group

Population

The total of 276 from 3 sections of students major the teacher education major with different levels of proficiency – beginner, intermediate, and advanced, who enroll in educational practical training course at Lishui University in semester 1 academic year 2023. Those sections involve the following.

46 students in class A

40 students in class B

21 students in class C

22 students in class D

35 students in class E

38 students in class F

40 students in class G

34 students in class H

The Sample Group

There are 35 students who enroll in Educational practical training course at Li Shui University in the 1st Semester academic year 2023 by cluster random sampling.

Independent Variable

Situational teaching and blended learning Instructional Model

Dependent Variable

Students' Instructional design skills

Contents

According to this study, the researcher chooses Unit2 Instructional design analysis and implementation (16 hours) for the experiment.

Time

Semester 1 of academic year 2023 (September- December 2023)

Advantages

To the students: It helps to stimulate students' interest in professional knowledge, deepen their understanding and practice of instructional design courses, and cultivate new ways of thinking. The adoption of situational learning and blended learning teaching models can not only give full play to students' imagination and creativity in a relaxed and pleasant classroom environment, but also activate and cultivate students' subjective consciousness to a certain extent, mobilizing their initiative to think and the enthusiasm to explore.

To the lecturers: It can helps teachers gain a deeper understanding of students' learning progress and outcomes, allowing them to provide more effective guidance to students. Teachers can adopt new teaching methods when teaching, which not only stimulates teachers' innovative thinking and creativity, but also helps them better adapt to the changing educational environment. In addition, this

innovative teaching method also helps to establish closer interaction between teachers and students, thereby improving teaching effectiveness.

To the institute: It can help schools manage teachers' teaching and students' learning progress more efficiently, and conduct multi-angle assessments. This not only promotes the progress of education, but also provides a new direction for educational reform and improvement of teaching quality.

Definition of Terms

The factors affecting the instructional design skills of undergraduate Normal students refers to the internal and external factors collected from students using questionnaire and interviews for lecturers designed by the researcher. The internal factors involve the information about students while external factors consist of information about the teacher and circumstances. In addition, the factors will be obtained by structured interviews with the lecturers.

Development of Situational teaching and Blended learning Instructional Model refers to a new instructional framework which consists of the stable teaching activities and procedures. Such a developed instructional model with 5 components: 1) Principle & Rationale, 2) Objectives, 3) Contents, 4) Methods of teaching & Materials and 5) Evaluation, is confirmed by the experts in 4 aspects: 1) Utility standards, 2) Feasibility standards, 3) Propriety standards and 4) Accuracy standards (Stufflebeam, 2012) as the follows:

Utility standards are intended to ensure that the developed instructional model will serve the information needs of intended users.

Feasibility standards are intended to ensure that the developed instructional model will be realistic, prudent, flexible, and frugal.

Propriety standards are intended to ensure that the developed instructional model will be conducted in conformity to teaching principles and provide positive results.

Accuracy standards are intended to ensure that the developed instructional model shows a measure of closeness to a true value.

Situational teaching refers to as a teaching method that stimulates students' interest, motivation, and reflection by placing learning in meaningful, real-world contexts and orienting them to challenging tasks and problems to develop

their practical skills, application skills, critical thinking, and cooperative spirit. Situational teaching emphasizes student engagement in authentic activities and experiences to enhance the meaning and depth of learning. It engages students in applying what they have learned to solve problems and promotes their cognitive development, interdisciplinary thinking, and social responsibility by simulating or creating scenarios related to subject content. Situational teaching focuses on developing students' practical application skills and encourages them to explore, collaborate and innovate in concrete situations to better adapt to real life and future challenges (Wu, 2002). The basic teaching process of the situational teaching model can be divided into the following three steps: (Lin, 2012; Feng, 2023)

Step 1: Design the problem and create the situation

Step 2: Students explore and try to solve

Step 3: Reflection and Summary

Blended learning refers to a teaching model that integrates different learning resources and teaching strategies by combining traditional face-to-face teaching with online learning in order to maximize the effectiveness, flexibility and personalization of learning. It creates rich and diverse learning environments that facilitate students to learn in a personalized way in different learning scenarios and provide opportunities for interactive, collaborative and self-directed learning. Blended learning leverages technology support and online learning platforms to meet students' individual learning needs and provide a richer, more flexible and effective learning experience. According to the purpose of this study blended learning can be divided into the following 3 steps: (Bai, Li and Chen, 2011; Li, 2016)

Step 1: Before class

Step 2: In class

Step 3: After class

Situational teaching and Blended learning Instructional Model refer to new instructional model By combining face-to-face teaching and online learning, the blended learning model provides a more flexible and personalized learning approach to meet the needs and learning objectives of different students. The steps are as follows: (Li, 2006; Shao, 2019)

Step 1: Design questions and create situations before class

Step 2: In class, students explore and try to solve

Step 3: Reflection and summary after class

Instructional design skills refer to the instructional design abilities that normal college students need to possess as future teachers. It includes the ability to set teaching objectives, select and organize content, and use appropriate teaching methods and strategies to assess student learning, personalize instruction, effectively utilize instructional resources, and conduct instructional evaluation and improvement. These skills can be developed through professional training, practical experience and reflection. The importance of instructional design skills for teacher college students has been widely discussed and studied. Many scholars emphasize the key role of instructional design in teachers' professional development. According to the purpose of this study, instructional design skills can be evaluated through 2 aspects: (Li, Li and Wang, 2023)

Item 1: Instructional design analysis ability

Standard 1: Analysis of teaching objects

Standard 2: Teaching goal analysis

Standard 3: Teaching task analysis

Item 2: Instructional design implementation ability

Standard 1: Selection and application of teaching methods

Standard 2: Selection and application of teaching media

Standard 3: Evaluation of teaching results

Undergraduate normal students refers to the students who enroll in Educational practical training course at Li Shui University in the 1st Semester academic year 2023 by cluster sampling.

Li Shui University refers to located in Lishui City, Zhejiang Province, this school is sponsored by the Lishui Municipal People's Government. It is not only the top university in Lishui City, but also the only undergraduate education institution in the city.

Research Framework

Based on the research objectives, relevant theories such as situational teaching theory, blended learning theory, and educational practice training were organized and studied. Research on style-based instructional design methods (Liu, 2008) provides ideas for the design of this research framework. The purpose of this study is to improve students' instructional design skills (dependent variable) by developing situational teaching and blended learning teaching models (independent variables), These ideas and principles were adopted as the basis for the following research framework, as shown in Figure 1.1

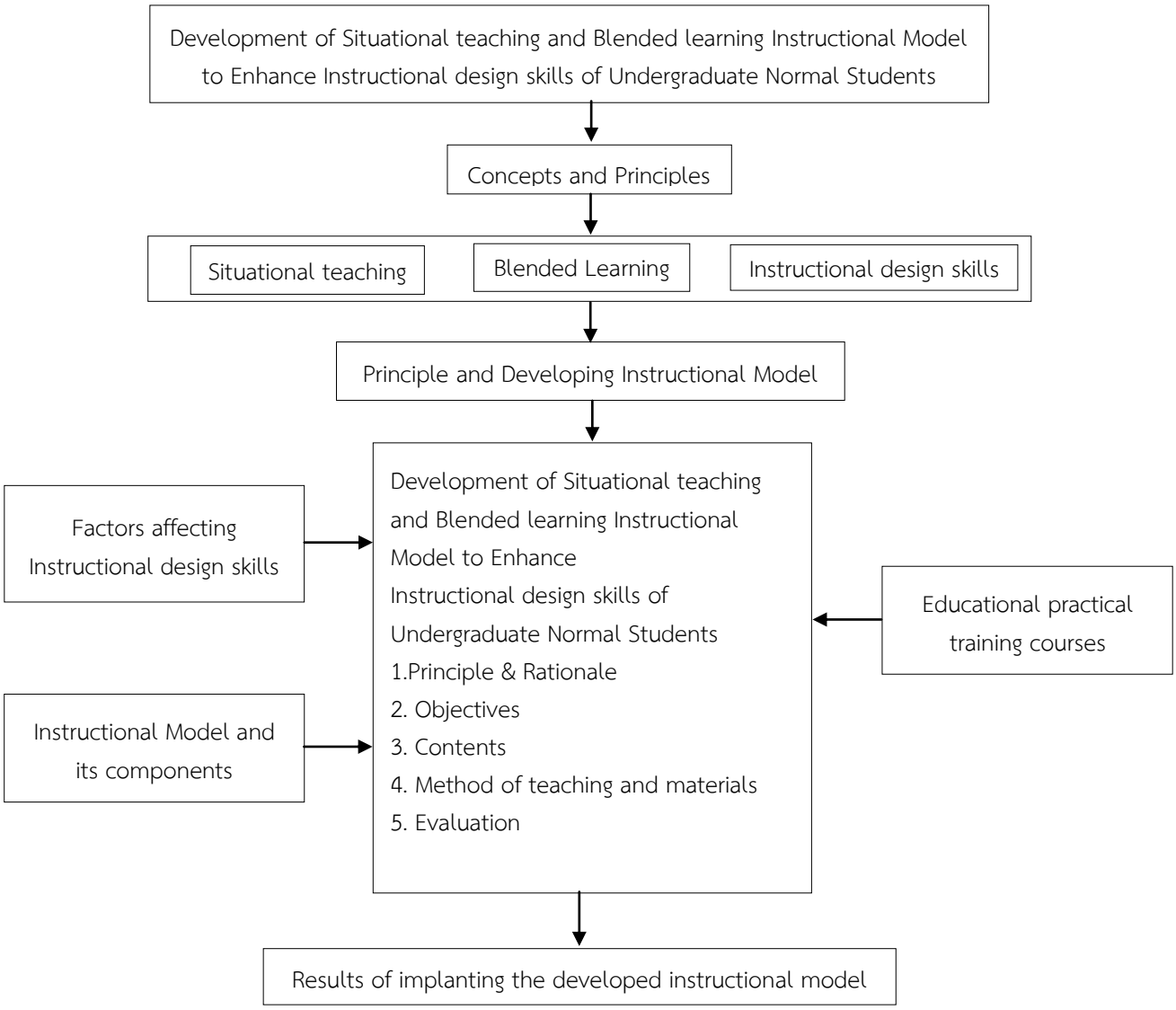

Figure 1.1 Research Framework

Chapter 2
Literature Review

In the study of “Development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students”, the researcher studied the documents concerning the following.

1. Education Practical Training Course
2. Development of Instructional Model
3. Situational teaching
4. Blended Learning
5. Instructional design skills
6. Related Research

The details are as follows.

Education Practical Training Course

Principle & Rationale

This course is a practical education training course offered by the College of Education, LiShui university. It is a compulsory course for undergraduate students majoring in elementary teacher education. It is mainly conducted in situational teaching and blended learning model, which helps Normal students to improve their practical ability, cultivate innovative thinking, promote independent learning and reflection, enhance information technology literacy, strengthen cooperation and interaction, and lay a solid foundation for Normal students to become excellent educators. (Academic Affairs Office of Lishui University, 2021)

Instructional design ability is a necessary ability for Normal students in teaching practice. In China, the Teachers' Law of the People's Republic of China (The Central People's Government of the People's Republic of China, 2005) and the Opinions of the Ministry of Education on Strengthening the Educational Practice of Normal College Students (Ministry of Education of the People's Republic of China, 2016) specify the requirements for the cultivation of Normal students' instructional design competence, and the Teacher Qualification Examination has made instructional design competence the focus of the content of the examination. The

Department of Education of Zhejiang Province has issued the Program for Cultivating Teaching Design Competence of Normal students in Ordinary Schools of Higher Education in Zhejiang Province (Notice from the Office of the Zhejiang Provincial Department of Education, 2018) and the Program for Cultivating Talents (Academic Affairs Office of Lishui University, 2021) in Elementary Education of Lishui College both regulate the educational training of undergraduate Normal students. Undergraduate Normal students are required to master the following in terms of instructional design ability enhancement:

1. Theoretical foundation of instructional design: to possess basic knowledge and understanding of instructional design theory, including basic concepts, principles and methods of pedagogy, psychology, teaching methodology and other related disciplines.

2. Curriculum instructional design: the ability to independently conduct curriculum instructional design.

3. Diversified instructional design: the ability to design diversified teaching activities and teaching strategies to meet the learning needs and individual differences of different students. This includes the application of various teaching methods such as cooperative learning, problem solving, and inquiry-based learning.

4. Utilization and Innovation of Teaching Resources: To be good at collecting, selecting and utilizing a variety of teaching resources and aids, such as multimedia teaching aids, experimental equipment, and internet resources, in order to support the design of teaching and the implementation of teaching activities.

5. Teaching evaluation and reflection: Utilize a variety of evaluation methods to effectively evaluate teaching, and be able to reflect on and improve the design and implementation of teaching based on the results of the evaluation in order to improve the effectiveness of teaching.

6. Competence in Practical Instructional Design: To develop Normal students' competence in independent instructional design and implementation in real teaching environments through internships, educational placements or actual teaching practice.

These require undergraduate Normal students to master subject-specific knowledge and theories and methods of pedagogy, psychology, curriculum and pedagogy through course work and skills training, which are effectively transformed

into professional thinking and standardized teaching behaviors, thus promoting the continuous improvement of undergraduate Normal students' professionalism and skills in teaching. (Hu, 2010)

Objectives

The purpose of the course is to provide a hands-on learning environment for students to develop and enhance their professional competencies, teaching skills and educational literacy through participation in real or simulated educational scenarios and activities. Have include the following:

1. Development Teaching Skills: The course aims to develop and enhance the pedagogical skills of pre-service teachers, including lesson planning, instructional delivery, classroom management, and student assessment.

2. Apply Educational Theories: It seeks to enable pre-service teachers to apply educational theories and principles learned in their academic studies into real classroom situations. This includes understanding teaching and learning processes, individual differences, and diverse student needs.

3. Reflective Practice: The course encourages pre-service teachers to engage in reflective practice, critically analyzing their teaching approaches, making adjustments based on feedback and self-reflection, and continuously improving their instructional practices.

4. Professional Collaboration: It fosters opportunities for pre-service teachers to collaborate with experienced educators, school staff, and fellow peers, enhancing their teamwork and communication skills within an educational setting.

5. Classroom Management: The course provides pre-service teachers with practical strategies and techniques for effective classroom management, creating a positive and conducive learning environment that promotes student engagement and positive behavior.

6. Cultural Competence: It promotes cultural competence by helping pre-service teachers understand and appreciate diverse cultural backgrounds and adapt their teaching methods to meet the needs of a diverse range of students.

Curriculum Structure

There are 2 Units, 32 hours in Educational Practical Training Course.

Table 2.1 Chapters and Contents Used in the Present Study

Unit	Chapter	Contents	Times (32hrs.)
1. Introduction to Effective Teaching	1.1 Definition of effective teaching	1.1.1 Different understandings of teaching at home and abroad 1.1.2 How teaching should be understood; 1.1.3 Diverse understandings of effective teaching, both domestically and internationally; 1.1.4 Basic characteristics of effective teaching	3 hrs.
	1.2 An overview of research on effective teaching	1.2.1 Teaching research before “effective teaching”; 1.2.2 A brief history of research on effective teaching; 1.2.3 Factors affecting effective teaching; 1.2.4 Analytical Models for Effective Teaching	3 hrs.
2. Instructional design analysis and implementation	2.1 Instructional design analysis ability	2.1.1 Analysis of teaching objects 2.1.2 Teaching goal analysis 2.1.3 Teaching task analysis	8 hrs.
	2.2 Instructional design implementation ability	2.2.1 Selection and application of teaching methods 2.2.2 Selection and application of teaching media 2.2.3 Evaluation of teaching results	8 hrs.

Unit 2 Instructional design analysis and implementation is chosen by the research for implementing the developed model in the present study.

Factors promoting instructional design skills in undergraduate normal students

Normal students' instructional design skills are influenced by both internal and external factors. The idea that the improvement of instructional design skills is influenced by internal and external factors is supported by the research of many scholars.

Zhang, Jin and Chen (2004) pointed out that the development of instructional design skills is influenced by personal factors, including teachers' level of expertise, educational background, teaching experience, and teachers' attitudes toward educational reform and innovation. At the same time, he also emphasized the contribution of external factors such as organizational culture and leadership style to instructional design skills.

Zhao and Xu (2004) explored the external factors of teachers' professional development, and she argued that aspects such as instructional environment, school, and policies have a significant impact on the enhancement of instructional design skills. For example, whether the school cultures in which teachers are embedded are supportive of pedagogical innovation and professional development, and whether the policy system provides appropriate support and resources.

Wieman (2014) found that internal and external factors, such as teachers' personal experiences, professional development opportunities, and support networks, play a key role in the enhancement of instructional design skills. They argued that beginning teachers need to be continually exposed to and practice different instructional design models and strategies, and receive support and guidance from resources around them such as colleagues and mentors.

Internal factors mainly include the following:

1. Subject knowledge and professionalism: in-depth knowledge and familiarity with the subject taught is the basis for designing high-quality teaching activities.

2. Reflection and self-assessment skills: the ability to reflect on and assess one's own teaching practice, identify problems and make improvements to improve the effectiveness of instructional design.

3. Learning of educational theories and methods: Knowledge of educational theories and teaching methods, such as instructional models, strategies and assessment methods, helps to apply them flexibly in instructional design.

4. Interest and motivation: Having interest and motivation in instructional design can motivate Normal students to actively engage in learning and continuously improve their design ability.

External factors also have an impact on Normal students' instructional design skills:

1. Mentors' guidance and feedback: Mentors' guidance and feedback play a key role in the improvement of instructional design skills by providing professional advice and guidance.

2. Practical experience and internship opportunities: Through participation in practical teaching activities and internships, Normal students can gain valuable practical experience and opportunities to develop instructional design skills.

3. Educational policies and institutional support: A well-developed educational policy and system can provide Normal students with better training opportunities, teaching resources and support systems for the development of instructional design skills.

4. School culture and atmosphere: A school culture and atmosphere that actively supports innovative teaching and encourages teachers' professional growth is conducive to Normal students giving full play to their creativity and talents and improving their instructional design skills. Taking internal and external factors into account, Normal students can improve and enhance their instructional design skills in a comprehensive manner.

The meaning of internal factors

The internal factors affecting instructional design skills are suggested by the following scholars:

"In-depth knowledge and familiarity with the subject matter taught is essential for teachers to improve their instructional design skills. Normal students need to acquire subject matter knowledge, including content, concepts, and methods, and appropriate professionalism in order to design discipline-specific and effective instructional activities." (Shulman, 1987)

"Reflection and self-assessment are critical competencies in the professional development of teachers. Normal students should be able to examine their teaching practice, identify problems and make improvements. Through continuous reflection

and self-assessment, they can improve the effectiveness and adaptability of their instructional design." (Brookfield, 1995)

"Knowledge of educational theories and teaching methods is of great importance to teachers. Familiarity with various educational theories and methods, such as constructivism, cooperative learning, and problem solving, helps teachers to select appropriate models, strategies, and assessment methods in instructional design to improve the effectiveness of teaching and learning." (Ormrod, 2016)

"Having an interest and motivation in instructional design is an important driver for Normal students to actively engage in learning and developing their design skills. Interest can fuel their passion for instructional design, their ongoing pursuit of professional growth, and their willingness to continually explore new pedagogical approaches and innovative practices." (Hidi & Renninger, 2006)

In summary, scholars have identified disciplinary knowledge and professionalism, reflection and self-assessment skills, learning of educational theories and methods, as well as interest and motivation as internal factors that influence Normal students' instructional design skills. These factors work together to provide internal support for Normal students to enhance their instructional design skills.

The meaning of external factors

The following scholars have suggested external factors that influence instructional design skills:

"Mentors are critical to Normal students' instructional design skill enhancement. Their experience and expertise can provide guidance, advice, and feedback to Normal students to help them understand the use of instructional design principles and methods to facilitate skill development." (Darling-Hammond, 2017)

"By engaging in hands-on teaching activities and internships, Normal students can gain practical experience and hone their instructional design skills. Practical experiences help Normal students translate theory into practice and develop creative and problem-solving skills." (Loughran et al., 2004)

"Sound educational policies and systems are crucial for Normal students to improve their instructional design skills. Good policies and systems can provide Normal students with better training opportunities, teaching resources, and support systems for their instructional design." (Cochran-Smith & Zeichner, 2005)

"School culture and climate have a significant impact on Normal students' instructional design skill enhancement. A school culture that encourages innovation and supports professional growth fosters a culture in which Normal students can actively participate in instructional design practices, utilize their creativity, and improve their instructional design skills." (Fullan, 2001)

In summary, scholars have identified mentor guidance and feedback, practical experience and internship opportunities, educational policies and institutional support, and school culture and climate as external factors that influence Normal students' instructional design skills. Together, these factors provide important support for Normal students to enhance their instructional design skills.

Development of Instructional Model

Definition of Instructional Model

There are scholars to define the meaning of definition blended learning model as follows:

Wang (1990) believed that the so-called teaching model refers to the basic framework, stages or structures used in the teaching process. It is a teaching method system with specific functions established by teachers under the guidance of certain educational ideas and teaching theories.

Mao (2000) pointed out that teaching models are the intermediary between theory and practice. Chinese and Western teaching models arising from different teaching practices and teaching theories each have their own uniqueness.

Chu and Hui (2003) pointed out the teaching model is actually a relatively stable basic teaching model that targets specific teaching goals through the summary and generalization of education and teaching practice experience under the guidance of specific teaching theories.

Zhang (2010) defined teaching model as a teaching method, strategy and activity framework specifically aimed at a certain teaching goal and intention, which is regarded as one of the most critical components in the entire process of teaching and learning.

Wan (2015) defined the teaching model as follows: “A relatively fixed framework of teaching activities established to achieve a specific teaching task,

covering logic that is logical, regular, and can accurately reflect specific teaching principles or principles. structure.

Zhang (2023) defined the teaching model as the core structure of a teaching system based on specific teaching concepts, theories or principles, with close connections, interactions and collaborative work between them.

From the definition above, we can clearly understand that a teaching model is a relatively stable teaching activity plan formulated to achieve predetermined teaching goals under the guidance of specific teaching thinking. This includes aspects such as teaching content, methods and assessment, and the formation and implementation of these activities will be comprehensively affected by multiple factors such as teachers, teaching materials, students, teaching concepts and educational concepts.

Components of Instructional Model

There are scholars to define the Components of Instructional Model as follows:

Qu (2005) In order to clarify the various components of the teaching model, we need to clearly understand the core elements required for the teaching model. A complete education model should cover the following five main parts: theoretical basis, teaching purpose, teaching process, auxiliary tools and evaluation criteria.

Yuan, Liu and Liang (2005) defined the teaching model should cover the three core elements of teaching structure, teaching process and teaching methods.

Yao (2001) holds the view that the components of the teaching model cover four parts: teachers, students, teaching content and teaching media.

Zhong (2005) believed that the five core elements of the teaching model include: theoretical foundation, goal orientation, implementation conditions, operating procedures, and effect evaluation.

Du, Zhu and Wang (2012) can classify the key components of the teaching model: the five core elements of concepts or concepts about education, the purpose of teaching, the teaching process, the teaching methods used, and the teaching methods constitute a complete teaching model.

Comprehensive consideration, the situational teaching and mixed teaching models in this study should be consistent with the five core parts of the aforementioned theory. These five parts are: principles or principles, teaching

objectives, teaching content, teaching methods used, and materials used. , and evaluation methods.

Situational teaching

Definition of Situational Teaching

Some well-known scholars have defined situational teaching as follows:

Huang, Wu and Shi (2008) considered contextualized teaching as an instructional approach that promotes active exploration, application of knowledge, and problem solving by placing learning in authentic, meaningful situations.

Wu (2002) defined contextualized teaching as an approach to learning based on problems and challenging scenarios that develops students' subject matter knowledge and cognitive skills by engaging them in real-world tasks and activities.

Li and Zhang (2003) described contextualized teaching as enhancing the meaning and depth of learning by placing it in situations or role-plays that are familiar to students. Contextualized teaching encourages students to apply what they have learned to solve real-world problems and develops interdisciplinary thinking and collaboration skills.

Yang (2003) emphasized that contextual teaching is an approach that combines learning with practical application by simulating real-life environments and situations to stimulate student interest, develop problem-solving skills, and foster critical thinking and cooperation.

Yu (2007) viewed contextual teaching as an instructional strategy based on brain research and cognitive science principles that promotes deep learning and memory formation by providing authentic and meaningful situations that stimulate students' curiosity and motivation.

Qin (2004) described situated teaching as an instructional approach that enables students to apply their knowledge and skills to solve real-world problems by placing learning in authentic, meaningful contexts and fosters interdisciplinary thinking, collaboration, and innovation.

Hu (2011) defined Situated Instruction as an instructional approach that promotes active student engagement, exploration, and collaborative problem solving by situating learning in meaningful situations and real-world problems.

Summarizing the views of the above scholars, situational teaching can be defined as a teaching method that stimulates students' interest, motivation, and reflection by placing learning in meaningful, real-world contexts and orienting them to challenging tasks and problems to develop their practical skills, application skills, critical thinking, and cooperative spirit. Situational teaching emphasizes student engagement in authentic activities and experiences to enhance the meaning and depth of learning. It engages students in applying what they have learned to solve problems and promotes their cognitive development, interdisciplinary thinking, and social responsibility by simulating or creating scenarios related to subject content. Situational teaching focuses on developing students' practical application skills and encourages them to explore, collaborate and innovate in concrete situations to better adapt to real life and future challenges.

Theory

Situational Teaching Theory, also known as Situational Pedagogy, has its roots in several educational theories and approaches. Its background can be traced to constructivism, social constructivism, and experiential learning theories. Here is a brief overview of the background of Situational Teaching Theory:

Constructivist Theory: Constructivism believes that learners actively construct their knowledge and understanding through interaction with the environment. Consistent with this perspective, situated teaching theory recognizes the importance of creating learning environments in which students actively participate, apply their prior knowledge, and construct meaning through problem solving and discovery.

Social Constructivism Theory: Social constructivism emphasizes the role of social interaction in learning. According to this view, learning can be enhanced through collaboration, discussion, and sharing of ideas. Situated teaching theory incorporates elements of social constructivism by promoting real-world collaborative learning activities, peer interactions, and cooperative problem solving.

Experiential Learning Theory: Experiential learning theory emphasizes the importance of engaging learners in practical experiences to deepen understanding and develop practical skills. Situated teaching theory builds on this concept, advocating for authentic and meaningful learning experiences that link theory and

practice. It encourages learners to apply knowledge to real-life situations, promoting skill development and reflective thinking.

The background of situated teaching theory is rooted in these theories that emphasize active learner participation, social interaction, and practical experience. By integrating elements of these educational perspectives, situated teaching theory aims to create dynamic and relevant learning environments that enable learners to construct meaning, collaborate with others, and apply their knowledge in authentic settings.

The development of situational teaching model

The situational teaching method originated from the progressive education system in the United States. From the late 19th century to the early 20th century, the well-known American educator John Dewey proposed a child-centered teaching model, which comprehensively considered systematic knowledge and activities, and used actual experience situations as the starting point for thinking. This is the preliminary form of the situational teaching model (Shi, 2002).

Liang (1999) believed that in the situational teaching process, there are several key points that need special attention, and teaching methods, strategies and teaching materials should be used to better meet the special needs of learners and the actual learning environment.

Sun (2000) believed that new knowledge should be integrated with actual situations, thus formally forming the situational teaching method. Subsequently, situational teaching became the consensus of many educators at home and abroad, and was gradually applied to teaching activities in various subjects, especially in primary school mathematics education, and achieved good results. Based on this, foreign scholars have further expanded and enriched the methods and models of situational teaching.

Hu (2008) conducted in-depth understanding of students, teaching topics, and the social environment behind teaching in situational teaching. As a new teaching method, situational teaching emphasizes teaching activities in real or simulated situations. The situational teaching method emphasizes that "teachers should have a high degree of flexibility and quick response capabilities, and make teaching adjustments based on the current learning environment, students' actual abilities and learning goals."

Yuan (2023) states that teaching strategies, methods and materials should be adjusted according to the needs of learners in a specific environment, while also taking into account their language proficiency, learning motivation and learning preferences to adapt to learners in specific contexts or situations. specific needs, abilities and circumstances. Situational teaching method is considered to be one of the most important ways to improve the efficiency of English classroom teaching.

In general, Chinese educators have conducted numerous studies on the situational teaching model and achieved many results, but there are still some problems, such as the lack of in-depth research on certain parts of the situational teaching model. Situational teaching can promote learners' independent construction of knowledge and improve their problem-solving ability to a certain extent. Therefore, teachers need the ability to provide students with a more efficient and engaging learning experience given their special learning environments and their individual characteristics.

The important of situational learning

Scholars have suggested the importance of situational teaching as follows：

He (1997) stated that situational teaching provides context for learning and places learning in challenging problems and situations. Such environments can stimulate students to think, explore, and collaborate to develop subject matter knowledge and cognitive skills.

Chen (2013) believed that situational teaching methods can assist students in learning through actual participation and experience. Students can develop their hands-on skills and practical application capabilities through imitation of real-life scenarios and observations.

Zhao (2013) Situational teaching methods can arouse students' desire to explore, innovative thinking and critical analysis skills. By providing students with authentic and diverse learning environments, they can think and learn more deeply.

An (2014) argued that situated instruction can integrate learning with real-world applications, stimulate student interest, develop problem-solving skills, and foster critical thinking and collaboration.

Yang (2020) emphasized that the core of situated teaching is to place learning in authentic, meaningful contexts that enable students to apply knowledge and skills

to solve real-world problems and develop disciplinary thinking, collaboration, and creativity.

Li (2023) believed that situational teaching methods can help students face various problems and challenges in daily life more effectively, while also cultivating their practical skills and sense of responsibility to society.

Hou (2023) believes that by emphasizing situational teaching methods, students' learning interests, learning motivation, and ways of thinking can be effectively stimulated, thereby helping them conduct deeper learning and conceptual understanding. Creating problem situations is one of the main forms of situational teaching in mathematics classrooms. Utilizing situational teaching methods, students are able to engage in in-depth learning in real and concrete environments.

To summarize, situational teaching plays an important role in developing students' practical ability, deep learning, application ability and creativity. It can stimulate students' interest, motivation and thinking, help them better cope with real-life problems and challenges, and develop their sense of social responsibility and spirit of cooperation.

The step to situational learning

Li (2006) divided the situational teaching model into the following 4 steps:

Step 1: Preparation points before class

Step 2: Create situations and introduce courses

Step 3: After-school tutoring

Step 4: Performance evaluation

Lin (2012) divided the situational teaching model into the following three steps:

Step 1: Create English conversation situations and cultivate students' English expression ability

Step 2: Teacher-student interaction, student-student interaction

Step 3: Reflection and Summary

Feng (2023) believes that the situational teaching model is divided into the following two steps:

Step 1: Design the problem and create the situation

Step 2: Students explore and try to solve

Table 2.2 The results of the synthesis of situational learning steps

Component \ Author	Li (2006)	Lin (2012)	Feng (2023)	Frequency
Step 1				
Design the problem and create the situation	√	√	√	3
Preparation points before class	√			
Step 2				
After-school tutoring	√			
Students explore and try to solve		√	√	2
Step 3				
Reflection and Summary	√	√		2

According to table 2.2, the researcher analyzed the steps and components of situational learning, which included Li (2006); Lin (2012); Feng (2023). The researchers selected components with a frequency of 2 or more according to the standard, as this situational learning Pattern steps. Which can be synthesized in3 steps as follows:

Step 1: Design the problem and create the situation

Step 2: Students explore and try to solve

Step 3: Reflection and Summary

Blended learning

Definition of blended learning

There are scholars to define the meaning of definition blended learning as follows:

Yang and He (2008) defined blended learning as "the organic combination of face-to-face instruction and online learning to create a more interactive, personalized learning experience.

Bai, Li and Chen (2011) defined blended learning as the use of online learning technologies in the classroom to facilitate student learning at different times and places, providing personalized and self-directed learning opportunities.

Chen and Wang (2013) defined blended learning as combining traditional classroom instruction and online learning methods to maximize learning effectiveness and flexibility.

Wang (2013) defined blended learning as combining traditional face-to-face instruction and online learning to optimize the learning experience by integrating different learning mediums and instructional strategies.

He, Zhang, Luo and Zhao (2019) defined blended learning as a seamless combination between face-to-face classroom instruction and online learning that provides a richer, flexible, and personalized learning experience by integrating different learning activities and resources.

Wang, Zhang and Wang (2020) defined blended learning as "facilitating students to learn in a personalized way in different learning environments by integrating face-to-face instructional activities and online learning resources.

Xie, Qu, Chen and Liu (2023) defined blended learning as an instructional approach that combines online and traditional face-to-face learning to achieve a more flexible, personalized, and effective learning experience by integrating different learning resources and activities.

In summary, blended learning is a teaching model that integrates different learning resources and teaching strategies by combining traditional face-to-face teaching with online learning in order to maximize the effectiveness, flexibility and personalization of learning. It creates rich and diverse learning environments that facilitate students to learn in a personalized way in different learning scenarios and provide opportunities for interactive, collaborative and self-directed learning. Blended learning leverages technology support and online learning platforms to meet students' individual learning needs and provide a richer, more flexible and effective learning experience.

Theory

Blended Learning (BL) is an instructional model that combines traditional face-to-face instruction with online learning. The theoretical background involves the following aspects:

Constructivist Learning Theory: It advocates that learning is an active process in which students construct new knowledge through their own experience and thinking. Blended learning provides diverse learning resources and rich learning

activities to help students construct knowledge in face-to-face and online environments.

Contextual Learning Theory: Contextual learning believes that learning best occurs in situations that are authentic and meaningful. Blended learning can provide richer and more authentic learning contexts and enhance the effectiveness of learning by combining online learning with practical applications.

Social Cognitive Theory: Social cognitive theory emphasizes that learning occurs through observing the behavior of others, engaging in social interactions, and cooperating. Blended learning promotes interaction and cooperation among students, and through online platforms and tools, students can share resources, collaborate to solve problems, and enhance each other's learning.

Technology Acceptance Theory: Technology acceptance theory focuses on learners' attitudes and willingness to use technology. By introducing online learning tools and platforms, blended learning provides a more convenient and flexible learning method, meeting students' needs for personalized learning, independent learning, and cross-time learning.

The theoretical background of blended learning emphasizes the importance of students constructing knowledge and collaborating and interacting in authentic, meaningful contexts, as well as the positive role of technology in education. Supported by these theories, blended learning becomes a teaching model that integrates traditional teaching and modern technology to better meet students' learning needs and enhance learning outcomes.

The development of blended learning

The blended learning method was first introduced in corporate training activities, which closely combines online teaching and offline teaching.

Driscoll (2002) believed that blended learning is the integration of network technology, teaching methods, teaching methods and classroom training. This can also be explained in many aspects such as the integration of teaching methods and teacher responsibilities.

He (2004) held the view that the hybrid teaching model that combines traditional teaching with online teaching not only values the guidance and inspiration of teachers, but also highly respects the status of students as the subject of teaching.

Huang, Ma, Zheng and Zhang (2009) believed the concept of blended learning was deeply analyzed and particularly emphasized the importance of "appropriate". It advocates that optimal learning can be achieved through the appropriate use of teaching elements. Results. He believes that "moderateness" is the most basic and critical principle and standard in blended learning, which is reflected in the transformation of teachers' roles, the cultivation of students' independent learning abilities, and the interaction between teachers and students. A clear understanding of its definition, the core significance is crucial for future theoretical research and practical applications.

Zhang and Chen (2014) believed that this is not only the integration of traditional and online teaching methods, but also the integration of various teaching elements such as technology, methods, and goals.

The carefully constructed hybrid teaching model has been widely used in many disciplines such as educational technology (Yang, 2015), medicine (Xu, Li, Li and Sun, 2015), resources and environment (Xue & Yang, 2023), His research results in the theory and practice of blended teaching are quite rich.

So far, the connotation of blended teaching has become richer. It not only integrates online and offline teaching methods, but also integrates multiple teaching elements such as teaching media, teaching strategies, and assessment methods. The hybrid teaching model is essentially a new teaching method. Pay more attention to the learning environment and students' actual experience. The hybrid teaching model emerged under the background of educational informatization. It is a new teaching method resulting from the application of information technology in classroom teaching. The blended teaching method is not a simple "transition", but a combination of various technologies and teaching methods to achieve more and deeper learning effects.

The important of blended learning

There are scholars to define the important of blended learning as follows :

He (1997) believed that the blended learning model can stimulate students' active participation and persistence, while also improving students' learning enthusiasm and self-driven learning ability.

Wang, Ruan and Zhou (2010) believed that blended learning methods can help students build stronger interpersonal relationships and improve their

communication and cooperation abilities in face-to-face communication and online learning environments.

Liu, Ge, He and Gao (2014) believe that blended learning methods provide students with more flexible learning periods and places, which helps them break through the constraints of time and place, thereby enhancing the accessibility and adaptability of learning. sex.

Lin, Hu and Deng (2015) emphasized that the blended learning model can provide students with a more flexible and personalized learning path, while also stimulating their creative thinking and critical analysis skills.

Liu & Wang (2021) enhanced students' thinking and metacognitive skills by emphasizing blended learning methods, allowing them to understand and apply the knowledge they have mastered more deeply.

Sun et al. (2022) integrated information technology teaching into the hybrid teaching model and proved that the blended learning method can strengthen students' independent learning and critical thinking, while also improving their academic performance in multiple subject areas.

Hu, Yan, Feng and Wang (2022) used a blended learning background teaching experimental method to find that blended learning methods can meet various learning modes and the unique needs of students, provide students with a customized learning experience, thereby improving their learning Enthusiasm and engagement.

In summary, blended learning promotes independent learning, critical thinking, motivation and engagement, and improves students' academic performance and subject comprehensiveness. At the same time, blended learning can also overcome time and place constraints, provide flexibility in learning to meet the needs of different learning styles and student characteristics, and promote the development of students' reflective and metacognitive skills.

The step of teach blended learning

There are scholars to define the step of teach blended learning as follows:

Bai, Li and Chen (2011) conducted research based on the instructional design of resource-based blended learning and divided teaching into 3 steps:

Step 1: Before class

Teachers provide resources and students prepare online independently

Step 2: In class

The teacher explains the experiment and the students practice freely

Step 3: After class

Students review and reflect independently online

Li (2016) combined the respective advantages of virtual environments and real environments and believed that the implementation of blended teaching can be divided into three main stages:

Step 1: Pre-class stage

Before starting the implementation, teachers are responsible for uploading the designed and completed independent learning task list and online course resources with micro-video technology as the core to the learning platform.

Step 2: In-class stage

Use centralized teaching or organized discussions to answer questions in class

Step 3: in-depth thinking after class

Students will revise, improve and refine their learning results and reflections based on the opinions of teachers and other students, and then submit them to the learning platform.

Xiong, Xing, and Wu (2022) successfully integrated TPACK and an online and offline hybrid teaching model based on the Wisdom Tree platform to conduct a structured design and divided the teaching model into three parts:

Step 1: Before class

Step 2: In class

Step 3: After class

Table 2.3 The results of the synthesis of blended learning teaching steps

Component \ Author	Bai, Li and Chen (2011)	Li (2016)	Xiong, Xing, and Wu (2022)	Frequency
Step1: Before class				
Teaching Preparation, Pre-teaching	√	√	√	3
Step 2: In class				
Teachers explain, organise discussion and answer questions	√	√	√	3
Step 3: After class				
Students reflect and revise	√	√	√	3

According to Table 2.3, the researcher analyzed the steps and components of blended learning teaching, which included Bai, Li and Chen (2011); Li (2016); Xiong, Xing, and Wu (2022). The researchers selected components with a frequency of 2 or more according to the standard, as this blended learning teaching Pattern steps. Which can be synthesized in 3 steps as follows:

Step 1: Before class

Step 2: In-class

Step 3: After class

Table 2.4 Connecting Situational Teaching and Blended Learning Instructional Models

Situational Teaching + Blended Learning		
ST S.1+BL S.1	**ST S.3+BL S.3**	**ST S.3+BL S.3**
ST: Design the problem and create the situation + BL: Before class	ST: Students explore and try to solve + BL: In-class	ST: Reflection and Summary + BL: After class
⇣	⇣	⇣
Situational Teaching and Blended Learning		
S.1	**S.2**	**S.3**
Design questions and create situations before class	In class, students explore and try to solve	Reflection and summary after class

ST Situational Teaching BL Blended Learning

According to Table 2.4, the researcher analysed the steps and components of Situational Teaching and Blended Learning and summarised the Situational Teaching and Blended Learning instructional model into the following three steps:

Step 1: Design questions and create situations before class

Step 2: In class, students explore and try to solve

Step 3: Reflection and summary after class

Development of Situational teaching and Blended learning Instructional

The means a new instructional framework which consists of the stable teaching activities and procedures. Such a developed instructional model with 5 components: 1) Principle & Rationale, 2) Objectives, 3) Contents, 4) Methods of teaching & Materials and 5) Evaluation, is confirmed by the experts in 4 aspects: 1) Utility Standards, 2) Feasibility Standards, 3) Propriety Standards and 4) Accuracy Standards (Stufflebeam and Social Impact, 2012) as the follows:

Utility Standards are intended to ensure that the developed instructional model will serve the information needs of intended users.

Feasibility Standards are intended to ensure that the developed instructional model will be realistic, prudent, flexible, and frugal.

Propriety Standards are intended to ensure that the developed instructional model will be conducted in conformity to teaching principles and provide positive results

Accuracy Standards are intended to ensure that the developed instructional model shows a measure of closeness to a true value.

From the definition above: The researcher has confirming instructional by 5 experts for objective 2.

Instructional design skills

Instructional design skills refer to the instructional design abilities that normal college students need to possess as future teachers. It includes the ability to set teaching objectives, select and organize content, and use appropriate teaching methods and strategies to assess student learning, personalize instruction, effectively utilize instructional resources, and conduct instructional evaluation and improvement. These skills can be developed through professional training, practical experience and reflection. The importance of instructional design skills for teacher college students has been widely discussed and studied. Many scholars emphasize the key role of instructional design in teachers' professional development.

According to the purpose of this study, instructional design skills can be evaluated through 2 aspects: (Li, Li and Wang, 2023)

Item 1: Instructional design analysis ability

Standard 1: Analysis of teaching objects

Standard 2: Teaching goal analysis

Standard 3: Teaching task analysis

Item 2: Instructional design implementation ability

Standard 1: Selection and application of teaching methods

Standard 2: Selection and application of teaching media

Standard 3: Evaluation of teaching results

Table 2.5 Summary the connection of contents, Situational teaching and Blended Learning Instructional Model, Instructional design skill and Instruments or Activities by table Unit 2 Decision Making (16 hours)

Unit	Method	Situational teaching and Blended Learning Instructional Model /Step			Instructional design skill		Instruments /Activities
		S.1	S.2	S.3	I.1	I.2	
Unit 2: Instructional design analysis and implementation (16 hours) Chapter 2.1: Instructional design analysis ability (8 hours)	Situational teaching and Blended Learning Instructional Model	L	S	L & S	√		Scoring rubic
Chapter 2.2: Instructional design implementation ability (8 hours)	Situational teaching and Blended	L	S	L & S		√	Scoring rubic

S.1 Design questions and create situations before class

S.2 In class, students explore and try to solve

S.3 Reflection and summary after class

S. Step T. Teacher L. Learner

1.1: Instructional design analysis ability

1.2: Instructional design implementation ability

Related Research

Lan (2001) studied about that situational teaching sheds light on science teaching and learning. The result had found that the placing learning in concrete situations can help students better understand and apply scientific knowledge.

Hmelo-Silver and Pfeffer (2004) studied about situated instruction on the understanding of complex systems by experts and novices. The result had found that contextual instruction can help students better understand complex systems from structural, behavioral, and functional perspectives.

Kolodner, Cox and González-Calero (2005) studied about situated instruction based on case-based reasoning. The result had found that facilitating learning by engaging students in solving complex problems in the real world, thereby developing their problem-solving skills and related knowledge.

Linn and Eylon (2011) studied about situational teaching in science education. The result had found that that contextual instruction can provide a deeper understanding of science concepts and practices and promote active student engagement and meaning construction.

Lajoie (2013) studied about the impact of contextualized instruction on translating learning into real-world performance. The result had found that that contextualized instruction can provide challenging tasks that motivate students to learn and work harder.

Penuel and Gallagher (2017) studied about the research-practice partnerships in education. The result had found that situational teaching is often viewed as an effective practice approach that facilitates connections between Normal students and actual educational scenarios through partnerships.

Gao, Liu, Xie and Zhang (2023) studied about the perspectives and case studies of several scholars The result had found that to explore the theory and practice of situated instruction and provide insights into the impact of contextualized instruction on learning outcomes and the learning process.

Means, Toyama, Murphy and Bakia (2013) studied about the effectiveness of online and blended learning. The result had found that the study indicated that blended learning was more effective than traditional face-to-face instruction in terms of learning outcomes and student satisfaction.

Garrison and Kanuka (2004) studied about the transformative potential of blended learning in higher education. The result had found that blended learning promotes the development of students' self-directed learning, collaboration and critical thinking skills, and provides hands-on experience relevant to the discipline.

Liu et l. (2016) study about the effectiveness of blended learning in the medical field. The result had found that blended learning improves students' knowledge acquisition, skill application, and learning satisfaction.

Huang (2013). study about whether e-learning can replace traditional classroom learning. The result had found that blended learning is a more effective teaching model that combines the advantages of online learning and face-to-face teaching to provide a richer learning experience and personalized instructional support.

Cochran-Smith (2004) studied about the development of Normal students' competence in instructional design The result had found that needs to be facilitated through collaboration, reflection, and exploration of effective instructional strategies in practice.

Bullough and Draper (2004) studied about the Teacher candidates' competency development in instructional design The result had found that should focus on their knowledge of educational philosophies and beliefs and their integration into practice.

Darling-Hammond, L. (2006) study about the teacher candidates' instructional skills The result had found that need to be enhanced by focusing on their deeper understanding of subject matter knowledge, student learning, and pedagogy."

Ball, Thames and Phelps (2008) studied about the Instructional design is at the core of Normal students' instructional skills, The result had found that they need to be prepared to design instructional tasks that are challenging and appropriate to the needs of their students."

Grossman, Hammerness, McDonald and Ronfeldt (2009) studied about the improve of the instructional design skills of Normal students, The result had found that emphasis needs to be placed on the development of their critical thinking, professional knowledge, and self-reflection."

Zeichner and Liston (2013) studied about "the development of Normal students' pedagogical skills needs to be based on practical experience and reflection.

The result had found that encourages them to think independently and solve authentic educational problems."

Normal students' mastery of instructional design skills promotes personalized teaching, improves teaching effectiveness, realizes curricular innovation, reflects on and improves the effectiveness of teaching through instructional design, and enables them to flexibly respond to challenges, which is of great significance to the development of Normal students' educational careers.

Situational teaching is an approach to teaching and learning based on real-life situations or problems that provides an opportunity for students to apply knowledge and solve problems in specific contexts. As technology continues to evolve, contextualized instruction can make better use of innovative technologies such as virtual reality, augmented reality, and online collaboration tools to create more authentic, immersive learning situations. In addition, contextual teaching can also incorporate personalized learning and adaptive technologies to provide customized learning experiences based on students' needs and progress.

The researcher conducted a study to better develop a situational teaching and blended learning instructional model in order to enhance the instructional design skills of undergraduate Normal students. The study involved an analysis of various documents related to the following areas: education practical training course, development of instructional models, situational teaching, blended learning, instructional design skills, and related research. The details of these aspects were examined and explored in order to develop an effective instructional model that can improve the instructional design skills of undergraduate Normal students.

In summary, this study aims to explore the situational teaching and blended learning instructional model and improve the instructional design skills of undergraduate Normal students by reviewing the Education practical training courses, the development of instructional models, situational teaching, blended learning, instructional design skills, and related studies. By studying and summarising this literature, a theoretical foundation and guiding direction can be provided for the study.

Chapter 3
Research Methodology

In the study of "Development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students" the researcher used Mixed Method of Research. This research is divided into 3 phases.

Phase 1 was conducted to answer research **objective 1**: To examine the factors to enhance the Instructional design skills of Undergraduate Normal Students.

Phase 2 was conducted to answer research **objective 2**: To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

Phase 3 was conducted to answer research **objective 3**: To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

The details are as follows.

Phase 1 was conducted to answer research objective 1: To examine the factors to enhance the Instructional design skills of Undergraduate Normal Students.

Population

Group 1: The former 229 from 3 sections of students who enroll in Educational practical training courses in semester I of academic year 2022 from LiShui University.

1) 81 students from Elementary Education Major (Mathematics)

2) 102 students from Elementary Education Major (Language Orientation)

3) 46 students from Elementary Education Major(General)

Research instrument

The questionnaire for students

Designing instrument 1 (The questionnaire for students)

1. Study literatures on Instructional design skills, and factors affecting the development of Instructional design skills of students.

2. Design a questionnaire on factors to improve Instructional design skills of students at LiShui University. The questionnaire consists of three parts. The first part is the commonly used data of the respondents, including gender, school and age. In the second part, there are 24 influencing factors, 12 internal factors including Subject knowledge and professionalism, reflection and self-evaluation abilities, learning of educational theories and methods, interest and motivation, etc. The external causes include 12 problems, including teachers, teaching materials, teaching environment, external environment, teaching resources, etc. The third part is expert advice.

3. Present the draft of questionnaire to the advisors for checking correctness and completion.

4. Assess the validity of questionnaire on factors affecting Instructional design skills for the students by 5 experts (List name in Appendix A) through Index of Item-Objective Congruence (IOC) according to the criteria shown below. (Phongsri, 2011)

+1 = Sure that the contents are related to the topics

0 = Not sure that the contents are related to the topics

-1 = The contents are not Guangxi Province related to the topics

The acceptable items must have the IOC values not less than 0.5. The IOC calculated from the validation measures 1.

5. Design Likert 5-point rating scale questionnaire on the following score rating criteria.

Score rating criteria

5 means the highest

4 means high

3 means moderate

2 means few

1 means the fewest

Quality Validation

Using IOC by 5 experts to test the quality of questionnaire.

Data Collection

1. Ask for permission for data collection.

2. Collect data from the assigned students using the developed questionnaire.

Data Analysis

The factors affecting Instructional design skills for the students are interpreted using mean interpretation criteria proposed by Phongsri (2011)

4.51-5.00 means the highest

3.51-4.50 means high

2.51-3.50 means moderate

1.51-2.50 means few

1.00-1.50 means the fewest

Descriptive statistics, frequency, mean (μ) standard deviation (σ)

Group 2: The lecturers who are teaching Educational practical training courses from Li Shui University

1) 1 Lecturer from Elementary Education Major (Mathematics)

2) 1 Lecturer from Elementary Education Major (Language orientation)

3) 3 Lecturers from Elementary Education Major (General)

Research instrument

The interview for the lecturers

Designing instrument 2 (The interview for the lecturers)

1. Study literature on Educational practical training courses, and factors affecting Instructional design skills for the students

2. Design the draft of open-ended interview on 2 factors Internal factors and external factors (10 questions) affecting Instructional design skills for the students.

3. Present the draft of open-ended interview to the advisors for checking correctness and completion.

4. Assess the validity of open-end interview on factors affecting instructional design skills for the students by 5 experts (List name in Appendix A) through Item-Objective Congruence (IOC) according to the criteria as shown below: (Phongsri, 2011)

+1 = Sure that the contents are related to the topics

0 = Not sure that the contents are related to the topics

-1 = Sure that the contents are not related to the topics

The acceptable items must have the IOC values not less than 0.5. The IOC calculated from the validation measures 1.00

5. Do the open-end interview in three local College in LiShui University, The open-end interview type can only be answered by the lecturers.

Quality Validation

Using IOC by 5 experts (List name in Appendix A) to test the quality of open-end interview.

Data Collection

1. Ask for permission for data collection.
2. Collect data from the assigned lecturers using the developed interview.

Data Analysis

Content analysis

Output Phase 1

Obtain important information that is used as a basis for examine the internal factors and external factors to promote Instructional design skills for the students from the former students and lecturers. And take the result to do Situational teaching and Blended learning Instructional Model. By table 3.1

Table 3.1 Summary how to conduct research from Phase 1

Topics	Details
Research process	Phase 1: was conducted to answer research objective 1
Research objective	To examine the factors to enhance the Instructional design skills of Undergraduate Normal Students.
Conduct research	Designing instrument 1 (The questionnaire for students) Designing instrument 2 (The interview for the lecturers) Assess the validity by 5 experts (List name from Appendix A)
Target group	1: The former 229 from 3 sections of students who enroll in Educational practical training courses in semester I of academic year 2022 from LiShui University. 2: The lecturers who are teaching Educational practical training course in LiShui University.
Instrument	1.Questionnaire for students Part 1 is about Common data of the respondent in overall (N=229)

Table 3.1 (Continued)

Topics	Details
Instrument	Part 2 Internal factors 12 numbers, external factors 12 numbers Part 3 suggestion 2.10 questions to interview for lecturers Part 1: is about Common data of the respondent in overall (N=5) Part 2:10 Questions both Internal factors and external factors Part 3 suggestion
Data analysis	1.Descriptive Statistics i.e., Frequency, mean (μ) standard deviation (σ) for questionnaires 2.Content analysis for interview
Output	The result factors affecting .....

Phase 2 was conducted to answer research objective 2: To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Research instrument

Conformity Assessment Form of situational teaching and blended learning instructional model in terms of accuracy standard, propriety standard, feasibility standard, and utility standard.

Designing instrument (the questionnaire for IOC)

1. Study related concepts, principles, process about developing instructional model, including results in terms of factors affecting Instructional design skills of undergraduate Normal students from research objective 1.

2. Design the development of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students to be the handout which consists of the stable teaching activities and procedures. Such a developed instructional model with 5 components: 1) Principle & Rationale, 2) Objectives, 3) Contents, 4) Methods of teaching & Materials and 5) Evaluation, is in 4 aspects standards: 1) Utility, 2) Feasibility, 3) Propriety and 4) Accuracy

3. Design a questionnaire on confirming the appropriateness of the instructional model in terms of accuracy standards, propriety standards, feasibility standards, and utility standards.

4. Present the draft of open-ended interview to the advisors for checking correctness and completion.

5. Assess the validity of the questionnaire of the appropriateness of the instructional model by 5 experts (List name in Appendix A) through Item-Objective Congruence (IOC) according to the criteria as shown below: (Phongsri, 2011)

+1 = Sure that the contents are related to the topics

0 = Not sure that the contents are related to the topics

-1 = Sure that the contents are not related to the topics

The acceptable items must have the IOC values not less than 0.5. The IOC calculated from the validation measures 1.00

6. Design the conformity assessment form of situational teaching and blended learning instructional model.

Data Collection

1. Ask for permission of data collection

2. Collect appropriateness of the instructional model in terms of accuracy standard, propriety standard, feasibility standard, and utility standard from the 5 experts (List name in Appendix A) using the developed conformity assessment form of situational teaching and blended learning instructional model.

Data Analysis

Descriptive analysis i.e. frequency and percentage.

The acceptable items must not be less than 100%.

Output Phase 2

Situational teaching and blended learning instructional model the appropriateness of which is confirmed by experts for further implementation. The acceptable items 100%. By table 3.2

Table 3.2 Summary how to conduct research from Phase 2

Topics	Details
Research process	Phase 2: was conducted to answer research objective 2
Research objective	To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.
Conduct research	Designing instrument 1 (IOC from 5 experts in development situational teaching and blended learning instructional model)
Target group	Designing instrument 2 (Confirming development situational teaching and blended learning instructional model by 5 experts) 5 experts confirming development situational teaching and blended learning instructional model
Instrument	1.The questionnaire for IOC 2.Designing instrument about the questionnaire on confirming the instructional
Data analysis	Descriptive analysis i.e. frequency and percentage.
Output	situational teaching and blended learning instructional model the appropriateness of which is confirmed by experts for further implementation. The acceptable items 100%.

Phase 3 was conducted to answer research objective 3: To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Population

The total of 276 from 3 sections of students major the teacher education major with different levels of proficiency – beginner, intermediate, and advanced, who enroll in educational practical training course at Lishui University in semester 1 academic year 2023. Those sections involve the following.

46 students in class A

40 students in class B

21 students in class C

22 students in class D

35 students in class E

38 students in class F

40 students in class G

34 students in class H

The Sample Group

There are 35 students who enroll in Educational practical training course at Li Shui University in the 1st Semester academic year 2023 by cluster sampling.

Research Design

Table 3.3 Posttest Only Experimental Design

Group	X	T1
Sample group	Situational teaching and blended learning instructional model	Students' Instructional design skills

X - Situational teaching and blended learning instructional model

T1 - Students' Instructional design skills

Research instruments

1. Lesson plans situational teaching and blended learning instructional model

2. Rubric scoring form

Designing instrument 1 (Lesson plans)

1. Study from handout about development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students

2. Design lesson plans composed the objectives, contents, method of teaching, material, resource learning and evaluation.

3. Present the lesson plan to the advisors for checking correctness, completion and improvement.

4. Assess the validity of the designed lesson plans by 5 experts (List name in Appendix A) through Item-Objective Congruence (IOC) according to the criteria as shown below: (Phongsri, 2011)

1 = Sure that the contents are related to the topics

0 = Not sure that the contents are related to the topics

-1 = Sure that the contents are not related to the topics

The acceptable items must have the IOC values not less than 0.5. The IOC calculated from the validation measures 1.00

5. Develop lesson plans for further implementation in the sample group.

Designing instrument 2

Rubric scoring form

1. Study the rubric scoring criteria aligned with Situational teaching and Blended learning Instructional Model

2. Design rubric scoring criteria.

3. Present the developed rubric scoring criteria to the advisors for checking correctness, completion and improvement.

4. Assess the validity of the designed rubric scoring criteria by 5 experts (List name from Appendix A) through Item-Objective Congruence (IOC) according to the criteria as shown below (Phongsri, 2011).

+1 = Sure that the descriptors are related to the issue of assessment

0 = Not sure that the descriptors are related to the issue of assessment

-1 = Sure that the descriptors are not related to the issue of assessment

The acceptable items must have the IOC values not less than 0.5. The IOC calculated from the validation measures 1.00.

Data Collection

1. Ask for permission of data collection

2. Collect students' performance by using rubric scoring before assessment by external raters.

Data Analysis

Categorize students' performance according to rubric scoring criteria into their levels descriptor.

Table 3.4 Criteria to Instructional design skills

Item	score				
	5 Perform all or nearly all of the following tasks well	**4 Do almost all of the following tasks well**	**3 Complete most of the following tasks**	**2 Inability to complete most or many of the following tasks**	**1 Cannot complete any of the following tasks**
1 Instructional design analysis ability					
Standard 1: Analysis of teaching objects	Students have strong ability to analyze different teaching objects	Students have better ability to analyze different teaching objects	Students have average ability to analyze different teaching objects	Students have poor ability to analyze different teaching objects	Students will not analyze the teaching object analysis
Standard 2: Teaching goal analysis	Students can perfectly analyze teaching objectives	Students can better analyze teaching objectives	Students' analysis of teaching objectives is generally	Students' analysis of teaching objectives is poor	Students do not analyze teaching objectives
Standard 3: Teaching task analysis	The student's ability to analyze teaching tasks is perfect	Students have better ability to analyze teaching tasks	Students' ability to analyze teaching tasks is average	Students' ability to analyze teaching tasks is poor	Students do not analyze teaching tasks
2. Instructional design implementation ability					
Standard 1: Selection and application of teaching methods	The selection and application of student teaching methods are perfect	Good selection and application of student teaching methods	Selection and application of student teaching methods in general	Poor selection and application of student teaching methods	Students will not be able to choose and apply teaching methods

Table 3.4 (Continued)

Item	score				
	5 Perform all or nearly all of the following tasks well	**4** Do almost all of the following tasks well	**3** Complete most of the following tasks	**2** Inability to complete most or many of the following tasks	**1** Cannot complete any of the following tasks
Standard 2: Selection and application of teaching media	Students' ability to select and use teaching media is perfect	Students have better ability to select and use teaching media	Students' ability to select and use teaching media is better than average	Students' ability to select and use teaching media is relatively poor	Students will not be able to select and use teaching media
Standard 3: Evaluation of teaching results	Students' selection and application of teaching outcome evaluation was perfect	Students' selection and application of teaching results evaluation are better	Students' selection and application of teaching outcome evaluation in general	Students' poor selection and application of teaching outcome evaluations	Students will not select and apply the evaluation of teaching results

Table 3.5 The criteria from item 1: Instructional design analysis ability

Standard 1: Analysis of teaching objects	
Standard 2: Teaching goal analysis	
Standard 3: Teaching task analysis	
Score Range	**Meaning**
13 - 15	Excellent
10 -12	Good
7 - 9	Moderate
4 - 6	Improved
Less than 4	Fail

Table 3.6 The criteria from Item 2: Instructional design implementation ability

Standard 1: Selection and application of teaching methods	
Standard 2: Selection and application of teaching media	
Standard 3: Evaluation of teaching results	
Score Range	**Meaning**
13 - 15	Excellent
10 -12	Good
7 - 9	Moderate
4 - 6	Improved
Less than 4	Fail

Table 3.7 The criteria from Instructional design skill over all 6 Standards

Score Range	**Meaning**
25 - 30	Excellent
19- 24	Good
13 - 18	Moderate
7- 12	Improved
Less than 7	Fail

Output Phase 3 (Rubric Scoring Criteria)

Results of implementing Lishui University Situational teaching and Blended Learning instructional model – students' performance according to rubric scoring criteria into their levels descriptor. By Table 3.8

Table 3.8 Summary how to conduct research from Phase 3

Topics	Details
Research process	Phase 3: was conducted to answer research objective 3
Research objective	To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.
Conduct research	1. Designing instrument 1 (Lesson plans) 2. Designing instrument 2(Rubric scoring form)
Target group	1. Design lesson plans by format given. 2. There are 35 students who enroll in Educational practical training course at Li Shui University in the 1st Semester academic year 2023 by cluster sampling.
Instrument	1. Lesson plans situational teaching and blended learning instructional model 2. Rubric Scoring Form
Data analysis	1. Descriptive analysis i.e. frequency and percentage. The acceptable items must not be less than 100% 2. Descriptive analysis, i.e. mean and standard deviation. The Instructional design skills of undergraduate Normal students reaches good level ≥ 80%.
Output	After implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level).

Chapter 4
Results of Analysis

In the study of "Development of Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students", the researcher studied the documents concerning the following.

Phase 1: Analysis results serving objective 1–To examine the factors to enhance the Instructional design skills of Undergraduate Normal Students.

Phase 2: Analysis results serving objective 2–To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

Phase 3: Analysis results serving objective 3–To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Data Analysis Results

Phase 1: Analysis results serving objective 1–To examine the factors to enhance the Instructional design skills of Undergraduate Normal Students.

This section presents analysis results serving objective 1 using table and description in terms of MEAN, standard deviation, interpretation (Level of Attitude), and ranking of all factors in overview. After that, items of all factors are presented likewise.

Table 4.1 Common data of the respondent in overall (N=229)

Data	Frequency	Percentage
Gender		
A. Male	37	16.20
B. Female	192	83.80
Total	229	100.00
Age		
A. below 18 yrs.	1	0.40
B. 18-20 yrs.	188	82.10
C. 21-23 yrs.	38	16.60
D. over 23 yrs.	2	0.90
Total	**229**	**100**

From Table 4.1, the common data of the respondent in overall shows that about 192 of the respondents are female, representing 83.80% of the total participants. The male respondents make up 16.20% of the total. The age distribution is relatively concentrated, 18-20 years old is the most common, 82.10% of the respondents belong to this category.

Table 4.2 The result of questionnaire from students in overview (N=229)

Factors	μ	σ	Interpretation	Ranking within All Factors
Internal factors (respondents)				
1. You know that the Education Practical Training course is a professional platform course.	4.50	0.692	High	4
2. You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	4.66	0.551	Highest	1
3. You believe that personal motivation and effort have an impact on improving instructional design skills.	4.64	0.542	Highest	2
4. You are very actively engaged in instructional design activities in the classroom.	4.35	0.702	High	7
5. You can engage in independent learning and gain in-depth understanding of the field of instructional design.	4.31	0.680	High	9
6. You are willing to accept feedback and improve their instructional design skills.	4.54	0.581	Highest	3
7.You demonstrate high creativity and innovation in solving instructional design problems.	4.18	0.732	High	11
8.You are highly confident in your ability to enhance your instructional design skills.	4.03	0.832	High	12
9.You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.	4.41	0.647	High	6

Table 4.2 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
10.You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.	4.49	0.639	High	5
11.You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.	4.28	0.687	High	10
12. You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.	4.32	0.719	High	8
Total Average	**4.39**	**0.667**	**High**	
External factors				
1. Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.	4.53	0.589	Highest	8
2. Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge.	4.52	0.604	Highest	11
3. Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills.	4.57	0.570	Highest	1
4. Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.	4.55	0.595	Highest	4

Table 4.2 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
5. Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	4.55	0.580	Highest	5
6. You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	4.53	0.639	Highest	9
7. You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.	4.53	0.566	Highest	10
8. You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.	4.54	0.638	Highest	6
9. The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.	4.56	0.579	Highest	3
10. Timely and specific feedback and evaluation help instructional design accordingly, thus improving their ability to produce effective instructional materials and strategies.	4.54	0.603	Highest	7

Table 4.2 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
11. An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.	4.57	0.554	Highest	2
12. Class size has a significant impact on the implementation of instructional design skills.	4.50	0.590	High	12
Total Average	**4.54**	**0.592**	**Highest**	

Table 4.2 indicates that internal factors affecting the Instructional design skills of undergraduate Normal students are found to be at a high level overall (μ=4.39). Considering each item individually, it was found that 2. You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career have the highest mean (μ=4.66), followed by 3. You believe that personal motivation and effort have an impact on improving instructional design skills (μ=4.64), and the lowest mean is 8. You are highly confident in your ability to enhance your instructional design skills (μ=4.03).

For external factors affecting the Instructional design skills of undergraduate Normal students, the overall level is found to be modelrate (μ=4.54). Considering each item individually, it was found that 3. Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills and 11. An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills have the highest mean (μ=4.57), followed by 9. The implementation of

effective instructional evaluation methods better measures the level of students' instructional design skills (μ=4.56), and the lowest mean is 12. Class size has a significant impact on the implementation of instructional design skills (μ=4.50).

Table 4.3 Common data of the respondent in Elementary Education Major (Mathematics) (N=81)

Data	Frequency	Percentage
Gender		
A. Male	16	19.80
B. Female	65	80.20
Total	**81**	**100**
Age		
A. Below 18 yrs.	0	0
B. 19-20 yrs.	65	80.20
C. 21-22 yrs.	1	18.50
D. Over 23 yrs.	2	1.20
Total	**40**	**100**

From table 4.3 the Common data of the respondent in Elementary Education Major (Mathematics), the most gender is Female, 80.20%. The largest number of people in the survey sample are those aged 19-20, accounting for 80.20%.

Table 4.4 Common data of the respondent in Elementary Education Major (Mathematics) (N=81)

Factors	μ	σ	Interpretation	Ranking within All Factors
Internal factors (respondents)				
1.You know that the Education Practical Training course is a professional platform course.	4.33	0.671	High	4
2.You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	4.52	0.615	Highest	1
3.You believe that personal motivation and effort have an impact on improving instructional design skills.	4.48	0.615	High	2
4.You are very actively engaged in instructional design activities in the classroom.	4.19	0.709	High	7
5.You can engage in independent learning and gain in-depth understanding of the field of instructional design.	4.07	0.667	High	10
6.You are willing to accept feedback and improve their instructional design skills.	4.35	0.616	High	3
7.You demonstrate high creativity and innovation in solving instructional design problems.	3.99	0.750	High	11
8.You are highly confident in your ability to enhance your instructional design skills.	3.77	0.779	High	12
9.You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.	4.25	0.603	High	6

Table 4.4 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
10.You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.	4.27	0.742	High	5
11.You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.	4.1	0.663	High	9
12.You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.	4.11	0.775	High	8
Total Average	**4.20**	**0.684**	**High**	
External factors				
1.Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.	4.37	0.601	High	10
2.Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge	4.37	0.601	High	10
3.Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills.	4.42	0.567	High	6
4.Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.	4.40	0.585	High	9

Table 4.4 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
5.Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	4.43	0.569	High	4
6.You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	4.43	0.569	High	4
7.You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.	4.41	0.565	High	7
8.You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.	4.46	0.571	High	1
9.The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.	4.41	0.565	High	7
10.Timely and specific feedback and evaluation help students to identify areas for improvement and adjust their instructional design accordingly, thus improving their ability to produce effective instructional materials and strategies.	4.44	0.548	High	3

Table 4.4 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
11.An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.	4.46	0.549	High	2
12.Class size has a significant impact on the implementation of instructional design skills.	4.35	0.574	High	12
Total Average	**4.41**	**0.572**	**High**	

Table 4.4 indicates that internal factors affecting the Instructional design skills of undergraduate Normal students are found to be at a high level overall (μ=4.2). Considering each item individually, it was found that 2. You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career have the highest mean (μ=4.52), followed by 3. You believe that personal motivation and effort have an impact on improving instructional design skills (μ=4.48), and the lowest mean is 8. You are highly confident in your ability to enhance your instructional design skills (μ=3.77).

For external factors affecting the Instructional design skills of undergraduate Normal students, the overall level is found to be modelrate (μ=4.41). Considering each item individually, it was found that 8. You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills has the highest mean (μ=4.46), followed by 11. An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills

(μ=4.46), and the lowest mean is 12. Class size has a significant impact on the implementation of instructional design skills (μ=4.35).

Table 4.5 Common data of the respondent in Elementary Education Major (Language Orientationl (N= 102).

Data	Frequency	Percentage
Gender		
Male	8	7.80
Female	94	92.20
Total	**102**	**100.00**
Age		
A. below 18 yrs.	0	0.00
B. 19-20 yrs.	17	16.70
C. 21-22 yrs.	85	83.30
D. over 23 yrs.	0	0.00
Total	**102**	**100.00**

From table 4.5 the common data of the respondent majoring in Elementary Education Major (Language Orientationl) the most gender is female, 92.20%. The most age is 18-20 yrs, 83.30%.

Table 4.6 The result of questionnaire from students in in Elementary Education Major (Language Orientation) (N=102)

Factors	μ	σ	Interpretation	Ranking within All Factors
Internal factors (respondents)				
1.You know that the Education Practical Training course is a professional platform course.	4.58	0.724	Highest	4
2.You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	4.75	0.481	Highest	1
3.You believe that personal motivation and effort have an impact on improving instructional design skills.	4.71	0.458	Highest	2
4.You are very actively engaged in instructional design activities in the classroom.	4.40	0.707	High	8
5.You can engage in independent learning and gain in-depth understanding of the field of instructional design.	4.43	0.653	High	7
6.You are willing to accept feedback and improve their instructional design skills.	4.66	0.497	Highest	3
7.You demonstrate high creativity and innovation in solving instructional design problems.	4.28	0.666	High	11
8.You are highly confident in your ability to enhance your instructional design skills.	4.18	0.776	High	12
9.You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.	4.47	0.671	High	6

Table 4.6 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
10.You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.	4.58	0.535	Highest	5
11.You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.	4.36	0.672	High	10
12.You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.	4.38	0.646	High	9
Total Average	**4.48**	**0.624**	**High**	
External factors				
1.Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.	4.59	0.569	Highest	6
2.Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge.	4.57	0.589	Highest	8
3.Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to. improve their instructional design skills	4.64	0.559	Highest	1
4.Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.	4.62	0.581	Highest	2

Table 4.6 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
5.Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	4.61	0.583	Highest	4
6.You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	4.57	0.682	Highest	9
7.You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.	4.57	0.554	Highest	10
8.You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.	4.54	0.713	Highest	12
9.The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.	4.60	0.585	Highest	5
10.Timely and specific feedback and evaluation help students to identify areas for improvement and adjust their instructional design accordingly, thus improving their ability to produce effective instructional materials and strategies.	4.59	0.551	Highest	7

Table 4.6 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
11.An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.	4.62	0.546	Highest	3
12.Class size has a significant impact on the implementation of instructional design skills.	4.56	0.590	Highest	11
Total Average	**4.59**	**0.592**	**Highest**	

Table 4.6 indicates that internal factors affecting the insturctional design skills of the educational practical training course are found to be at a high level overall (μ=4.48). Considering each item individually, it was found that 2. You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career have the highest mean (μ=4.75), followed by 3. You believe that personal motivation and effort have an impact on improving instructional design skills (μ=4.71), and the lowest mean is 8. You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills. (μ=4,18).

For external factors affecting the insturctional design skills of the educational practical training course, the overall level is found to be modelrate (μ=4.59). Considering each item individually, it was found that No.3 Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills has the highest mean (μ=4.64), followed by 4. Incorporating diverse teaching methods is conducive to the

development of students' instructional design skills (μ=4.62), and the lowest mean is 8. You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills. (μ=4.54).

Table 4.7 Common data of the respondent in Elementary Education Major (General) (N=46).

Data	Frequency	Percentage
Gender		
A. Male	13	28.30
B. Female	33	71.70
Total	**46**	**100**
Age		
A. below 18 yrs.	1	2.20
B. 19-20 yrs.	38	82.60
C. 21-22 yrs.	6	13.00
D. over 23 yrs.	1	2.20
Total	**46**	**100.00**

From table 4.7 the common data of the respondent majoring in Elementary Education (General) the most gender is female, 82.60 %. The most age is 18-20 yrs, 82.60%.

Table 4.8 The result of questionnaire from students majoring in Elementary Education (General) (N=46).

Factors	μ	σ	Interpretation	Ranking within All Factors
Internal factors (respondents)				
1.You know that the Education Practical Training course is a professional platform course.	4.61	0.614	Highest	15
2.You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	4.74	0.535	Highest	2
3.You believe that personal motivation and effort have an impact on improving instructional design skills.	4.76	0.524	Highest	1
4.You are very actively engaged in instructional design activities in the classroom.	4.54	0.622	Highest	7
5.You can engage in independent learning and gain in-depth understanding of the field of instructional design.	4.48	0.658	High	9
6.You are willing to accept feedback and improve their instructional design skills.	4.63	0.610	Highest	4
7.You demonstrate high creativity and innovation in solving instructional design problems.	4.30	0.785	High	11
8.You are highly confident in your ability to enhance your instructional design skills.	4.20	0.934	High	12
9.You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.	4.59	0.617	Highest	6

Table 4.8 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
10.You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.	4.67	0.560	Highest	3
11.You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.	4.39	0.714	High	10
12.You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.	4.54	0.690	Highest	8
Total Average	**4.54**	**0.655**	**Highest**	
EXternal factors				
1.Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.	4.67	0.560	Highest	3
2.Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge.	4.65	0.604	Highest	7
3.Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills.	4.70	0.553	Highest	2
4.Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.	4.65	0.604	Highest	8

Table 4.8 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
5.Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	4.65	0.566	Highest	9
6.You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	4.61	0.649	Highest	11
7.You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.	4.67	0.560	Highest	4
8.You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.	4.67	0.560	Highest	5
9.The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.	4.74	0.535	Highest	1
10.Timely and specific feedback and evaluation help students to identify areas for improvement and adjust their instructional design accordingly, thus improving their ability to produce effective instructional materials and strategies.	4.59	0.777	Highest	12

Table 4.8 (Continued)

Factors	μ	σ	Interpretation	Ranking within All Factors
11.An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.	4.67	0.560	Highest	6
12.Class size has a significant impact on the implementation of instructional design skills.	4.65	0.566	Highest	10
Total Average	**4.66**	**0.591**	**Highest**	

Table 4.8 indicates that internal factors affecting the instructional design skills of undergraduate Normal students majoring in Elementary Education(General) are found to be at a high level overall (μ=4.54). Considering each item individually, it was found that 3. You believe that personal motivation and effort have an impact on improving instructional design skills have the highest mean (μ=4.76), followed by 2. You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career (μ=4.74), and the lowest mean is 8. You are highly confident in your ability to enhance your instructional design skills. (μ=4.20).

For external factors affecting the instructional design skills of undergraduate Normal students majoring in Elementary Education(General), the overall level is found to be modelrate (μ=4.66). Considering each item individually, it was found that 9. The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills has the highest mean (μ=4.74), followed by 15. Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills (μ=4.7), and the lowest mean is 22. Timely and specific feedback and

evaluation help students to identify areas for improvement and adjust their instructional design accordingly, thus improving their ability to produce effective instructional materials and strategies (μ=4.59).

The amount of lecturers' interview by table 4.9

Table 4.9 Common data of the respondents in overall (N=5)

Data	Frequency	Percentage
Gender		
Male	1	20.00
B. Female	4	80.00
Total	**5**	**100.00**
Experience teaching		
A. below 3 yrs.	0	0
A. 3-6 yrs.	0	0
B. 7- 9 yrs.	0	0
C. over 9 yrs.	5	100.00
Total	**5**	**100.00**
Age		
A. below 25 yrs.	0	0
B. 25-35 yrs.	2	40.00
C. 36-49 yrs.	2	40.00
D. over 49yrs.	1	20.00
Total	**5**	**100.00**

From table 4.9 it can be seen that the most common gender was female, which accounted for 80% of the respondents, while male teachers accounted for 20% of the sample. The author conducted interviews with five primary education teachers who were teaching in order to find out their views on facilitating teacher trainees to improve their instructional design skills and the use of pedagogical methods, and to explore the feasibility of scenario-based teaching and the blended learning model as applied to the practical teaching and learning programme. In this interview, the author had in-depth communication with five senior teachers who had been teaching primary education for more than nine years. The interview process was relaxed and enjoyable, and the results of the interviews are as follows.

Interview Lecturers Results

After the results from interview with the 5 lecturers, the factors affecting students' learning achievement can be concluded as follows.

Internal Factors

Knowledge and experience

Physical: In the teaching of Educational practical training course, the five lecturers all hope that students can actively participate in the Instructional design skills training. From their experience, students need to increase their accumulation of subject matter knowledge and continue to improve their ability to understand, analyze, and solve instructional design through contextualized training and diverse learning.

Psychological: In teaching the Teaching Practice Program, the five lead instructors believe it is important for students to have creative thinking. Teaching is a process of grasping the psychology of the educated, which requires students to use their brains to think about problems and innovatively solve various problems encountered in teaching. They believe that students' learning initiative, sharing of excellent teaching cases, and mutual promotion between teachers and students stimulate students' passion and internal drive to create excellent teaching designs, thus enhancing the ability of teaching design.

External Factors

Materials: Teachers agreed that teaching resources, teaching materials and teaching mode are important factors affecting the improvement of students' instructional design ability. Lecturer A thinks that showing students excellent instructional design cases can stimulate students' creativity; high-quality teaching materials can make students think more clearly and get more information from them; diversified teaching resources can enrich students' instructional design materials, all of which can help to improve students' instructional design ability; Lecturer B thinks that by cultivating students' creative thinking, creating contexts, using case studies to teach, encouraging students to Lecturer B thinks that by cultivating students' innovative thinking, creating contexts, using case studies, encouraging students to try new teaching methods (flipped classroom, project-based learning, etc.), creating a positive, open and cooperative learning atmosphere, and providing diversified learning resources are all conducive to improving students'

instructional design ability. The other three lecturers think that diversified teaching methods and high-quality teaching materials such as online and offline learning, communication and discussion between teachers and students, and catechism learning are more conducive to the improvement of students' instructional design skills.

Teaching methods: All lecturers agreed that appropriate teaching methods can stimulate students' interest in learning practical education training courses, and that stimulating students' learning initiative is an important purpose of using teaching methods. Lecturer A thinks that giving students the leading position, stimulating students' interest, combining with real teaching cases, independent learning cooperative inquiry, diversified learning resources, scientific evaluation mechanism, through cooperative learning methods, case teaching methods can stimulate students' interest in learning; Lecturer B thinks that setting up real situations, case teaching, independent learning, using various blended methods, simulating scenario setups, discussing, observing, encouraging students to adopt blended learning methods is more conducive to the enhancement of students' instructional design skills; Lecturer C believes that mutual learning, listening to and evaluating lectures and training, reading, studying and observing can promote students' energy saving in instructional design. The other two lecturers believed that students' instructional design skills could be enhanced through reflection, communication, and task-driven approaches.

Evaluation: In terms of evaluation, all lecturers agreed that teachers' measurements and evaluations can reflect students' learning effects. Lecturers A and E think that students' teaching skills, presentation skills and educational concepts are examined through teaching demonstrations and group discussions. Lecturer B thinks that students need to carry out actual teaching or instructional design, such as making micro-recordings, lesson plan design, class management, etc., to examine students' practical teaching skills. Lecturers C and D think that evaluation can help students find out their deficiencies in teaching design by giving feedback on the problems in their teaching design; guiding students to design their own teaching according to the evaluation criteria, encouraging them to give full play to their creativity and teamwork spirit, and promoting their development, so that they can

have a better understanding of their own strengths and deficiencies, and thus better improve their own teaching ability.

Environment: In terms of the environment, all lecturers agreed that a good environment is more conducive to improving students' instructional design skills. Lecturer A believed that complete and advanced facilities and technology would enable students to design more practical content, which would help them to implement their instructional design and thus improve their instructional design skills. Lecturer B believed that the provision of abundant teaching resources, motivation of students, promotion of cooperative learning, cultivation of students' creativity, and enhancement of students' practical ability. Other lecturers believed that good teaching facilities and teaching environment are more conducive to students' completion of instructional design and stimulate students' interest in independent learning.

Class size: All lecturers think that the class size is too large for teachers to provide targeted guidance, too small for the lack of learning atmosphere, which is not conducive to mutual evaluation and communication between students and pupils, and the collision of thinking fire, and that a medium class size is more convenient for the development of students' personalities, the cultivation of students' sense of responsibility, the development of peer-to-peer mutual help and cooperation, and the enhancement of students' participation, etc., which is more conducive to the use and implementation of the instructional design methodology. The class size is more conducive to the use and implementation of instructional design methods.

The above analysis reveals that among the factors affecting instructional design skills, students' active participation in learning is an important factor. Meanwhile, appropriate teaching methods, teaching modes, well-veined teaching materials, good teaching environment and medium-sized class size can better mobilize students' motivation and creativity. At the same time, assessment reflects well on the effectiveness of learning and the level of learning knowledge.

Collected from both groups of informants, the researcher synthesizes those factors dividing them into 2 main types – internal and external factors as shown in table 4.10 below.

Table 4.10 Summary of factors affecting Instructional Design Skills of Undergraduate Normal Students

Students' opinion		Lecturers' opinion		Synthesized opinion	
Internal Factors	External Factors	Internal Factors	External Factors	Internal Factors	External Factors
1) Psychological factors: Students realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	**1) Teaching environment:** An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve	**1) Psychological factors:** The lecturer believes that teaching design skills are essential for teacher candidates and crucial for their future career development.	**1) Teaching environment:** A good teaching environment can stimulate students' enthusiasm for learning and contribute to the implementation of instructional design.	**1) Psychological factors:** Instructional design skill is an important skill for normal students, which is very important for teachers' future career development.	**1) Teaching environment:** Creating a teaching environment that meets the requirements of actual education and training (comfortable classroom environment, the most advanced teaching equipment, etc.) can help improve students'

Table 4.10 (Continued)

Students' opinion		Lecturers' opinion		Synthesized opinion	
Internal Factors	External Factors	Internal Factors	External Factors	Internal Factors	External Factors
	students' instructional design skills.				instructional design skills, stimulate students' learning enthusiasm, and contribute to the implementation of teaching design.
2) Physical factors: Students are willing to accept feedback and improve their instructional design skills.	**2) Teaching methods:** Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	**2) Physical factors:** Lecturers usually guide students to carry out instructional design to provide reference to students, so as to promote their instructional design skills.	**2)Teaching methods:** Teaching methods such as independent learning, observation and discussion, teaching simulation, cooperative learning, reflection and communication can be applied to teaching	**2) Physical factors:** Teaching feedback is an important means to promote undergraduate normal students' instructional design skills.	**2) Teaching methods:** Applying diversified teaching methods to teaching instructional design skills can promote students to improve instructional design skills.

Table 4.10 (Continued)

Students' opinion		Lecturers' opinion		Synthesized opinion	
Internal Factors	External Factors	Internal Factors	External Factors	Internal Factors	External Factors
			of instructional design skills.		
3)Psychological factors: Students believe that personal motivation and effort have an impact on improving instructional design skills.	**3)Teaching materials:** Students think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	**3)Psychological factors:** Students' desire to improve instructional design skills is very important for improving instructional design skills.	**3)Teaching materials:** A variety of teaching materials can enrich students' instructional design materials.	**3) Psychological factors:** Students' learning motivation is very important to improve their instructional design skills.	**3) Teaching materials:** Teaching materials play an important role in cultivating students' instructional design materials.
	4) Evaluation: The implementation of effective instructional		**4) Evaluation:** Accurate evaluation can make students face their own problems, which is of		**4) Evaluation:** The effective teaching evaluation method can better promote students to

Table 4.10 (Continued)

Students' opinion		Lecturers' opinion		Synthesized opinion	
Internal Factors	External Factors	Internal Factors	External Factors	Internal Factors	External Factors
	evaluation methods better measures the level of students' instructional design skills.		great help to improve instructional design skills.		face their own problems, and is of great help to improve teaching design skills.
	5)Class size: Class size has a significant impact on the implementation of instructional design skills.		**5)Class size:** Class size affects students' development and teaching participation, and moderate class size is beneficial to teaching and learning.		**5)Class size:** Reasonable class size contributes to teaching implementation and student development, and has a significant impact on the implementation of instructional design skills.

As can be seen from Table 4.10, internal physiological and psychological factors and external factors such as teaching environment, teaching methods, teaching materials, evaluation and class size all play an important role in the situational teaching and blended learning instructional model. Internal factors, students realize that instructional design skills are very important for their future career, and they hope to enhance their learning motivation, receive feedback and strengthen their efforts to master the principles and methods of instructional design in order to improve their instructional design skills. In terms of external factors, students attach great importance to the teaching methods used by lecturers in the situational teaching and blended learning instructional model, hoping that lecturers can simulate their authenticity by creating actual scenarios.

Among the internal factors, the lecturer stressed that the shaping of instructional design skills is crucial to the future career of normal students. Students' desire to improve teaching skills is very important for improving instructional design skills. Among the external factors, teachers emphasize the importance of teaching materials. The importance of proper teaching methods and scientific teaching evaluation is emphasized. The key to instructional design skills. Reasonable class size is more conducive to teaching implementation. In addition, it also emphasizes the positive effect of teaching environment on the improvement of teaching skills of normal university students.

Phase 2: Analysis results serving objective 2–To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

To serve objective 2, the collected data of confirming the appropriateness of 5 components of instructional model are analyzed in 4 areas, i.e., utility, feasibility, propriety, and accuracy and presented by frequency and percentage of the specialists as shown in table and description below.

Table 4.11 Frequency and percentage of confirmability of utility, feasibility, propriety, and accuracy of the instructional model components in 5 areas by specialists

No.	Components of Instructional Model Situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students	Opinion of the Specialists															
		Utility				Feasibility				Propriety				Accuracy			
		Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	Principle and Rationale	5	100	5	0	5	100	5	0	5	100	5	0	5	100	5	0
2	Objectives	5	100	5	0	5	100	5	0	5	100	5	0	5	100	5	0
3	Contents	5	100	5	0	5	100	5	0	5	100	5	0	5	100	5	0
4	Methods of Teaching &Materials	5	100	5	0	5	100	5	0	5	100	5	0	5	100	5	0
5	Evaluation	5	100	5	0	5	100	5	0	5	100	5	0	5	100	5	0

From Table 4.11 the confirmability of each component of the instructional model by 5 specialists can be elaborated as follows.

Principle and Rationale

Principle and rationale of the instructional model is confirmed to be appropriate by 5 specialists 100% of all specialists; feasibility 5 specialists 100%; propriety 5 specialists 100%; and accuracy 5 specialists 100%.

Objectives

The objectives of principle and rationale of the instructional model is confirmed to be appropriate by 5 specialists100% of all specialists; feasibility 5 specialists 100%; propriety 5 specialists 100%; and accuracy 5 specialists 100%.

Contents

The contents of principle and rationale of the instructional model is confirmed to be appropriate by 5 specialists100% of all specialists; feasibility 5 specialists 100%; propriety 5 specialists 100%; and accuracy 5 specialists 100%.

Methods of Teaching & Materials

The methods of teaching & materials of principle and rationale of the instructional model is confirmed to be appropriate by 5 specialists100% of all specialists; feasibility 5 specialists 100%; propriety 5 specialists 100%; and accuracy 5 specialists 100%.

Evaluation

The evaluation of teaching & materials of principle and rationale of the instructional model is confirmed to be appropriate by 5 specialists100% of all specialists; feasibility 5 specialists 100%; propriety 5 specialists 100%; and accuracy 5 specialists 100%.

Phase 3: Analysis results serving objective 3–To study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Objective 3 analysis results are presented the results of the analysis are based on the situational teaching and blended learning instructional model in Chapter 3, and are displayed by students' performance through tables and descriptive analysis in accordance with the scoring standards for Instructional design skills. instructional design skills can be evaluated through 2 Item s: Item 1

Instructional design analysis ability and Item 2 Instructional design implementation ability.

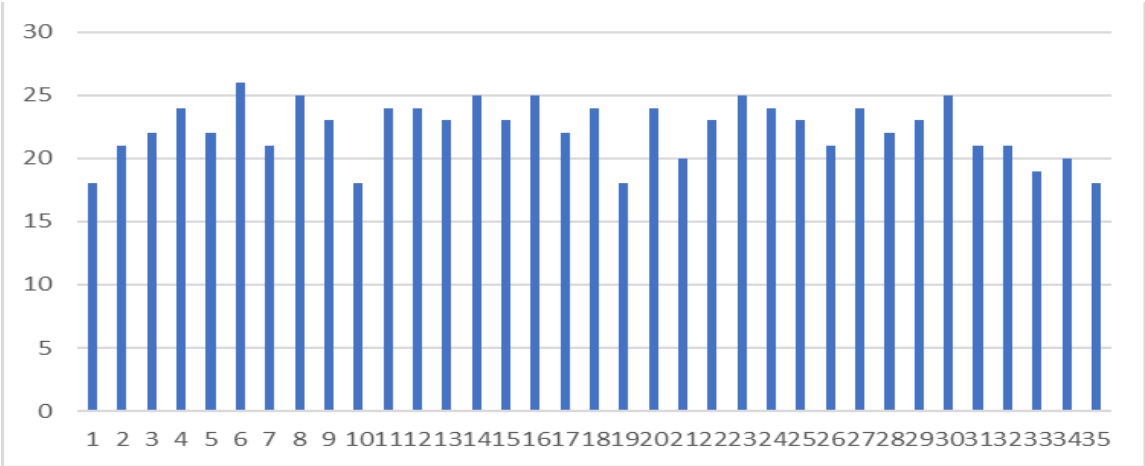

Figure 4.1 The score of students' instructional design skills after learning under the situational teaching and blended learning instructional model.

Table 4.12 Individual students' relative development scores in instructional design skills

Development level	Frequency	Percentage
Excellence	6	17.14
Good	25	71.43
Moderate	4	11.43
Improved	0	0
Fail	0	0

From figure 4.1, Table 4.12, it can be seen that 25 of the students (71.43%) showed good instructional design skills. Among them, 6 of the students (17.14%) were excellent, 4 of the students (11.43%) were Moderate.

Overall, as can be seen from Table 4.12, After implementing situational teaching and blended learning instructional model, students' instructional design skills (88.57%) has been improved. This result is consistent with the research hypothesis that after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at

80% (Good Level or higher). Therefore, we can conclude that to study the results of situational teaching and blended learning instructional model to enhance Instructional design skills of undergraduate Normal students.

Table 4.13 Students' performance results on the basis of analytic rubric-score assessment

Aspects of assessment	$\overline{X}$	*S.D.*	Interpretation of quality level	Rank
Item 1: Instructional design analysis ability	11.25	1.599	Good	1
Item 2: Instructional design implementation ability	11.06	1.955	Good	2
Total	**22.31**	**2.285**	**Good**	

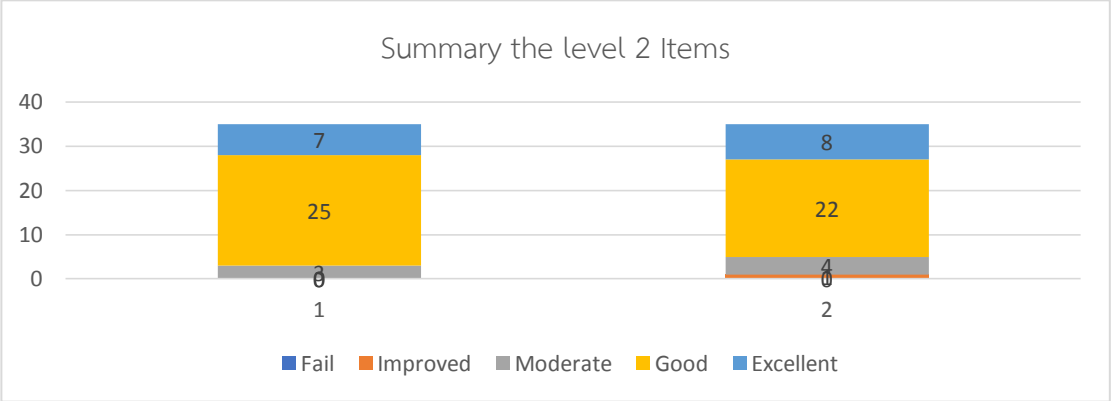

Figure 4.2 Relative scores of students' instructional design skills enhancement (Criteria to evaluate 2 Items).

It can be seen from Table 4.13 and figure 4.2 that the rubric overall scores is Good level ($\overline{X}$=22.31), the average value of Item 1 instructional design analysis ability is Good level ($\overline{X}$=11.25) and the average value of Item 2 Instructional design implementation ability is Good level ($\overline{X}$=11.06), indicating that students have

mastered the instructional analysis ability. Better ability. However, the number of students achieving excellent levels in Item 2 increased by 2.86%.

Table 4.14 Students' relative development scores in item 1 Instructional design analysis ability. (Chapter 2.1: Instructional design analysis ability)

Development level	Frequency	Percentage
Excellence	7	20.00
Good	25	71.43
Moderate	3	8.57
Improved	0	0
Fail	0	0

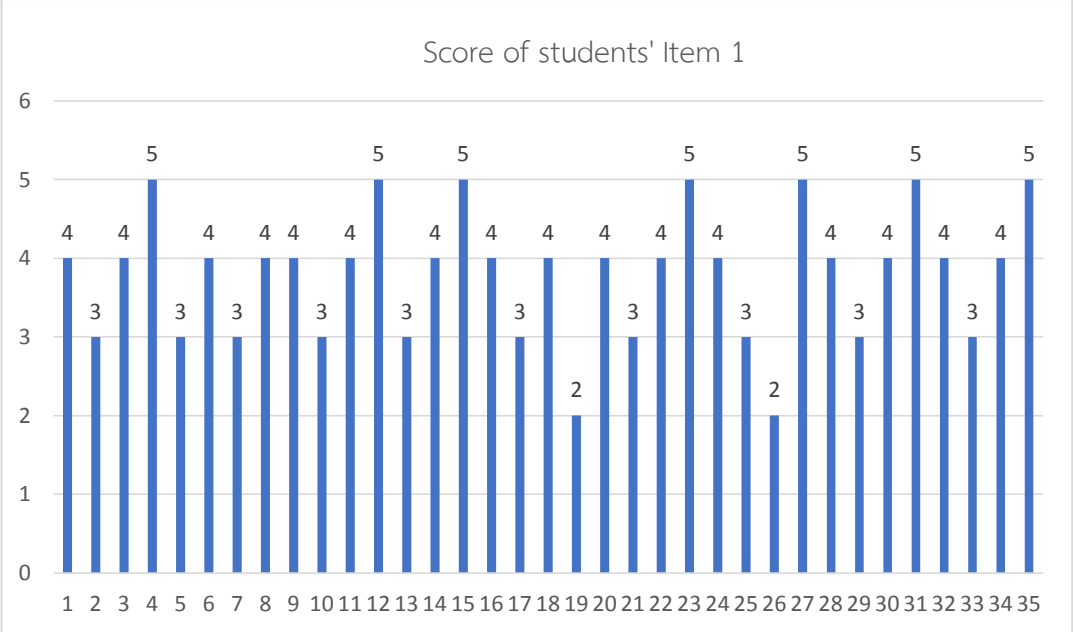

Figure 4.3 Relative scores of students' instructional design skills enhancement (Item 1 Instructional design analysis ability)

From figure 4.3, Table 4.14, it can be seen that 25 of the students (71.43%) showed good instructional design skills. Among them, 7 of the students (20.00%) were excellent, 3 of the students (8.57%) were Moderate.

Overall, as can be seen from Table 4.14, After implementing situational teaching and blended learning instructional model, students' instructional design

analysis ability (91.43%) has been improved. This result is consistent with the research hypothesis that after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level or higher).

Table 4.15 Students' relative development scores in item 2 Instructional design implementation ability. (Chapter 2.2: Instructional design implementation ability)

Development level	Frequency	Percentage
Excellence	8	22.86
Good	22	62.86
Moderate	4	11.42
Improved	1	2.86
Fail	0	0

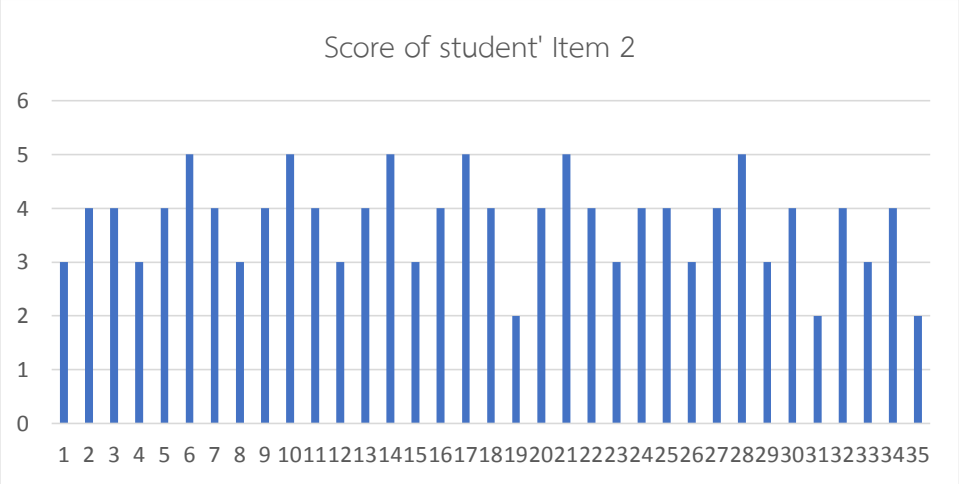

Figure 4.4 Relative scores of students' instructional design skills enhancement (Item 2 Instructional design implementation ability)

From figure 4.4, Table 4.15, it can be seen that 22 of the students (62.86%) showed good instructional design skills. Among them, 8 of the students (22.86%) were excellent, 4 of the students (11.42%) were Moderate, 1 of the students (2.86%) were Improved.

Overall, as can be seen from Table 4.15, After implementing situational teaching and blended learning instructional model, students' instructional design implementation ability (85.72%) has been improved. This result is consistent with the research hypothesis that after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level or higher).

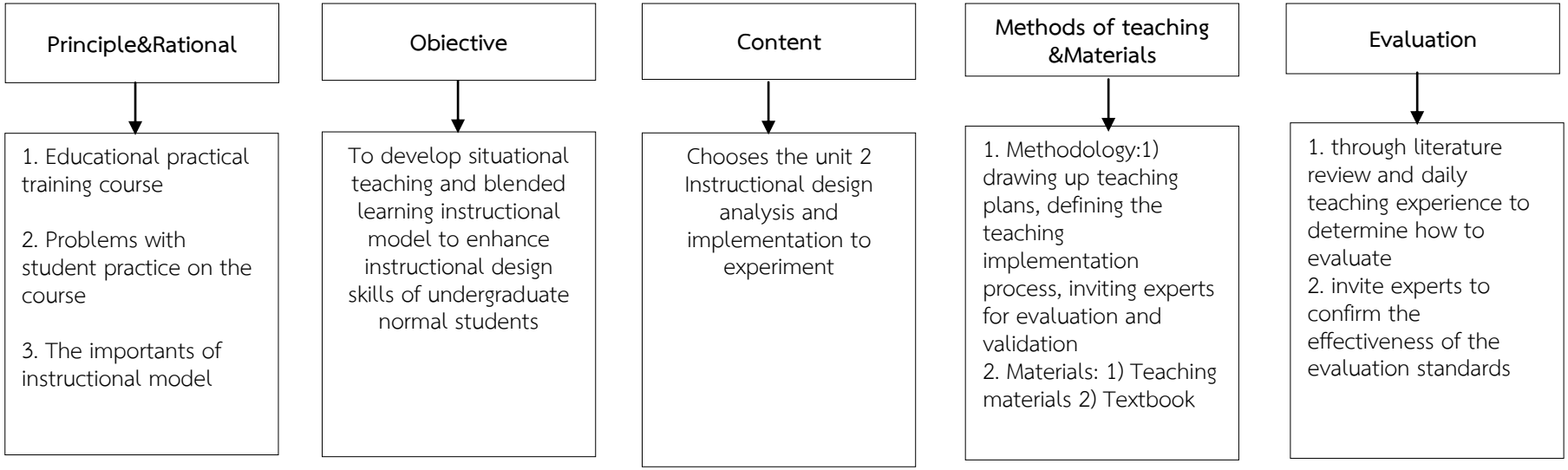

Figure 4.5 Summary of situational teaching and blended learning instructional model

As can be seen in Figure 4.5, the core content of the thesis includes 1) Principle were as about the Educational practical training course, Problems with student practice on the course and the importants of instructional model 2) Objective there are to develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate normal students in LiShui University. 3) Contents there are choose unit 2 Instructional design analysis and implementation to experiment 4) The method is to develop the instructional plans, determine the teaching implementation process, and invite experts to evaluate and demonstrate; the material is to choose teaching materials and textbook5) Evaluation were as through literature review and daily teaching experience to determine how to evaluate and invite expert to confirm. ST&BDL Model is as follows:

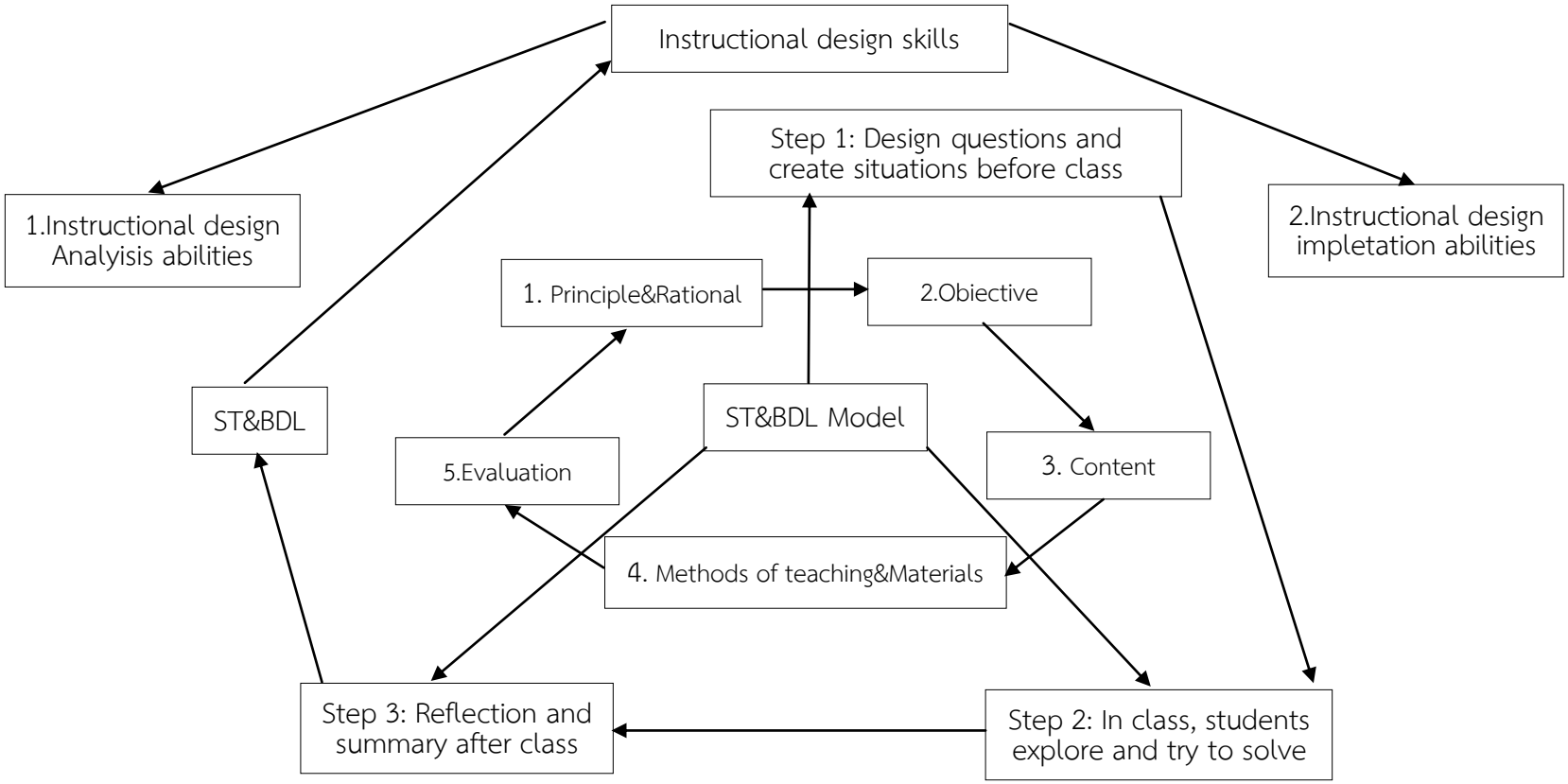

Figure 4.6 ST&BDL operating model

Chapter 5
Conclusion Discussions and Recommendations

After analyzing and presenting data analysis results in chapter 4 as serving all research 4 research objectives of the present study "Development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students", it can be concluded and discussed as follows. Further, some approaches are recommended on basis of the findings.

Conclusion

From the objectives of research

1. There are 2 Factors 1) internal factors and 2) externals factors from both the students and lecturers affecting Instructional design skill. Internal factors affecting instructional design skills of undergraduate normal students in Li Shui University. There are 3 internal factors mainly include 1) physical factors; 2) psychological factors and communicate and there are 5 external factors mainly include 1) teaching environment; 2) teaching methods; 3) Teaching materials; 4) evaluation; 5) class size.

2. Situational teaching and blended learning instructional model was 100% confirmed by 5 experts for further Implementation.

3. This result after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level).

Discussions

1. There are 2 Factors 1) internal factors and 2) externals factors from both the students and lecturers affecting Instructional design skill. Internal factors affecting instructional design skills of undergraduate normal students in Li Shui University. There are 3 internal factors mainly include 1) physical factors; 2) psychological factors and communicate and there are 5 external factors mainly include 1) teaching environment; 2) teaching methods; 3) Teaching materials; 4) evaluation; 5) class size.

1.1 Information collected based on surveys of learners and conversations with lecturers shows that both internal and external factors may have an impact on

learners' learning in Educational practical training courses. These include learning motivation, interests and attitudes. As Yuan (2023) emphasized, learning effects will be affected to varying degrees by internal and external factors. Therefore, to carry out student-centered teaching reform in colleges and universities, we must start from changing teachers' concepts, reforming teaching methods and methods, and at the same time strengthening the construction of teaching staff and establishing an effective assessment mechanism, so as to achieve the improvement of teaching effects under the comprehensive influence of internal and external factors. Optimization of internal and external factors will help improve the quality of teaching and enhance the effectiveness of teaching results. Zhang (2012), Wang and Qiao (2002) showed that non-intellectual physics and other internal factors can also have an impact on students' knowledge mastery and understanding. Xu (2017); Ji (2016) proved the promoting effect of psychological factors on different subjects. These studies have shown that good internal conditions play a great role in improving learning effects.

1.2 Zhang (2023) believed that external environmental factors will have an impact on students' enthusiasm for learning and have a positive effect on their motivation to learn. They also proposed various research methods to measure the role of environmental factors in the learning process. Fan, Ma, and Wang (2023) proved that using efficient teaching methods to solve problems can significantly improve the quality and results of teaching. Under this research background, domestic and foreign researchers have explored how teachers use strategies to promote student learning effects from different angles. The most representative one is the theoretical research on "external factors" and "internal factors". Wang Zhen (1999) holds the view that external and internal factors complement and influence each other, which makes the teaching process more perfect and has a significant effect on the learning process.

2. Situational teaching and blended learning instructional model was 100% confirmed by 5 experts for further Implementation according to :

The principle and rationale of the Situational teaching and Blended learning Instructional Model has been generally recognized by participating experts in terms of practicality, feasibility, suitability and accuracy. These research results confirm that the core theories and inferences developed by the Situational teaching and Blended

learning Instructional Model are stable, which helps to improve Undergraduate Normal Students' Instructional design skills.

The objectives of the instructional model were agreed upon by all specialists. They believe that the model should include elements such as learning content and methods as well as teacher guidance. Such consensus means that the purpose set by the model is clear, relevant, and aimed at improving students' academic performance.

The contents component also all experts gave a 100% confirmatory rating, which emphasized the adaptability of the learning materials and topics, as well as the careful planning of the model's goals. Ensure that teaching methods and materials meet standards of practicality, usefulness, feasibility, appropriateness and accuracy.

The methods of teaching & materials were confirmed to be useful, utility standards, feasibility standards, propriety standards, and accuracy standards. Experts from all fields are involved. This shared agreement demonstrates that the teaching strategies and resources used are effective for the advancement of Situational teaching and Blended learning Instructional Model.

The evaluation component was unanimously confirmed by all specialists, underlining the effectiveness and appropriateness of the evaluation and feedback mechanisms to assess, and enhancing Undergraduate Normal Students' Instructional design skills.

In conclusion, the experts reached a unanimous consensus on multiple criteria such as practicality, feasibility, appropriateness and accuracy, which further confirmed the robustness of the Situational teaching and Blended learning Instructional Model in the development process. It also confirmed that some of the hypotheses proposed in this study are correct and valid, and these hypotheses are consistent with the experimental data. The study strongly points out that the model and its individual elements can effectively improve Undergraduate Normal Students' Instructional design skills.

3. This result after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level) according to :

3.1 After implementing situational teaching and blended learning instructional model, students' instructional design skills (88.57%) has been improved. The are 25 of the students (71.43%) showed good instructional design skills. Among them, 6 of the students (17.14%) were excellent, 4 of the students (11.43%) were Moderate. Liu and Wang (2021) This helps meet students' unique needs and enhance their engagement, thereby further optimizing their learning outcomes and thinking skills.

3.2 After implementing situational teaching and blended learning instructional model, students' instructional design skills (88.57%) has been improved. This result is consistent with the research hypothesis that after implementing situational teaching and blended learning instructional model, students' instructional design skills will be overall improved at 80% (Good Level or higher). Lin and Pan (2016) also found that through the practice and research of this teaching model, they found that it stimulated students' interest in learning to a certain extent, enhanced students' awareness of independent inquiry and hands-on operation ability, thus effectively improving classroom efficiency and Teaching Quality. The blended teaching model is a new teaching method that makes up for the shortcomings of traditional classrooms to a large extent, making it more effective in stimulating students' enthusiasm for knowledge exploration. Therefore, educators can consider applying this teaching model to other courses to comprehensively improve students' learning abilities.

Recommendations

The findings from the present study bring twofold suggestions: applicability of the results and future research.

1. To arouse the passion for professional knowledge, deepen their understanding and practical experience of instructional design courses, and cultivate their new thinking patterns to have maximize students' imagination and creativity in a relaxed and pleasant classroom environment, activate and cultivate students' subjective consciousness to a certain extent, Stimulate their active thinking and enthusiasm for exploration.

2. The lecturers must gain a deeper understanding of students' learning progress and achievements, provide students with more efficient guidance and

assistance help them better adapt to the changing educational environment, use these methods to promote the development of students' independent exploration, cooperative and communication abilities in the classroom, and enable students to gain richer emotional experiences and this innovative teaching method also promotes a closer interactive relationship between teachers and students, further improving teaching effectiveness.

3. The institute provided to manage teachers' teaching methods and students' learning pace more efficiently, and evaluate them from multiple perspectives. By establishing a scientific, comprehensive and systematic evaluation system to measure whether a class or a subject meets the teaching requirements within a certain period of time. This not only promotes the forward development of education, but also points out a new path for educational innovation and further improvement of teaching quality.

Future Research

In future research, further research on Situational teaching and Blended learning Instructional Model can be carried out in several key areas:

1. In situational and blended teaching methods, we should analyze and apply teaching techniques more clearly to further broaden the teaching scope of educational practice courses. At present, there are relatively few studies on situational teaching and hybrid teaching models. We expect more researchers to integrate these two models into education and teaching-related courses to expand their application scope and increase their applicable student groups.

2. By exploring the application of contextual teaching and blended learning teaching strategies in different fields, we hope that future researchers will think about how to integrate such strategies into their professional courses.

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Appendices

Appendix A

List of Specialists and Letters of Specialists Invitation for IOC Verification

List name the specialist to check research instruments for IOC

1. Assistant Professor Dr.Wapee Kong-In	English Program Bansomdejchaopraya Rajabhat University
2. Assistant Professor Dr.Sarayuth Sethakhajorn	Administration Program Bansomdejchaopraya Rajabhat University
3. Assistant Professor Dr. Prapai Sridama	Computer and Teachbnolog Program Bansomdejchaopraya Rajabhat University
4. Professor Dr.He Yongda	Statistics Program LiShui University
5. Dr. Jiang Wenhua	Chinese language education Program LiShui University

List name the specialist to evaluate the Instructional Model

1. Associate Professor Jittawisut Wimutipanya	Science Program Bansomdejchaopraya Rajabhat University
2. Assistant Professor Dr.Wanida Ploysangwal	English Program University of the Thai Chamber of Commerce
3. Dr. Panas Jansritong	Admistration Program Krirk University
4. Associate Professor Xie Qing	Curriculum and Instruction Program LiShui University
5. Dr. Chen Meiping	Pedagogical Program LiShui University

Appendix B

Official Letter

Ref. No. MHESI 0643.14/ 1834

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for research tool validation

Dear Assistant Professor Dr.Wapee Kong-In

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Mrs.Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol, questionnaire as instruments will be used in the said research. In view with this, the researcher would like your expertise to validate the attached questionnaires to qualify for conduction. Knowing your experience in the field of Education, I would like to ask for your help in validating the said instrument before administering it to the participants of the study.

The research objective, definitions of terms, Rubric Scoring, questionnaire and the validation sheets are hereby attached. I will be glad to hear your suggestions and comments for the improvement of the instrument. Your positive response is highly appreciated.

Sincerely,

(Asst.Prof.Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. +66 0204737000

Ref. No. MHESI 0643.14/ 1835

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for research tool validation

Dear Assistant Professor Dr.Sarayut Sethakhajorn

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Mrs.Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol, questionnaire as instruments will be used in the said research. In view with this, the researcher would like your expertise to validate the attached questionnaires to qualify for conduction. Knowing your experience in the field of Education, I would like to ask for your help in validating the said instrument before administering it to the participants of the study.

The research objective, definitions of terms, Rubric Scoring, questionnaire and the validation sheets are hereby attached. I will be glad to hear your suggestions and comments for the improvement of the instrument. Your positive response is highly appreciated.

Sincerely,

(Asst.Prof.Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. +66 0204737000

Ref. No. MHESI 0643.14/ 1840

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for research tool validation

Dear Assistant Professor Dr.Prapai Sridama

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Mrs.Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol, questionnaire as instruments will be used in the said research. In view with this, the researcher would like your expertise to validate the attached questionnaires to qualify for conduction. Knowing your experience in the field of Education, I would like to ask for your help in validating the said instrument before administering it to the participants of the study.

The research objective, definitions of terms, Rubric Scoring, questionnaire and the validation sheets are hereby attached. I will be glad to hear your suggestions and comments for the improvement of the instrument. Your positive response is highly appreciated.

Sincerely,

(Asst.Prof.Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. +66 0204737000

Ref. No. MHESI 0643.14/1836

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for research tool validation

Dear Professor Dr.He Yongda

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Mrs.Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol, questionnaire as instruments will be used in the said research. In view with this, the researcher would like your expertise to validate the attached questionnaires to qualify for conduction. Knowing your experience in the field of Education, I would like to ask for your help in validating the said instrument before administering it to the participants of the study.

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Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. +66 0204737000

Ref. No. MHESI 0643.14/ 1837

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for research tool validation

Dear Dr.Jiang Wenhua

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Mrs.Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol, questionnaire as instruments will be used in the said research. In view with this, the researcher would like your expertise to validate the attached questionnaires to qualify for conduction. Knowing your experience in the field of Education, I would like to ask for your help in validating the said instrument before administering it to the participants of the study.

The research objective, definitions of terms, Rubric Scoring, questionnaire and the validation sheets are hereby attached. I will be glad to hear your suggestions and comments for the improvement of the instrument. Your positive response is highly appreciated.

Sincerely,

(Asst.Prof.Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. +66 0204737000

Ref. No. MHESI 0643.14/ 1841

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for evaluation of instructional model

Dear Associate Professor Jittawisut Wimutipanya

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree as major advisor and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol as co-advisors, the instructional model will be developed in the said research. In view with this, the researcher would like your expertise to evaluate the appropriateness of such a developed instructional model. Knowing your experience in the field of Education, I would like to ask for your help in evaluating the said instructional model before its implementation.

I will be glad to hear your suggestions and comments for the improvement of the instructional model. Your positive response is highly appreciated.

Sincerely,

(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. (662) 4737000
Fax. (662) 4737000

Ref. No. MHESI 0643.14/1830

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for evaluation of instructional model

Dear Assistant Professor Dr.Wanida Ploysangwal

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree as major advisor and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol as co-advisors, the instructional model will be developed in the said research. In view with this, the researcher would like your expertise to evaluate the appropriateness of such a developed instructional model. Knowing your experience in the field of Education, I would like to ask for your help in evaluating the said instructional model before its implementation.

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Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. (662) 4737000
Fax. (662) 4737000

Ref. No. MHESI 0643.14/1831

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for evaluation of instructional model

Dear Dr.Panas Jansritong

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree as major advisor and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol as co-advisors, the instructional model will be developed in the said research. In view with this, the researcher would like your expertise to evaluate the appropriateness of such a developed instructional model. Knowing your experience in the field of Education, I would like to ask for your help in evaluating the said instructional model before its implementation.

I will be glad to hear your suggestions and comments for the improvement of the instructional model. Your positive response is highly appreciated.

Sincerely,

(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. (662) 4737000
Fax. (662) 4737000

Ref. No. MHESI 0643.14/ 1832

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for evaluation of instructional model

Dear Associate Professor Xie Qing

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational teaching and Blended learning Instructional Model to Enhance Instructional design skills of Undergraduate Normal Students*"of Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree as major advisor and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol as co-advisors, the instructional model will be developed in the said research. In view with this, the researcher would like your expertise to evaluate the appropriateness of such a developed instructional model. Knowing your experience in the field of Education, I would like to ask for your help in evaluating the said instructional model before its implementation.

I will be glad to hear your suggestions and comments for the improvement of the instructional model. Your positive response is highly appreciated.

Sincerely,

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Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. (662) 4737000
Fax. (662) 4737000

Ref. No. MHESI 0643.14/ 1833

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for evaluation of instructional model

Dear Dr. Chen Meiping

Attachment Validation sheets

Regarding the thesis entitled "*Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students*"of Liu Danhua, a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomejchaopraya Rajabhat University code number 6473103114, Thailand under the supervision of Assistant Professor Dr.Nuttamon Punchatree as major advisor and Associate Professor Dr.Areewan Iamsa-ard and Associate Professor Dr.Suriya Phankosol as co-advisors, the instructional model will be developed in the said research. In view with this, the researcher would like your expertise to evaluate the appropriateness of such a developed instructional model. Knowing your experience in the field of Education, I would like to ask for your help in evaluating the said instructional model before its implementation.

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Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. (662) 4737000
Fax. (662) 4737000

Ref. No. MHESI 0643.14/ 1838

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for data collection

Dear President of LiShui University

Attachment 2 copies of questionnaire

Regarding the thesis entitled *"Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students"* of Mrs. Liu Danhua , a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114 Thailand under the supervision of

Major Advisor : Assistant Professor Dr.Nuttamon Punchatree

Co-advisor : Associate Professor Dr.Areewan Iamsa-ard

Co-advisor : Associate Professor Dr.Suriya Phankosol

the researcher needs to collect data using questionnaire in terms of factors affecting students' instructional design skills from 229 students who enroll in Educational practical training course of LiShui University.Hence, I'm formally requesting your assistance in distributing the attached questionnaire to the informants as referred above and please send the completed ones back to the researcher via No.1 Xueyuan Road, Liandu District, Lishui City, Zhejiang Province, China.

The researcher plans to use this data for her thesis completion and further necessary publication as required by the Ph.D. course.

I am grateful for your consideration of my request. I pledge to adhere to any stipulations you deem fit. You may reach me at the phone number or email address provided below in case of any related questions. I look forward to your response.

Sincerely,

(Asst.Prof.Dr.Kanakorn Sawangcharoen)
Dean of Graduate School
Bansomdejchaopraya Rajabhat University

Tel. +66 0204737000 Ext.
Fax. 66 0204737000

Ref. No. MHESI 0643.14/ 1839

Graduate School
Bansomdejchaopraya Rajabhat University
1061 Itsarapap 15 Itsarapap Rd.
Thonburi Bangkok 10600

5 September 2023

Subject Request for permission to implement experiment

Dear President of LiShui University

Regarding the thesis entitled *" Development of Situational Teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students"* of Mrs. Liu Danhua , a Ph.D. student majoring in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University code number 6473103114 Thailand under the supervision of

Major Advisor : Assistant Professor Dr.Nuttamon Punchatree
Co-advisor : Associate Professor Dr.Areewan Iamsa-ard
Co-advisor : Associate Professor Dr.Suriya Phankosol

the researcher needs to collect data using questionnaire in terms of factors affecting students' instructional design skills from 229 students who enroll in Educational practical training course of LiShui University.Hence, I'm formally requesting your assistance in distributing the attached questionnaire to the informants as referred above and please send the completed ones back to the researcher No.1 Xueyuan Road, Liandu District, Lishui City, Zhejiang Province, China.

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Bansomdejchaopraya Rajabhat University

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Appendix C

Research Instrument

- Questionnaire for students (Objective 1)
- Interview for lecturers (Objective 1)
- Questionnaire for experts (Objective 2)
- Lesson Plan 1 (Objective 3)
- Scoring Rubric (Objective 3)

Questionnaire for students (Objective 1)

Directions:

These questionnaires are the instruments for collecting data in 1st phase of the research entitled "Development of Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students ",conducted by Liu Danhua, a Ph.D. student in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University under the supervision of Assistant Professor Dr.Nuttamon Punchatree, Associate Professor Dr.Areewan Iamsa-ard, Associate Professor Dr.Suriya Phankosol.

This questionnaire is divided into 3 sections i.e.

Section 1 Common data of the respondent

Section 2 Information on factors affect Instructional Design Skills of Undergraduate Normal Students.

The questionnaire type is the closed-ended questions that can only be answered by selecting from provided number to summated rating scale, 5 scales.

The important issues of the items consist of two groups of the factors: Internal factors (respondents) and External factors (teachers, circumstances, etc.)

Section 3 Further suggestions

Data obtained from this questionnaire are only used for the purpose of conducting aforementioned research and remain confidential. Individual or personal data presentation will be avoided.

Answer the questionnaire:

Section 1 Common data of the respondent

***Directions**: Please put ✔into the ❑ according to your own personal data.*

1. Gender is ❑ Male ❑ Female

2. Major

❑ A.Elementary Education Major (Mathematics)

❑ B.Elementary Education Major (Language Orientationl)

❑ C.Elementary Education Major(General)

3. Age

❑ A. below 18 yrs. ❑ B. 18-20 yrs.

❑ C. 21-23 yrs. ❑ D. over 23 yrs.

Section 2 Questionnaire on factors affect Instructional Design Skills of Undergraduate Normal Students.

***Directions**: Please rate the following factors affecting instructional design skills by putting ✔into the attitude level column based on the criteria given below. Each question can select only one answer.*

5 means you STRONGLY agree with the contents.

4 means you QUITE agree with the contents.

3 means you remain NEUTRAL. with the contents

2 means you DO NOT QUITE agree with the contents

1 means you DO NOT STRONGLY agree with the contents

Questions	Answers				
	5	4	3	2	1
1.Internal factors (respondents)					
1.You know that the Education Practical Training course is a professional platform course.					
2.You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.					
3.You believe that personal motivation and effort have an impact on improving instructional design skills.					
4.You are very actively engaged in instructional design activities in the classroom.					
5.You can engage in independent learning and gain in-depth understanding of the field of instructional design.					
6.You are willing to accept feedback and improve their instructional design skills.					
7.You demonstrate high creativity and innovation in solving instructional design problems.					
8.You are highly confident in your ability to enhance your instructional design skills.					
9.You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.					
10.You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.					

Questions	Answers				
	5	4	3	2	1
11.You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.					
12.You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.					
2. External factor (students) teachers, environments, faculty facilities, materials and so on.					
13.Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.					
14.Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge.					
15.Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills.					
16.Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.					
17.Combining teaching methods with real teaching scenarios can improve students' instructional design skills.					
18.You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.					
19.You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.					
20.You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.					
21.The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.					
22.Timely and specific feedback and evaluation help students to identify areas for improvement and adjust their instructional design					

Questions	Answers				
	5	4	3	2	1
accordingly, thus improving their ability to produce effective instructional materials and strategies.					
23.An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.					
24.Class size has a significant impact on the implementation of instructional design skills.					

Section 3 Suggestions

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Thank you for your kind cooperation for completing the questionnaire!

Researcher

Mrs. Liu Danhua

Interview for Lecturers (Objective 1)

Directions:

This interview is a part of research entitled “Development of Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students”.

Research Objectives: 1 To examine the factors Influencing the Improvement of Instructional Design Skills for Undergraduate Normal Students

It is conducted by Liu Danhua, a Ph.D. student in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University under the supervision of

1. Assistant Professor Dr.Nuttamon Punchatree
2. Associate Professor Dr.Areewan Iamsa-ard
3. Associate Professor Dr.Suriya Phankosol

The following open questions are the instrument for collecting data in 1st phase of the research, concerning about factors to affect Instructional Design Skills.

Please write down your own opinion for each questions. Data obtained from this questionnaire are only used for the purpose of conducting aforementioned research and remain confidential. Individual or personal data presentation will be avoided.

These questions are the instrument for collecting data in 1st phase of the research.

1.Gender

❑ A. Male ❑ B. Female

2. Major

❑A. Elementary Education Major (Mathematics)

❑B. Elementary Education Major (Language Orientationl)

❑C. Elementary Education Major (General)

3. Teaching experience

❑A. below 3 yrs. ❑B. 3-6 yrs.

❑C.7-9 yrs . ❑D. over 9 yrs.

4. Age

❑A. below 25 yrs . ❑C. 25-35 yrs.

❑B. 36-49 yrs. ❑D. over 49 yrs.

5.Professional title

❑ A. Professor ❑ B. Associate Professor

❑ C. Assistant Professor ❑ D. Lecturer

Section 2 Interview on factors Influencing the Improvement of Instructional Design Skills for Undergraduate Normal Students.

Directions*: The type of question is open-ended questions, you can answer according to your actual situation. Your answers will only be used in this research and will not be disclosed individually.*

1. What factors do you think influence students' instructional design skills?
2. How do you inspire creativity and innovation in instructional design in your teaching?
3. How do you use teaching methods to promote the development of students' instructional design skills?
4. What learning methods do you think can help students to develop their instructional design skills?
5. How do you think the quality of teaching materials affects students' instructional design skills?
6. How important do you think diversified teaching resources are in improving students' instructional design skills?
7. How do you give feedback to students on their instructional design and help them improve?
8. How do you think assessment methods affect students' instructional design skills?
9. How do you think the instructional environment (e.g., classroom facilities, technology support, etc.) affects students' instructional design skills?
10. How do you think class size affects students' instructional design skills?

Comment and recommendation for improving the better instruction.

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Thank you for your kind cooperation for completing the questionnaire!

Researcher

Mrs. Liu Danhua

Questionnaire for experts (Objectives: 2)

Dear assessors,

It is conducted by Liu Danhua, a Ph.D. student in Curriculum and Instruction Programme at Bansomdejchaopraya Rajabhat University under the supervision of

1. Assistant Professor Dr.Nuttamon Punchatree
2. Associate Professor Dr.Areewan Iamsa-ard
3. Associate Professor Dr.Suriya Phankosol

The attached open questions are the instrument for collecting data in phase 2 of the research, the objective of which is to confirm instructional model.

Please write down your own opinion for each question. Data obtained from this questionnaire are only used for the purpose of conducting aforementioned research and remain confidential. Individual or personal data presentation will be avoided.

These questions involve 3 parts as follows.

Part 1: Assessor's information

Part 2: Assessment of the quality of instructional model on 5-point rating scale basis in 4 aspects 1) Utility Standards 2) Feasibility Standards 3) Propriety Standards and 4) Accuracy Standards.

Part 3: Suggestion

The researcher certifies that all information obtained from this questionnaire will be used for academic purposes and to generate maximum benefit meeting objectives.

Thank you very much for dedicating your valuable time and providing useful information to this research for the benefit of further research and development.

Name: Liu Danhua
Ph.D. student

Curriculum and Instruction Program
Bansomdejchaopraya Rajabhat University

Assessment of confirm the quality of Situational teaching and Blended Learning Instructional Model

Direction: Assessment of confirm the quality of instructional model
Please answer all questions by making ✓ in the answer box that corresponds to your opinion or the truth using the following criteria.

Assessment Items	Rating Results		
	Agree	Disagree	Remarks
Utility Standard 1. Situational teaching and Blended Learning Instructional Model is useful to lecturers to enhance learning achievement.			
2. Situational teaching and Blended Learning Instructional Model is useful to students to enhance learning achievement.			
3. Situational teaching and Blended Learning Instructional Model includes necessary and enough contents.			
4. Situational teaching and Blended Learning Instructional Model promotes to enhance learning achievement more compared to traditional teaching.			
5. Situational teaching and Blended Learning Instructional Model increases the learning achievement of students.			
Feasibility Standard 1.The lecturer can apply p Situational teaching and Blended Learning Instructional Model to enhance learning achievement to their work and it is worth the time for actual use.			
2. The lecturer can develop the students to Situational teaching and Blended Learning Instructional Model			
3. Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design			

Assessment Items	Rating Results		
	Agree	Disagree	Remarks
Skills of Undergraduate Normal Students is easy to use.			
4.the students always develop their learning all time by Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students			
5. The students are comfortable in learning by themselves Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students.			
Propriety Standard 1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriate for lecturers to use assessment results to improve the students.			
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriateness for students to create knowledge by themselves.			
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is convenient to use.			
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a systematic process to use.			
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is clear and suitable for use in learning and students development.			
Accuracy Standard 1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is comprehensively analyzed from			

Assessment Items	Rating Results		
	Agree	Disagree	Remarks
different contexts and sufficient for the synthesis of patterns.			
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement has a clear process.			
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement are described and the acquisition is clear.			
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement use techniques and tools which acquires accurate information and communication.			
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a correct and comprehensive learning system.			

Suggestion

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Lesson plan 1 (Objective 3)

Using Situational teaching and Blended Learning Instructional Model to teach Instructional design analysis ability to improve students' Instructional design skill(8 hour)

Objectives

Item 1: Instructional design analysis ability——To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

Teaching:

The situational teaching and blended learning instructional model refers to a comprehensive teaching model that is divided into 4 steps in the classroom. This lesson plan uses Instructional design analysis ability as the teaching content and implements teaching activities through the situational teaching and blended learning instructional model, aiming to improve students' instructional design skills.

Step 1: Design questions and create situations before class. (120 minutes)

Determine specific situations or scenarios based on the content of the teaching design course and the needs of students. In this class, students must learn to analyze the teaching objects, teaching goals, and teaching tasks, and allow students to apply the knowledge and skills they have learned according to the teaching goals and actual conditions. Apply it to real life.

Introduction to effective teaching

Why do some students want to study and others don't? Why do some students happily do extra homework while others don't do any homework at all? Why are some students able to actively engage in the learning process, while others are not. There are a lot of individual differences in every classroom, and no matter how skillfully you convey knowledge, these differences will always affect your teaching effectiveness.

Problems existing in classroom teaching

Failure to achieve teaching goals; lack of life in the classroom; students knowing only a little bit; scientific errors in knowledge, which constitutes ineffective teaching. Rote memorization and question-answer tactics make teachers miserable and students tired. Belongs to inefficient teaching. No matter how hard and serious the teacher teaches, whether the students have made any progress. effective teaching. Students can learn and meet in class; teachers can ensure implementation and reduce their burden. Belongs to efficient teaching.

The pursuit of effective teaching: effective, efficient and efficient.

The internal and external factors in the process of effective teaching are related to teaching objectives, teaching objects, teaching content, teaching methods, teaching evaluation, etc.

Step 2: In class, students explore and try to solve. (240 minutes)

Create an online learning platform or use existing educational technology tools to provide context-related learning resources, such as case studies, simulations, multimedia materials, etc., to ensure that students can learn independently and obtain context-related information and practice opportunities.

(1) The instructor provides literature, courseware, videos and other resources based on the teaching design analysis.

(2) Students preview literature, courseware, videos and other content on their own.

(3) The lecturer organizes and summarizes the common problems encountered by learners in independent learning before class, adjusts the course content, and explains it in class.

Organize face-to-face teaching activities such as group discussions, role plays and field trips. Teachers guide students to explore ways to solve problems Motivate, and provide real-time feedback and guidance.

Fish and Cow Fable

There lived a pair of good friends, a frog and a fish, in the pond. As an amphibian, the frog often had the opportunity to see the world on the shore. The fish learned all the knowledge about the shore from the frog's mouth. One day, the frog came back from the shore and excitedly told the fish that it had seen a cow. The fish begged the frog to describe to it what the cow looked like.

Fish: "Frog, tell me what a cow looks like!"

Frog: "A cow has a very strong body, four legs under its belly, a tail, and two pointed horns on its head. It eats grass...", the image of a cow slowly emerged in the fish's mind. The image is - "fish and cow".

The fish-cow fable of constructivism has given us many inspirations, the core of which is that "learning is a construction process based on students' existing experience and knowledge."

It can be seen that if we only instill knowledge in the classroom, students will get a superficial, fragmented, and unreal understanding. Over time, an unreal land world will emerge in the fish's mind, with not only fish and cows, but also fish, birds, fish-men, etc.

Bruner said that the teaching process is a continuous activity of raising questions and solving problems. And this problem often refers not to the teacher's problem, but to the student's problem. Human learning is the process of constantly asking questions and answering questions.

Goals and standards say little about what strategies will be used in the classroom to achieve them, and when they will be achieved or achieved. To get satisfactory answers to these questions, you need to prepare unit or course objectives. You need to prepare lesson objectives. Lesson objectives communicate to learners the specific behaviors they want to achieve, the conditions required to demonstrate these behaviors, and how these behaviors must be based on Learner learning history, abilities and current level of understanding.

The meaning of teaching task analysis

Instructional task analysis is a complex instructional design technology. As many learning theories as there are, there will be as many corresponding task analysis methods.

Nathan said: The definition of task analysis depends on the purpose of task analysis, the situation of task analysis and who will perform the analysis. One of the definitions

The subject of teaching task analysis

Comparison of expert-novice problem-solving processes shows that in order to conduct teaching task analysis, the analyst must master knowledge in the specialized field and understand the characteristics of beginners' knowledge representation, problem-solving steps and other characteristics.

The main body of task analysis: teachers (experts) and teaching designers must cooperate with each other. Task analysts need to have a combination of the following knowledge or skills: professional knowledge and proficiency in a certain task field, theoretical knowledge or skills in instructional design, and knowledge for beginners entering this task field.

Questions for Group

①What is the difference between fish and frog?

②What would the turtle or shrimp think?

③What factors are related to teaching effectiveness?

④ From what aspects should we analyze these elements?

⑤What is the difference between teaching objects and effective teaching?

⑥How to analyze different teaching objects?

⑦What is the relationship between teaching objectives and effective teaching?

⑧How to analyze the teaching objectives?

⑨How should teaching tasks be analyzed?

Step 3: Reflection and summary after class. (120 minutes)

Online learning and face-to-face teaching are organically combined to support and complement each other. For example, online learning can serve as a form of preview or review, while face-to-face teaching focuses on cultivating students' practical skills and cooperative spirit. make sure Students are required to transform theoretical knowledge into practical exercises in situations and conduct reflections.

1) Teachers are supplementing learning resources based on students' discussions to help students with strong independent learning ability expand their learning. Students can also share their learning resources to the online learning space during the after-class learning process.

(2) After each chapter, students are required to use learning tools or conduct practical summary and reflection in the course circle. Teachers also reflect on teaching and improve teaching plans. Teachers upload excellent works to the resource library for other learners to learn from.

(3) Students complete homework after class

Evaluation

Students make a PPT to analyze teaching objects, teaching objectives, and teaching tasks for teachers to score, in order to judge the level of students' teaching analysis ability.

Item 1: Instructional design analysis ability——To develop situational teaching and blended learning instructional model to enhance instructional design skills of undergraduate Normal students.

The criteria from item 1: Instructional design analysis ability

Standard 1: Analysis of teaching objects	
Standard 2: Teaching goal analysis	
Standard 3: Teaching task analysis	
Score Range	**Meaning**
13 - 15	Excellent
10 -12	Good
7 - 9	Moderate
4 - 6	Improved
Less than 4	Fail

Materials:

1) Teaching materials

2) Textbook

For Lesson plan 1

PPT picture

Textbook

Clip Video

1.https://open.163.com/newview/movie/free?pid=FHHH53RLB&mid=RHHH54D6R

2. https://www.youtube.com/watch?v=KoWTFKxwJHU

3.https://open.163.com/newview/movie/free?pid=OHLA495OI&mid=KHLA498A0

Instructional Design Skills Assessment Form for Scoring Rubric (Objective 3)

Research Title: Development of Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students

Research Objectives 3: To study the results of implementing project based situational teaching and blended learning instructional model to enhance the Instructional design skills of Undergraduate Normal Students.

Assessor: Associate Professor Dr.Prapai Sridama

Position: Computer and technology Program

Workplace: Bansomdejchaopraya Rajabhat University

Directions: Please assess the validity of the attached lesson plans regarding the given issues by putting ✓ in the box according to the following criteria.

+1 if you think the Item CORRESPONDS with the item of assessment

0 if you are NOT SURE the Item corresponds with the item of assessment

-1 if you think the Item DOES NOT correspond with the item of assessment

Item	score				
	5	4	3	2	1
	Perform all or nearly all of the following tasks well	**Do almost all of the following tasks well**	**Complete most of the following tasks**	**Inability to complete most or many of the following tasks**	**Cannot complete any of the following tasks**
1 Instructional design analysis ability					
Standard 1: Analysis of teaching objects	Students have strong ability to analyze different teaching	Students have better ability to analyze different teaching	Students have average ability to analyze different teaching	Students have poor ability to analyze different teaching objects	Students will not analyze the teaching object analysis

Item	score				
	5	4	3	2	1
	Perform all or nearly all of the following tasks well	Do almost all of the following tasks well	Complete most of the following tasks	Inability to complete most or many of the following tasks	Cannot complete any of the following tasks
	objects	objects	objects		
Standard 2: Teaching goal analysis	Students can perfectly analyze teaching objectives	Students can better analyze teaching objectives	Students' analysis of teaching objectives is generally	Students' analysis of teaching objectives is poor	Students do not analyze teaching objectives
Standard 3: Teaching task analysis	The student's ability to analyze teaching tasks is perfect	Students have better ability to analyze teaching tasks	Students' ability to analyze teaching tasks is average	Students' ability to analyze teaching tasks is poor	Students do not analyze teaching tasks
2. Instructional design implementation ability					
Standard 1: Selection and application of teaching methods	The selection and application of student teaching methods are perfect	Good selection and application of student teaching methods	Selection and application of student teaching methods in general	Poor selection and application of student teaching methods	Students will not be able to choose and apply teaching methods
Standard 2: Selection and application of teaching	Students' ability to select and use teaching	Students have better ability to select and	Students' ability to select and use teaching	Students' ability to select and use teaching	Students will not be able to select and use

Item	score				
	5	4	3	2	1
	Perform all or nearly all of the following tasks well	Do almost all of the following tasks well	Complete most of the following tasks	Inability to complete most or many of the following tasks	Cannot complete any of the following tasks
media	media is perfect	use teaching media	media is better than average	media is relatively poor	teaching media
Standard 3: Evaluation of teaching results	Students' selection and application of teaching outcome evaluation was perfect	Students' selection and application of teaching results evaluation are better	Students' selection and application of teaching outcome evaluation in general	Students' poor selection and application of teaching outcome evaluations	Students will not select and apply the evaluation of teaching results

No.	Items	Assessment Results			Remarks
		+1	0	-1	
1	**Instructional design analysis ability**				
	Standard 1: Analysis of teaching objects				
	Standard 2: Teaching goal analysis				
	Standard 3: Teaching task analysis				
2	**Instructional design implementation ability**				
	Standard 1: Selection and application of teaching methods				
	Standard 2: Selection and application of teaching media				
	Standard 3: Evaluation of teaching results				

The criteria from item 1: Instructional design analysis ability

Standard 1: Analysis of teaching objects	
Standard 2: Teaching goal analysis	
Standard 3: Teaching task analysis	
Score Range	**Meaning**
13 - 15	Excellent
10 -12	Good
7 - 9	Moderate
4 - 6	Improved
Less than 4	Fail

The criteria from Item 2: Instructional design implementation ability

Standard 1: Selection and application of teaching methods	
Standard 2: Selection and application of teaching media	
Standard 3: Evaluation of teaching results	
Score Range	**Meaning**
13 - 15	Excellent
10 -12	Good
7 - 9	Moderate
4 - 6	Improved
Less than 4	Fail

The criteria from Instructional design skill over all 6 Standards

Score Range	**Meaning**
25 - 30	Excellent
19- 24	Good
13 - 18	Moderate
7- 12	Improved
Less than 7	Fail

Appendix D

The Results of the Quality Analysis of Research Instruments

- IOC- Questionnaire for students
- IOC- Questionnaire for lecturers
- IOC- Validity of instructional model for lecturers
- IOC- Lesson Plans
- IOC- Scoring Rubric Form

Table Appendix 1: Evaluation Results of IOC for Factor Analysis (For Students)

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Section 1 Common data of the respondent									
1	**Gender** ❑ A. Male ❑ B. Female	+1	+1	+1	+1	+1	5	1.00	Valid
2	**Major** ❑ A. Elementary Education Major (Mathematics) ❑ B. Elementary Education Major (Language Orientationl) ❑ C. Elementary Education Major(General)	+1	+1	+1	+1	+1	5	1.00	Valid
3	**Age** ❑ A. below 18 yrs. ❑ B. 18-20 yrs. ❑ C. 21-23 yrs. ❑ D. over 23 yrs.	+1	+1	+1	+1	+1	5	1.00	Valid
Section 2 Factors									
Internal factors (respondents)									
1	You know that the Education Practical Training course is a professional platform course.	+1	+1	+1	+1	+1	5	1.00	Valid
2	You realize that acquiring instructional design skills is beneficial in building a strong foundation for your future teaching career.	+1	+1	+1	+1	+1	5	1.00	Valid
3	You believe that personal motivation and effort have an impact on improving instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
4	You are very actively engaged in instructional design activities in the classroom.	+1	+1	+1	+1	+1	5	1.00	Valid
5	You can engage in independent learning and gain in-depth understanding of the field of instructional design.	+1	+1	+1	+1	+1	5	1.00	Valid

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
6	You are willing to accept feedback and improve their instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
7	You demonstrate high creativity and innovation in solving instructional design problems.	+1	+1	+1	+1	+1	5	1.00	Valid
8	You are highly confident in your ability to enhance your instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
9	You think that previous experience in instructional design has a major influence on students' performance in the Educational practical training course.	+1	+1	+1	+1	+1	5	1.00	Valid
10	You believe that collaboration and mutual learning among peers have a significant impact on improving instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
11	You frequently apply theoretical knowledge to practical instructional design in the Educational practical training course.	+1	+1	+1	+1	+1	5	1.00	Valid
12	You have a complete understanding of and accept the role of lecturer and students in the Educational practical training course.	+1	+1	+1	+1	+1	5	1.00	Valid
13	You know that the Education Practical Training course is a professional platform course.	+1	+1	+1	+1	+1	5	1.00	Valid
External factors									
1	Lecturers with rich experience in theoretical and practical teaching are more helpful to improve your instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
2	Lecturers use modern teaching methods in the teaching process, which is more conducive to increasing students' interest in learning course design and expanding their knowledge.	+1	+1	+1	+1	+1	5	1.00	Valid

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
3	Lecturers emphasize the importance of students' active participation in the process of teaching practice in order to improve their instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
4	Incorporating diverse teaching methods is conducive to the development of students' instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
5	Combining teaching methods with real teaching scenarios can improve students' instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
6	You think that discipline or school rules, learning atmosphere, standard lessons, the state of the building, the location of schools affect in learning.	+1	+1	+1	+1	+1	5	1.00	Valid
7	You think that the social environment influences learning by creating a language environment and an experience environment which stimulate the mind to grow, and by systematically rewarding a child for learning.	+1	+1	+1	+1	+1	5	1.00	Valid
8	You think that teacher relationships with students, student relationships with students, discipline or school rules, learning atmosphere, the state of the building, the location of schools, and others affect students interest in instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
9	The implementation of effective instructional evaluation methods better measures the level of students' instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
10	Timely and specific feedback and evaluation help students to identify areas for improvement and adjust their instructional design accordingly, thus improving their ability to produce effective instructional materials and	+1	+1	+1	+1	+1	5	1.00	Valid

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
	strategies.								
11	An instructional environment that meets the requirements of practical educational training (comfortable classroom environment, state-of-the-art instructional equipment, etc.) helps to improve students' instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
12	Class size has a significant impact on the implementation of instructional design skills.	+1	+1	+1	+1	+1	5	1.00	Valid
Total (In Overview)							**135**	**27.00**	**Valid**

Table Appendix 2: Evaluation Results of IOC for Factor Analysis (For lecturers)

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Section 1 Common data of the respondent									
1	**Gender** ❑ A. Male ❑ B. Female	+1	+1	+1	+1	+1	5	1.00	Valid
2	❑ A. Elementary Education Major Mathematics ❑ B. Elementary Education Major (Language Orientationl) ❑ C. Elementary Education Major(General)	+1	+1	+1	+1	+1	5	1.00	Valid
3	**Teaching experience** ❑ A. Below 3 yrs. ❑ B. 4-6 yrs. ❑ C. 7- 9 yrs. ❑ D. Over 9 yrs.	+1	+1	+1	+1	+1	5	1.00	Valid
4	**Age** ❑ A. below 18 yrs. ❑ B. 18-20 yrs. ❑ C. 21-23 yrs. ❑ D. over 23 yrs.	+1	+1	+1	+1	+1	5	1.00	Valid
5	**Professional title** ❑A. Professor ❑ B. Associate Professor ❑ C. Assistant Professor ❑ D. Lecturer	+1	+1	+1	+1	+1	5	1.00	Valid
Section 2 Questions									
1	What factors do you think influence students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
2	How do you inspire creativity and innovation in instructional design in your teaching?	+1	+1	+1	+1	+1	5	1.00	Valid
3	How do you use teaching methods to promote the development of students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
4	What learning methods do you think can help students to develop their instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
5	How do you think the quality of teaching materials affects students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
6	How important do you think diversified teaching resources are in improving students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
7	How do you give feedback to students on their instructional design and help them improve?	+1	+1	+1	+1	+1	5	1.00	Valid
8	How do you think assessment methods affect students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
9	How do you think the instructional environment (e.g., classroom facilities, technology support, etc.) affects students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
10	How do you think class size affects students' instructional design skills?	+1	+1	+1	+1	+1	5	1.00	Valid
Total (In Overview)							**75**	**15.00**	**Valid**

Table Appendix 3: Evaluation Results of IOC for instructional model

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Utility Standard								
1. Situational teaching and Blended Learning Instructional Model is useful to lecturers to enhance learning achievement.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model is useful to students to enhance learning achievement.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model includes necessary and enough contents.	+1	+1	+1	+1	+1	5	1.00	Valid
4. Situational teaching and Blended Learning Instructional Model promotes to enhance learning achievement more compared to traditional teaching.	+1	+1	+1	+1	+1	5	1.00	Valid
5. Situational teaching and Blended Learning Instructional Model increases the learning achievement of students.	+1	+1	+1	+1	+1	5	1.00	Valid
Feasibility Standard								
1.The lecturer can apply p Situational teaching and Blended Learning Instructional Model to enhance learning achievement to their work and it is worth the time for actual use.	+1	+1	+1	+1	+1	5	1.00	Valid
2. The lecturer can develop the students to Situational teaching and Blended Learning Instructional Model	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
3. Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students is easy to use.	+1	+1	+1	+1	+1	5	1.00	Valid
4.the students always develop their learning all time by Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students	+1	+1	+1	+1	+1	5	1.00	Valid
5. The students are comfortable in learning by themselves Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students.	+1	+1	+1	+1	+1	5	1.00	Valid
Propriety Standard								
1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriate for lecturers to use assessment results to improve the students.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriateness for students to create knowledge by themselves.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is convenient to	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
use.								
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a systematic process to use.	+1	+1	+1	+1	+1	5	1.00	Valid
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is clear and suitable for use in learning and students development.	+1	+1	+1	+1	+1	5	1.00	Valid
Accuracy Standard								
1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is comprehensively analyzed from different contexts and sufficient for the synthesis of patterns.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement has a clear process.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement are described and the acquisition is clear.	+1	+1	+1	+1	+1	5	1.00	Valid
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement use techniques and tools which acquires accurate information and communication.	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a correct and comprehensive learning system.	+1	+1	+1	+1	+1	5	1.00	Valid

Table Appendix 4: Evaluation Results of IOC for handout

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Utility Standard								
1. Situational teaching and Blended Learning Instructional Model is useful to lecturers to enhance learning achievement.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model is useful to students to enhance learning achievement.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model includes necessary and enough contents.	+1	+1	+1	+1	+1	5	1.00	Valid
4. Situational teaching and Blended Learning Instructional Model promotes to enhance learning achievement more compared to traditional teaching.	+1	+1	+1	+1	+1	5	1.00	Valid
5. Situational teaching and Blended Learning Instructional Model increases the learning achievement of students.	+1	+1	+1	+1	+1	5	1.00	Valid
Feasibility Standard								
1.The lecturer can apply p Situational teaching and Blended Learning Instructional Model to enhance learning achievement to their work and it is worth the time for actual use.	+1	+1	+1	+1	+1	5	1.00	Valid
2. The lecturer can develop the students to Situational teaching and Blended Learning Instructional Model	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Model to Enhance Instructional Design Skills of Undergraduate Normal Students is easy to use.								
4.the students always develop their learning all time by Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students	+1	+1	+1	+1	+1	5	1.00	Valid
5. The students are comfortable in learning by themselves Situational teaching and Blended Learning Instructional Model to Enhance Instructional Design Skills of Undergraduate Normal Students.	+1	+1	+1	+1	+1	5	1.00	Valid
Propriety Standard								
1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriate for lecturers to use assessment results to improve the students.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is appropriateness for students to create knowledge by themselves.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is convenient to use.	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a systematic process to use.	+1	+1	+1	+1	+1	5	1.00	Valid
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is clear and suitable for use in learning and students development.	+1	+1	+1	+1	+1	5	1.00	Valid
Accuracy Standard								
1. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is comprehensively analyzed from different contexts and sufficient for the synthesis of patterns.	+1	+1	+1	+1	+1	5	1.00	Valid
2. Situational teaching and Blended Learning Instructional Model to enhance learning achievement has a clear process.	+1	+1	+1	+1	+1	5	1.00	Valid
3. Situational teaching and Blended Learning Instructional Model to enhance learning achievement are described and the acquisition is clear.	+1	+1	+1	+1	+1	5	1.00	Valid
4. Situational teaching and Blended Learning Instructional Model to enhance learning achievement use techniques and tools which acquires accurate information and communication.	+1	+1	+1	+1	+1	5	1.00	Valid

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
5. Situational teaching and Blended Learning Instructional Model to enhance learning achievement is a correct and comprehensive learning system.	+1	+1	+1	+1	+1	5	1.00	Valid

Table Appendix 5: Evaluation Results of IOC for Lesson Plan

No.	Item	Specialists' rating					Total	Mean	Results
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
Learning Objective									
1	Complying with content of the course	+1	+1	+1	+1	+1	5	1.00	Valid
2	Covering knowledge, process, and attitude	+1	+1	+1	+1	+1	5	1.00	Valid
3	Being measurable in knowledge, process, and attitude	+1	+1	+1	+1	+1	5	1.00	Valid
Contents									
4	Complying with learning objective	+1	+1	+1	+1	+1	5	1.00	Valid
5	Being appropriate in terms of time management	+1	+1	+1	+1	+1	5	1.00	Valid
6	Situational teaching and Blended Learning Instructional Model Complying with the designed instructional model	+1	+1	+1	+1	+1	5	1.00	Valid
7	Supporting students' learning	+1	+1	+1	+1	+1	5	1.00	Valid
8	Including various activities	+1	+1	+1	+1	+1	5	1.00	Valid
Learning materials									
9	Complying with the learning objectives	+1	+1	+1	+1	+1	5	1.00	Valid
10	Complying with the contents	+1	+1	+1	+1	+1	5	1.00	Valid
Evaluation and Assessment									
11	Complying with the learning objectives	+1	+1	+1	+1	+1	5	1.00	Valid
12	Including various methods and instruments	+1	+1	+1	+1	+1	5	1.00	Valid

IOC- Scoring Rubric Form

Item	Specialists' rating					Total	Mean	Results
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5			
1 Instructional design analysis ability								
Standard 1: Analysis of teaching objects	+1	+1	+1	+1	+1	5	1.00	Valid
Standard 2: Teaching goal analysis	+1	+1	+1	+1	+1	5	1.00	Valid
Standard 3: Teaching task analysis	+1	+1	+1	+1	+1	5	1.00	Valid
2. Instructional design implementation ability	+1	+1	+1	+1	+1	5	1.00	Valid
Standard 1: Selection and application of teaching methods	+1	+1	+1	+1	+1	5	1.00	Valid
Standard 2: Selection and application of teaching media	+1	+1	+1	+1	+1	5	1.00	Valid
Standard 3: Evaluation of teaching results	+1	+1	+1	+1	+1	5	1.00	Valid

Appendix E

Certificate of English

BANSOMDEJCHAOPRAYA
RAJABHAT UNIVERSITY

This is to certify that

Mrs. Liu Danhua

Achieved BSRU English Proficiency Test (BSRU-TEP) level

C1

Given on 22nd August 2021

(Assistant Professor Dr Kulsirin Aphiratvoradej)
Director

Appendix F

The Document for Acceptance Research

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RESPONSE FOR PUBLICATION OF THE ARTICLE

24th October 2023

The Editorial Department of Mcu Ubonratchathani journal of Buddhist Studies (TCI.2) MCU, Ubon Ratchathani Campus has considered the article

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Your article has been sent to 3 experts for peer review and found that its quality is at a "**Good**" level and academically useful.

Please be informed accordingly.

(Assoc.Prof. Dr.Phrakhruwutthidhampandit)
Editor of Mcu Ubonratchathani journal of Buddhist studies (TCI)
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The Editorial Department of Mcu Ubonratchathani journal of Buddhist studies (TCI)
Mahachulalongkornrajavidyalaya University,Ubon Ratchathani Campus
Somdet Rd. (7th Km.), Tambon Krasobe,
Mueang Ubon Ratchathani District, Ubon Ratchathani Province, 34000
The Editor: Tel.081-7908464, Coordinator: Tel. 081-2642443
E-mail: Sripracho2515@gmail.com, Website: https://journal.ubonmcu.org

Researcher Profile

Name–Surname	Liu Danhua
Day/Month/Year	27/12/1985
Address	1 Xueyuan Road, Liandu District, Lishui City, Zhejiang Province, China
Education	
2003.9-2007.7	WenZhou University, WenZhou City, China Major: Chinese Language and Literature, Degree: Bachelor's Degree
2012.4-2014.6	Zhejiang Normal University, Jinhua, China Major: Public Administration, Degree: Master
2021.8-Present	Bansomdejchaopraya Rajabhat University, Bangkok, Thailand. Major: Curriculum and Instruction, Degree: Ph.D.
Working experience	
2007.9- Present	Lishui College, Lishui, China; Location: Research Intern