DEVELOPMENT OF ACTIVE LEARNING MODEL FOR ENHANCING TEACHER SELF- EFFICACY OF PRE-SERVICE ENGLISH TEACHERS

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DEVELOPMENT OF ACTIVE LEARNING MODEL FOR ENHANCING TEACHER SELF- EFFICACY OF PRE-SERVICE ENGLISH TEACHERS

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BY

DAI MANMAN

HAS BEEN APPROVED BY THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DOCTOR OF EDUCATION IN ED.D. (EDUCATIONAL PSYCHOLOGY AND GUIDANCE)
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Title	DEVELOPMENT OF ACTIVE LEARNING MODEL FOR ENHANCING TEACHER SELF- EFFICACY OF PRE-SERVICE ENGLISH TEACHERS
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This study aimed 1) to investigate the definition and components of Teacher Self-Efficacy (TSE) of pre-service English teachers, 2) to develop an active learning model for enhancing their TSE, and 3) to evaluate the model's effectiveness. Forty third-year pre-service English teachers from Liupanshui Normal University participated, assigned via matched-pair random sampling to an Experimental Group (EG, n=20) receiving the Active Learning Model intervention, and a Control Group (CG, n=20) receiving traditional instruction. Data were collected using semi-structured interviews and a TSE Questionnaire, analyzed with descriptive statistics and ANOVA. Key findings revealed: 1) Pre-service English teachers' TSE consists of three components: Classroom Management, Instructional Strategies, and Student Engagement. 2) The developed 11-session Active Learning Model, each lasting 90 minutes, followed four steps: Lead-in, Activities Applying, Active Assessment, and Wrap-up. 3) The model effectively enhanced pre-service English teachers' TSE: (1) EG's average TSE scores significantly increased from pre-test to post-test and follow-up, and (2) EG's average TSE scores were significantly higher than those of the non-intervened CG's in both post-test and follow-up assessments.

Keywords: Teacher Self-Efficacy, Active Learning model, Pre-service English teachers

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CHAPTER 1
INTRODUCTION

1.1 Research Background

Teacher education has been paid constant attention worldwide as it is a crucial role shaping human capital development. In order to strengthen teacher education, many countries improve teacher education from the perspective of national system and strategical supports, theory and practice innovation. For example, China has put forward the concept of “education power”, emphasizing the importance of “teacher education”. With the continuous in-depth research, the theories of teacher education in all aspects have gradually developed and matured. The issue of how to improve the quality of teacher education from various aspects such as teaching theory, teaching method and teacher psychology has been heatedly discussed by scholars. Among them, the research of Teacher Self-Efficacy (TSE for short) originated in the 1970s, and has been paid more and more attention in the research of teacher education.

In this study, the researcher observed that pre-service teachers often struggle with issues such as the disconnect between theory and practice, classroom management difficulties, and poor development of teaching skills, all of which can influence their future career decisions and professional development.

Despite calls for reform, there’s a gap in research on pedagogical models that effectively enhance TSE of pre-service English teachers. Specifically, empirical studies on how active learning strategies boost TSE in future English language teachers in China are scarce. Most existing research focuses on in-service teachers, overlooking the crucial pre-service phase where professional identity and efficacy beliefs are initially formed.

TSE is crucial for effective teaching, positive student outcomes, and teacher well-being. It influences instructional practices, classroom management, student motivation, and teacher resilience. The research on teacher education has gradually developed from teaching theory and subject teaching methods to the study of teachers’

psychology and other aspects. In terms of research objects, scholars not only pay attention to in-service teachers, but also gradually attach importance to the cultivation of pre-service teachers. According to the previous research, TSE not only influences their capabilities as future educators but also shapes their professional identity and commitment to the teaching profession. Literature consistently supports the notion that fostering TSE is essential for improving educational outcomes and ensuring teacher satisfaction and retention. (Klassen et al., 2009; Klassen and Tze, 2014; Caprara et al., 2003).

TSE was firstly proposed by Armor at al. (Armor et al., 1976) in a Rand corporation report. According to Bandura (1977), TSE means "teachers' beliefs in their ability to effectively handle the tasks, obligations, and challenges related to their professional activity" (Barni et al., 2019). Pfitzner-Eden (2016) explained TSE as "the beliefs that in-service and pre-service teachers hold about their capabilities to organize and execute the courses of action required to produce given teaching attainments with regard to instruction, classroom management, and student engagement" (Pfitzner-Eden, 2016, p. 2). TSE can also be defined as "a teacher's belief in his or her own capability to prompt student engagement and learning, even when students are difficult or unmotivated" (Lazarides & Warner, 2020, p. 1). TSE demonstrates confidence of "individual teachers' beliefs in their own ability to plan, organize, and carry out activities that are required to attain given educational goals" (Skaalvik & Skaalvik, 2010, p. 1059).

There are three components of TSE in this study: Instructional Strategies Efficacy (a teacher's belief in their ability to design classes, including using effective teaching methods and assessment approaches, and adapting instruction to meet diverse student needs and foster student learning), Classroom Management Efficacy (a teacher's belief in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment), and Student Engagement Efficacy (a teacher's belief in their ability to motivate students, maintain their interest, and promote active participation in learning activities). The study will investigate TSE of pre-service teachers based on the three different components.

The issue of enhancing TSE has been heatedly discussed recent years. Literature show that TSE can be enhanced with four resources: mastery experiences, vicarious experiences, verbal persuasion, and emotional and psychological states. (Bandura, 1977; Tschannen-Moran & Hoy, 2001; Gibson & Dembo, 1984). Blending Bandura (1977) and Tschannen-Moran et al. (1998) into his explanation, Gordon et al. (2024) also proposed four sources of improving TSE: Mastery experiences, Vicarious experiences, Social persuasion, Emotional arousal. The study will design a learning model that can cover the above four resources to enhance TSE of pre-service English teachers.

Numerous scholars have explored a variety of approaches aimed at enhancing Teacher Self-Efficacy (TSE). For example, Hoogendijk et al. (2018) implemented a professional development program with “Key2Teach”, which was designed to enhance teachers' self-efficacy through targeted, structured training. In another study, Şahin et al. (2024) introduced a STEM-based professional development (PD) initiative involving 25 teachers of gifted students, aiming to examine the impact of STEM pedagogy on teacher efficacy. Similarly, Susan Raymond and Florence Gabriel (2023) proposed an Ecological Framework that integrates both environmental and individual factors to support the development of TSE in both pre-service and in-service teachers.

Among the various strategies identified for fostering TSE, active learning has attracted substantial attention in recent years due to its learner-centered orientation and emphasis on experiential engagement. Empirical research has consistently demonstrated a positive relationship between active learning and self-efficacy (Fook et al., 2015; Canakay & Bilen, 2008; Hendrickson, 2019). Students who participate in well-structured active learning environments tend to report higher levels of self-efficacy compared to those in more traditional, passive learning contexts. Tien and Hamid (2020) further support this view, noting that the adoption of active learning strategies in higher education classrooms significantly enhances the teaching self-efficacy of instructors.

Active learning can be broadly defined as a pedagogical approach that positions students as active participants in their own learning process. According to

Bonwell and Eison (1991), Prince (2004), and Felder and Brent (2009), active learning involves a range of structured learning activities that require learners to engage cognitively and behaviorally in tasks such as discussion, analysis, application, and reflection. Rather than passively receiving information, learners in active learning environments are encouraged to interact with content, peers, and instructors to deepen their understanding. As Freeman et al. (2014) emphasize, this approach fosters the development of critical thinking, problem-solving skills, and meaningful comprehension, ultimately leading to more sustained and authentic learning outcomes.

Building on these theoretical and empirical foundations, the present study introduces a pedagogical design grounded in the principles of active learning, with the specific goal of enhancing the TSE of pre-service English teachers. Recognizing that high self-efficacy is essential for future educators to manage classrooms, design effective lessons, and respond adaptively to diverse student needs, this study develops an instructional model that integrates three core components and four key influencing resources of TSE. These include mastery experiences, vicarious experiences, verbal persuasion, and emotional/physiological states, aligned with Bandura's (1997) framework.

The proposed model is structured around four major pedagogical steps: Lead-in, Activities Applying, Active Assessment, and Wrap-up. Each step is carefully designed to incorporate active learning strategies, namely collaborative learning, experiential learning, project-based learning, and active assessment. This framework aims to provide pre-service teachers with rich opportunities to explore, practice, and reflect on teaching practices in a supportive, interactive, and constructively challenging environment. Through this dynamic learning experience, the model seeks to strengthen their professional identity, boost their instructional confidence, and prepare them for the complex realities of the modern classroom.

1.2 Research Questions

In order to achieve the research objectives, the present study raises three research questions:

1.What are the definition and components of TSE of pre-service English teachers?

2.What are the characteristics of the Active Learning Model for enhancing TSE of pre-service English teachers?

3.How to evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers?

1.3 Objectives of the Study

The objectives of the study are:

1.To study the definition and components of Teacher Self-Efficacy of pre-service English teachers.

2.To develop an active learning model for enhancing Teacher Self-Efficacy of pre-service English teachers.

3.To evaluate the effectiveness of the Active Learning Model for enhancing Teacher Self-Efficacy of pre-service English teachers.

1.4 Significance of the Study

The study is of significance in the domain of educational psychology and teacher education as an interdisciplinary research. Its significance are analyzed in the section from both theoretical and practical aspects.

1.4.1 Theoretical Significance

This study not only demonstrates how Active Learning can be specifically applied to boost TSE, contributing to the theoretical development of Active Learning in teacher education, but also provides theoretical insights into the relationship between Active Learning and the development of self-efficacy, showing how experiential, collaborative, and reflective practices influence teacher confidence. Moreover, this study contributes to the refinement of teacher education models by incorporating Active

Learning as a key strategy for enhancing TSE, offering a new perspective on teacher training, connecting theories of Active Learning with educational psychology, fostering interdisciplinary dialogue and enriching the theoretical landscape of both fields.

1.4.2 Practical Significance

This study provides teacher education programs with actionable strategies to enhance TSE, leading to more confident and capable future educators. It also helps pre-service teachers to develop practical classroom management techniques, improving their ability to handle real-world teaching challenges by encouraging them to be more engaged and participatory, leading to deeper understanding and retention of teaching concepts. By enhancing TSE of pre-service teachers, Active Learning can help reduce stress and burnout among them, driving them to develop a stronger professional identity and a deeper commitment to the teaching profession and long-term career growth.

1.5 Scope of Research

This sections introduces participants, population and sample, along with the variables of the study.

1.5.1 Participants of Phase 1

In the first phase, five experts from the relevant domain of study and 100 pre-service English teachers participate in the research. 5 experts take part in a semi-structured interview and examine the questionnaire (measurement of TSE) developed in this phase. 100 pre-service English teachers from A university of Guizhou Province fill in the questionnaire as a pilot test to testify the reliability of the questionnaire.

1.5.2 Participants of Phase 2

In the second phase, 5 experts of more than 10 years of teaching experience and 20 pre-service English teachers from B University of Guizhou were involved. 5 experts are invited to evaluate the teaching plan based on the Active Learning Model, including the layout of the plan, learning objectives and teaching procedures. 20 pre-service English teachers took part in a try-out teaching to evaluate the teaching plan in a real-world teaching environment.

1.5.3 Identifying Population and Sample

Population: The population of the study is 80 pre-service English teachers in the 3rd year Liupanshui Normal University (a university located in the west of Guizhou Province) who are preparing to teach English at the local primary or secondary schools as its population.

Sample: 40 participants with the lowest TSE scores were purposively selected for inclusion in the experimental phase. These 40 pre-service English teachers were then assigned to either the experimental group or the control group using simple random sampling with matched pairs based on their TSE scores. This approach ensured that the two groups were balanced in terms of their initial self-efficacy levels, thereby improving the internal validity of the study.

1.5.4 Variables

Dependent Variable

Teacher Self-efficacy

Independent Variable

Active Learning Model

1.6 Definition of Terms

Key definitions of the study are illustrated in this section. Firstly, the study defines the TSE along with its components. And then the study gives the definition of Active Learning, including a thorough explanation of major steps in the learning model.

1.6.1 Teachers Self-efficacy (TSE)

Teacher self-efficacy (TSE) of pre-service English teachers refers to their belief in their ability to effectively plan, instruct, and manage a classroom in the context of English language teaching. It encompasses confidence in delivering engaging lessons, facilitating student learning, handling classroom challenges, and adapting instructional strategies to diverse learners.

The three components can be defined as the following:

1. **Classroom Management Efficacy**: a teacher's belief in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment.

2. **Instructional Strategies Efficacy**: a teacher's belief in their ability to design classes, including using effective teaching methods and assessment approaches, and adapting instruction to meet diverse student needs and foster student learning.

3. **Student Engagement Efficacy**: a teacher's belief in their ability to motivate students, maintain their interest, and promote active participation in learning activities.

1.6.2 Active Learning Model

Active Learning Model can be defined as an instruction to learning engaging a series of learning-centered activities that students participate in to acquire knowledge and cultivate skills.

To effectively enhance TSE of pre-service English teachers, this study incorporates four active learning strategies based on its theoretical foundations and demonstrated potential to strengthen components of TSE.

1. **Collaborative Learning**

Collaborative Learning emphasizes the importance of social interaction in knowledge construction. It involves students working together in pairs or small groups to discuss concepts, solve problems, and co-construct understanding. Collaborative Learning will be applied through activities such as lesson planning in teams, peer evaluation, group discussion and role-play simulations of teaching scenarios.

2. **Experiential Learning**

Experiential Learning focuses on learning through direct experience, reflection, conceptualization, and experimentation. Experiential Learning will be integrated through teaching demonstrations, micro-teaching sessions, classroom management simulations, and reflection journals in the study, allowing pre-service teachers to apply theory in realistic contexts, reflect on their actions, and continuously refine their teaching strategies.

3. Project-based Learning

Project-Based Learning is an instructional method in which learners actively explore real-world problems and produce meaningful outputs over an extended period. Participants in the study will engage in team-based projects such as designing teaching plans, creating learning materials for specific learning objectives, and developing assessments aligned with certain teaching objectives. Through such strategy, pre-service teachers will take ownership of their learning, engage in authentic teaching-related tasks, and develop both subject matter knowledge and pedagogical skill, all of which contribute positively to their TSE.

4. Active Assessment

Active Assessment refers to assessment practices that are integrated into the learning process and involve learners in monitoring, evaluating, and improving their performance. This includes peer assessment, self-assessment, mentor-feedback, etc. In this study, Active Assessment will be embedded in the model to help pre-service teachers track their own progress, identify strengths and areas for improvement, and build confidence in their teaching abilities.

The above four strategies will be adopted in the following steps of the Active Learning Model in the study:

Step 1: Lead-in is the first step of the class, including introduction to necessary information required for implementing the class such as the learning goals and methods of the class and warm-up activities. Project-based Learning and Experiential Learning are used in this step.

Step 2: Activities Applying is the main body of the process, mainly consists of knowledge input, collaboration and practice. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

Step 3: Active Assessment is the stage of evaluating learning, including self-assessing, peer assessing and teacher-student assessing. Active Assessment is used in this step.

Step 4: Wrap-up is the closing part of the class, including concluding answering potential questions and homework assigning, etc. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

1.7 Research Hypothesis

The study aims to enhance TSE of pre-service English teachers through the implementation of the Active Learning Model. To guide this research, two hypotheses have been proposed.

Hypothesis 1: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than their average TSE score at the pre-test stage.

Hypothesis 2: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than that of their counterparts in the control group.

1.8 Conceptual Framework

The research is developed with the following theoretical foundation: Constructivist learning theory and social learning theory developed by Bandura. Aiming to enhance TSE of pre-service English teachers by conducting Active Learning Model, the conceptual framework of this study is illustrated in Figure 1. The conceptual framework shows that, based on Constructivist Learning Theory, the study develops the Active Learning Model to enhance TSE in pre-service English teachers. The model consists of four steps (Lead-in, Activities Applying, Active Assessment, and Wrap-up) with the following active learning strategies: Collaborative Learning, Experiential Learning, Project-Based Learning and Active Assessment. This model is designed to enhance the dependent variable, TSE with its three components: Classroom Management Efficacy, Instructional Strategies Efficacy, and Student Engagement Efficacy.

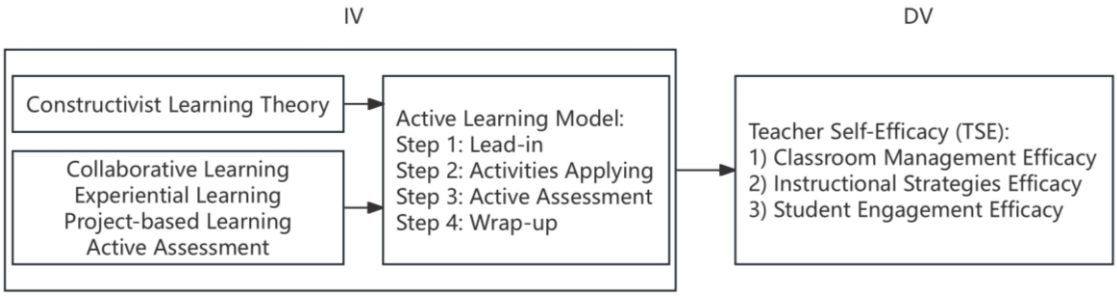

Figure 1 Conceptual Framework

CHAPTER 2
LITERATURE REVIEW

This chapter reviews Teacher Self-Efficacy (TSE), Active Learning Model and the interplay between the two as a comprehension of the definitions, components and other related aspects what the present study requires. The outline of the review is shown as below:

2.1 Review of TSE

TSE spans several decades, originating from Bandura's foundational work on self-efficacy in the late 1970s and early 1980s to a well-established field of research. The term was official proposed in a Rand corporation report by Armor (1976). Understanding and enhancing TSE is crucial for improving teaching practices and student outcomes. This section reviews TSE from the perspective of definition, components, measurements, enhancing strategies and related research.

2.1.1 The Definition of TSE

Scholars explained TSE from many perspectives with terms as "beliefs and judgments", regarding TSE as a kind of mental state or mental behavior. Bandura (1997)

defined TSE as judgments of their capabilities to organize and execute courses of action required to attain designated types of performances.

Gibson and Dembo (1984) extended Bandura's concept to education, identifying two key dimensions:

1. Personal Teaching Efficacy (PTE): A teacher's belief in their own teaching capabilities

2. General Teaching Efficacy (GTE): A belief in the efficacy of teachers as a whole in influencing student learning and motivation.

Tschannen-Moran & Hoy (2001) also defined TSE as beliefs teachers hold about their capabilities to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context. They distinguished TSE and teaching efficacy beliefs of teachers, claiming that TSE reflects how teachers evaluate their professional capabilities even if confronted with difficulties and problems. Caprara et al. (2003) proposed TSE as beliefs of one's capability to organize and execute the courses of action required to manage prospective situations.

TSE can be also referred to as the beliefs of capability in teaching tasks as one's capabilities to perform teaching-related tasks effectively, capability to accomplish specific teaching tasks in particular contexts, capability to influence student learning and motivate students in the classroom (Klassen & Tze, 2014; Gibson & Dembo, 1984; Tschannen-Moran et al, 1998)

Guskey & Passaro (1994) proposed that TSE was teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated.

Since self-efficacy can be referred to as one's perceived expectations of achieving certain tasks or receiving rewards through personal efforts (Bandura, 1999). TSE are defined as a teacher's perceived ability to affect students' learning (Soodak & Podell, 1996). According to Ma, McMaugh & Cavanagh (2022), TSE referred to how teachers perceive their capability to achieve goals in daily teaching. Hoy (2004) defined TSE as a judgment about capabilities to influence student engagement and learning,

even among those students who may be difficult or unmotivated. Malinen et al. (2013) defined TSE for inclusive practices as teachers' belief in their ability to successfully teach and support all students, including those with diverse needs (e.g., disabilities, learning difficulties) in an inclusive classroom setting. This involves the confidence to adapt instruction, manage classroom behavior, and create a supportive environment that fosters learning for students of varying abilities.

According to Berkant & Baysal (2018), TSE refers to a pre-service teacher's belief in their ability to effectively perform various teaching tasks and responsibilities. These tasks may include classroom management, instructional strategies, and engaging students in learning. Kasalak & Dagyar (2020) also defined TSE as teachers' belief in their ability to successfully carry out teaching-related tasks and responsibilities. This includes managing the classroom, implementing instructional strategies, and fostering student engagement.

The concept of TSE, as outlined above, stressing "belief of capacity", refers to how confident teachers feel in their capabilities to handle classroom challenges, motivate students, and foster a productive learning environment, based on their training and experiences. It is a key psychological factor that influences teaching behavior, decision-making, and professional development. The above definitions show that teachers with high level of TSE tend to remain constant enthusiasm in teaching and a growing commitment to teaching career. Also, high level of TSE has positive effects on students achievement and sustainable persistence of sticking to professional development.

Making use of Bandura, Tschannen-Moran and Hoy, the study re-organizes a definition, on which the current study is conducted:

TSE refers to *personal beliefs in capabilities that provides teachers with sustainable professional commitment and the faith for success in teaching and student learning even if confronted with hinders*.

2.1.2 Components of TSE

This section focuses on components of TSE, which can be used to analyze and evaluate TSE of pre-service English teachers. Previous research proposed components related to instructional design, classroom management, etc.

Ma, McMaugh & Cavanagh (2021, p. 64) proposed a three-domain Model of TSE "classroom management, student engagement and instructional strategies", summarizing that TSE of pre-service teachers are supported by interactions with students, feedback from mentors, and experiences of success or challenge in the classroom, which are manifestations of mastery experiences, vicarious experiences and verbal persuasion. Mireles-Rios et al (2019) explored how administrative feedback influences TSE in three key areas: classroom management, instructional strategies, and student engagement. The study proposed the three elements of classroom as sub-scales of TSE. Cason (2018) examined how student engagement, instructional strategies, and classroom management influence TSE of teachers in Christian private schools, which can help in developing certain programs/models to enhance TSE. Bekoe et al (2015) made use of a mixed-method, sampling of 150 final-year teacher-trainees from a Ghanaian College to investigate their TSE of samples in student engagement, instructional practices, and classroom management. The study revealed a significant link between these trainees' self-efficacy beliefs and their actual teaching approaches that their beliefs influenced on student engagement, instructional strategies, and classroom management of trainees.

The current study proposes three components of TSE of pre-service English teachers. The three components of TSE which will be adopted in the teaching experiment design are: Classroom Management Efficacy, Instructional Strategies Efficacy and Students Engagement Efficacy.

1. Classroom Management Efficacy

According to the literature review, Classroom Management Efficacy is a component of TSE referring to a teacher's belief in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning

environment. Bandura (1997) emphasized that teachers with high efficacy in classroom management are better at creating a positive classroom atmosphere, which reduces disruptive behaviors and enhances student learning. Tschannen-Moran & Woolfolk Hoy (2001) defined "classroom management efficacy" as the teacher's confidence in establishing rules, maintaining discipline, preventing disruptionsand promoting a supportive learning environment. They (ibid) highlighted that teachers with strong classroom management efficacy are more resilient in classroom challenges and are more likely to persist in maintaining discipline and order. They found that classroom management is a significant predictor of overall TSE. Gibson & Dembo (1984) collected data from the perspective of teachers' confidence in their ability of engaging students, managing classroom behaviors, and facilitating learning, which can be regarded as components of TSE.

Classroom management efficacy is crucial, especially in challenging classroom environments (Evertson & Weinstein, 2013). Studies indicated that teachers with high classroom management efficacy experience less stress and burnout (Özdemir, 2003; Aloe et al., 2014). On the contrary, teachers with lower classroom management efficacy are more likely to struggle with managing students behavior and may be easier to give up when confronted with disruptive challenges, and tend to exhibit greater distrust and frustration toward misbehaving students and are more likely to have a higher number of problem students in their classrooms as a consequence (Brouwers & Tomic, 2000).

2. Instructional Strategies Efficacy

Hattie (2009) defined instructional efficacy as the measurable impact of specific teaching strategies on student achievement, emphasizing the importance of feedback, teacher clarity, direct instruction, and student-teacher relationships. Rosenshine (2012) conceptualized instructional strategies as teaching practices supported by both cognitive science and classroom research, emphasizing clarity, structure, and active student engagement.

Tschannen-Moran & Woolfolk Hoy (2001) showed that teachers with high instructional efficacy are more likely to use innovative teaching methods, including Active Learning. Guskey (1988) stressed in his study on the impact of teacher training and professional development on enhancing instructional efficacy. Gibson and Dembo (1984) found that teachers with high instructional efficacy are more likely to use a variety of teaching methods, such as differentiated instruction, cooperative learning, and inquiry-based learning, to meet the needs of students. Hattie (2009) revealed that TSE, particularly in instructional strategies, is one of the key factors influencing students' achievement.

Based on the above review, the study defines this component as "a teacher's belief in their ability to design classes, including using effective teaching methods and assessment approaches, and adapting instruction to meet diverse student needs and foster student learning".

3. Student Engagement Efficacy

Previous studies (Tschannen-Moran & Woolfolk Hoy, 2001; Emiru, E. K., & Gedifew, M. T., 2024; Skinner & Belmont, 1993) pointed out that Student Engagement Efficacy refers to a teacher's confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities. It is very important since when teachers work with at-risk or low-achieving students, they tend to have more faith with these students if they have a high sense of Student Engagement Efficacy (Pendergast, Garvis, & Keogh, 2011). Research indicates that teachers who are of higher Student Engagement Efficacy are more likely to experience a higher perception of student engagement and employ specific strategies (Van Uden, Ritzen, & Pieters, 2013).

Schunk and Pajares (2009) agreed that teachers who believe in their ability to engage students are more likely to implement strategies that foster intrinsic motivation, who are often more successful in maintaining high levels of student engagement. Klassen and Chiu (2010) found that students' engagement efficacy is highly related to positive student outcomes, from higher levels of academic achievement to lower dropout

rates. Teachers with high confidence in their ability to engage students tend to see higher active participation and better learning outcomes in their class. Emiru & Gedifew (2024) found that TSE, particularly in student engagement, positively correlates with students' behavioral, emotional, and cognitive engagement. They (ibid) pointed out that teachers with higher Student Engagement Efficacy are more likely to employ diverse instructional methods, leading to increased student participation and interest.

2.1.3 Measurements of TSE

Several scales of TSE have been raised in recent years. While these scales share the common goal of measuring TSE, they vary in focus, structure, and applicability. Several scales of TSE are listed as the follows with a comparison to use for reference. Those scales are clearly verified with high validity and reliability.

1.Teacher Sense of Efficacy Scale (TSES):

TSES was developed by Tschannen-Moran and Hoy (2001) to measure teachers' beliefs in their abilities to influence students' outcomes. Grounded in Bandura's social cognitive theory, emphasizing context-specific of self-efficacy, TSES conceptualizes teacher efficacy as a multifaceted construct.

There are 24 items covering three domains: instructional strategies, classroom management, and student engagement, with each domain contains 8 items. The scale used a 9-point Likert-type scale, allowing teachers to indicate their degree of confidence in their abilities, and has been considered a reliable and valid instrument for measuring teacher self-efficacy and its relationship with various educational outcomes (Moulding et al., 2014; Scherer et al., 2016; Gálvez-Nieto et al., 2023).

2.Teachers' Self-Efficacy Scale (TES):

Designed to assess teachers' professional task management confidence, the 12-item Teachers' Self-Efficacy Scale (TSES) by Caprara et al. (2003) employed a 7-point Likert scale from "totally disagree" to "totally agree". With a Cronbach's alpha of 0.83, the scale demonstrates strong internal consistency.

The scale can be used to demonstrate its relevance in understanding various aspects of teachers' professional experiences. For example, Caprara et al. (2006) pointed out that TSE beliefs significantly predict job satisfaction and students'

academic achievement. Teachers with higher TSE tend to exhibit greater work involvement and effectiveness, which in turn positively influences students' outcomes. What's more, it is used in studies (Caprara et al., 2003; Barni et al., 2019; Stephanou et al., 2013) indicating TSE's association with personal values and motivations for teaching.

In summary, the scale proposed by Caprara et al. can be used as a tool for assessing TSE, offering valuable insights into factors that influence teaching effectiveness, job satisfaction, and students' achievement.

3.Teachers' Efficacy Beliefs Scale (TEBS):

The Teacher Efficacy Belief Scale (TEBS) is designed to measure teachers' self-efficacy beliefs from two primary dimensions: Personal Teaching Efficacy (a teacher's confidence in their own teaching abilities and their capacity to influence student learning outcomes) and General Teaching Efficacy (a teacher's belief in the overall impact of effective teaching on student achievement, considering external factors such as socioeconomic status and home environment).

It is developed by Gibson and Dembo (1984) originally with 30 items and a 6-point Likert scale ranging from "strongly disagree" to "strongly agree". The TEBS has demonstrated good internal consistency, with an alpha coefficient of 0.79.

Since its proposal, researches (Cerit, Y., 2010; Yorke, L., 2011) have adopted modified versions of TEBS to assess TSE across different cultural settings, acknowledging that certain items may require contextual adjustments to maintain relevance. Some scholars (Tschannen-Moran & Hoy, 2001; Cerit, 2010) even questioned the scale, arguing it is potentially influenced by cultural factors.

4.Beliefs About Teaching Efficacy Scale (BATES):

Guskey (1988) developed BATES as a tool to focus on their perceptions of teachers' ability to influence students' learning and behaviors. BATES comprises items that evaluate teachers' confidence in their teaching abilities and their perceptions of the impact of their teaching on student outcomes.

As a valuable assessment in understanding the role of TSE in education, BATES underscores the importance of fostering positive efficacy among teachers to

enhance teaching effectiveness and student learning outcomes. It is used in educational research to provide insights into how TSE influence teaching behaviors and student achievement (Guskey, 1988; Tschannen-Moran & Hoy, 2001; Guske & Passaro, 1994; Barnes, 2000).

The study launched a comparison study from the following perspectives: purpose, structure and application domains (Table 1).

Table 1 Comparison of Research Tools (TSE Questionnaire)

	Teacher Sense of Efficacy Scale (TSES)	Teachers' Self-efficacy Scale (TES)	Teachers' Efficacy Beliefs Scale (TEBS)	Beliefs About Teaching Efficacy Scale (BATES):
Purpose	To measure teachers' beliefs in their abilities to impact students' outcomes across instructional strategies, classroom management, and student engagement	To Measures teachers' self-efficacy beliefs related to job satisfaction	To measures teachers' self-efficacy beliefs in areas such as student engagement, instructional strategies, classroom management, dealing with problem students, and working with parents	To measures teachers' beliefs in their efficacy to implement instructional innovations and practices

Table 1 (continued)

	Teacher Sense of Efficacy Scale (TSES)	Teachers' Self-efficacy Scale (TES)	Teachers' Efficacy Beliefs Scale (TEBS)	Beliefs About Teaching Efficacy Scale (BATES):
Structure	Likert-scale items assessing different aspects of teaching efficacy	Likert-scale items assessing teachers' beliefs about their teaching efficacy	Likert-scale items assessing multiple domains of teaching efficacy	Likert-scale items assessing teachers' beliefs about their efficacy in implementing instructional innovations
Domains	instructional strategies, classroom management, and student engagement	teachers' beliefs about their teaching efficacy	student engagement, instructional strategies, classroom management, dealing with problem students, and working with parents	teachers' beliefs on efficacy in implementing instructional innovations

In conclusion, the present study will make use of Teacher Sense of Efficacy Scale (TSES) proposed by Tschannen-Moran and Hoy (2001) as the measurement of the study. Th study will develop a questionnaire covering 3 components of TSE of pre-service teachers (Classroom Management Efficacy, Instructional Design Efficacy, and Student Engagement Efficacy) with 24 items that are used among pre-service teachers

to assess their TSE. Modification of the questionnaire along with testing of its reliability and validity will be discussed in Chapter 3.

2.1.4 Strategies of Enhancing TSE

Since TSE plays a significant role in cultivating qualified teachers, scholars intend to pay constant attention to the topic of “enhancing TSE”. The most common approach would be implemented grounded in Bendura’s four sources of self-efficacy.

According to Bendura (1977), there are fours sources that can help enhancing self-efficacy, which are: Mastery Experiences, Vicarious Experiences, Emotional, Physical, and Psychological States and Verbal Persuasion. Enhancing of TSE also needs to put its emphasize on the four aspects. The four sources are highly suggested to be used in the research of generating strategies of enhancing TSE. For example, Shaughnessy (2004, pp. 159-161) concluded some suggestions to enhance TSE, which can be used as guidelines to design an Active Learning model with the purpose of enhancing TSE: “Modeling, Mastery Experiences, Verbal Persuasion, Physiological Arousal and Teach Self-Regulation Strategies”.

Blending Bandura (1977) and Tschannen-Moran et al. (1998) into his explanation, Gordon et al. (2024) proposed four sources of TSE of pre-service teachers, which will be used in the next section to illustrate effective strategies:

1. Mastery experiences: successful experiences that PSTs (means pre-service teachers in this study) have when they attempt to teach a new curriculum or assessment processes;

2. Vicarious experiences: observations of others’ teaching, for example, PSTs watching their mentor teachers implementing the knowledge and skills of curriculum and assessment reforms, either successfully or not;

3. Social persuasion: mentor teachers and/or peers giving verbal feedback;

4. Emotional arousal: defined as physical and emotional states of being in reaction to attempting or thinking about undertaking a skill or experience, like teaching a new curriculum.

Since the study has proposed three component of TSE of pre-service teachers (Classroom Management, Instructional Design and Student Engagement), the study will review strategies that can be effective in enhancing three components of TSE components from the perspective of the four resources.

2.1.4.1 Mastery Experiences and Instructional Design, Classroom Management and Student Engagement

According to Bandura (1999), Mastery experiences are the most influential factor in building TSE. Active learning methods such as micro-teaching, peer teaching, and problem-based learning (PBL) allow pre-service teachers to practice and refine their teaching strategies. Research indicates that repeated engagement in these practices leads to increased confidence and competence in teaching (Darling-Hammond, 2006; Hagger et al., 2008).

Using Mastery experiences as a strategy to enhance TSE usually refers to using teaching methods such as project-based learning, experiential learning, etc. to make student get hands-on experience. Literature (Darling-Hammond et al, 2009; Marzano, et al., 2003; Fredricks et al., 2004; Klassen & Chiu, 2010; Hattie, 2009) show the importance of mastery experiences in developing the three components, consequently effective in enhancing TSE.

Guskey (2002) referred in his study that crafting and delivering influential lessons that foster student learning strengthens instructional efficacy. Zee and Koomen (2016) pointed out that effective classroom management not only boosts self-efficacy but also relieves teachers' stress. What's more, implementing interactive teaching methods and observing high student engagement enhances TSE too (Fredricks, Blumenfeld, & Paris, 2004).

Hence, Pre-service teachers need to be given opportunities to practice and refine their teaching strategies and shape their skills of managing classroom and engaging students in real or simulated classroom settings.

2.1.4.2 Vicarious Experiences and Instructional Design, Classroom Management and Student Engagement

Methods as peer observation and collaborative teaching, modelling and case studies, video-based learning and role playing can be used as fostering vicarious experience to enhance TSE of pre-service teachers. It is verified that the three components of TSE can be enhanced through fostering vicarious experience. (Wei et al., 2010; Brouwers & Tomic, 2000)

Marzano (2007) stressed the importance of observing successful teaching practices peers or mentors and how those observations help teachers learn strategies that engage students more effectively. Teachers can adopt similar strategies to enhance their own student engagement efficacy. Rots et al (2012) claimed that observing others can enhance a teacher's faith in their own instructional abilities and classroom management, especially in terms of applying motivation and engagement strategies. Those who observe how colleagues successfully manage their classrooms and design engaging lessons tend to be more capable of achieving the same goal. Beijaard et al (2004) discussed how teachers develop a sense of what works in the classroom by learning from the experiences of others, which influences their own classroom practices and teaching efficacy, contributing to the development of teaching practices, including classroom management and student engagement. Cooperative learning and peer feedback create structured opportunities for pre-service teachers to observe effective teaching methods, analyze their effectiveness, and model similar behaviors (Putnam & Borko, 2000).

As an illumination, the study will consider related effective teaching methods into the design of the Active Learning model.

2.1.4.3 Verbal/Social Persuasion and Instructional Design, Classroom Management and Student Engagement

Verbal/Social Persuasion, mainly referring to positive feedback, peer support and mentorship, is verified effective in enhancing TSE either (Guskey, 2002; Brouwers & Tomic, 2000; Tschannen-Moran, et al, 2001).

Tschannen-Moran et al (2007) argued that teachers who receive positive feedback from leaders and co-workers on handling students' behavior feel more confident in classroom management skill, which indicates encouragement from peers and mentors can reinforce TSE that they can effectively manage classroom disruptions. Hattie et al (2007). also claimed that receiving positive reinforcement about their ability to engage students would encourage teachers wiling to initiate new engagement techniques and persist through challenges. This means supportive feedback from mentors, students, and/or supervisors make teachers implement strategies that increase student engagement.

Vanderlinde and Van Braak (2010) found that teachers working in cooperative and friendly environments and sharing teaching strategies and experiences with each other are of higher TSE. Dweck's (2006) found that when teachers who receive positive reinforcement about their teaching methods would be more likely to develop a sense of competence, which in turn enhance their TSE.

In summary, Verbal/Social Persuasion has been proven effectively enhance TSE, especially via positive feedback and encouragement, which is suggested to be adopted in the further modelling of teaching design.

2.1.4.4 Physiological and Affective States and Instructional Design, Classroom Management and Student Engagement

It is of significance to focus on the function of Physiological and Affective States on enhancing TSE, in concrete, Instructional Design, Classroom Management and Student Engagement. Methods such as counselling, emotional regulation, building a supportive environment can be used to prove sources of Physiological and Affective States. Kyriacou (2001) studied that TSE of teachers would be rather stable and less likely to experience burnout when their well-being is prioritized. This means enough time for self-care and well-being can help reduce stress and maintain TSE. Schutz et al (2006) proposed that when teachers are more emotionally regulated experience less stress and and show more effective teaching performances. Teachers who manage emotions well tend to hold higher TSE, leading to better students' outcomes.

Brackett et al (2010) found out teachers with strong emotional regulation skills experience lower burnout, greater job satisfaction, and higher teaching effectiveness, which manifesting that emotional well-being is crucial for maintaining high-quality teaching and student engagement.

Emotional and psychological supports from school leaders and colleagues can also help reduce stress and burnout (Friedman, 2000). Cohen and Ball (1999) also found in his study that teachers who are supported by school leadership through resources, time, and emotional support are more likely to show higher TSE.

In general, based on the review, emotionally well-regulated and less stressful teachers with enthusiasm plan better lessons and manage student behavior more effectively.

2.1.4.5 Other effective strategies

Other than what has been concluded above, there are still other effective strategies scholars raised that can be utilized when designing the Active Learning Model in the study.

1. Growth Mindset Encouraging

From the perspective of positive psychology, scholars noticed that growth mindset has a positive relation to TSE. Encouraging growth mindset could help teachers believe in their abilities of improving themselves professionally with effort and perseverance. Research by Kraft, Blazar & Hogan (2018) indicated that teachers with a growth mindset are more voluntary to opportunities of developing, leading to enhancing of TSE.

2.Providing Autonomy in Teaching

Autonomy in teaching is a crucial in enhancing TSE. Ryan & Deci (2000) proposed Self-Determination Theory to underline that giving teachers the freedom to make decisions about their teaching methods could produce greater intrinsic motivation and higher TSE. They (ibid) believed teachers who feel trusted to make decisions about instructional design were more likely to be confident in their teaching skills.

3.Self-Reflection

Self-Reflection on teaching practices can significantly enhance TSE (Korthagen & Nuijten (2021). Korthagen et al (2005) introduced the concept of core reflection encouraging teachers to delve into their core qualities, ideals, and mission, aligning their practices with intrinsic motivations and enhancing their TSE and professional growth. Black (2015) explored how structured reflection contribute to the development of self-efficacy by fostering a deeper understanding of one's own teaching practices and areas for growth.

To conclude the review above, enhancing of TSE can make use of a multifaceted approach integrating Bandura's four sources of self-efficacy. Mastery experiences, such as project-based learning, and hands-on classroom practice allow pre-service teachers to develop instructional design, classroom management, and student engagement skills. Observing experienced teachers through peer observation, video-based learning, and modeling fosters vicarious experiences that strengthen instructional confidence. Providing verbal feedback, mentorship, and a collaborative teaching environment can reinforce TSE by building a supportive teaching culture. Addressing physiological and affective states through emotional regulation, counseling, and stress reduction strategies ensures that teachers remain resilient and effective. These strategies collectively contribute to the development of confident, adaptable, and effective teachers.

The study, based on related literature review, will adopt Active Learning as the basis to design a proper teaching model which include the four sources introduce above. Section 2.2 is a comprehensive illustration of Active Learning with the purpose of explaining the choice.

2.1.5 Research Related to TSE of Pre-service Teachers

Research on TSE of teachers focus on its relation on teaching and learning activities, including job satisfaction (Klassen & Chiu, 2010), professional stress and teacher burnout (Klassen & Chiu, 2011; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010), teaching effectiveness (Gibson & Dembo, 1984; Caprara et al., 2006), students'

learning motivations and achievements (Mojavezi & Tamiz, 2012; Tschannen-Moran & Hoy, 2001; Henson, 2001)

Klassen & Chiu (2010) studied 1,430 teachers to comprehend the relation between experience, personal traits, self-efficacy, stress, and job satisfaction. The researches found out that self-efficacy peaks in mid-career, and female teachers report higher workload and classroom stress, impacting classroom management efficacy. While workload stress correlated with higher classroom management efficacy, classroom stress lowered both self-efficacy and job satisfaction. Teachers of young children showed higher classroom management and engagement efficacy. Crucially, higher self-efficacy in management or instruction led to greater job satisfaction, revealing the comprehensive connections within teachers' professional lives.

With the purpose of testing the factor structure of a scale for measuring teacher self-efficacy and exploring among teachers' perception of the school context, teacher self-efficacy, collective teacher efficacy, teacher burnout, teacher job satisfaction, and teachers' beliefs, Skaalvik & Skaalvik (2010) involved 2249 Norwegian teachers from elementary school and middle school to collect data and analyze by means of structural equation modelling. The study found out that teacher self-efficacy, collective efficacy and teacher burnout were differently related both to school context variables and to job satisfaction.

Mojavezi (2012) probed into the influence of TSE on students' motivation and achievement. Making use of Teacher Self-Efficacy and Students' Motivation Questionnaires, the study randomly selected students and teachers from different high schools of four cities, analyzing through Pearson product-moment correlation coefficient and ANOVA. The results show a positive influence between TSE and students' motivation and achievement, implying that TSE are important for both teachers and students.

Likewise, a study focusing on the relation between Teachers' self-efficacy beliefs and job satisfaction and students' academic achievement selected 2000 teachers from junior high schools (Caprara et al., 2006), initiating questionnaires and collecting data based on its sample, figuring out that teachers' efficacy beliefs did affect their job

satisfaction and students' academic achievement, and take a control for previous levels of achievement, implying an theoretical possibility of intervening teachers; capacity based on the research findings.

The above research majorly focus on the relation of TSE to other factors of teaching and learning activities to see its impacts, functions and values to education.

Research also regards TSE as a DV to see how this variable is influenced (Wray et al., 2022; Malik, 2011) and what strategies can be used to enhance TSE (Chao et al., 2017; Sylvester, 2018; Şahin, 2024) since it is a key element to teaching and learning activities. This approach mainly involves two groups of teachers: in-service teachers and pre-service teachers (Malinauskas, 2017; Gordan, 2024; Ma et al., 2021).

Wray et al. (2022) explored how TSE are influenced in inclusive education. Using the method of literature review, the study concluded two factors influencing TSE: teaching experience and teaching context. It pointed out that pre-service teacher education are influential to TSE, providing a feasible reference for the current study.

Chao, et al. (2017) raised up a study to examine the impact of a one-week training course on TSE in terms of enhancing teaching and learning strategies and classroom management to support students with special educational needs (SEN) in ordinary schools in Hong Kong, and to analyze various teacher-related variables to identify significant predictors of teacher self-efficacy in inclusive education. The study found the training course had positive effect on TSE, demonstrating the effectiveness of the training intervention.

Aiming to develop strategies to enhance TSE of secondary school teachers, Sylvester et al. (2018) launched a study with 1790 teachers from various public schools as the sample. The study suggested TSE can be enhanced effectively by better salary, improving work conditions, capacity-building programs and helpful leaders.

Saputro (2020) investigated the impact of Problem-Based Learning on pre-service elementary teachers' self-efficacy and critical thinking skills. With a quasi-experimental nonequivalent pretest-posttest control group design, the researchers assigned 44 pre-service teachers from a private Indonesian university into experimental

and control groups. The experimental group used a Problem-Based Learning learning method while the control group used the traditional method. The study found out that the experimental group exhibited significant improvements in both self-efficacy and critical thinking compared to the control group, suggesting that the problem-based learning is effective in enhancing these competencies in teacher education programs.

Gordon et al. (2024) launched a study on how reform of education influences pre-service teachers' TSE, proposing a triadic model to analyzed teachers that outlines three determinants, which are personal/cognitive, behavioral and environmental. Among the three, personal/cognitive determinants refer to beliefs and confidence about teaching. Malinauskas (2017) designed a training module of three sessions (Emotional Communication, Promoting Social Skills and Discipline and Behavior Management) on enhancing TSE among teacher education students, in which 68 teacher students participated with a training module of three sessions (Malinauskas, 2017, p. 735)

Ma et al. (2021) investigated how TSE change across the whole process of professional experience placements for pre-service teachers. 201 pre-service teachers participated in the study as the sample. The study found that TSE changed during the whole process: before, in and after. The finding is consistent with previous studies concluded in the study (Ma et al., 2021): TSE changes during professional experience placements and coursework experiences.

The above research make educators understand better on the importance of enhancing TSE in teacher education, extensively exploring the role of TSE in relation to teaching effectiveness, job satisfaction, student outcomes, and teacher burnout, as well as potential factors influencing TSE such as teaching experience, contexts-affecting, and professional training. However, there is limited research on structured pedagogical interventions of making use of Active Learning to systematically enhance TSE among pre-service teachers. While some studies highlight the potential of experiential learning and problem-based learning, few offer a comprehensive, theory-informed Active Learning Model designed to enhance TSE across all teaching domains. This study addresses this gap by developing and evaluating an Active Learning model tailored for

pre-service English teachers, focusing on its impact on enhancement of TSE and its long-term maintenance.

2.2 Review of Active Learning

Active Learning is characterized by a shift from passive to student-centered or say learner-centered educational instruction. From the Socratic Method to contemporary technology-enhanced approaches, Active Learning has evolved to emphasize engagement, critical thinking, and collaboration. The study chooses Active Learning as the basis of its learning model because it is operational in merging multiple teaching methods that can supply sources of TSE together.

2.2.1 The Definition of Active Learning

This research makes use of Active Learning as the instruction to design an effective learning model and to verify whether it affects TSE of teacher students with it. As a method of learning, Active Learning refers to "instructional activities involving students in doing things and thinking about the things they are doing" (Bonwell and Eison, 1991, p. 2). This definition focuses on "students", implying "learners-centered" of the method.

Also focusing on "students", Freeman at al. (2014) claimed that Active Learning engages students in the process of learning through activities and/or discussion in class, as opposed to passively listening to an expert. It emphasizes higher-order thinking and often involves group work. Carr et al. (2015, p. 173) referred Active Learning as "students' efforts to actively construct their knowledge". Prince (2004, p. 224) pointed out that "Active Learning involves students engaging with course content through activities and exercises that promote critical thinking, problem-solving, and collaboration, rather than passively receiving information from lectures." Felder & Brent (2009, p. 2) explained that "Active learning consists of short course-related individual or small-group activities that all students in a class are called upon to do, alternating with instructor-led intervals in which student responses are processed and new information is presented."

The above definitions share the common idea of learning with activities, or say "learning by doing", which can be seen as a reciprocal process involving both competences and performances of learning activities.

Active Learning also emphasizes the active participating of learning. Active Learning can be recognized as a method which holds that "humans learn by actively using new information and experiences to modify their existing models of how the world works" (Theobald et al., 2020, p. 6477). As Fook at al. (2015, p. 140) pointed out: "An Active Learning process occurs when the learners do not just listen to the lecture but they are also actively engaged in the learning process through reading, writing, discussion and hands-on activities."

Active Learning are also introduced as a teaching instruction "utilizing learning strategies that can include small-group work, role-play and simulations, data collection and analysis, Active Learning is purported to increase student interest and motivation and to build students' critical thinking, problem-solving and social skills" (Scheyvens at al., 2008, pp. 51-52). Eison (2010) referred to Active Learning as "instructional strategies" that "include a wide range of activities that share the common element" of "involving students in doing things and thinking about the things they are doing" (the definition by Bonwell & Eison, 1991, p. 2).

Michael (2006, p. 160) illustrated Active Learning in detail, which are of adopted in the study:

1. The process of having students engage in some activity that forces them to reflect upon ideas and how they are using those ideas.

2. Requiring students to regularly assess their own degree of understanding and skill at handling concepts or problems in a particular discipline.

3. The attainment of knowledge by participating or contributing.

4. The process of keeping students mentally, and often physically, active in their learning through activities that involve them in gathering information, thinking, and problem solving.

In conclusion, through the definitions of Active Learning, it can be seen that as a learning strategy, Active Learning values “learner-centered”, “initiative learning” and “learning through practical activities”. Hence, this study tends to regard Active Learning as “an instruction to learning engaging a series of learning-centered activities that students participate in to acquire knowledge and cultivate skills”.

2.2.2 Theoretical Foundation of Active Learning

This section introduces the theoretical foundation of Active Learning to better understand the concept. Active Learning is grounded in Constructivist Learning Theory which was developed mainly by Piaget and Vygotsky.

Active Learning, as a pedagogical approach, is deeply rooted in Constructivist Learning Theory, primarily developed by Jean Piaget and Lev Vygotsky. This theory provides a comprehensive framework for understanding how learners actively engage with content, context, and peers to build knowledge and develop higher-order thinking skills,which can be an essential foundation for enhancing Teacher Self-Efficacy (TSE).

Constructivist learning theory proposes that learners actively construct their understanding of the world by integrating new information with existing knowledge and experiences. Active Learning aligns with constructivism by providing opportunities for learners to engage in hands-on activities, problem-solving tasks, and collaborative projects, allowing them to construct meaning and develop deeper understanding. Piaget (1970) defined learning as the process of constructing knowledge based on their experience through engagement with the environments. He (ibid) suggested that learners progress through different levels of understanding, and meaningful learning occurs when they are challenged to assimilate new information into existing cognitive structures.

Being applied into active learning, the theory is supportive in utilizing teaching methods such as problem-based learning, inquiry-based learning and hands-on activities, which the study discussed earlier that can be used to enhance TSE by providing mastery experiences. It is verified useful in classroom. For example, Bishop & Verleger (2013) explored how students construct understanding actively through hands-

on activities in a flipped classroom setting before formal instructions. As an Active Learning strategy by engaging students with foundational concepts before class, it is proven to be effective. Findings of the study support constructivist and social learning theories, underlining the importance of student autonomy, collaboration, and experiential learning in Active Learning.

Vygotsky (1978) expanded on Piaget's theory by emphasizing the social and cultural aspects of learning. He proposed that learners are able to achieve better understanding when being supported by more knowledgeable peers or instructors in his Zone of Proximal Development (ZPD). Vygotsky's theory underpins collaborative learning and peer teaching, where students can support one other in problem-solving strategy (Wood, Bruner, & Ross, 1976; Crouch & Mazur, 2001). Also, group-based learning activities (a popular active learning strategy) where students work together to solve complex tasks are verified to be helpful in developing skills like higher-order thinking and knowledge co-construction (Johnson, Johnson & Smith, 2007).

In conclusion, Active Learning is theoretically and pedagogically anchored in both cognitive constructivism (Piaget) and social constructivism (Vygotsky). By fostering experiential, collaborative, and reflective learning environments, Active Learning promotes the kind of deep, authentic engagement that strengthens TSE. These theoretical foundations justify the integration of strategies such as collaborative learning, experiential learning, project-based learning, and active assessment in the instructional model developed in this study, which will be introduced in the following section.

2.2.3 Strategies of Active Learning

Active Learning involves various strategies designed to engage students in the learning process actively. These strategies help creating a dynamic and interactive classroom environment where students are not merely passive recipients of information but active participants in constructing knowledge. This section will give a brief introduction to some strategies which inspire the current study.

2.2.3.1 Collaborative Learning

Collaborative learning can be regarded as a significant strategy of Active Learning, emphasizing interaction of peers, shared knowledge construction, and cooperative problem-solving. It involves students working together in groups to achieve common learning goals, fostering deeper understanding of knowledge.

This approach enhances communication skills, promotes critical thinking, and allows for the sharing of diverse perspectives. Peer teaching, where students teach each other, has been shown to reinforce learning and improve retention. It is a core component of Active Learning where students work together in small groups to achieve common academic goals. There are several different concrete methods to fulfill the strategy including think-pair-share, jigsaw method and team-based projects (Bishop et al., 2014; Prince, 2004).

Research utilizing Active Learning are highly likely to introduce collaborative learning. For instance, Tien et al. (2020, p. 436) made use of Active Learning encompassing five strategies, including “online learning, hands-on experiments, blended learning, collaborative teaching and laboratory activities” to realize technology application in teaching, assessing its effects on self-efficacy. Fook (2015, p. 140) claimed three major approaches of Active Learning in his study, “collaborative learning, cooperative learning and problem-based learning.” Gillies (2016) found that collaborative learning can help teachers improve TSE by providing peer support, shared experiences, and opportunities for reflection. Johnson & Johnson (2009) pointed out that cooperative learning could enhance interpersonal skills of teachers, making teachers effective in managing diverse classrooms.

In a word, this strategy are suggested in fostering TSE of pre-service teachers based on its functions.

2.2.3.2 Experiential Learning

Experiential learning is an essential Active Learning strategy that promotes deeper engagement, reflection, and application as it involves learning through direct experience and reflection. It is based on the idea that students learn best when they can

apply their knowledge in real-world contexts. It can be aligned with Active Learning by emphasizing participation, self-reflection, and application. Major ways of experiential learning include: Simulations and Role-Playing, Field Trips and Service Learning and Laboratory Work.

Darling-Hammond et al. (2005) argued that teachers who engage in experiential learning during their training are more confident and better prepared to handle classroom challenges. Putnam & Borko (2000) claimed that learning within authentic contexts fosters adaptive capability.

Based on the review, this strategy is a suggested learning method for pre-service English teachers to bridge theory and practice, enhancing TSE and prepare them for real-world teaching challenges.

2.2.3.3 Project-based Learning

Project-Based Learning is also an active learning strategy that engages learners in sustained real-world and meaningful projects. It requires students to explore complex problems, collaborate, and apply knowledge to develop solutions, fostering deep learning and critical thinking by setting up projects and missions to students, requiring them to explore and construct their own understanding. Ways like open-ended question, problem-based learning and group activities can help implement the strategy.

Project-Based Learning are capable of shifting the focus from passive knowledge absorption to active engagement, Prince (2004) highlighted that active learning strategies, such as PBL, enhance deep learning by involving students in analysis, synthesis, and evaluation.

Research supports the effectiveness of the strategy in teacher education. Darling-Hammond et al. (2005) found that teachers who engage in project-based learning tend to demonstrate higher TSE and pedagogical competence.

The strategy can also be adopted in the active learning model of enhancing TSE of pre-service teachers as it can help with accumulating mastery experiences.

2.2.3.4 Active Assessment

Active assessment is an approach to align with active learning principles by engaging students in the evaluation process. It covers more than traditional test and quizzes, moving to emphasizing continuous feedback from peers, mentors/coaches and self. This strategy emphasizes that learners actively construct knowledge through both experience and interaction and the role of continuous assessment throughout the process of learning. Three different types of assessment can be adopted to implement the strategy, namely formative assessment, peer assessment and performance-based assessment.

Varying from traditional assessment methods such as summative assessment, active assessment encourage students to think critically about their learning rather than receiving grades. Van Note Chism et al. (1988) described Classroom Assessment Techniques such as minute papers and concept maps, as examples of active assessment that promote reflection and deeper understanding. Black & Wiliam (1998) found that formative assessment significantly improves student learning. Sadler (1989) stressed that active feedback helps learners shorten the gap between current performance and desired outcomes.

Due to its advantages, Active Assessment can help pre-service English teachers enhance TSE by providing meaningful feedback, authentic evaluation, and opportunities for self-improvement.

There are also other effective teaching methods that can be regarded as active learning strategies. For example, flipped classroom model inverts traditional teaching methods by delivering instructional content outside of class (e.g., through videos) and using class time for Active Learning activities. Technology plays a significant role in facilitating Active Learning by providing interactive and engaging tools such as educational software and apps and online discussion forums. Besides, self-regulated learning encourages students to take control of their own learning process through goal-setting, self-monitoring, and self-assessment with learning journals keeping and Personal Learning Goals setting.

Active Learning encompasses a variety of strategies to engage students actively in the learning process. By incorporating the above strategies, educators can create a more dynamic and effective educational experience. This study will make use of "collaborative learning, experiential learning, project-based learning and active assessment" to design an active learning model for English pre-service teachers, with a purpose of enhancing their TSE.

2.2.4 Research on Active Learning Related to TSE

This section will briefly review benefits along with challenges of Active Learning on TSE and then make a summary based on the review.

2.2.4.1 Benefits of Active Learning on enhancing TSE

Active Learning has been widely verified by researches as an effective approach to enhancing TSE since this instruction provides pre-service teachers with hands-on, engaging, and reflective learning experiences. Researches indicate that active learning strategies, such as problem-based learning, micro-teaching, simulations, and collaborative learning, help pre-service teachers develop beliefs in their teaching abilities and improve their problem-solving skills (Darling-Hammond et al., 2005; Brouwers & Tomic, 2000). There are several major benefits of active learning on TSE are outlined as follows:

1. Mastery experience accumulating and confidence development

Teachers who engage in problem-based learning, micro-teaching, simulations, and teaching practicums develop greater confidence in their instructional abilities (Darling-Hammond et al., 2005).

Nelson et al. (2015) found that Active Learning strategies in service-learning courses led to improved confidence levels in pre-service teachers. Participants demonstrated higher self-efficacy in handling classroom challenges after engaging in active learning experiences and assessments using the Teacher Efficacy Scale.

Kolb (1984) emphasized that experiential learning—involving direct experiences, reflective observation, abstract conceptualization, and active experimentation—helps pre-service teachers develop confidence and preparedness for practical classroom situations.

2. Fostering of problem-solving and analytical skills

Blumenfeld et al. (1991) suggested that project-based learning enhances TSE by encouraging teachers to design curricula, create instructional materials, and conduct action research, thereby increasing their confidence in problem-solving.

Hmelo-Silver (2004) found that problem-based teaching helped pre-service teachers develop a deeper understanding of pedagogical concepts, leading to higher self-confidence and better preparedness for real-world teaching.

Tschannen-Moran & McMaster (2009) argued that self-assessment and critical thinking are essential for developing professional competence and self-efficacy. His model suggested that teachers who engage in reflection-in-action (adapting while teaching) and reflection-on-action (analyzing past experiences) become more confident and adaptable.

Saputro et al. (2020) conducted a quasi-experimental study demonstrating that Problem-Based Learning (PBL) enhances self-efficacy and critical thinking in pre-service elementary teachers. The study found that exposure to real-world teaching challenges improved problem-solving skills and teaching confidence, supporting the need for broader implementation of PBL in teacher training programs.

3. Social support

Johnson & Johnson (2009) demonstrated that collaborative learning, which involves peer interactions and shared experiences, reduces anxiety and increases confidence. Their study emphasized that pre-service teachers refine instructional strategies and lesson planning through knowledge exchange.

Fernández (2010) found that micro-teaching and simulated teaching allow pre-service teachers to practice in controlled environments, giving them greater confidence before entering real classrooms.

Duran (2017) showed that pre-service teachers who participated in peer teaching or tutoring engaged more deeply with the material and developed stronger instructional confidence.

4. Emotional support and inclusive teaching readiness

Theobald et al. (2020) demonstrated that active learning strategies contribute to deep engagement and mastery experiences, both of which significantly increase self-efficacy. Their findings were particularly relevant for underrepresented groups, showing that a sense of competence and mastery fosters resilience.

A large-scale study by Emiru & Gedifew (2024) on 714 secondary school teachers found a strong correlation between TSE and effective teaching strategies, ultimately improving student participation and academic success.

All in all, Active Learning significantly enhances TSE by providing mastery experiences, vicarious learning opportunities, social support, and an emotionally supportive environment. Integrating active learning into pre-service English teacher training can lead to more confident, adaptive, and effective educators. Future research should explore longitudinal impacts and how active learning can be optimized across different cultural and institutional contexts.

2.2.4.2 Challenges of Active Learning on enhancing TSE

Despite its numerous benefits, Active Learning also presents challenges that may impact its effectiveness in enhancing TSE which are highly suggested to pay special attention in the study while designing Active Learnning model.

1. Potential time consuming One of the major challenges of Active Learning is that it requires more time than traditional lecture-based methods (Hmelo-Silver, 2004). Designing and executing problem-based or experiential learning activities can be demanding for both educators and students, potentially limiting its widespread adoption in teacher education.

2. Engagement and participation gap among learners While active learning relies on student participation, not all pre-service teachers are equally engaged (Johnson & Johnson, 2009). Factors such as personality differences, lack of confidence, or unfamiliarity with interactive teaching methods can hinder the effectiveness of active learning strategies. Without proper scaffolding and instructor support, some students may struggle to benefit from these approaches (Duran, 2017).

3. Assessment challenge Traditional assessment methods often focus on knowledge retention rather than skill development and self-efficacy. Evaluating the impact of active learning on TSE requires alternative assessment tools, such as self-reflection journals, peer feedback, and performance-based evaluations, which may be subjective and time-consuming (Darling-Hammond & Snyder, 2000; Korthagen, 2017)

4. Potential lack of resource and instructor preparedness Effective Active Learning requires well-trained instructors, adequate resources, and supportive learning environments (Valtonen et al., 2023). In some teacher training programs, limited financial and institutional support can restrict access to innovative learning tools, thereby affecting the quality of active learning experiences.

2.2.4.3 Initial Findings

The above review illustrates key considerations for this study on enhancing TSE among pre-service teachers. The positive impact of active learning on confidence, problem-solving skills, emotional resilience, and professional identity suggests that implementing structured, interactive learning experiences can be an effective way to develop TSE. However, challenges Active Learning might bring are advised to be addressed to maximize the benefits of Active Learning.

There are some suggestions that shall be taken into account:

1. Incorporating diverse active learning strategies to cater to different learning preferences.

2. Providing structured support to enhance engagement and participation.

3. Using alternative assessment methods during the process of learning.

4. Considering institutional and instructor readiness to implement active learning-based teacher training programs.

By concluding both the advantages and challenges of Active Learning, the current study aims to provide practical recommendations for improving teacher education programs, ultimately enhancing their TSE.

In conclusion, this chapter provides a review on both IV and DV of the current study. The review has demonstrated that TSE has been identified as a key psychological construct influencing pre-service teachers' instructional confidence, classroom management skills, and abilities of interacting during teaching. Meanwhile, Active Learning, rooted in constructivist learning theory, plays a critical role in promoting engagement, reflective thinking, and deeper understanding among learners.

By synthesizing existing literature, this chapter lays a theoretical foundation for examining how Active Learning strategies may contribute to enhancing TSE of pre-service English teachers by designing an model to foster meaningful improvements in teacher training outcomes.

CHAPTER 3
METHODOLODY

With the purpose of enhancing TSE of pre-service English teachers by using Active Learning Model, the study raises three objectives:

1. To study the definition and components of TSE of pre-service English teachers.

2. To develop an active learning model for enhancing TSE of pre-service English teachers.

3. To evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers.

In order to achieve the above objectives, the research are divided into three phases, which will be explained in detail thereinbelow:

Phase 1: To define TSE of pre-service English teachers and its components

Phase 2: To develop an active learning model for enhancing TSE of pre-service English teachers

Phase 3: To evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers

3.1 Phase 1: To Define TSE of Pre-service English Teachers and Its Components

In this phase, three steps are implemented in order to illustrate the definition and components of TSE of pre-service teachers as the basis to launch the study.

3.1.1 Literature Review of Related Variables

In the initial step of the study, a thorough review of the literature on both TSE and Active Learning was conducted. This comprehensive research aims to comprehensively explore and analyze the key concepts, theories, and previous studies related to relevant areas. By delving into the scholarly work on TSE, the study sought to understand the various factors that influence pre-service teachers' confidence in their teaching abilities, as well as the different components that constitute their self-efficacy in an educational context.

Simultaneously, the literature on Active Learning was carefully examined to identify its principles, strategies, and effectiveness in fostering student engagement and improving learning outcomes. This review of Active Learning strategies provided insights into how these approaches could be integrated into the teaching practices of pre-service English teachers, thereby potentially enhancing their TSE.

The primary goal of the literature review was to identify and illustrate the relevant variables that would be explored in the study. By establishing a clear understanding of the connections between TSE and Active Learning, the study aims to identify the theoretical frameworks that would guide the subsequent research. This foundational step was crucial in defining the scope and direction of the study, ensuring that the research would be grounded in established theories and supported by empirical evidence.

In summary, the initial phase of the study involved a thorough investigation into the literature on TSE and Active Learning, with the objective of highlighting the key variables and laying a solid theoretical foundation for the research that would follow.

3.1.2 Semi-structured Interview

After reviewing literature on TSE and Active Learning concerning with the research, the study formed a definition of TSE and its components as the basis and guideline of a semi-structured interview focusing on understanding TSE along with its components and strategies of enhancing it. Then the study designed and implemented the semi-structured interview including the following steps (Figure 2):

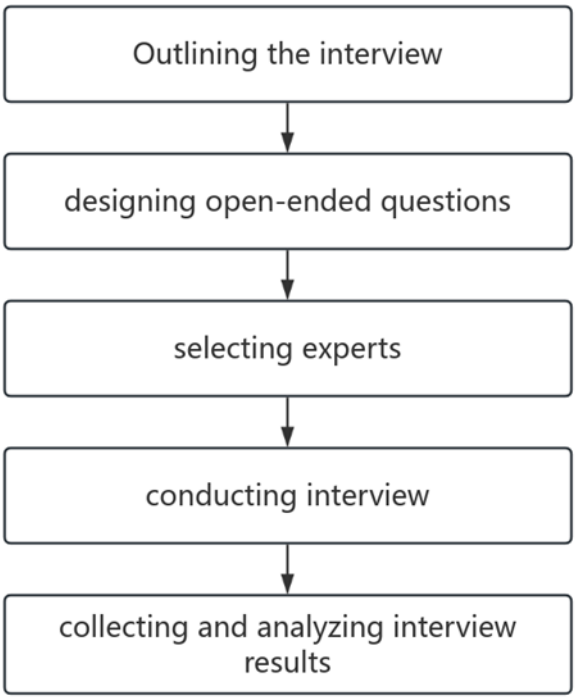

Figure 2 Steps of Semi-Structured Interview

Step 1: Outlining the interview

In the first step, the study set up an outline of the interview as follows:

1.Background and Expertise;

2.Understanding TSE;

3.Understanding Active Learning;

4.Interplay Between TSE and Active Learning;

5.Future Directions and Innovations.

This extended guide provides a structured and adaptable framework for engaging with experts on the complex interplay between TSE and Active Learning. It allows for a deep dive into specific topics while encouraging the exploration of broader themes and emerging trends.

Step 2: Designing open-ended questions

Secondly, the study designed a semi-structured interview (Appendix A) based on the outline. There are three sections of the interview with a direction which illustrates the purpose of the interview clearly. The three sections are shown in Table 2.

Table 2 Structure of the Interview

Section	Main Contents	Number of Questions
Section 1	General information on the experts	6
Section 2	Understanding of TSE	3
	Understanding of Active Learning	3
	Interplay between TSE and Active Learning	3
	Measurements of TSE	2
Section 3	Further suggestions	1

There are totally 12 semi-structured interview covering questions from definitions of relevant variables to modelling and implementing of the teaching model. The purpose of the interview is:

1.To verify/amend the definition and components of Teacher Self-Efficacy (TSE) of pre-service English teachers in China context and Active Learning.

2.To perceive connections between TSE of pre-service English teachers and Active Learning.

3.To gain the suggestions for developing an active-learning model to enhance TSE of pre-service English teachers in China.

4.To gain the suggestions for developing measuring instruments to evaluate TSE of pre-service English teachers in China.

Step 3: Selecting experts

The study selected 5 experts (listed out in Appendix B) from the relevant field to conduct the interview. There are several standards of selecting experts including experiences of teaching and scientific research, academic backgrounds, professional position and specialties. The 5 experts who took part in the interview all work in universities as teachers for at least 10 years, with abundant experiences of teaching and scientific research in the field of educational psychology.

Step 4: Conducting interview

During the interview process, the researcher firstly built rapport with the experts to create a comfortable and open environment. And then the researcher explained the purpose of the interview along with ethical considerations, ensuring that participants fully understand the context and their rights. Finally, the researcher conducted the interview.

Step 5: Collecting and analyzing interview results

After completing the interviews, the study analyzed the results based on the structure of the interview with the method of thematic analysis, identifying conceptions and insights on the definition and components of relevant variables arising from the discussions. The analysis contributes to developing a measurement questionnaire and building the learning model for the study.

3.1.3 Developing of TSE Questionnaire for Pre-service English Teachers

After conducting an interview on the basis of reviewing TSE, the study designs a questionnaire as the measurement instrument for TSE. Based on what has been discussed and analyzed previously, the TSE questionnaire used in the study has been designed based on the three components of TSE (Instructional Strategies Efficacy, Classroom Management Efficacy And Student Engagement Efficacy) and adapted from TSES developed by Tschannen-Moran and Hoy (2001). The complete procedure of designing the questionnaire, shown in Figure 3, include 4 steps.

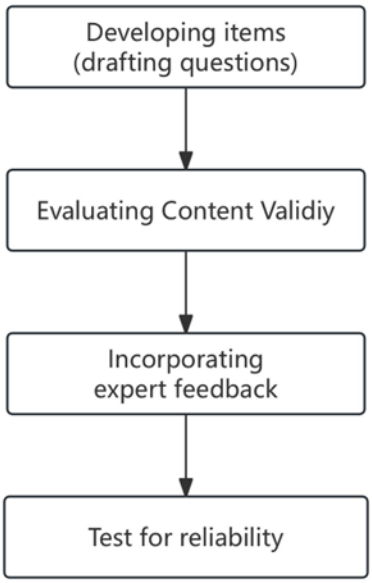

Figure 3 Steps of TSE Questionnaire for Pre-service English Teachers

Step 1: to develop the items (or say draft questions) of the questionnaire:

The study developed a TSE questionnaire to evaluate TSE of pre-service teachers with 24 items in the questionnaire (shown in Appendix C) on the basis of Teacher Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001), among which 7 were negatively worded (items 4, 6, 15, 16, 22, 23, and 24) and required reverse coding prior to reliability analysis. A 5-point Likert Scale is used in the questionnaire to measure the level of disagreement/agreement of the respondents, ranging from “strongly disagree” to “strongly agree”, with scoring criteria as follows:

1.00-1.80: Moderate low

1.81-2.60: low

2.61-3.40: medium

3.41-4.20: high

4.21-5.00: Moderate high

Item 1-8 are designed to evaluate the component of Classroom Management Efficacy. Item 9-16 are designed to evaluate the component of Instructional Strategies

Efficacy as Item 17-24 are designed to evaluate the component Student Engagement Efficacy.

Step 2: to evaluate Content Validity through the Index of Item-Objective Congruence (IOC) by asking 5 Subject Matter Experts to review each item to assess its quality and relevance:

The 5 experts (listed out in Appendix B) are selected out with the same standards as what has been set in the semi-structured interview. Each of them are given an assessment form (Appendix D) with the content of the research topic, definitions of TSE and three components and a detailed direction on the assessment. Each item was followed by columns of a consistency index and a comment. Experts were required to determine the consistency of the items (+1.0 represents “consistent”, 0.0 represents “not sure”, -1.0 represents “inconsistent”) and potential suggestions that might contributes to the items or even the study. As shown in Appendix E, the IOC of each item is 0.8-1.00, which means that each item aligns with the specific research objectives. This results indicate that the items in the questionnaire are considered by the expert relevant, clear, and representative of the intended content, consequently appropriate for measuring TSE of pre-service English teachers.

Step 3: to incorporate expert feedback into the questionnaire, amending it based on IOC scores and comments. And the amended questionnaire is used in a pilot test as the fourth step to evaluate its reliability.

Step 4: to try out the questionnaire with 100 pre-service English teachers with the purpose of evaluating the reliability of the TSE questionnaire.

In this step, in order to evaluate the reliability of the questionnaire, the study tried out the questionnaire with 100 pre-service English teachers who are randomly chosen from Grade 3, School of Foreign Languages, University A. 100 questionnaires were distributed and all retrieved and valid.

A total of 100 participants completed the try-out, resulting in a dataset comprising 100 responses. The initial stage of data processing involved the reverse coding of negatively worded items to align the directional meaning with that of positively worded items. This transformation employed the following re-coding scheme: 1 as 5, 2

as 4, 3 remained unchanged, 4 as 2, and 5 as 1. This procedure was applied to Item 4, 6, 15, 16, 22, 23, and 24. Following the completion of the reverse coding, a reliability analysis was performed to assess the internal consistency of the instrument.

An analysis of internal consistency was conducted on the 24-item TSE scale using Cronbach's alpha coefficient. The results indicated excellent internal reliability (α=0.972), with all item-total correlations (r-values) falling within a strong range of 0.712 to 0.840. These findings surpass the accepted reliability threshold of 0.7 for Cronbach's alpha and the 0.7 criterion for item-total correlations, confirming the robust internal consistency of the scale. Consequently, all 24 items were retained for subsequent analysis (shown in Appendix F).

Outcomes of the try-out affirm the high reliability of the TSE questionnaire, in which reverse-coded items were effectively integrated with positively worded items. The overall internal consistency demonstrates that each item contributes to the measured construct. This validation supports the instrument's use for dependable data collection in the main study, ensuring accurate and consistent data acquisition.

3.2 Phase 2: To Develop an Active Learning Model for Enhancing TSE of Pre-service English Teachers

This phase concentrates on the developing of the Active Learning Model and the instructional design on the basis of the model. According to Smith and Ragan (2005), effective instructional design begins with a thorough needs assessment and the articulation of learning objectives that align with cognitive, affective, and psych-motor domains.

In the case of the instructing of the Active Learning Model in the study, the following key factors should be considered while modelling:

1. Learning environment: The model would be implemented in a Chinese university with a flexible classroom layout where desks and chairs are movable to support in-class activities such as group discussion and micro-teaching.

2. Learning goals: The ultimate goal of the learning model is to enhance TSE of pre-service English teachers. Learning goals of each class are analyzed in the teaching plan (Appendix J) under the principles of measurable, observable and clearly demonstrated.

3. Learners: The model is designed to target junior students of English teacher students. After learning the subject knowledge and basic pedagogy knowledge, those students enter into the last phase before internship (real-world teaching practice), it is key to preparing them for the real-world teaching.

Taking the above factors into account, the steps of developing Active Learning Model on Enhancing TSE of English Teachers are shown in Figure 4.

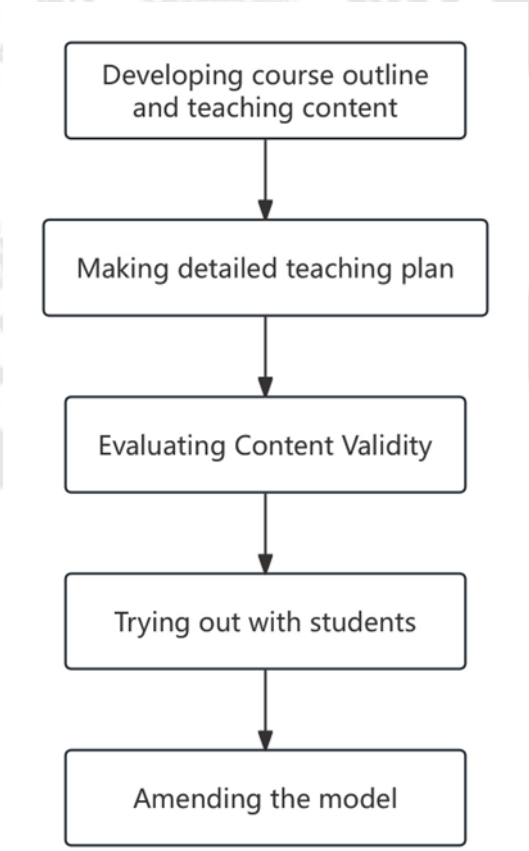

Figure 4 Steps of Developing Active Learning Model

In the first step, the researcher developed a course outline (Appendix H) of 11 classes with teaching contents based on the three components of TSE of pre-service English teachers (Table 3).

Table 3 Layout of Class Topic

Topics	Times of class
Orientation	1
Classroom Management Efficacy	3
Instructional Strategies Efficacy	3
Student Engagement Efficacy	3
Commencement-lesson closure	1

Based on the topic, the researcher developed 11 teaching plans (Appendix J) in detail. The teaching procedure consists of four major steps (Figure 5) with the aim of modelling active learning strategies.

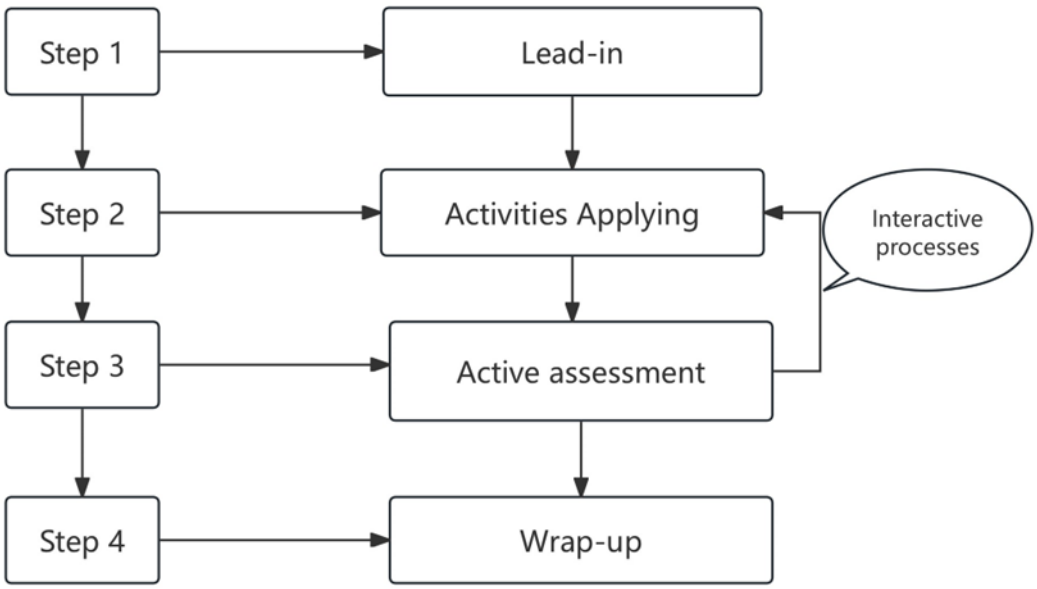

Figure 5 Teaching Procedure of Active Learning Model

Step 1: Lead-in: The first step of the learning model. In this step, necessary information required for implementing the class is introduced to get the students prepared and involved. Project-based Learning and Experiential Learning are used in this step.

Step 2: Activities applying: the second step of the learning model, in which multiple learning activities such as group discussion, peer-teaching, case study, plan design are carried out. This is the main body of the whole model, which provides activities for students to engage in the learning process. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

Step 3: Active assessment: the third step of the model, consists of self-assessing, peer assessing and teacher-student assessing. It is notable that Step 2 and 3 are not a simple linear sequence; rather, they involve a cyclic and reciprocal pattern that occurs during the teaching process. The strategy of "Active Assessment" is used in this step.

Step 4: Wrap-up: the closing part of each session, including conclusion of the session and answering potential problems, etc. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

After completing teaching plan developing, the researcher evaluated the content validity to assess whether the learning activities aligns with the teaching objectives through IOC.

Evaluating Content Validity of Teaching Plan

5 experts (listed out in Appendix B) who experienced for no less than 10 years in curriculum design and teacher education are invited to evaluate the content validity to assess whether the learning activities aligns with the teaching objectives through IOC. Each of them are given an assessment form (Appendix K) with the content of teaching objectives, teaching procedures along with the teaching outlines (Appendix H) and the detailed teaching plan (Appendix J). Each lesson plan is followed by columns of a consistency index and a comment. Experts are required to determine the consistency of the items (+1.0 represents "strong alignment", 0.0 represents "neutral or

unclear alignment", -1.0 represents "no alignment") and potential suggestions that might contributes to the teaching plan or even the study. As shown in Appendix I, the IOC of each item is 1.00, which means that the teaching activities are highly aligned with the teaching objectives, verifying the operability and availability of the teaching plan.

Try-out of the Teaching Plan and Revisions

A try-out of the teaching plan was carried out in a class of 20 English teacher students of Grade 3 in University B, who took part in a two-day trial training, which consists of 11 planned lessons. Trying out the teaching plan is a crucial step in the instructional design process. This try-out served as a formative evaluation phase, aligning with Smith and Ragan's (2005) instructional design model. According to them, formative evaluation plays a critical role in determining whether instructional strategies effectively lead to the desired learning outcomes as it tests the effectiveness, appropriateness, and alignment of instruction with learning goals.

The observations are illustrated with the following points: alignment of expected objectives with actual outcomes, validation of lesson effectiveness, pacing and sequencing, and classroom interactions.

1. Alignment of expected objectives with actual outcomes

Students showed observable progress in classroom management and engagement skills. Performance of learning activities matched the intended learning objectives.

2. Validation of lesson effectiveness

The try-out teaching showed high levels of student engagement, participation, and task performance. Feedback confirmed that students found lessons interesting and helpful, validating the instructional approach.

3. Pacing and sequencing

During the try-out, most students/groups completed tasks within the planned time frame. and lesson flow was mostly smooth and logical. However, a few groups struggled with time management, suggesting a need for minor adjustments.

4. Classroom interactions

Activities designed in the teaching successfully encouraged peer collaboration, discussion, and reflection. Student engagement was sustained throughout the teaching. What's more, some students suggested advance access to worksheets to enhance preparedness.

In conclusion, the above results demonstrated a strong alignment as students showed increasing confidence and skills in places as classroom management and student engagement. The effectiveness of the lessons was further validated through high levels of student engagement, active participation, and generally qualified performance. Most students completed the activities on time, indicating that the pacing and sequencing of the lessons were appropriately structured.

However, some groups reported challenges with time control during group work, yielding improvement in activity timing and facilitation. Additionally, several students suggested receiving worksheets in advance to be better prepared, which was adopted in the later amendment of the teaching plan, making the course more learner-centered. Overall, the analysis indicates that the course design is effective, with high validation of outcomes, strong student involvement. Yet, improvement of timing is made use of as minor adjustment to the plan. And the study designed worksheet for each session based on the suggestion.

The observed feedback based on try-out teaching helped the study **revise and develop a final vision of teaching plan** to be more well-structured, learner-centered, and cognitively supportive. And then, the study implemented the revised teaching plan in the experiment to testify its effectiveness of TSE of pre-service English teachers.

3.3 Phase 3: To Evaluate the Effectiveness of the Active Learning Model for Enhancing TSE of Pre-service English Teachers

After designing a course aiming to enhance TSE of pre-service English teachers based on the Active Learning Model, the study implemented the course as an experiment to testify its effectiveness. The complete process is shown as below.

3.3.1 Research Design

The study employed a quasi-experimental design using a randomized pretest-posttest-follow-up design (Table 4) within a purposively selected sample.

Table 4 Randomized Pretest, Posttest, Follow-up Design[1]

Groups	Pre-Test	Experiment	Post-Test	Follow-up Test
E R	T1	×	T2	T3
C R	T1	-	T2	T3

There are five major steps (Figure 6) in this phase, including identifying population and sample size, experiment, post-test & follow-up test and data analysis, which are introduced in the following.

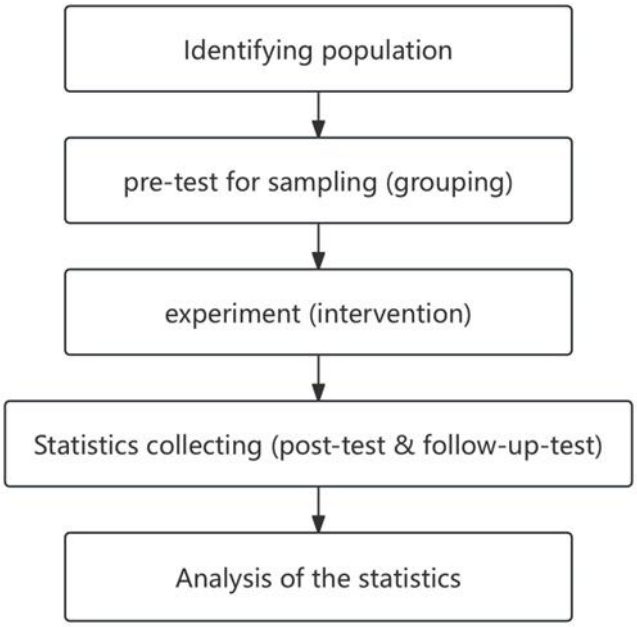

Figure 6 Evaluation of the Active Learning Model

[1] E: Experimental Group; C: Control Group; R: Random Allocation; T1: Pre-test ; T2: Post-test T3: Follow-up test; ×: Experiment; -: No Experiment

3.3.2 Identification of Population and Sample

Population: As one of the research objectives of the study is to research into the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers, the study identifies pre-service English teachers in the 3rd year in universities or teacher training colleges in Guizhou Province who are preparing to teach English at the local primary or secondary schools as its population.

Sample: 40 pre-service English teachers enrolled in Liupanshui Normal University (a university located in the west of Guizhou Province) who currently in the third year of study are selected out as the sample of the study.

A total of 80 pre-service English teachers participated in the questionnaire administered prior to the implementation of the Active Learning Model. Following data collection, the researcher computed the aggregate scores for each respondent based on the questionnaire. These scores were subsequently ranked in an ascending order. To ensure methodological rigor and control for baseline disparities in TSE levels, the 40 participants with the lowest overall scores were purposively selected with matched pairs and random assignment to experimental and control groups in the experimental phase.

3.3.3 Research Procedure

The research lasts for two months with the sequence (Figure 7) as follows:

1.Week 1: **Pre-test**: Before conducting the experiment

2.Week 1-4: **Experiment**: 11 times of class, 90 minutes for each, three times a week in the first three weeks, twice a week in the last week, lasting for 4 weeks

3.Week 4: **Post-test**: at the end of conducting the experiment

4.Week 8: **Follow-up test**: 1 month after the post-test

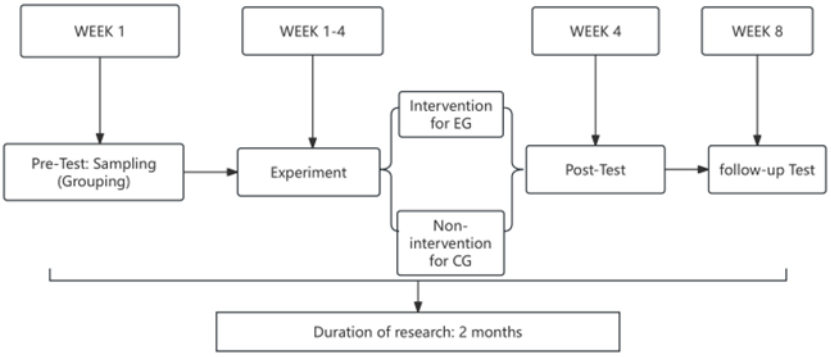

Figure 7 Research Procedure

1. Week 1: Pre-Test:

A total of 80 pre-service English teachers participated in the questionnaire administered prior to the implementation of the Active Learning Model. Following data collection, the researcher computed the aggregate scores for each respondent based on the questionnaire. These scores were subsequently ranked in an ascending order. To ensure methodological rigor and control for baseline disparities, the 40 participants with the lowest overall scores were purposively selected for inclusion in the experiment.

The decision to focus on the lowest-scoring individuals was grounded in the rationale that participants exhibiting lower initial self-efficacy are more likely to benefit from structured pedagogical interventions, given their greater capacity for measurable improvement. By targeting experimental group, the study enhanced its sensitivity to detect the effects of the Active Learning Model, thereby increasing the likelihood of observing significant changes in TSE. Moreover, this approach ensured that intervention efforts were directed toward those most in need, thereby maximizing both the practical relevance and educational significance of the research.

To establish baseline equivalence between the experimental and control groups, 40 participants with the lowest overall score were assigned to either the experimental group or the control group using simple random sampling method with matched-pairing based on their TSE scores. This approach ensured that the two groups were balanced in terms of their initial self-efficacy levels, thereby improving the internal validity of the study. Participants were assigned in an alternating sequence based on

their TSE rankings: the individual with the lowest score was assigned to the experimental group, the second-lowest to the control group, the third-lowest to the experimental group, and so forth until all 40 selected participants were evenly distributed into two groups. Appendix G illustrates the details of the allocation of participants to the experimental group and control group based on TSE scores.

This allocation strategy is essential to minimize potential selection bias and enhance the internal validity of the study. By ensuring that both groups start with an equivalent range of TSE scores, any observed differences in post-test outcomes can be more confidently attributed to the effects of the Active Learning Model rather than pre-existing disparities in self-efficacy levels.

As a result of this allocation process, E comprised 20 participants while the C are also consisted of 20 participants. This systematic approach strengthens the reliability of the findings and ensures that any improvements in TSE levels can be meaningfully linked to the intervention.

2.Week 1-4: Experiment:

E will engage in the 11-class teaching with the instruction of the Active learning Model. The experiment lasts for 4 weeks, ensuring sufficient exposure of participants to the Active Learning Model.

3. Week 4: Post-Test:

After the completion of the intervention, both groups will retake the revised TSES to measure any potential changes in their TSE levels. The post-test will be conducted under similar conditions to the pre-test to ensure consistency.

4. Week 8: Follow-up test:

One month later a follow-up test are conducted with both groups to assess long-term retention and affects of the Active Learning Model on TSE of pre-service teachers.

3.3.4 Data Analysis

There are three sets of data that are analyzed in this phase. Before the experiment, a pre-test is launched, in which 80 pre-service English teachers from Liupanshui Normal University took the questionnaire. A total of 80 questionnaires were

distributed and 80 were retrieved, of which the total of 80 were valid. After implementing the Active Learning Model based teaching, 40 participants from both EG and CG took the post-test in the same week. A total of 40 questionnaires were distributed and 40 were retrieved, of which the total of 40 were valid. After a month, the third set of data was collected from the follow-up test. A total of 40 questionnaires were distributed and 40 were retrieved, of which the total of 40 were valid. All three sets of data are analyzed with corresponding methods according to the research objectives.

1. Descriptive Statistics

Descriptive statistics will be employed to summarize and describe the characteristics of the dataset, including participants' TSE scores across different time points (pre-test, post-test, and follow-up). The following measures will be used:

Mean: To determine the average TSE score at each phase;

Standard Deviation: To assess the variability of scores among participants.

These descriptive analyses will provide a general overview of the participants' self-efficacy levels before and after the intervention.

2. Inferential Statistics

Inferential statistics will be conducted to test hypotheses and draw conclusions about the effect of the Active Learning Model with the following method:

General Linear Model Repeated Measures ANOVA:

The study uses General Linear Model (GLM) Repeated Measures ANOVA To examine within-subject and between-group effects over three time points (pre-test, post-test, follow-up), analyzing the interaction between group and time.

CHAPTER 4
RESEARCH RESULTS

This chapter elaborates in detail the research results of this study. The topic of this research is *Development of Active Learning Model for Enhancing Teacher Self-Efficacy of Pre-Service English Teachers*. There are three research objectives of this study:

1. To study the definition and components of TSE of pre-service English teachers.

2. To develop an active learning model for enhancing TSE of pre-service English teachers.

3. To evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers.

The detailed explanation of the research results in this chapter are carried out in accordance with the three stages of the research by presenting, discussing and analyzing the research results and data of each stage:

Phase 1: To define TSE of pre-service English teachers and its components;

Phase 2: To develop an active learning model for enhancing TSE of pre-service English teachers;

Phase 3: To evaluate the effectiveness of Active Learning Model for enhancing TSE of pre-service English teachers.

Then the chapter summarizes the results of the study after detailed explanation.

The letter abbreviations and symbols in the following table will be used in the chapter when illustrating the research results. Table 5 explains the meanings represented by the corresponding abbreviations and symbols.

Table 5 Abbreviations and Symbols

Abbr.	Meaning
α	Cronbach's Alpha
r	Reliability
IOC	Item-Objective Congruence
E	Experimental Group
C	Control Group
CME	Classroom Management Efficacy
ISE	Instructional Strategies Efficacy
SEE	Student Engagement Efficacy
N	Number Of Participants In The Group
M	Mean Value
SD	Standard Deviation
t	t-test Value
df	Degrees Of Freedom
p	Probability Value
MD	Mean Difference
95% CI [x, y]	95% Confidence Interval Range
SE	Standard Error
X^2	Approx. Chi-Square
F	F-Statistic
partial η^2	Partial Eta Squared

4.1 Analysis of Phase 1: To Define TSE of Pre-service English Teachers and Its Components

This phase is designed to achieve the first research objective, which is “to explore the meaning and components of TSE of pre-service English teachers”. Throughout the whole phase, methods of literature review and semi-structured interview

were implemented to probe into TSE and its components. Five experts (Appendix B) took part in the semi-structured interview.

Then the study launched a thematic analysis to analyze the dialogues of the five experts' semi-structured interview. Based on the results, a TSE questionnaire as the research tool was developed. Then the study launched a pilot-test to evaluate its Content Validity through the Index of Item-Objective Congruence (IOC) to verify the validity of the questionnaire as the research tool of the study.

In the following section, the study illustrated the results of the literature review and the thematic analysis, defining TSE in accordance with the research design.

4.1.1 Definition of TSE

The study concludes a definition of TSE after reviewing its definitions proposed by different scholars (Tschannen-Moran & Hoy, 2001; Caprara et al., 2003; Klassen & Tze, 2014; Ma, McMaugh & Cavanagh, 2022; Malinen, etc., 2013; Kasalak & Dagyar, 2020).

TSE refers to personal beliefs in capabilities that provides teachers with sustainable professional commitment and the faith for success in teaching and student learning even if confronted with hinders.

The study found that the experts who took part in the interview also agree that TSE is a belief or confidence in one's ability to successfully carry out teaching tasks (e.g., lesson planning, student engagement, and classroom management) and an internal psychological resource that influences future career commitment, persistence, and adaptability.

All five experts emphasize that TSE involves a psychological belief or confidence in one's ability to perform teaching-related tasks. Experts 2, 3, and 5 highlight this belief as a crucial part of choosing or continuing in a teaching career.

"According to related theories, TSE refers to teachers' belief in fulfilling their teaching tasks, including making teaching plans, organizing classes well, making students willing to learn. As for pre-service teachers, if they want to be confident in

their internship, they have to be at least well prepared for teaching plans, and be confident on their ability of coping with whatever they will meet during teaching activities." (Expert 2)

"TSE means teachers' confidence on how well they can be a qualified teacher. TSE of Pre-service teachers, I think, can be defined as teacher students' confidence on how well they can become a teacher. This will help them to be confident enough to choose education as future career." (Expert 3)

"Teacher self-efficacy of pre-service English teachers refers to their psychological belief in their ability to successfully manage instructional tasks, engage students, and navigate classroom challenges. It is closely linked to their emotional resilience, stress management, and self-confidence, influencing their motivation, persistence, and overall well-being." (Expert 5)

In conclusion, TSE for pre-service teachers refers to their psychological belief or confidence in their their capability to perform essential teaching tasks effectively, such as classroom management, instructional delivery, student engagement, and assessment.

This sense of confidence is not merely a psychological trait but a crucial predictor of teaching readiness, adaptability, and long-term professional success. When pre-service teachers possess high TSE, they are more likely to demonstrate initiative, persist through challenges, and respond constructively to setbacks during their early teaching experiences.

High levels of TSE are also positively correlated with increased motivation, job satisfaction, and commitment to the teaching profession (Tschannen-Moran & Hoy, 2001). Conversely, low TSE is often linked to feelings of anxiety, avoidance of difficult teaching situations, and even attrition during the early career stages. Therefore, enhancing TSE during the pre-service stage is not only a matter of improving teaching performance but fundamentally about nurturing the psychological foundation for sustainable and effective professional development.

Given its pivotal role, TSE are obliged to be deliberately developed through research-based instructional strategies. This study positions Active Learning as an

effective approach to cultivate TSE, as it enables pre-service teachers to gain mastery experiences, collaborate with peers, engage in reflection, and apply knowledge in meaningful contexts. By fostering these experiences in a supportive environment, the study aims to enhance the confidence, competence, and resilience of future English teachers and then ultimately contributing to their success and retention in the teaching profession.

4.1.2 Components of TSE

The study proposed three components of TSE based on literature review, which the study thinks closely supportive to the contribution of TSE for pre-service English teachers. The three components (Instructional Strategies Efficacy, Classroom Management Efficacy And Student Engagement Efficacy) are used to design the TSE questionnaire, which means its crucial to establish appropriate components in order to carry out further study.

All the five experts took the interview agreed on the established components of TSE, which they think are suitable especially for pre-service teachers. And no experts raise differences in the definitions of the three components. What is worth mention is that Expert 1 proposes that TSE can be connected with emotional resilience, stress management, self-confidence, and well-being, suggesting it impacts more than just teaching performance. This is a valuable suggestion for further research.

"Yes. I think the components are suitable in this situation." (Expert 1)

"Like I mentioned earlier, TSE includes teachers' belief in the three components you have concluded above. I think the three components are suitable for pre-service teachers." (Expert 2)

"For pre-service English teachers, other than their English capacity, they also need pedagogical capacity to make them feel confident. Being a qualified teacher will require ability of teaching design, classroom management and student engagement and other related techniques. I think the above three components are a fair proposal for components of TSE." (Expert 3)

"Yes I do. When teachers are confident in their job, they are actually confident on their techniques of designing their lessons, and the way they can manage their students, and how they can bound with their students. Especially when they are challenged with difficult questions and difficult students, they will feel very capable when they handle it well. So based on that, I would say the above three components are suitable for TSE of pre-service teachers." (Expert 4)

"Yes, it is suitable. Based on the definition I gave earlier, TSE involves belief in ability to successfully manage instructional tasks, engage students, and navigate classroom challenges, which is the three components you have concluded." (Expert 5)

In summary, the study proposed three components, namely Instructional Strategies Efficacy, Classroom Management Efficacy And Student Engagement Efficacy, which suits for pre-service teachers when it comes to their TSE. Consequently, the study developed a TSE questionnaire as the research tool to evaluate TSE.

4.2 Analysis of Phase 2: to Develop a Learning Model through Active Learning for Enhancing TSE of Pre-service English Teachers

The purpose of this phase is "to develop a learning model through Active Learning for enhancing TSE of pre-service English teachers". In order to achieve this purpose, the study implemented this phase. First of all, an outline concluding topic, learning objectives, learning methods, etc. is scripted after analyzing learning contexts, learners and learning task. And then a detailed teaching plan with teaching content is designed based on the outline. Subsequently, the study invited five experts to evaluate the teaching plan and launched a try-out teaching with 20 students to testify the design. In this section, the study introduces the steps in detail.

4.2.1 Comprehension of Active Learning

Based on the literature review and interviews, this study defined Active Learning and further created a learning model based on Active Learning, considering enhancing

three elements in the model, consequently enhancing TSE of pre-service English teachers.

The definition developed by literature review is as the following:

Active Learning refers to an instruction to learning engaging a series of learning-centered activities that students participate in to acquire knowledge and cultivate skills.

According to the experts being interviewed, they agreed that Active Learning is "Learner-Engaged" and emphasizes "participation". The experts claimed that Active Learning requires active participation, for instance, classroom activities (Expert 1), discussions (Experts 2, 5), and hands-on experiences (Experts 3, 4).

"Actually teaching methods as role-playing and in-class discussion can be considered as active learning approaches,..." (Expert 2)

"...active learning can be seen as a cognitive and emotional process that enhances engagement, motivation, and self-efficacy by promoting hands-on experiences, critical thinking, and collaboration. It shifts learners from passive recipients to active participants, fostering deeper understanding and personal growth, ..." (Expert 4)

Based on the discussions of the interview, Active Learning can be defined as:

a learner-centered approach that involves engaging students in meaningful, hands-on activities that foster critical thinking, collaboration, and practical skill development. In teacher education, it bridges theory and practice by encouraging pre-service teachers to participate in simulations, discussions, and reflective exercises, thereby enhancing motivation, self-efficacy, and real-world teaching competence.

When discussing on application of the model, all the experts agree that the learning model can be applied effectively in the classroom. Other than listing out examples of applying Active Learning in classroom teaching, several experts propose the relevance of Active Learning for training pre-service teachers, as it helps them apply pedagogical theory in practical, classroom-like situations.

"Successful implementation of Active Learning can boost TSE. Seeing students engaged and learning effectively reinforces their belief in their teaching abilities." (Expert 2)

"TSE and Active Learning can create a positive feedback loop, where success in one area reinforces the other." (Expert 3)

"I would view Active Learning as a tool for empowering pre-service English teachers by strengthening their self-efficacy, reducing anxiety, and fostering resilience." (Expert 5)

According to previous research, there are several common strategies of Active Learning: collaborative learning (Bishop, 2014; Prince, 2004; Tien et al., 2020; Gillies, 2016), experiential learning (Darling-Hammond et al., 2005; Putnam & Borko, 2000), project-based learning (Prince, 2004; Darling-Hammond et al., 2005) and active assessment (Black & Wiliam, 1998; Angelo & Cross, 1993).

The interview shows that the suggestions proposed by the experts also confirm that the above strategies can be used to apply Active Learning.

"Active learning in teacher education can be seen an instructional approach that engages future educators in hands-on learning experiences rather than passive content absorption. It involves strategies such as collaborative discussions, problem-solving tasks, case studies, simulations, and reflective teaching practices." (Expert 2)

"I think when making use of active learning model to enhance TSE of pre-service English teachers, it is highly suggestable to focus on how to 'experience in person',..." (Expert 3)

"...to begin with simple active learning techniques, like "Think-Pair-Share" or short group discussions, to build confidence..." (Expert 5)

After comprehending both TSE and Active Learning, the study developed a learning model aiming to enhance TSE of pre-service English teachers, in concrete, enhance three components of TSE with the Active Learning Model as the instruction.

4.2.2 Introduction to the Active Learning Model

The study developed an Active Learning Model containing four steps aiming to enhance the three components of TSE. As concluded earlier, four active learning strategies are used in the design of the Active Learning Model:

1.Collaborative Learning

Collaborative Learning emphasizes the importance of social interaction in knowledge construction. It involves students working together in pairs or small groups to discuss concepts, solve problems, and co-construct understanding. Collaborative Learning will be applied through activities such as lesson planning in teams, peer evaluation, group discussion and role-play simulations of teaching scenarios.

2.Experiential Learning

Experiential Learning focuses on learning through direct experience, reflection, conceptualization, and experimentation. Experiential Learning will be integrated through teaching demonstrations, micro-teaching sessions, classroom management simulations, and reflection journals in the study, allowing pre-service teachers to apply theory in realistic contexts, reflect on their actions, and continuously refine their teaching strategies.

3.Project-based Learning

Project-Based Learning is an instructional method in which learners actively explore real-world problems and produce meaningful outputs over an extended period. Participants in the study will engage in team-based projects such as designing teaching plans, creating learning materials for specific learning objectives, and developing assessments aligned with certain teaching objectives. Through such strategy, pre-service teachers will take ownership of their learning, engage in authentic teaching-related tasks, and develop both subject matter knowledge and pedagogical skill, all of which contribute positively to their TSE.

4.Active Assessment

Active Assessment refers to assessment practices that are integrated into the learning process and involve learners in monitoring, evaluating, and improving their performance. This includes peer assessment, self-assessment, mentor-feedback, etc. In this study, Active Assessment will be embedded in the model to help pre-service teachers track their own progress, identify strengths and areas for improvement, and build confidence in their teaching abilities.

There are four steps in the Active Learning Model, which are used in each session of the whole training course:

Lead-in: The first step of the learning model. In this step, necessary information required for implementing the class is introduced to get the students prepared and involved. Project-based Learning and Experiential Learning are used in this step.

Activities applying: the second step of the learning model, in which multiple learning activities such as group discussion, peer-teaching, case study, plan design are carried out. This is the main body of the whole model, which provides activities for students to engage in the learning process. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

Active assessment: the third step of the model, consists of self-assessing, peer assessing and teacher-student assessing. It is notable that Step 2 and 3 are not a simple linear sequence; rather, they involve a cyclic and reciprocal pattern that occurs during the teaching process. The strategy of “Active Assessment” is used in this step.

Wrap-up: the closing part of each session, including conclusion of the session and answering potential problems, etc. Collaborative Learning, Project-based Learning, and Experiential Learning are used in this step.

With the purpose of enhancing TSE, (enhancing Instructional Strategies Efficacy, Classroom Management Efficacy And Student Engagement Efficacy in concrete), the study designed a training course of 11 sessions based on the active learning model, in which learning objectives and teaching contents are all prescribed. The following section firstly illustrates the analysis of the key elements of the course: the

analysis of the learning contexts, the analysis of learners and the analysis of course task and then exhibits how the 11 sessions are designed.

4.2.3 Training Course Design

The study designed the training the Active Learning Model course under the guidance of the Instructional Design Process Model proposed by Smith and Ragan (2005), who illustrated that the initial process of instructional design is “analysis”, which includes “learning contexts, learners and learning task” (Smith and Ragan, 2005, p. 7). Making use of the procedure in designing a course, the study analyzed the major aspects before composing the teaching plan.

4.2.3.1 Analysis of learning contexts

Analysis of learning contexts includes “needs assessment” and “description of environment” (Smith & Ragan, 2005). The Active Learning Model designed in this study satisfied the “Problem Model” proposed in their research as it is used to improve TSE of pre-service English teachers. A pre-test was carried out to select out participants with comparatively low TSE before the training. The course is to solve the “low TSE problem”.

Description of the environment covers analysis of physical realities as well as temporal and social environment. In detail, analysis of learning contexts of this course include:

1. Characteristics of the teacher that will implement the course:

The teacher implementing the course has 10 years of teaching experience as an English teacher, with a background in Educational Psychology, linguistics and English literature. The teacher is likely to have a reflective and learner-centered approach informed by educational psychology and may utilize active learning strategies, such as group discussion, role play, micro-teaching, and peer feedback in this course.

This combination equips the teacher with sufficient classroom skills, profound theoretical knowledge and expertise in language teaching. Those experience allows the teacher to mentor pre-service teachers to effectively enhance their TSE by

using Active learning to bridge theory and practice and foster both confidence and competence in future educators.

2. Existing curricula that the course are ought to integrate in:

Since its target audience is pre-service English teachers, the course is supposed to integrate with educational psychology, ELT methodology and pedagogical courses, reinforcing and expanding them to enhance TSE through learning. More specifically, the course is more likely to be incorporated or be a part of English Language Teaching (ELT) Curriculum, which focuses on psychological training of future educators.

3. Characteristics of the class:

The experimental class, consists of 20 junior students majoring in English education can be seen as well-positioned for a course where active learning is implemented. The study analyzed its characteristics in the following detail:

(1) Size of the class:

The class is composed of 20 junior English education majors, being divided into 5 groups with 4 for each to satisfy the Active Learning Model. This size is small enough for learner-centered teaching mode, allowing for effective peer collaboration, individualized feedback, and active learning strategies such as group discussion, micro-teaching, etc.

(2) Location of the class:

The course was carried out in a flexible, movable multimedia classroom (Appendix J) that allows for varied seating arrangements and interactive instructional designs, supporting active learning methodologies. Besides, the classroom is equipped with projector, whiteboard, seating for group work that suits for micro-teaching. This provides an supportive environment for the Active Learning.

(3) Class climate:

Academically, students in the class are motivated and career-focused, aiming to become English teacher with a mix of confidence and anxiety on real-world teaching. This makes them willing to learn new strategies that can help relieve the anxiety.Socially, the class is likely to be cooperative and peer-supportive due to shared major and small group size, consequently makes communication, peer feedback, and

collaboration more likely active. Emotionally, the class is positive but includes potential teaching-related stress or self-doubt.

In conclusion, the size and location of the class is well-suited for the Active Learning Model for enhancing TSE of pre-service English teachers as it provides a friendly atmosphere that can help students engage actively, be willing to take risks, and grow as confident future educators.

4. Characteristics of the school:

The teaching will be applied in a university in the southwest of China. Due to its location, the resources for the students more limited than urban centers. The university serves a practical and regionally focused mission, preparing English education majors for careers in the local region. Most students graduate from the university will work in local primary/secondary schools, which implies that pre-service teachers are supposed to be well-prepared for local teaching conditions since it is essential to emphasize on practical and adaptable teaching skills. Consequently, the curriculum should make students prepared for realistic and local teaching challenges.

The overall context analysis reflects a transition from theory-based university learning which pre-service teachers have completed adequate courses of pedagogy and English knowledge to the practice-oriented professional development, providing a critical setting for interventions aiming at enhancing TSE through the Active Learning Model.

4.2.3.2 Analysis of learners

The learners of the course are junior students majoring in English education in their third year of university study. As part of their teacher education program, they have learned both pedagogical theories and subject-specific knowledge over the past three years. However, their real-world teaching experience remains limited. They participate in short-term internships each term and are currently in their final term of training before taking part in a long-term teaching practicum. This limited classroom exposure means their practical teaching skills are still emerging, often relying on observation and theory rather than real-world experience. More specifically, they are

familiar with concepts such as lesson planning, classroom management, and language acquisition mostly in simulated or academic contexts.

The course is set in the second term of the third year for the participants who are experiencing a critical period right before long-term internship, making them highly receptive to targeted training aimed at increasing their teaching confidence and readiness. As they are going to attend a long-term teaching practicum, they are likely to experience both anticipation and anxiety, making them cognitively willing to accept training that can help relieve anxiety. A course aiming at enhancing their TSE is promising in helping build their confidence and skills essential for success in real-world teaching.

4.2.3.3 Analysis of the learning task

The learning task refers to the course goal, which is “to enhance TSE of pre-service English teachers through Active Learning Model”. This section illustrates the detailed analysis of the learning task.

1. Types of learning:

Smith and Ragan (2005) categorized learning into different types: verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills. The learning task of this course include Verbal Information (learning the theory TSE and its components), Cognitive Strategies (reflecting on and regulating one’s own teaching practices to build confidence and applying problem-solving in classroom scenarios), Intellectual Skills (designing lesson plans, managing a class,etc.) and Attitudes (developing a positive belief in one’s ability to teach. building motivation, etc.). This is a complex and multidimensional task involving higher-order thinking, emotional readiness, and applied skills. During the process of fulfilling the task, multiple cognitive processes are involved, which are ought to be fully considered while designing the teaching plan.

2. Information processing:

The learning task aligns active learning's emphasis on reflection and application with deep cognitive engagements and meta-cognitive awareness to fulfill the task. For instance, participants of the course must attend to instructional content and peer-teaching classes to learn, which arouse the cognitive activity of perception and

attention. Encoding knowledge of effective teaching strategies and classroom practices into long-term memory is also required in fulfilling the task. And participants are required to practice through micro-teaching, reflection, and feedback cycles as retrieval process. Application and Generalization: As learners are supposed to apply strategies during simulations or teaching tasks and generalize learned skills to various classroom scenarios, the course involve application and generalization into the process of learning. Assessment of learners requires them to reflect on their strengths, weaknesses, and growth areas in teaching of peer and self, which is a mental process of meta-cognition.

Above all, the information process of the learning task involves perception, attention, encoding, retrieval, application, generalization and meta-cognition. To better understand the mental processes the participants go through to complete the learning task helps the course designer better anticipate where learners may struggle and provide timely guidance and transfer learning to new contexts, leading to improved learning outcome. Also, this analysis helps the designer sequence content logically, select appropriate teaching strategies and provide effective practice and supportive feedback that matches learners' cognitive needs, as a result produce a better teaching plan.

3. Prerequisites of the learning task

The study proposed three components of TSE, which is Classroom Management Efficacy, Instructional Strategies Efficacy and Student Engagement Efficacy. The above three components can be regarded as the prerequisites of the learning task. And the course is designed to enhance TSE by respectively enhance the three specific forms through Active Learning Model. By targeting and enhancing the three prerequisites, the course builds a solid foundation for enhancing TSE. These components act as entry points into the compound belief system of TSE of pre-service teachers. The study explained each component earlier in Chapter 2 with the support of literature.

(1) Classroom Management Efficacy: a teacher's confidence in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment.

Based on the given definition, the course designed three topics in the part as the prerequisites to enhance Classroom Management Efficacy:

a) Classroom organization;

b) Behaviour management & conflict resolution;

c) Supportive learning environment.

To develop pre-service teachers' skills of supporting the above three parts is the approach of enhancing Classroom Management Efficacy.

(2) Instructional Strategies Efficacy: a teacher's belief in their ability to design classes, including using effective teaching methods and assessment approaches, and adapting instruction to meet diverse student needs and foster student learning.

This component can be supported by:

a) Analysis of related factors (contexts, learners and objectives);

b) Curriculum design;

c) Feedback & evaluation.

Likely, the above parts are of significance in enhancing Instructional Strategies Efficacy.

(3)Student Engagement Efficacy: a teacher's confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities.

The focus of the following three parts can be used to enhance Student Engagement Efficacy:

a) Motivating students in class;

b) Interaction in classroom;

c) rapport with students.

Based on the above discussion, the prerequisites can be used as the guideline for topic-determination. Figure 8 illustrates the prerequisites of the learning task.

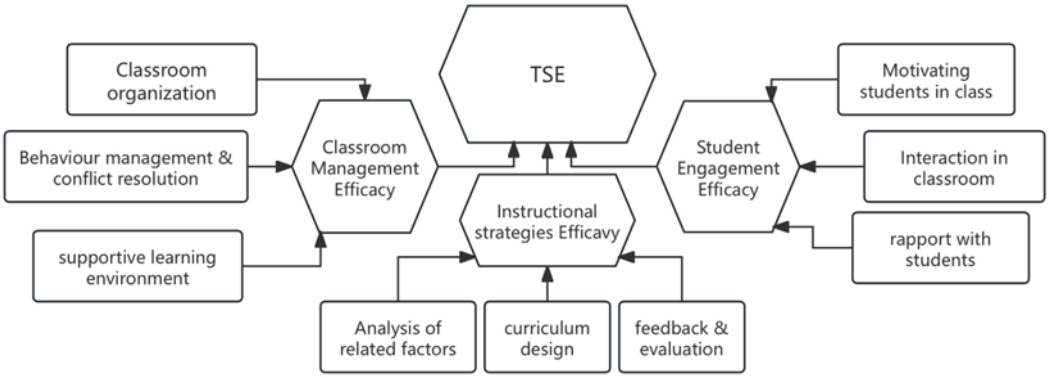

Figure 8 Prerequisites of the Learning Task

1. Learning objectives

Learning objectives origin from predetermined prerequisites, which is the precise and specific statements for prerequisites.

According to Smith & Ragan, "A learning objective is a statement that tells what learners should be able to do when they have completed a segment of instruction." (2005, p. 96) Hence, the study composed for each session learning objectives (See Appendix H) which abide by the rules of feasible, operable and measurable.

In order to achieve the task by respectively achieving the prerequisites, the study has designed 11 sessions (Appendix J), in which elaborated on the learning objectives of each session in detail. The detailed design of each session is illustrated in the next section.

4.2.3.4 Composing of the teaching plan

The Active Learning Model designed on the basis of the analysis of learning contexts, learners and learning task, consists of 11 sessions including orientation, enhancing of three components of TSE and commencement. As mentioned earlier in Section 4.2.2, there are four major strategies the model make use of: collaborative

learning, experiential learning, project-based learning and active assessment and four steps in each session. This section mainly introduces how each session is designed and how the active learning strategies are used.

Session 1: Orientation

This session serves as a foundational introduction to the training, orienting pre-service teachers to the critical concept of TSE. Its primary aim is to establish rapport, motivate participants, and foster a shared understanding of course objectives, potential challenges, and personal learning goals. Collaborative Learning is used to design activities such as “group-discussion” and “discussion prompt”, and Project-based Learning is used to design activities as “goal-setting” and “summarizing tasks”. Active Assessment is used to encourage participants to conduct peer-feedback and self-feedback and receive teacher feedback.

Session 2: Classroom Management Efficacy: Classroom Organization

This session delves into the “Classroom Organization” of Classroom Management Efficacy. The core objective is to empower pre-service teachers with the confidence and practical skills to design structured, predictable, and efficient learning environments. This includes understanding how to arrange the physical space, establish instructional routines, and define behavioral expectations to promote student engagement and minimize disruptions. The session highlights Classroom Organization as a pivotal aspect of effective Classroom Management Efficacy. Active learning strategies as Collaborative Learning and Project-based Learning are used to design activities as “ice-breaker discussion”, “choosing the best layout” and “plan making”. Experiential Learning is used in this session in the activity of “classroom setup challenge”. Participants are required to exchange plans, make self-comments and share ideas in class, which is the active learning strategy of Active Assessment.

Session 3: Classroom Management Efficacy: Behavior Management & Conflict Resolution

This session extends Classroom Management Efficacy to “Behavior Management and Conflict Resolution”. Behavior management encompasses strategies to promote positive conduct and prevent disruptions, while conflict resolution focuses on

peacefully resolving disputes. The session's overarching goal is to equip pre-service teachers with the skills and confidence to effectively and respectfully handle student misbehavior and interpersonal conflicts. Collaborative Learning and Project-based Learning are used to design activities as "brainstorming for mind-map" and "Proactive strategy plan". Experiential Learning such as "role play" is also used in this session. Active Assessment is also encouraged in this session.

Session 4: Classroom Management Efficacy: Supportive Learning Environment Building

This session continues to strengthen Classroom Management Efficacy by focusing on how teachers establish and maintain a supportive learning environment that fosters emotional safety, mutual respect, and active student engagement. The central idea is to enhance their TSE by developing the skill of cultivating positive classroom climates that reduce behavioral issues and promote academic and social-emotional success. In this session, activities as "group discussion", "case studies" and "role-play" are designed with the guidance of Collaborative Learning, Project-based Learning and Experiential Learning.

Session 5: Instructional Strategies Efficacy: Analysis of Related Factors

This session targets Instructional Strategies Efficacy by focusing on the analysis of factors influencing effective instruction, including learning contexts, learners, and learning objectives. The aim is to train pre-service teachers to systematically examine these elements to select and apply the most effective instructional strategies. This session cultivates their analytical and adaptive thinking, transforming them into strategic decision-makers in instructional planning and delivery by implementing activities such as "learning objectives developing", "lesson plan template designing", "mind-map drawing" and "mini-lecture". Active learning activities like Collaborative Learning, Project-based Learning, Experiential Learning and Active Assessment are used while designing the above activities.

Session 6: Instructional Strategies Efficacy: Curriculum Design

This session aims to strengthen Instructional Strategies Efficacy by engaging pre-service teachers in the curriculum design process. It moves beyond

isolated lesson planning to integrated, purposeful curriculum thinking, which involves the intentional planning and organization of content, methods, and assessments to maximize instructional effectiveness by asking participants designing a lesson plan. The implementation of Collaborative Learning, Project-based Learning, Experiential Learning and Active Assessment are shown in the design of activities.

Session 7: Instructional Strategies Efficacy: Feedback & Evaluation

This session aims to build Instructional Strategies Efficacy by training pre-service teachers to use feedback and evaluation as effective tools for improving student learning and guiding their own instructional decisions. The session helps pre-service teachers understand how to design, deliver, and respond to feedback in a way that enhances learning and strengthens teaching effectiveness. Activities like “peer micro-teaching” and “hands-on evaluation of student work” designed with the guidance of Collaborative Learning, Project-based Learning, Experiential Learning are implemented in this session.

Session 8: Student Engagement Efficacy: Motivating Students in Class

This session focuses on cultivating Student Engagement Efficacy by training pre-service teachers to develop and apply motivational strategies. The goal is to equip them with intrinsic and extrinsic motivational strategies, helping them understand how engagement connects to autonomy, relevance, and emotional connection in the classroom, thereby stimulating student interest, persistence, and active participation. This session carries out activities as “brainstorming”, “group work and discussion” and “peer review” to help students acquire motivational strategies.

Session 9: Student Engagement Efficacy: Interaction in Classroom

This session focuses on Interaction in Classroom, which contributes to Student Engagement Efficacy. It aims to improve classroom interaction through effective questioning strategies, active listening, and communication. Classroom interaction is presented not just as participation, but as a dynamic process where learners socially construct knowledge, develop communication skills, and feel a stronger sense of belonging and investment. The session intends to build pre-service teachers’ Student Engagement Efficacy with active learning strategies (Collaborative Learning, Project-

based Learning, Experiential Learning and Active Assessment) by enabling them to effectively facilitate, encourage, and manage classroom interaction through “role play questioning”, “peer-coaching for active listening” and “mini-lecture”.

Session 10: Student Engagement Efficacy: Rapport with Students

This session focuses on enhancing Student Engagement Efficacy by developing the skills of building rapport with students. Rapport refers to the teacher’s ability to establish mutual trust, respect, and emotional connection, creates a supportive environment where students feel safe to engage, ask questions, express opinions, and take academic risks. The session aims to deepen pre-service teachers’ understanding that positive teacher-student rapport is foundational for a safe, respectful, and motivating classroom climate. In this session, participants took part in activities like “empathy practice through role-play” and “case study”.

Session 11: Commencement: Lesson Closure

This session provides a closure for the entire training course. It’s an instructional strategy designed to help participants consolidate learning, reflect on key takeaways, and reinforce their sense of progress. For TSE training, this closure is vital for connecting theory to practice, building confidence, and deepening professional identity. The session aims to reinforce core concepts, encourage reflection on changes in teaching beliefs, set future goals, and celebrate their accomplishments, fostering a sense of mastery and competence. Active learning strategies as Collaborative Learning, Project-based Learning, Experiential Learning and Active Assessment are also encouraged in this session.

In conclusion, the 11-session training course is designed to enhance TSE of pre-service teachers through a structured progression of themes and active learning strategies. It begins with establishing rapport and introduces the training objectives using Collaborative and Project-based Learning for goal-setting and self-assessment in Session 1. Session 2–4 build Classroom Management Efficacy, covering classroom organization, behavior management, conflict resolution, and supportive environments through hands-on activities like layout planning, role plays, and case discussions.

Session 5–7 focus on Instructional Strategies Efficacy, engaging participants in analyzing instructional factors, curriculum design, and effective feedback practices using tools like mind-maps, peer micro-teaching, and lesson planning. Session 8–10 target Student Engagement Efficacy, training participants in motivational strategies, classroom interaction, and rapport building via brainstorming, peer-coaching, and empathy-based role plays. Finally, in Session 11, Commencement consolidates learning by encouraging reflection, reinforcing key concepts, and celebrating achievements.

Across all sessions, active learning strategies including Collaborative Learning, Project-based Learning, Experiential Learning, and Active Assessmen are systematically integrated to foster confidence, adaptability, and reflective teaching practices. Concepts, teaching materials and teaching procedures of the training course are thoroughly exhibited in Appendix J.

4.3 Analysis of Phase 3: To Evaluate the Effectiveness of Active Learning Model on TSE of Pre-service English Teachers

The study gives a brief review of the major factors including research purpose, participants, variables and research procedures of the phase, and then illustrates the results based on the tree stages of research procedures.

4.3.1 Overview of the Phase

The purpose of this phase is “to evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers”. Thus, the study proposed two research hypotheses:

Hypothesis 1: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than their average TSE score at the pre-test stage.

Hypothesis 2: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than that of their counterparts in the control group.

40 participants were selected from 80 pre-service English teachers enrolled in the third year of Liupanshui Normal University. To ensure baseline equivalence, the

study made use of a stratified allocation strategy (the lowest scorer to the experimental group, the next to the control group, and so on, until all 40 participants were evenly divided) to select the participants based on pre-test score rankings of the questionnaire. As a result, there are two groups involved in the experiment: experimental group (n=20) and control group (n=20).

As mentioned in Chapter 3, the experiment involved several major procedures lasting for 2 months:

1.Before conducting the experiment, a pre-test is launched to establish the participants along with its experimental group and control group.

2.Then the study carried out a teaching experiment for 4 weeks immediately after the pre-test and launched a post-test at the end of the experiment.

3.One month later, a follow-up test is conducted in both groups with the purpose of verifying the effectiveness over time.

TSE of pre-service English teachers is the dependent variable while the Active Learning Model designed to enhance TSE the independent variable. The research instrument is a questionnaire based on Tschannen-Moran and Hoy's (2001) Teacher Sense of Efficacy Scale (TSES). There are 3 dimensions of the questionnaire referring to the three components of TSE of pre-service teachers (Classroom Management Efficacy (CME), Instructional Strategies Efficacy (ISE), and Student Engagement Efficacy (SEE)), with a total of 24 items, in which each dimension involves 8 items.

After collecting the data, the study employed both descriptive analysis and inferential analysis of the data. Descriptive statistics were employed to calculate the mean value of TSE and its three components for both the experimental and control groups. In order to testify Hypothesis 1 and Hypothesis 2, a General Linear Model Repeated Measures ANOVA was conducted, accounting for repeated TSE measurements across three tests: pre-, post-, and follow-up tests. The convergence of results across these analytical methods strengthens the reliability of the study and supports the empirical validity of the Active Learning Model as an effective intervention, offering a solid foundation for future application and research.

4.3.2 Descriptive Analysis

Mean Value (M) and Standard Deviation (SD) of overall TSE along with the three components of E and C were analyzed to determine baseline equivalence between the experimental and control groups. After the experiment, the study employed a post-test with both groups to evaluate the immediate influence of the Active Learning Model on the TSE of the experimental group. The study conducted a follow-up test one month after the experiment. Table 6 shows the descriptive statistics of the whole process of the experiment, including pre-test, post-test and follow-up test. The illustration shows the influence of the Active Learning Model.

Table 6 Comparison of M & SD of Pre-, Post- and Follow-up Test

Overall TSE	E (n=20)			C (n=20)		
	M	SD	Interpretation	M	SD	Interpretation
Pre-test	3.153	0.165	Moderate	3.170	0.157	Moderate
Post-test	3.684	0.238	High	3.146	0.163	Moderate
Follow-up	3.682	0.234	High	3.156	0.164	Moderate
CME	E (n=20)			C (n=20)		
	M	SD	Interpretation	M	SD	Interpretation
Pre-test	3.114	0.210	Moderate	3.246	0.220	Moderate
Post-test	3.846	0.316	High	3.234	0.250	Moderate
Follow-up	3.839	0.320	High	3.252	0.240	Moderate
ISE	E (n=20)			C (n=20)		
	M	SD	Interpretation	M	SD	Interpretation
Pre-test	3.164	0.287	Moderate	3.120	0.262	Moderate
Post-test	3.565	0.330	High	3.077	0.271	Moderate
Follow-up	3.559	0.337	High	3.090	0.254	Moderate
SEE	E (n=20)			C (n=20)		
	M	SD	Interpretation	M	SD	Interpretation
Pre-test	3.184	0.190	Moderate	3.146	0.148	Moderate
Post-test	3.646	0.264	High	3.135	0.179	Moderate
Follow-up	3.652	0.258	High	3.128	0.172	Moderate

Before the intervention, both E (M=3.153, SD=0.165) and C (M=3.170, SD=0.157) exhibited comparable, moderate baseline TSE scores. After the experiment, the overall TSE of E significantly increased to a high level (M=3.684, SD=0.238), while of C remained stable at a moderate level (M=3.146, SD=0.163), indicating a substantial improvement attributable to the intervention. Follow-up test after one month showed that the level of TSE of E (M=3.682, SD=0.234) remained close to the post-test results, demonstrating effectiveness and stability over time. Conversely, the level of overall TSE of C showed no prominent change in the follow-up stage (M=3.156, SD=0.164), further emphasizing the reliable influence of the Active Learning Model on enhancing TSE of pre-service English teachers.

The experimental group consistently maintained high levels across all three components in the follow-up tests, demonstrating the intervention's sustained and stable influence over time. Specifically, CME score remained high (M=3.839, SD=0.320), as did ISE score (M=3.559, SD=0.337), and SEE score (M=3.652, SD=0.258), reflecting resemblance with their post-experiment levels. In contrast, CME score of C (M=3.252, SD=0.240), ISE score (M=3.090, SD=0.254), and SEE score (M=3.128, SD=0.172) showed no obvious change, indicating that the three components of TSE of C remained unchanged without being intervened.

All these statistical findings support the robust and sustained positive influence of the intervention across all the components of TSE of pre-service English teachers.

4.3.3 General Linear Model Repeated Measures ANOVA across All Phases

In this section, the study illustrates the General Linear Model Repeated Measures ANOVA across All Phases to the overall TSE and three components of TSE as a comprehensive understanding from the perspective of data analysis.

4.3.3.1 General Linear Model Repeated Measures ANOVA of the overall TSE

To thoroughly assess the overall effects of the Active Learning Model on TSE of pre-service English over time and between groups, a General Linear Model (GLM) Repeated Measures ANOVA was performed. This analysis incorporated three distinct measurement points (pre-test, post-test, and follow-up) with Time serving as the within-

subjects factor and Group (experimental vs. control) as the between-subjects factor. This advanced analysis aims to determine if there is a significant interaction effect between Time and Group, demonstrating a comprehensively precise evaluation of the intervention's influence on TSE of pre-service English teachers. The analysis included the overall TSE and the three components of TSE, providing comprehensive statistical explanations to the research conclusions. Table 7 is the Mauchly's Test of Sphericity of the overall TSE. This analysis is employed to assess whether the assumption of sphericity was met for the TSE scores across the three measurement points.

Table 7 Mauchly's Test of Sphericity (The overall TSE)

Measure: TSE							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Time	0.932	2.611	2	0.271	0.936	1.000	0.500

As shown in Table 7, The result indicated that the assumption of sphericity was not violated (Mauchly's W=0.932, X^2=2.611,df=2, p=0.271($\geqq$0.05)), indicating the sphericity was assumed, thus the standard F-ratios from the repeated measures ANOVA were considered valid and available in subsequent analysis.

After conducting the Mauchly's Test, the study employed tests of within-subjects effects (Table 8) to testify whether TSE of the experimental group has been enhanced.

Table 8 Tests of Within-Subjects Effects (The overall TSE)

Measure: TSE							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	1.745	2	0.872	244.453	***	0.865
Time * Group	Sphericity Assumed	2.010	2	1.005	281.643	***	0.881
Error (Time)	Sphericity Assumed	0.271	76	0.004			

Note: *** means $p < 0.001$.

The analysis revealed a statistically significant main effect of time on TSE ($F(2,76)=244.453$, $p<0.001$, partial $\eta^2=0.865(>0.50)$. This result indicates that, across all three phases, the experimental group exhibited significantly higher TSE levels, which further suggests that the Active Learning Model had a substantial and meaningful impact on TSE of pre-service teachers regardless of time. Besides, the interaction between time and group is verified significant, ($F(2,76)=281.643$, $p<0.001$, partial $\eta^2=0.881$), indicating that there are significant differences in the level of TSE between the experimental group and the control group at different time points, and the intervention enhanced TSE of the experimental group from pre-test to post-test and maintained this level at follow-up, while TSE of the control group showed no notable change. These findings support the effectiveness and sustainability of the influence of Active Learning Model on enhancing pre-service teachers' TSE.

The differences between experimental and control groups were further analyzed with a test of between-subjects effects (Table 9).

Table 9 Tests of Between-Subjects Effects (The overall TSE)

Measure:	TSE					
Transformed Variable:	Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	1331.867	1	1331.867	13148.319	***	0.997
Group	3.654	1	3.654	36.073	***	0.487
Error	3.849	38	0.101			

The result of the between-subjects effects ($F(1, 38)=36.073$, $p<0.001$, partial $\eta^2=0.487$) demonstrated a significant main effect of the overall TSE. This indicates that 48.7% of the variance in TSE scores can be attributed to the group factor (experimental vs. control). The significant intercept effect ($F(1, 38)=13148.319$, $p<0.001$, partial $\eta^2=0.997$) confirms a robust overall TSE level of the experimental group. Initially, these results support the effectiveness of the intervention as the experimental group consistently demonstrated significantly higher TSE than the control group.

Table 10 Pairwise Comparisons between Groups (The overall TSE)

Measure: TSE						
					95% Confidence Interval for Difference	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Experimental Group	Control Group	0.349	0.058	***	0.231	0.467
Control Group	Experimental Group	-0.349	0.058	***	-0.467	-0.231

The pairwise comparison between the experimental and control groups was employed (Table 10), further revealing a statistically significant difference in the overall level of TSE. The experimental group reported significantly higher TSE levels (MD=0.349, SE=0.058, $p<0.001$, 95% CI [0.231, 0.467]), indicating a robust and meaningful influence, further providing evidence for the effectiveness of the Active Learning Model on enhancing the TSE of pre-service English teachers.

Furthermore, a pairwise comparisons among different measurement points was conducted (Table 11). The result of the pairwise comparisons across the three measurement points (pre-test, post-test, and follow-up) showed that a statistically significant improvement was observed from pre- to post-test (MD=-0.254, SE=0.012, $p<0.001$, 95% CI [-0.284, -0.223]), indicating that the Active Learning Model had a substantial positive influence on TSE of the experimental group. Similarly, a significant difference was found between the pre-test and follow-up test (MD=-0.258, SE=0.015, $p<0.001$, 95% CI [-0.295, -0.220]), demonstrating that the intervention holds sustained influence over time. On the contrary, no significant difference was detected between the post-test and follow-up test (MD=-0.004, SE=0.013, $p=1.000$, 95% CI [-0.036, 0.028]),

suggesting that the elevated TSE levels were effectively maintained after the experiment. These findings affirm the effectiveness and long-term stability of the Active Learning Model in enhancing TSE.

Table 11 Pairwise Comparisons among Different Measurements (The overall TSE)

Measure: TSE						
					95% Confidence Interval for Difference	
(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-0.254	0.012	***	-0.284	-0.223
	3	-0.258	0.015	***	-0.295	-0.220
2	1	0.254	0.012	***	0.223	0.284
	3	-0.004	0.013	1.000	-0.036	0.028
3	1	0.258	0.015	***	0.220	0.295
	2	0.004	0.013	1.000	-0.028	0.036

Note: Time 1=pre-test, 2=post-test, 3=follow-up test, *** means $p<0.001$.

To visually represent the interaction effects, the estimated marginal means of TSE scores across the three phases for each group are presented in Figure 9.

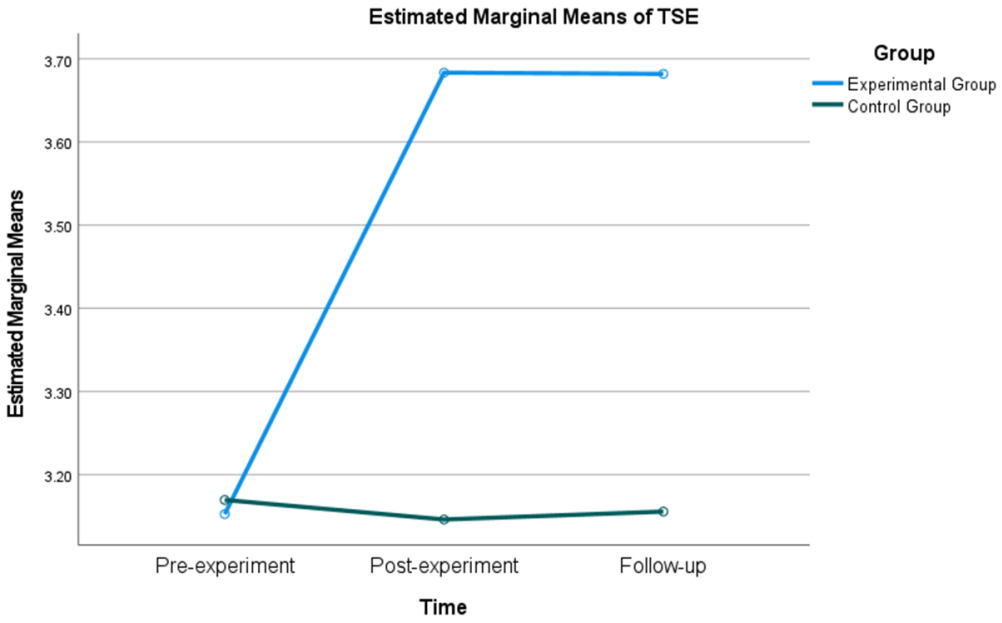

Figure 9 Interaction Figure of Times and Groups (The overall TSE)

The estimated marginal means (EMM) analysis within a two-factor mixed experimental design (Group × Time) evaluates the temporal effects of the Active Learning Model on TSE. As depicted in Figure 15, TSE of the experimental group showed a prominent increase from pre-test, post-test to the follow-up. This pattern suggests a continuous and sustained intervention effect. In contrast, TSE of the control group scores remained consistent across all three time phases. This indicates that the enhancement of TSE is not only a short-term reaction but rather also a structural and lasting positive influence.

In general, the above analysis reveals a clear and coherent statistical trend, underscoring the significance of the active learning model's effects in both temporal dynamics and inter-group differences, thereby strengthening its scientific value and practical application potential.

4.3.3.2 General Linear Model Repeated Measures ANOVA of the 3 TSE Components

1. Classroom Management Efficacy (CME):

Table 12 Mauchly's Test of Sphericity (Classroom Management)

Measure: CME							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon: Greenhouse-Geisser	Epsilon: Huynh-Feldt	Epsilon: Lower-bound
Time	0.778	9.303	2	***	0.818	0.872	0.500

Note: *** means p < 0.001.

Mauchly's sphericity test of CME (Table 12) showed a significant difference in the variance synergy among measurements, indicating that the time effect did not retain the sphericity assumption (Mauchly's W=0.778, X^2=9.303, df=2, p<0.05, Therefore, the Greenhouse-Geisser correction coefficient (Epsilon=0.818) was adopted in further analysis to improve the robustness of the results.

Table 13 Tests of Within-Subjects Effects (CME)

Measure: CME							
	Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Greenhouse-Geisser	3.510	1.636	2.145	116.484	***	0.754
Time * Group	Greenhouse-Geisser	3.570	1.636	2.182	118.502	***	0.757
Error (Time)	Greenhouse-Geisser	1.145	62.177	0.018			

Note: *** means p < 0.001.

Analysis of CME (Table 13), using Greenhouse-Geisser correction, revealed a highly significant main effect of time ($F(1, 38)=116.484$, $p<0.001$, partial $\eta^2=0.754$), confirming the sustained influence of the Active Learning Model on CME over time.

Further analysis of CME Between-Subjects Effects (Table 14) revealed a significant main effect of group ($F(1, 38)=21.446$, $p<0.001$, partial $\eta^2=0.361$), demonstrating a substantial difference in the level of CME between the experimental and control groups as the level of CME of experimental group is significantly higher. The pairwise comparison results further confirmed this group difference. Specifically, the level of CME of the experimental group was significantly higher than that of the control group (MD=0.356, SE=0.077, $p < 0.001$, 95% CI [0.200, 0.512]) (Table 15). These findings provide additional support for the effectiveness of the Active Learning Model in enhancing CME of pre-service English teachers in the experimental group.

Table 14 Tests of Between-Subjects Effects (CME)

Measure:	CME					
Transformed Variable:	Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	1404.868	1	1404.868	7916.832	***	0.995
Group	3.806	1	3.806	21.446	***	0.361
Error	6.743	38	0.177			

Note: *** means $p < 0.001$.

Table 15 Pairwise Comparisons between Groups (CME)

Measure: CME						
					95% Confidence Interval for Difference	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Experimental Group	Control Group	0.356	0.077	***	0.200	0.512
Control Group	Experimental Group	-0.356	0.077	***	-0.512	-0.200

Note: *** means $p < 0.001$.

What's more, the study also employed a pairwise comparisons among different measurements (pre-, post- and follow-up test) (Table 16) to determine when significant changes occurred and whether it remained. A statistically significant improvement was observed at the phase of post-test (MD=-0.360, SE=0.031, p<0.001, 95% CI [-0.439, -0.281]), which suggests that the Active Learning Model had a substantial positive effect on enhancing CME. And then, the influence of post-test lasted to the phase of follow-up (MD=-0.365, SE=0.029, p<0.001, 95% CI [-0.439, -0.292]). This confirms that the influence was not only immediate but also sustained over time, demonstrating its stability. In contrast, there is no significant difference detecting between the post-test and follow-up test (MD=-0.005, SE=0.020, p=1.000, 95% CI [-0.056, 0.045]). This suggests that the improved level of CME achieved by the intervention were maintained after the experimental period concluded, further supporting the persistence of the intervention's positive influence.

Table 16 Pairwise Comparisons among Different Measurements (CME)

Measure: CME						
					95% Confidence Interval for Difference	
(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-0.360	0.031	***	-0.439	-0.281
	3	-0.365	0.029	***	-0.439	-0.292
2	1	0.360	0.031	***	0.281	0.439
	3	-0.005	0.020	1.000	-0.056	0.045
3	1	0.365	0.029	***	0.292	0.439
	2	0.005	0.020	1.000	-0.045	0.056

Note: *** means $p < 0.001$.

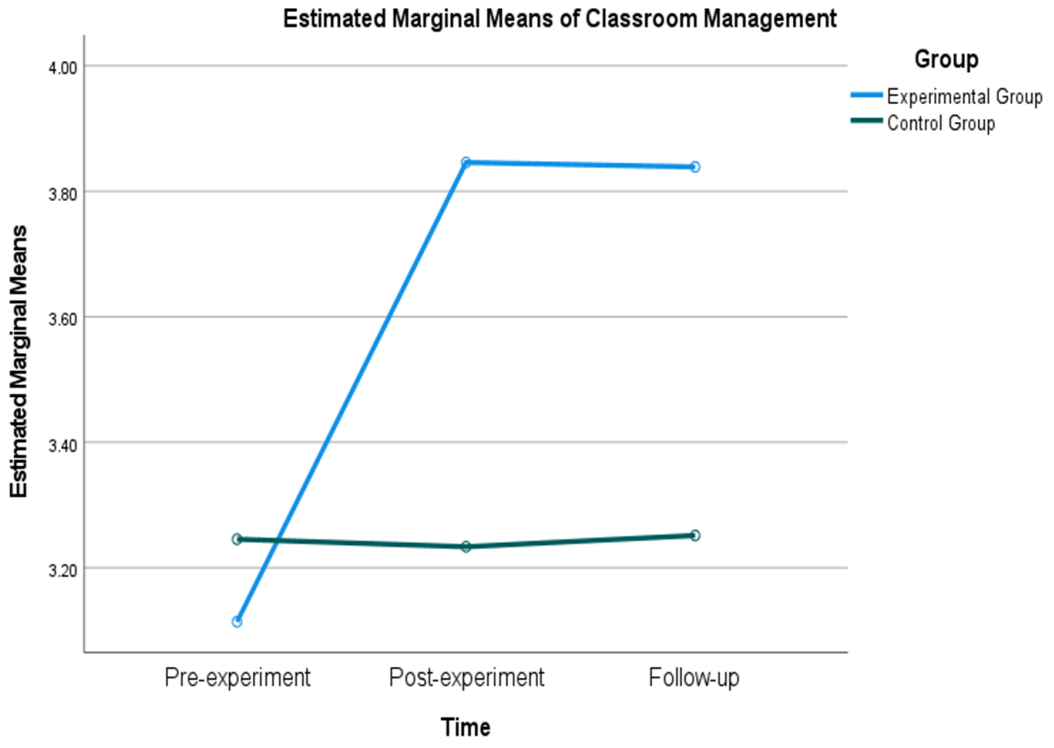

Figure 10 Interaction Figure of Times and Groups (CME)

As shown in the Figure 10, CME in the experimental group showed a prominent increase from pre-test to post-test, and continued to remain a high level in the follow-up phase, indicating that the intervention effect has a certain continuity. In contrast, the level of CME of the control group remains unchanged through the whole process. This indicates that the improvement of CME in the experimental group is not only a short-term reaction, but more likely to represent a structural positive impact of the intervention on the participants' classroom management level.

2. Instructional Strategies Efficacy (ISE)

The following illustrates the GLM-RM ANOVA of ISE. Table 17 shows the results of Mauchly's Test of Sphericity of ISE. The results ((Mauchly's W=0.976, X^2=0.887,df=2, p=0.642($\geqq$0.05)) was not violated, then the standard F-ratios from the repeated measures ANOVA were considered valid and available in subsequent analysis.

Table 17 Mauchly's Test of Sphericity (ISE)

Measure: ISE							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Time	0.976	0.887	2	0.642	0.977	1.000	0.500

Assuming sphericity, the main effect of time on the level of ISE (shown in Table 18) was significant (F=36.174, df=2, p<0.001, partial η^2=0.488). More importantly, the interaction effect between time and group was also significant (F=52.450, p<0.001, partial η^2=0.580), which demonstrated that the changes in the ISE scores in the long run differed significantly between the experimental and control groups, indicating developmental trends influenced by the intervention.

Table 18 Tests of Within-Subjects Effects (ISE)

Measure: ISE							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	0.870	2	0.435	36.174	***	0.488
Time * Group	Sphericity Assumed	1.262	2	0.631	52.450	***	0.580
Error (Time)	Sphericity Assumed	0.914	76	0.012			

Note: *** means $p < 0.001$.

Analysis of the between-subjects effects for ISE (Table 19) revealed a significant main effect of group($F(1, 38)=14.452$, $p<0.001$, partial $\eta^2=0.276$). This result indicates a substantial difference in the level of ISE between the two groups, with the experimental group demonstrating significantly higher level than the control group.

Table 19 Tests of Between-Subjects Effects (ISE)

Measure: ISE						
Transformed Variable: Average						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	1277.204	1	1277.204	5521.016	***	0.993
Group	3.343	1	3.343	14.452	**	0.276
Error	8.791	38	0.231			

Note: *** means $p < 0.001$, ** means $p < 0.01$.

Besides, the pairwise comparison between groups (Table 20) further substantiated this finding: ISE of the experimental group scored significantly higher than the control group (MD=0.334, SE=0.088, p<0.01, 95% CI [0.156, 0.512]). These results consistently demonstrate that the active learning model had a significant positive influence on enhancing the ISE level of pre-service English teachers in the experimental group.

Table 20 Pairwise comparisons between groups (ISE)

Measure: ISE						
					95% Confidence Interval for Difference	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Experimental Group	Control Group	0.334	0.088	**	0.156	0.512
Control Group	Experimental Group	-0.334	0.088	**	-0.512	-0.156

Note: *** means p < 0.01.

Table 21 Pairwise Comparisons among Different Measurements (ISE)

Measure: ISE						
					95% Confidence Interval for Difference	
(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-0.179	0.025	***	-0.241	-0.117
	3	-0.182	0.026	***	-0.247	-0.117
2	1	0.179	0.025	***	0.117	0.241
	3	-0.003	0.023	1.000	-0.060	0.054
3	1	0.182	0.026	***	0.117	0.247
	2	0.003	0.023	1.000	-0.054	0.060

Note: *** means $p < 0.001$.

The pairwise comparisons among three phases (Table 21) showed statistically significant increase in ISE scores (MD=-0.179, SE=0.025, $p<0.001$, 95% CI [-0.241, -0.117]), which indicates that the Active Learning Model left a notable and immediate influence on ISE. Also, a significant improvement was observed between the pre-test and follow-up test (MD=-0.182, SE=0.026, $p<0.001$, 95% CI [-0.247, -0.117]), suggesting that the positive effects of the intervention were long-term. In contrast, no statistically significant difference was traced between the post-test and follow-up test (MD=-0.003, SE=0.023, $p=1.000$, 95% CI [-0.060, 0.054]), indicating that the enhanced levels of ISE were maintained after the intervention concluded. These findings provide solid evidence of the lasting impact and stability of the instructional benefits resulting from the active learning model.

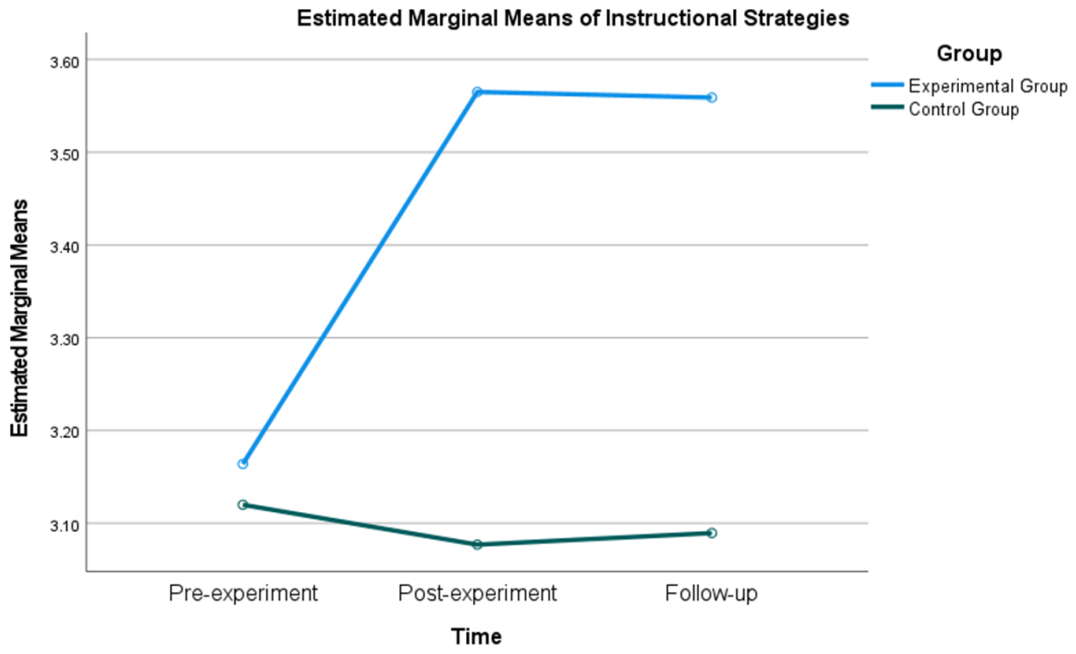

Figure 11 Interaction Figure of Times and Groups (ISE)

As illustrated in the Figure 11, ISE of the experimental group demonstrated a significant increase throughout the phase. This consistent trend indicates a sustained intervention influence. Conversely, ISE of the control group scores remained unchanged across all three phases, suggesting that the improvement in ISE of the experimental group is not a transient response, but rather a structural and lasting positive influence of the intervention on ISE.

3. Student Engagement Efficacy (SEE)

Mauchly's sphericity test of SEE (Table 22) revealed a violation of the sphericity assumption for the time effect, (Mauchly's $W=0.529$, $X^2=23.574$, $df=2$, $p<0.001$), indicating a significant disparity in variance synergy across the measurement time points. Consequently, the Greenhouse-Geisser correction (Epsilon=0.680) was applied in subsequent analyses to enhance the robustness of the statistical results.

Table 22 Mauchly's Test of Sphericity (SEE)

Measure: SEE							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Time	0.529	23.574	2	***	0.680	0.715	0.500

Note: *** means p < 0.001.

Following the Greenhouse-Geisser correction, a highly significant main effect of time was observed for SEE ($F(1, 38)=57.762$, $p<0.001$, partial $\eta^2=0.603$) of the variance, demonstrating the intervention's strong temporal influence on SEE (shown in Table 23).

Table 23 Tests of Within-Subjects Effects (SEE)

Measure: SEE							
	Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Greenhouse-Geisser	1.352	1.359	0.994	57.762	***	0.603
Time * Group	Greenhouse-Geisser	1.535	1.359	1.129	65.612	***	0.633
Error (Time)	Greenhouse-Geisser	0.889	51.659	0.017			

Note: *** means p < 0.001.

The result of Between-Subjects Effects (Table 24) of SEE scores revealed a significant main effect of group ($F(1, 38)=36.660$, $p<0.001$, partial $\eta^2=0.491$), showing

a substantial difference in the level of SEE between the experimental and control groups, with the experimental group demonstrating significantly higher scores.

Table 24 Tests of Between-Subjects Effects (SEE)

Measure: SEE						
Transformed Variable: Average						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	1318.574	1	1318.574	12619.261	***	0.997
Group	3.831	1	3.831	36.660	***	0.491
Error	3.971	38	0.104			

Note: *** means $p < 0.001$.

The pairwise comparison between groups (Table 25) further confirmed that SEE of the experimental group was significantly higher than the control group (MD=0.357, SE=0.059, $p<0.001$, 95% CI [0.238, 0.477]). These results demonstrate that the Active Learning Model had a significant influence on SEE of pre-service English teachers in the experimental group.

Table 25 Pairwise Comparisons between Groups (SEE)

Measure: SEE						
					95% Confidence Interval for Difference	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Experimental Group	Control Group	0.357	0.059	***	0.238	0.477
Control Group	Experimental Group	-0.357	0.059	***	-0.477	-0.238

Note: *** means $p < 0.001$.

Further, the study conducted pairwise comparisons among different measurement points from pre-test to follow-up test (Table 26).

Table 26 Pairwise comparisons among different measurements (SEE)

Measure: SEE						
					95% Confidence Interval for Difference	
(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	-0.225	0.028	***	-0.294	-0.156
	3	-0.225	0.028	***	-0.296	-0.154
2	1	0.225	0.028	***	0.156	0.294
	3	0.000	0.014	1.000	-0.034	0.034
3	1	0.225	0.028	***	0.154	0.296
	2	0.000	0.014	1.000	-0.034	0.034

Note: *** means $p < 0.001$.

A statistically significant improvement of SEE was observed from the pre-test to post-test (MD=-0.225, SE=0.028, p<0.001, 95% CI [-0.294, -0.156]), indicating that the intervention had a substantial positive effect on enhancing participants' SEE. Similarly, a significant difference was found between the pre-test and follow-up test (MD=-0.225, SE=0.028, p<0.001, 95% CI [-0.296, -0.154]), confirming the intervention's positive effect was not only immediate but also sustained over time. On the contrary, no significant difference was detected between the post-test and follow-up test (MD=0.000, SE=0.014, p=1.000, 95% CI [-0.034, 0.034]). This suggests that the improved SEE were maintained after the experiment concluded, further supporting the persistence of the impact.

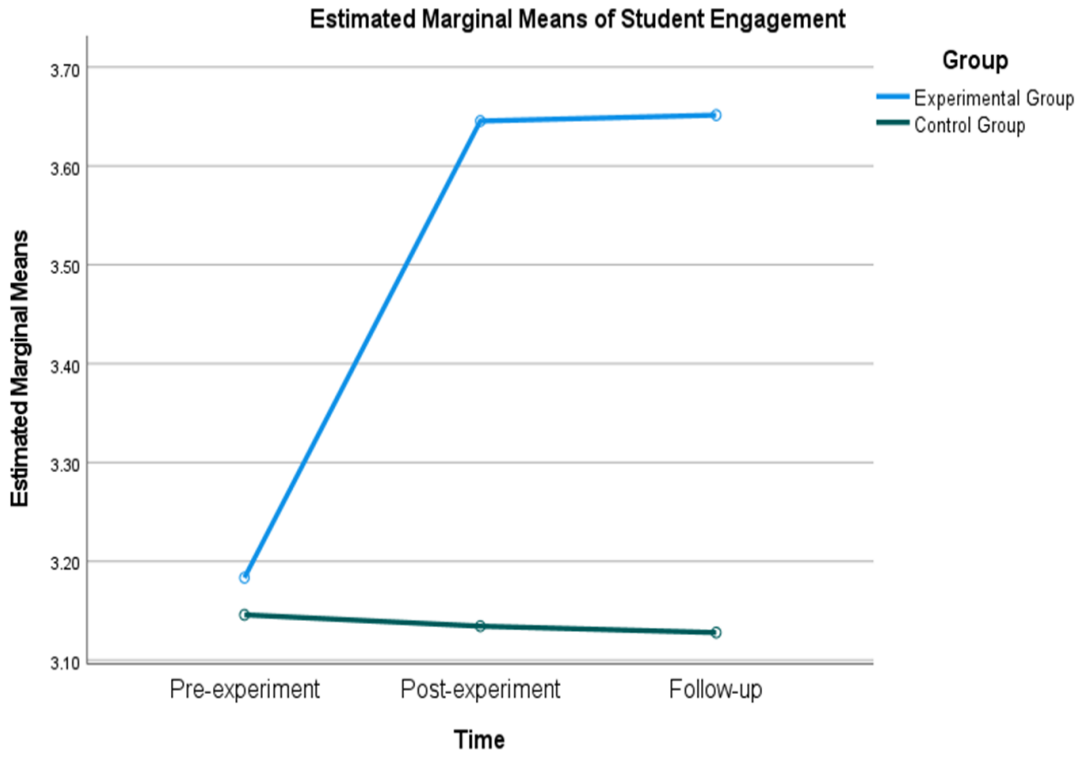

Figure 12 Interaction figure of times and groups (Student Engagement)

As illustrated in Figure 12, SEE of the experimental group demonstrated a significant increase throughout all phases. This consistent trend indicates a sustained intervention influence. Conversely, SEE of the control group remained unchanged across the whole process. This observed interaction effect suggests that the improvement in

SEE of the experimental group is not a transient response, but a structural and lasting positive effect of the Active Learning Model on SEE.

In conclusion, this study employed a systematic and multi-method statistical approach by utilizing paired samples t-tests, independent samples t-tests, and GLM-RM ANOVA to comprehensively examine the instant impact, inter-group differences, and longitudinal stability of the Active Learning Model on TSE of pre-service English teachers. The findings illustrating in this section indicate that the intervention significantly enhanced TSE of the experimental group, which were sustained over time, highlighting the enduring effectiveness and educational relevance of the Active Learning Model in fostering pre-service teachers' professional development by enhancing their TSE. This multi-tiered analytical strategy not only strengthened the rigor of statistical inference but also enhanced the validity, reliability, and applicability of the study's outcomes.

4.3.4 Summary of the Findings

This study aims to testify the influence of the Active Learning Model on TSE of pre-service English teacher (especially in China). To achieve the goal, the study made use of an experiment, with pre-service English teachers of the third year from Liupanshui Normal University as participants, to testify the impact of the Active Learning Model. Participants were purposely sampled with a stratified allocation strategy. After being divided into two groups, the experimental group received the intervention (Active Learning Model-based teaching for enhancing TSE). Three measurements were set to testify the effectiveness: pre-test, post-test and follow-up test. Pre-test is used before the experiment to evaluate the baseline of the two groups. Post-test, being taken immediately after the intervention, was used to testify the instant effectiveness of the experiment. Then a follow-up test was implemented to evaluate the continuity and stability of the effectiveness.

According to the pre-test, TSE of both groups were at a medium level, which means there was no significant statistical difference between the two, indicating that the starting points of the two groups were comparable, providing an effective premise for the subsequent comparison of intervention effects.

Post-test results showed that TSE of the experimental group significantly increased after receiving the teaching intervention, rising from a medium level to a comparatively high level. In contrast, TSE of the control group remained unchanged during the whole process. The difference between the two groups significantly widened in the post-test, preliminarily indicating that the Active Learning Model has a positive influence in enhancing the TSE of pre-service English teachers.

The follow-up test results indicated that after four weeks of the intervention, the TSE of the experimental group remained at the same as testified in post-test with no obvious decline, which suggests that the intervention has stable and sustained effects. In contrast, TSE of the control group did not change significantly. This result further verifies the effectiveness, continuity and stability of the Active Learning Model in enhancing TSE of pre-service English teachers.

In conclusion, the results showed that the Active Learning Model has a positive influence on enhancing TSE of pre-service English teachers. This finding provides empirical support for the application of the Active Learning Mode in teacher education and verifies its effectiveness in the field of teacher professional development.

The above empirical results will be further analyzed and discussed in Chapter 5, focusing on the implications and application value for teacher education, with the aim of providing theoretical and practical references for the improvement of the future pre-service teacher training model.

CHAPTER 5
DISCUSSION & CONCLUSION

5.1 Summary of the Study

This chapter is the conclusive part of the study by reviewing the objectives and rationale, discussing the key findings, proposing implications and suggestions for the research.

5.1.1 Research Objectives and Hypotheses

This study aims to develop the Active Learning Model to enhance TSE of pre-service English teachers in China and evaluate its effectiveness. There are three objectives of this study:

1.to study the definition and components of TSE of pre-service English teachers.

2.to develop an active learning model for enhancing TSE of pre-service English teachers.

3.to evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers.

In order to fulfill the third objectives, the study proposed two hypotheses:

Hypothesis 1: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than their average TSE score at the pre-test stage.

Hypothesis 2: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than that of their counterparts in the control group.

5.1.2 Summary of Research Design

Phase 1: To define TSE of pre-service English teachers and its components

In this phase, the study employed literature review, semi-structure interview and measurement-developing. 5 experts from relevant domain and 100 pre-service English teachers were involved in this phase as the research participants. The above

methods made sure that the study acquired a comprehensive understanding of relevant variables and developed a solid measurement with high validity and reliability.

Phase 2: To develop an active learning model for enhancing TSE of pre-service English teachers

In this phase, the study designed a course based on the Active Learning Model aiming to enhance TSE of Pre-service English Teachers with the following steps: analyzing learning contexts, learners and the learning task, outlining the teaching plan, evaluating its validity and trying out the plan. 5 experts and 20 pre-service English teachers participated in the study in this phase. The analysis of relevant factors before designing the course along with the expert-evaluation and teaching try-out ensured the feasibility and effectiveness of the course.

Phase 3: To evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers

The study made use of a quasi-experimental pre-test/post-test control group design to verify the effectiveness of the teaching plan, trying to identify the influence of the Active Learning Model on TSE of Pre-service English Teachers.

The experimental group participated in an four-week intervention based on the Active Learning Model, while the control group received traditional instruction. To track progress and the lasting influence of the learning, three assessments were employed in this phase: a pre-test (for baseline of TSE of both groups), a post-test (right after the intervention), and a follow-up test (four weeks later).

5.1.3 Summary of Key Findings

This study was conducted in 3 phases to develop and evaluate the Active Learning Model aimed at enhancing the TSE of pre-service English teachers. The key findings from each phase are summarized in the following:

Phase 1: To define TSE of pre-service English teachers and its components

In this phase, the study focused on defining TSE in the context of pre-service English teacher education. A comprehensive literature review, supported by expert consultation, led to the identification of three components of TSE: Instructional Strategies Efficacy, Classroom Management Efficacy, and Student Engagement Efficacy. These

components were used to develop the measurement in the study. Pre-test results revealed moderate levels of TSE of pre-service English teachers in general and in three components, confirming the need for an intentional and structured intervention.

Phase 2: To develop an active learning model for enhancing TSE of pre-service English teachers

In the second phase, the Active Learning Model was designed with four steps (lead-in, activities applying, active assessment and wrap-up) incorporating strategies as collaborative learning, project-based teaching, experiential teaching and active assessment. The content of the instructional plan was evaluated by experts to ensure its validity. A try-out teaching was conducted to assess its operability and availability. Feedback from the pilot phase indicated that the model was well-structured, engaging, and contextually suitable for pre-service English teachers.

Phase 3: To evaluate the effectiveness of the Active Learning Model for enhancing TSE of pre-service English teachers

The third phase involved implementing the model in an experimental group and comparing outcomes with a control group using pre-test, post-test, and follow-up test data. The findings revealed statistically significant improvements in TSE among participants in the experimental group across all three dimensions.

In terms of Instructional Strategies, participants reported increased confidence in lesson planning, using student-centered techniques, and delivering content effectively.

For Classroom Management, participants demonstrated improved skills in maintaining discipline, creating supportive environments, and responding to student behavior constructively.

Regarding Student Engagement, there was a marked improvement in participants' perceived ability to motivate, involve, and respond to students' needs.

Moreover, the follow-up test indicated that the improvements were sustained, suggesting the potential long-term impact of the model on professional confidence and teaching preparedness.

The study explains and evaluate key findings of the three phases in the following section, showing how the research questions are responded and how it serves as a contribution to the relevant research.

5.2 Discussion of the Study

The study explains in this section how the research questions are answered by delving into the meanings of key findings of each phase.

5.2.1 Phase 1: Defining TSE of Pre-Service English Teachers and Its Components

This phase focuses on the definition and components of TSE of pre-service English teachers. The study began by clearly defining the construct of Teacher Self-Efficacy (TSE) specifically in the context of Pre-Service English Teachers. In this study, TSE is conceptualized as the psychological belief or confidence that pre-service teachers hold in their ability to successfully perform key teaching-related tasks, such as instructional delivery, classroom management, and student engagement.

Focusing on “belief”, the study examined multiple researches and defined Teacher Self-Efficacy as: personal beliefs in capabilities that provides teachers with sustainable professional commitment and the faith for success in teaching and student learning even if confronted with hinders. The theoretical grounding highlighted that TSE is task-based and context-specific, especially for pre-service teachers who often experience uncertainty and anxiety in teaching practice (Klassen & Tze, 2014).

This definition aligns closely with Bandura’s (1997) social cognitive theory, which emphasizes self-efficacy as an individual’s belief in their capacity to execute behaviors necessary to produce specific outcomes. It also echoes Tschannen-Moran and Hoy’s (2001) teacher-specific definition, where TSE refers to “the teacher’s belief in his or her capability to organize and execute the courses of action required to successfully accomplish a specific teaching task in a particular context.”

This definition are considered highly appropriate for this study for several reasons. First, pre-service teachers, unlike their in-service counterparts, are still shaping their professional identity and confidence in real-world teaching contexts. Their self-

efficacy beliefs as teachers are thus more malleable and sensitive to experiences in teacher education programs, particularly those involving active learning and practice-based approaches. Second, since the study aims to improve practical teaching confidence through the Active Learning Model, adopting a definition focused on task-specific confidence in instructional settings allowed the intervention to be more targeted and measurable.

In defining the components of TSE for Pre-Service English Teachers, this study adopted a widely recognized tripartite model, consisting of the following three domains, which were were validated and endorsed by 5 experts that were interviewed in this phase:

Instructional Strategies:

This component refers to a teacher's belief in their ability to design classes, including using effective teaching methods and assessment approaches, and adapting instruction to meet diverse student needs and foster student learning. This definition is consistent with Tschannen-Moran and Hoy (2001), who emphasize instructional efficacy as a core dimension of teacher self-efficacy. It is particularly relevant for pre-service English teachers, who often struggle with integrating language pedagogy with content delivery, especially in multilingual or multicultural classrooms.

Classroom Management:

This refers to a teacher's belief in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment. Effective classroom management is critical for pre-service teachers, who may feel unprepared or anxious about discipline and behavior control. Bandura (1997) and Emmer & Evertson (2009) both highlight classroom management as a vital area where self-efficacy plays a decisive role. For pre-service English teachers, who may encounter language-related classroom challenges, having high self-efficacy in this area enhances their resilience and sense of control.

Student Engagement:

This component refers to a teacher's belief in their ability to motivate students, maintain their interest, and promote active participation in learning activities. It

also involves adapting teaching to diverse learners and connecting content to student interests. As pointed out by Klassen and Tze (2014), student engagement is a dynamic and culturally responsive aspect of teaching efficacy, making it particularly salient for pre-service English teachers who must navigate linguistic and cultural diversity in the classroom.

These above components are also theoretically grounded in Bandura's (1997, 1999) four sources of self-efficacy including Mastery Experiences, Vicarious Experiences, Verbal/Social Persuasion, and Physiological and Affective States, which directly inform the design of the Active Learning Model in this study. For instance, mastery experiences such as micro-teaching, project-based learning, and peer teaching provide practical opportunities for pre-service teachers to enhance their instructional competence, classroom control, and engagement techniques (Darling-Hammond, 2006; Hagger et al., 2008). Vicarious experiences, including peer observation, modeling, and collaborative learning, further strengthen TSE by allowing candidates to internalize effective teaching behaviors (Marzano, 2007; Beijaard et al., 2004). Verbal and social persuasion through mentorship, peer feedback, and supportive learning environments reinforces pre-service teachers' belief in their ability to manage classrooms and engage students (Tschannen-Moran et al., 2007; Vanderlinde & Van Braak, 2010). Additionally, attention to physiological and affective states, such as stress management and emotional regulation, is critical to sustaining TSE and avoiding burnout (Kyriacou, 2001; Brackett et al., 2010).

In summary, the study's definition and operationalization of TSE through the three components are not only supported by previous research but also directly informed by theoretical insights into how TSE develops. The inclusion of the three components ensured that the construct of TSE for pre-service English teachers in this study was both comprehensive and developmentally appropriate. These areas collectively reflect the central tasks expected of pre-service teachers during their practicum and early teaching experiences. By aligning the study's operationalization of TSE with established theoretical models and practical realities, the research was able to generate findings

that are both academically robust and professionally meaningful, providing a solid conceptual foundation for the subsequent development of the Active Learning Model aimed at enhancing TSE of pre-service English teachers.

5.2.2 Phase 2: To Develop the Active Learning Model for Enhancing TSE

In this phase, the study focused on designing the Active Learning Model aimed at enhancing TSE of pre-service English teachers. The study proposed four steps in the Active Learning Model, **(Lead-in, Activities Applying, Active Assessment and Wrap-up)**, which aligned with previous research emphasizing the value of experiential learning in teacher education (Darling-Hammond, 2006; Korthagen, 2010).

The four steps serve as a systematic process to ensure engagement, participation, reflection, and consolidation:

Lead-in provides contextual grounding and motivation, activating prior knowledge and setting the purpose for learning. This stage supports student engagement by increasing relevance and psychological readiness to participate.

Activities Applying involves structured, hands-on teaching tasks, such as simulations, micro-teaching, and peer collaboration. This phase creates mastery experiences, allowing pre-service teachers to practice and refine their teaching strategies in safe, feedback-rich environments.

Active Assessment integrates continuous peer and instructor feedback, which not only guides learning but also offers verbal/social persuasion, reinforcing learners' belief in their developing abilities.

Wrap-up encourages reflection, consolidation of learning outcomes, and transfer to future practice, supporting physiological and affective states by reducing anxiety through closure and self-awareness.

It integrated four major active teaching strategies, which are Collaborative Learning, Experiential Learning, Project-Based Learning and Active Assessment, each aligned with one or more sources of self-efficacy proposed by Bandura (1997). The above strategies were used in various researches as approach to enhancing TSE (Bishop, 2014; Prince, 2004; Tien et al., 2020; Gillies, 2016; Darling-Hammond et al.,

2005; Putnam & Borko, 2000; Prince, 2004; Darling-Hammond et al., 2005; Black & Wiliam, 1998; Angelo & Cross, 1993). The selected strategies are used in the Active Learning Model to enhance TSE as follows:

1. Experiential Learning and Project-Based Learning can be used to provide the source of Mastery Experiences:

According to Bandura (1999), mastery experiences are the most powerful source of self-efficacy. Experiential and project-based learning provide pre-service teachers with direct, hands-on opportunities to design and implement lessons, manage learning activities, and respond to diverse student needs. These experiences mirror real teaching conditions, allowing pre-service teachers to apply pedagogical theories in practice and develop competence in core areas of teaching.

Activities such as micro-teaching, simulations, and role-play tasks embedded in these strategies allow pre-service teachers to enhance their abilities of instructional strategies (Darling-Hammond et al., 2009), classroom management (Zee & Koomen, 2016), and student engagement (Fredricks et al., 2004). Mastery experiences accumulated through exposures to such practices are essential in enhancing TSE across its three components.

2. Collaborative Learning can be used to support Vicarious Experiences and Verbal/Social Persuasion:

Collaborative learning environments, such as peer teaching, group planning, and co-reflection, facilitate vicarious learning by enabling participants to observe, discuss, and model effective teaching behaviors (Marzano, 2007; Rots et al., 2012). As pre-service teachers observe peers managing classrooms or implementing engaging instructional strategies, they build a stronger belief in their own abilities to do the same (Beijaard et al., 2004). Besides, collaborative learning provides regular opportunities for feedback, mentoring and mutual support, which are core aspects of verbal/social persuasion (Tschannen-Moran et al., 2007).

This strategy cultivates a supportive professional environment where constructive feedback and shared experiences lead to increased self-confidence,

reduced anxiety, and enhanced willingness to attempt new teaching approaches. It also addresses the emotional and social aspects of learning to teach, which are crucial for sustaining motivation and resilience in pre-service teachers (Putnam & Borko, 2000).

3. Active Assessment can be used to support Verbal/Social Persuasion and Physiological and Affective States:

Active Assessment in the model functions both as a strategy and a step. It emphasizes formative, process-oriented evaluation where feedback is continuous, actionable, and supportive. This helps pre-service teachers enhance their beliefs in their teaching abilities (Guskey, 2002). Frequent feedback from instructors, peers, and self-assessment activities creates a culture of encouragement and validation, promoting verbal/social persuasion.

Moreover, when assessment is constructive, and reflective, it contributes to a reduction in anxiety and promotes positive affective states. Emotionally regulated environments, supported by various assessment practices, contributing to increased TSE by reducing fear of failure and encouraging risk-taking in teaching (Schutz et al., 2006; Brackett et al., 2010).

In conclusion, the four strategies embedded in the Active Learning Model were not only pedagogically effective but also theoretically grounded in the mechanisms that contribute to the development of TSE of pre-service English teachers. Each strategy targets one or more of Bandura's four sources, offering comprehensive support for the growth of instructional strategies, classroom management, and student engagement among pre-service English teachers. The integration of these strategies within a clear instructional sequence ensures that learning is active, reflective, and sustainable.

Besides, the process of teaching plan design in this study contributed conceptually to the field by proposing a structured and flexible pedagogical framework that directly targets TSE in teacher preparation programs. Its novelty lies in contextualizing active learning principles within the challenges faced by Chinese pre-service English teachers.

In conclusion, the Active Learning Model designed in this study is not just a collection of instructional techniques, but a strategically developed, context-responsive framework aimed at bridging the gap between theory and practice for pre-service teachers, further enhancing TSE of pre-service English teachers. The results of this phase showed that by emphasizing the real-world applicability, learner engagement, and emotional readiness, the Active Learning Model can be a promising tool for fostering sustainable professional growth and confidence in future educators, which are also proposed in various research (Darling-Hammond, 2006; Klassen et al., 2014; Chong et al., 2012; Gill, & Hoffman, 2009).

5.2.3 Phase 3: To Evaluate the Effectiveness of the Active Learning Model

The third phase of the study aimed to evaluate the effectiveness of the Active Learning Model through a quasi-experimental design and analyzed the data with GLM Repeated Measures ANOVA. This phase involved both an experimental group, which received a four-week intervention based on the Active Learning Model, and a control group, which continued with traditional instruction. This section discusses the results of the study with reference to these two hypotheses, elaborating on how the findings validate the design of the Active Learning Model and its theoretical underpinnings. The discussion is organized into two main parts: (1) effectiveness of the model as evidenced by intra-group improvement (Hypothesis 1) and (2) comparative effectiveness over traditional instruction (Hypothesis 2). The justifications are grounded in the model's key features, namely its steps and major strategies, and are supported by empirical data and participant feedback.

Hypothesis 1: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than their average TSE score at the pre-test stage.

The findings of this study strongly support the first Hypothesis. A statistically significant increase was observed in the TSE scores of pre-service English teachers in the experimental group between the pre-test and post-test, with these gains sustained at the follow-up stage. The three core components of TSE also showed similar meaningful

improvement. These results affirm that the Active Learning Model can generate enduring changes in TSE of pre-service English teachers.

These findings are consistent with previous research. Darling-Hammond (2006) emphasized the importance of experiential teacher education practices in promoting lasting self-efficacy. Similarly, Hoy and Spero (2005), Klassen and Chiu (2010), and Ma and Trevethan (2020) documented the moderate baseline TSE levels of pre-service teachers and the capacity for growth when programs emphasize active engagement, reflection, and practical experience.

The steps of the Active Learning Model, including “Lead-in, Activities Applying, Active Assessment, and Wrap-up”, contributed significantly to these improvements. The “Lead-in” phase activated prior knowledge and established relevance, promoting cognitive readiness. The “Activities Applying” phase provided “Mastery Experiences” through micro-teaching, peer teaching, and problem-solving activities. These real-time applications of instructional design and classroom management enabled students to test, revise, and solidify their pedagogical competence.

The course was widely appreciated for its engaging and well-structured activities, which effectively connected theory with real teaching practice. Students found the experiential and interactive tasks highly meaningful, especially those involving curriculum design, classroom management, and student engagement. The effectiveness can be reflected through class observation and feedback from students.

“The step-by-step structure helped me focus and engage consistently. The collaborative tasks were interactive and enjoyable. I improved my ability to organize classroom activities effectively.” (Student A)

“The structure encouraged active participation in all stages.Role-plays and peer feedback were very helpful. I developed skills in motivating and engaging students.” (Student F)

“Active Assessment”, used both as a strategy and a step, ensured continuous feedback, which is a key driver of verbal/social persuasion (Bandura, 1997).

Students felt more confident in applying feedback techniques, building rapport with students, and promoting inclusive classroom practices. Overall, participants reported significant growth in their teacher self-efficacy and felt better prepared for real classroom challenges.

"Each session had a clear flow, especially the active assessment. Group work allowed me to exchange diverse teaching ideas. I gained confidence in managing student behavior." (Student B)

"Active assessment was well-integrated and motivating. Learning through tasks felt realistic and teacher-centered. I became more confident in giving feedback and evaluation." (Student E)

The "Wrap-up" stage reinforced learning through reflection and planning, allowing participants to make connections between their experiences and future teaching practice. These integrated steps created a comprehensive learning loop that reinforced TSE through cycled and meaningful engagement.

The four strategies implemented in the mode also played a vital role. Each strategy targets one or more of Bandura's four sources of self-efficacy. For example, Experiential Learning and Project-Based Learning offered Mastery Experiences, identified by Bandura (1999) as the most influential source of TSE. Through practice-based and inquiry-oriented tasks, pre-service English teachers enhanced their TSE. Also, Collaborative Learning fostered vicarious experiences and social persuasion through peer observation, joint reflection, and co-construction of knowledge and Active Assessment facilitated real-time feedback and self-regulation, contributing to both verbal persuasion and affective stability.

Student reflections further validated the effectiveness of the model. Participants frequently reported increased confidence in lesson planning, handling classroom behavior, and engaging students.

"The course structure gave a strong sense of progress. Projects and group discussions boosted my creativity and teamwork. I now feel more prepared for real classroom situations." (Student J)

These reflections confirm that the intervention not only enhanced cognitive and technical skills but also supported emotional and motivational readiness for teaching.

Hypothesis 2: The average TSE score of pre-service English teachers in the experimental group at the post-test and follow-up stages will be significantly higher than that of their counterparts in the control group.

The findings also provided clear support for the second Hypothesis. At both the post-test and follow-up stages, TSE scores in the experimental group were significantly higher than those in the control group across all three components. The control group exhibited no statistically significant change in TSE over time, underscoring the limitations of traditional lecture-based instruction in fostering teacher development.

This contrast highlights the effectiveness of the Active Learning Model comparing to conventional teaching approaches. Without continuous engagement of the Active Learning Model, the participants from the control group lacked the structured opportunities required in internalizing pedagogical concepts and building belief in their application. This supports the findings of Chao et al. (2017) and Wray et al. (2022), who argued that interactive and context-responsive teacher education models are more effective than passive instruction.

The experimental group, by contrast, benefited from the model, which provides a supportive and well-sequenced learning environment. The regular use of group work, peer feedback, and performance-based tasks ensured that learning was socially and professionally relevant. This aligns with the recommendations of Guskey (2002), who emphasized the value of designing influential lessons and applying them in realistic contexts to reinforce instructional confidence.

The effectiveness of the Active Learning Model are brought by the active learning activities aiming to enhance three components and ulterior the general TSE. This integrated course design is what makes the model effective, sustainable, and scalable.

1.Through repeated teaching practice, curriculum design, and classroom simulations, the model allowed pre-service teachers to develop their abilities of classroom management, instructional design and student engagement, which contributes to the enhancement of TSE.

2.Facilitated by collaborative learning and peer observation, the model enabled participants from the experimental group to study successful strategies used by peers and mentors.

3.Incorporated through ongoing peer and instructor feedback, the pre-service English teachers are fostered with motivation and belief in their teaching abilities by the model.

4.Through structured and active environments that emphasized positive engagement and leaner-centered, the model managed to make participants from the experimental group able to promote physiological and emotional states.

Qualitative feedback of participants from the experimental group provided additional support for the model's impact.

"I learned how to design supportive learning environments." (Student C)

"I understood key factors in curriculum design more clearly." (Student D)

"The four stages made each lesson goal-oriented and effective. Tasks were collaborative and encouraged critical thinking. I learned how to build rapport with students successfully." (Student H)

These reflections affirm that students did not merely acquire theoretical knowledge but experienced transformative shifts in their teaching self-concept, which is the ultimate goal of teacher education.

The pedagogical effectiveness and empirical validation of the Active Learning Model in enhancing TSE of pre-service English teachers from the experimental group are demonstrated in this phase. By combining active learning with a the practical and learner-centered instructional process, the model achieved statistically and educationally meaningful improvements in TSE.

The quasi-experimental design ensured methodological rigor, while the integration of Bandura's framework ensured conceptual alignment. The intervention's success in both short-term and sustained gains across all three components of TSE supports its broader application in teacher education.

In conclusion, the study contributes to the growing evidence that active learning, when implemented with structured strategies and reflective feedback, is not only engaging but also transformational for pre-service teachers. The findings have significant implications for curriculum development in teacher training programs, particularly those aimed at bridging the gap between theory and practice. The broader implications of these findings are discussed in the following section.

5.3 Implications for Teacher Education

The findings of this study have multiple implications for the design, implementation, and reform of teacher education programs, especially in contexts where pre-service English teachers face limited real-world teaching experience. The study will discuss implications brought by research findings from three aspects: pedagogical design, curriculum development and teacher educator roles.

5.3.1 Instructional Design for Pre-Service Teacher Training

The success of the Active Learning Model highlights the need to shift from lecture-based, teacher-centered methods toward participatory, reflective, and learner-centered instructional practices. Components such as collaborative learning, group-based inquiry, and peer feedback should be systemically integrated into pre-service course design. This is aligned with experiential learning theory (Kolb, 1984), which emphasizes the role of concrete experiences and reflective observation in knowledge construction. Furthermore, learning activities should be explicitly designed to trigger all four sources of TSE: mastery experience, vicarious experience, social persuasion, and emotional regulation (Bandura, 1997).

Based on the above discussion, there are several suggestions that can be utilized while designing such courses:

1. Project-based tasks setting

It is highly recommended to design authentic and multi-phase projects that require pre-service teachers to apply pedagogical knowledge in simulated or real-world contexts (e.g., designing a unit plan or preparing for a mock teaching demonstration). These projects should culminate in a public product (e.g., a peer-teaching session or a teaching plan), offering mastery experiences and opportunities for reflection.

2. Teaching simulations and micro-teaching integrating

Based on the study, it is beneficial to integrate structured teaching simulations and micro-teaching sessions into the course to provide constant and supportive practice of teaching skills. These activities should include observation, peer assessment, and mentor feedback to reinforce vicarious learning, verbal persuasion, and emotional regulation (Bandura, 1997). Simulations in such courses are suggested to focus on core domains of TSE such as classroom management, student engagement, and instructional strategies.

3. Collaborative and peer teaching developing

While designing similar courses, fostering peer-based teaching through group lesson planning, co-teaching exercises, and reciprocal peer observation are also recommended since collaboration enhances vicarious experiences and social support while building a sense of collective TSE. Structured peer feedback sessions are suggested to be incorporated into the curriculum to normalize reflection and promote a supportive environment for growth.

4. Structured reflection and journaling

The study encourages systematic reflective practices, such as guided teaching journals, reflective essays, or debriefing sessions after simulations to help students analyze teaching successes, failures, emotions, and growth, supporting emotional regulation and cognitive development.

5. Feedback from peers and mentors

It is recommended to incorporate regular and formative feedback from both peers and mentors.Feedback should be constructive, timely, and tightly linked to specific teaching behaviors to maximize persuasive and developmental impact.

These recommendations ensure that pre-service teachers can be active participants in their professional formation by intentionally accumulating active experiences. Active learning should not be limited to develop courses alone, but embedded across all pedagogical and subject-specific domains.

5.3.2 Integration into Curriculum Reform in Chinese Context

Teacher education curricula should be restructured to embed active learning pedagogy as a core instructional approach rather than an optional supplement. This means shifting assessment strategies from traditional written exams to performance-based assessments such as lesson planning, classroom simulations, peer teaching, and reflective journals.

There remains a heavy emphasis on test preparation and subject mastery in the Chinese educational system which tends to lead over-emphasis of pedagogical and practical training. This “exam-driven” pattern restricts opportunities for pre-service teachers to develop beliefs in real classroom settings. Another challenge is the limited and fragmented practicum experience for Chinese pre-service teachers, which often involves only brief observational visits or short-term internships, failing to provide sufficient real classroom engagement.

There are several suggestions that are useful while designing the curricula for teacher education:

1.Curricula should be re-balanced to ensure equality of pedagogical competence and subject knowledge.

2.Policy incentives can be used to encourage universities to assess teaching competence through performance-based formats rather than theoretical examinations.

3.University are suggested to establish partnerships to provide sustained, supervised practicum opportunities that are integrated with coursework.

4.Pairing pre-service teachers with both university supervisors and in-service school mentors for continuous guidance and feedback are ought to promote in the domain of teacher education.

5. Development of simulation-based practicum in institutions where extended practicum access is limited is recommended to make sure abundant practical training.

6. Reform of policies of redefining how teaching competence is measured and valued in both teacher education and employment selection processes are required in teacher education. The transition from knowledge acquisition to competency development must be supported by educational authorities, teacher certification bodies, and university leadership.

In conclusion, the curricula revolution is called upon in developing teacher education, which should receive multiple attentions.

5.3.3 Professional Development of Teacher Educators

To successfully make use of the Active Learning Model in pre-service teacher education not only requires curriculum design but the readiness and capacity of teacher educators, who are important roles for delivering teacher preparation programs in universities and colleges. In many cases, teacher educators have been trained and socialized within traditional, lecture-based systems and may lack the necessary training or experience in designing and facilitating learner-centered, reflective, and collaborative learning environments.

To solve this problem, teacher educators are suggested to change their roles from a lecturer to coaches and mentors. Comprehensive and continuous professional development programs are required as a shift in how teachers approach education. There are some that are advisable:

1.Training for active learning design, including project-based learning, micro-teaching, peer feedback, and active assessment;

2.Activities for experiential learning, where teacher educators themselves engage in modeling and co-developing active learning modules;

3.Collaborative inquiry groups or professional learning communities which focus on reflective teaching practices and ongoing instructional improvement;

4.Workshops for reshaping professional identity from authoritative lecturer to responsive and adaptive mentors.

In general, to effectively use Active Learning Model would require teacher educators to become learners themselves, willing to change and prepare for revolution.

In conclusion, the study can be regarded as an example of reform for teacher education that concentrates on psychological growth of teachers since it provides multiple suggestions.

5.4 Recommendations of the Study

5.4.1 Suggestions for Teaching Practice

There are several suggestions that are proposed for the teaching practice:

Firstly, teacher education programs are recommended to systematically embed active learning strategies such as role play, peer teaching, and project-based activities into coursework to provide authentic teaching experiences.

Secondly, Reflective practice are encouraged in the teacher training by giving opportunities for self-assessment and peer feedback that can be incorporated to promote reflective teaching and continuous growth.

What's more, the Active Learning Model from this study can serve as a practical framework for designing teacher training courses focused on TSE enhancement.

5.4.2 Suggestions for Future Research

Other than proposing suggestions for teaching practice, the study also lists out several suggestions for future research.

The Active Learning Model proposed in the study can be tested in different teacher education settings, including other subject areas or cultural contexts to evaluate its adaptability and impact.

Besides, long-term influence of the model on enhancing TSE during the transition from pre-service to in-service teaching is recommended to be explored.

Also, combination of quantitative assessments with qualitative tools such as teaching portfolios or reflective journals to gain deeper insights into how and why TSE changes are also suggested in the future research.

5.5 Conclusion

This study contributes to the field of teacher education by defining TSE for pre-service English teachers and proposing three components, developing the Active Learning Model to enhance TSE, and evaluating the model's effectiveness through the teaching experiment. The findings highlight the potential of active learning to promote instructional confidence, classroom management skills, and student engagement strategies among future educators. The study emphasizes the importance of learner-centered training in preparing teachers for the demands of modern classrooms. By bridging theory and practice, the model offers a effective framework for enhancing TSE of pre-service teachers and supporting high-quality teacher preparation.

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APPENDIX

APPENDIX A

Sample of Semi-Structured Interview Questionnaire

Semi-Structured Interview Questionnaire for Interviewing Eligible Respondents

Direction: This semi-structured interview is used for the following purposes:

1.To define the definition and components of Teacher Self-Efficacy (TSE) of pre-service English teachers in China context and Active Learning.

2.To perceive connections between TSE of pre-service English teachers and Active Learning.

3.To gain the suggestions for developing an active-learning model to enhance TSE of pre-service English teachers in China.

4.To gain the suggestions for developing measuring instruments to evaluate TSE of pre-service English teachers in China.

Section 1: General Information

Name of Expert:

Educational Background:

Work Experience:

Position:

Organization Specialized Field:

Date and Time of Interview:

Section 2: Problem Orientation

Question 1: Definition, perception and components of TSE of pre-service English teachers in China context

1.1 How would you define TSE of pre-service English teachers?

1.2 In the study, three components of TSE are proposed as “Classroom Management Efficacy, Instructional Design Efficacy and Student Engagement Efficacy”.

Do you think the above three components are suitable for TSE of pre-service English teachers?

1.2.1 Classroom Management Efficacy means “a teacher’s confidence in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment”.

1.2.2 Instructional Strategies Efficacy: means “a teacher’s belief in their ability to use effective teaching methods, adapt instruction to meet diverse student needs, and foster student learning”.

1.2.3 Student Engagement Efficacy means “a teacher’s confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities”.

1.3 In addition to the three components mentioned above, do you think there are other components that reflect TSE of pre-service English teachers? What are they?

Question 2: Understanding and application of Active Learning

2.1 How do you define Active Learning, particularly in the context of teacher education?

2.2 Based on your opinion, Can Active Learning be applied effectively in the classroom? Can you give an example?

2.3 What are the main challenges teachers face when implementing active learning strategies?

Question 3: Interplay between TSE of pre-service English teachers and Active Learning

3.1 How do you see the relationship between TSE of pre-service English teachers and Active Learning? Are there synergies or conflicts between these two concepts? Can you share an example?

3.2 What areas of research do you believe are most promising for advancing our understanding of teacher self-efficacy and Active Learning?

3.3 In your opinion, can Active Learning-based model be used to enhance TSE of pre-service English teachers in China? If so, can you provide any suggestions on developing the Active Learning-based model?

Question 4: Developing measuring instruments to evaluate TSE of pre-service English teachers in China

1.1 In your opinion, it is suitable to use Teachers' Sense of Efficacy Scale to evaluate TSE of pre-service English teachers in China?

1.2 If not, what other tools or methods have you found most reliable for evaluating TSE, and how do you interpret these results?

(Skip if the answer of 4.1 is positive.)

Section 3: Closing

1.Is there anything else you would like to introduce regarding TSE of pre-service English teachers in China, Active Learning, or their applications in teacher education? What advice would you give to educators or researchers who are new to these concepts and want to explore them further?

APPENDIX B

Experts for the Research

1. Expert for the Semi-structured Interview

No.	Expert	Position	Specialties
1	Yu Ge	Associate Professor	Educational Psychology
2	Wang Yujiao	Associate Professor	Educational Psychology
3	Chen Yuanyan	Associate Professor	Educational Psychology
4	Yang Qin	Associate Professor	Pedagogy, Instructional Design
5	Zheng Yuanyuan	Instructor	Counselling Psychology, Statistics

2. Experts for the Evaluation of Content Validity of the TSE Questionnaire

No.	Expert	Position	Specialties
1	Yu Ge	Associate Professor	Educational Psychology
2	Wang Yujiao	Associate Professor	Educational Psychology
3	Chen Yuanyan	Associate Professor	Educational Psychology
4	Yang Qin	Associate Professor	Pedagogy, Instructional Design
5	Zheng Yuanyuan	Instructor	Counselling Psychology, Statistics

3. Experts for the Evaluation of Content Validity of the Teaching Plan

No.	Expert	Position	Specialties
1	Wu Delu	Professor	English, Teacher Education
2	Yu Ge	Associate Professor	Educational Psychology
3	Chen Yuanyan	Associate Professor	Educational Psychology
4	Yang Qin	Associate Professor	Pedagogy, Instructional Design
5	Wang Yujiao	Associate Professor	Educational Psychology

APPENDIX C

TSE Questionnaire of Pre-service English teachers

Dear Students,

This questionnaire is used to measure Teacher Self Efficacy(TSE) of pre-service English teachers. There are 24 questions. Each of them provides 5 options from 1=Strongly disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly agree. Your answer will be a great contribution to the current research by helping the researcher better understand TSE of of pre-service teachers. There are no "right" or "wrong" answers for the questionnaire and the answers will be only used for the research. Any personal information and answers of the questionnaire are confidential. Please consider each question and select the answer that best describes how you think of yourself and tick "√" in the corresponding column.

Items	1	2	3	4	5
1. I can control disruptive behaviors in the classroom.					
2. I can get children to obey classroom rules and teacher orders.					
3. I can calm a student who is disruptive or noisy.					
4. I cannot establish a classroom management system with students.					
5. I can make my expectations clear about student behavior.					
6. I find it impossible to establish routines to make class activities under control.					
7. I can always handle defiant students with proper responses.					
8. I can keep potential problem students from ruining classes.					
9. I can always respond to difficult questions in class.					
10. I can raise good questions in class for students.					
11. I can provide appropriate challenges for highly capable students.					
12. I can use a variety of assessment strategies in my teaching.					
13. I can provide an alternative explanation or instance when students are confused.					
14. I can implement variant teaching strategies in my classroom.					
15. I cannot adjust my lessons to the proper level for different classes.					
16. I am incapable of assessing students' comprehension in class.					
17. I can motivate students who show low motivation in learning.					
18. I can get students to believe they can achieve in learning.					
19. I can help students value learning.					

Items	1	2	3	4	5
20. I can help a student who is failing to improve the understanding.					
21. I can get through the most difficult students.					
22. I don' know how to foster students' creativity.					
23. I don't know how to foster students' critical thinking ability.					
24. I am not aware of the importance of families' assisting their children's school learning.					

APPENDIX D

Expert Assessment Form

Expert Assessment Form

Research topic is A Development of Active Learning Model for Enhancing Teacher Self-efficacy of Pre-service English Teachers.

This form was used to examine the measurement tool, which measures TSE of pre-service English teachers in China.

Name of the expert:

Please assess the consistency of the item with the definitions of terms by checking the score box. The criteria to be considered are listed below:

+1 When you find item that is consistent with the definition of a term;

0 When you're not sure if the item matches a term;

-1 When you find the item is inconsistent with the definition a term.

If there is any information you think might be helpful, please provide your comments in the form as a guide for further development of an effective tool.

Definition of Terms

TSE refers to personal beliefs in capabilities that provides teachers with sustainable professional commitment and the faith for success in teaching and student learning even if confronted with hinders.

The three components can be defined as the following:

1. Classroom Management Efficacy: a teacher's confidence in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment.

2. Instructional Strategies Efficacy: a teacher's belief in their ability to use effective teaching methods, adapt instruction to meet diverse student needs, and foster student learning.

3. Student Engagement Efficacy: a teacher's confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities.

Items A 5-Point Likert Scale 1=Strongly disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly agree		Index of Consistency			Comments
		+1	0	-1	
A. **Classroom Management Efficacy:** a teacher's confidence in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment.					
A1(+)	I can control disruptive behaviors in the classroom.				
A2(+)	I can get children to obey classroom rules and teacher orders.				
A3(+)	I can calm a student who is disruptive or noisy.				
A4(-)	I cannot establish a classroom management system with students.				
A5(+)	I can make my expectations clear about student behavior.				
A6(-)	I find it impossible to establish routines to make class activities under control.				
A7(+)	I can always handle defiant students with proper responses.				

Items A 5-Point Likert Scale 1=Strongly disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly agree		Index of Consistency			Comments
		+1	0	-1	
A8(+)	I can keep potential problem students from ruining classes.				
B. **Instructional Strategies Efficacy:** a teacher's belief in their ability to use effective teaching methods, adapt instruction to meet diverse student needs, and foster student learning.					
B1(+)	I can respond to difficult questions in class.				
B2(+)	I can raise good questions in class for students.				
B3(+)	I can provide appropriate challenges for highly capable students.				
B4(+)	I can use a variety of assessment strategies in my teaching.				
B5(+)	I can provide an alternative explanation or instance when students are confused.				
B6(+)	I can implement variant teaching strategies in my classroom.				
B7(-)	I cannot adjust my lessons to the proper level for different classes.				
B8(-)	I am incapable of assessing students' comprehension in class.				
C. **Student Engagement Efficacy:** a teacher's confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities.					
C1(+)	I can motivate students who show low motivation in class.				

Items A 5-Point Likert Scale 1=Strongly disagree, 2=Disagree, 3=Not sure, 4=Agree, 5=Strongly agree		Index of Consistency			Comments
		+1	0	-1	
C2(+)	I can get students to believe they can achieve in learning.				
C3(+)	I can help students value school.				
C4(+)	I can help a student who is failing to improve the understanding.				
C5(+)	I can get through the most difficult students.				
C6(-)	I don' know how to foster students' creativity				
C7(-)	I don't know how to foster students' critical thinking ability.				
C8(-)	I am not aware of the importance of families' assisting their children's school learning.				

APPENDIX E

Index of Item-Objctive Congruence

of TSE Questionnaire of Pre-service English Teachers

No.	Evaluation score of experts					Total	IOC	Summary
	1	2	3	4	5			
1	1	1	1	1	1	5	1	Available
2	1	1	1	1	1	5	1	Available
3	0	1	1	1	1	4	0.8	Available
4	1	1	1	1	1	5	1	Available
5	1	1	1	1	1	5	1	Available
6	1	1	1	1	0	4	0.8	Available
7	1	1	1	1	1	5	1	Available
8	1	1	1	1	1	5	1	Available
9	1	0	1	1	1	4	0.8	Available
10	1	1	1	1	1	5	1	Available
11	1	1	1	1	1	5	1	Available
12	1	1	1	1	1	5	1	Available
13	1	1	1	1	1	5	1	Available
14	1	1	1	1	1	5	1	Available
15	1	1	1	1	1	5	1	Available
16	1	1	1	1	0	4	0.8	Available
17	1	1	1	1	1	5	1	Available
18	1	1	1	1	1	5	1	Available
19	1	1	1	1	0	4	0.8	Available
20	1	1	1	1	1	5	1	Available
21	1	1	1	1	1	5	1	Available
22	1	1	0	1	1	4	0.8	Available
23	1	1	0	1	1	4	0.8	Available
24	1	1	1	1	1	5	1	Available

APPENDIX F

r value of Items for Measures of Self-Efficacy of Pre-Service English Teachers

Items	r	Appliance	Items	r	Appliance
Q1	0.840	Applicable	Q13	0.712	Applicable
Q2	0.753	Applicable	Q14	0.726	Applicable
Q3	0.745	Applicable	Q15_R	0.738	Applicable
Q4_R	0.742	Applicable	Q16_R	0.761	Applicable
Q5	0.752	Applicable	Q17	0.748	Applicable
Q6_R	0.734	Applicable	Q18	0.760	Applicable
Q7	0.760	Applicable	Q19	0.763	Applicable
Q8	0.735	Applicable	Q20	0.756	Applicable
Q9	0.800	Applicable	Q21	0.761	Applicable
Q10	0.713	Applicable	Q22_R	0.756	Applicable
Q11	0.835	Applicable	Q23_R	0.818	Applicable
Q12	0.748	Applicable	Q24_R	0.734	Applicable

Note: R= Reverse Coding Item; Overall 24 items Cronbach's Alpha = 0.972

APPENDIX G

Allocation of Participants Based on TSE Scores

Rank (Lowest TSE Score)	Assigned Group	Rank (Lowest TSE Score)	Assigned Group
1	E	21	E
2	C	22	C
3	E	23	E
4	C	24	C
5	E	25	E
6	C	26	C
7	E	27	E
8	C	28	C
9	E	29	E
10	C	30	C
11	E	31	E
12	C	32	C
13	E	33	E
14	C	34	C
15	E	35	E

Rank (Lowest TSE Score)	Assigned Group	Rank (Lowest TSE Score)	Assigned Group
16	C	36	C
17	E	37	E
18	C	38	C
19	E	39	E
20	C	40	C

Note: E = Experimental Group; C = Control Group.

APPENDIX H

Active Learning Model Format for Enhancing TSE of Pre-service English Teachers

Times	Learning Activities	Objectives (Learning Goals)	Strategy
1	Orientation (90 mins)	1. To identify personal strengths and areas for growth in teaching and complete a questionnaire on TSE. 2. To discuss and summarize the **importance of teacher self-efficacy (TSE)** through **small group discussions**. 3. To set **personal learning objectives** for the course using a **goal-setting worksheet**.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
2	Classroom Management Efficacy: Classroom organization (90 mins)	1. To analyze different **classroom layouts** and select the most effective one for a given scenario using a **case study**. 2. To develop a **classroom management plan** with clearly defined **routines and expectations**. 3. To participate in a **simulated classroom setup activity** to arrange seating and learning materials.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment

Times	Learning Activities	Objectives (Learning Goals)	Strategy
3	Classroom Management Efficacy: Behaviour management & conflict resolution (90 mins)	1. To identify common classroom behavior challenges through **video analysis**. 2. To role-play and apply **positive reinforcement** and **conflict resolution strategies** in classroom scenarios. 3. To develop a **behavior management plan** incorporating at least three **preventative strategies**.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
4	Classroom Management Efficacy: supportive learning environment building (90 mins)	1. To reflect on and share experiences of **positive and negative teacher-student relationships** in a **group discussion**. 2. To create a **classroom climate checklist** to assess inclusivity and student motivation. 3. To practice strategies for **addressing diverse student needs** using case study analysis.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
5	Instructional Strategies Efficacy: Analysis of related factors (90 mins)	1. To assess learning contexts including external environment and internal conditions. 2. To develop clear objectives and ensure alignment with instruction and assessment. 3. To identify student needs and adapt teaching strategies for diverse learning styles.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment

Times	Learning Activities	Objectives (Learning Goals)	Strategy
6	Instructional Strategies Efficacy: curriculum design (90 mins)	1. To design a **detailed lesson plan** using the provided template, incorporating **clear objectives and active learning strategies**. 2. To analyze sample lesson plans and identify **strengths and weaknesses**. 3. To present and justify **lesson plan choices** in a peer feedback session.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
7	Instructional Strategies Efficacy: feedback & evaluation (90 mins)	1. To develop a **rubric** for assessing student performance in a specific lesson. 2. To provide **constructive feedback** on peer micro-teaching sessions. 3. To compare and contrast **different assessment methods** through hands-on practice with sample student work.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
8	Student Engagement Efficacy: Motivating students in class (90 mins)	1. To identify and categorize different **student motivation types** using real classroom examples. 2. To create a **lesson segment** that integrates **motivational strategies** and present it in pairs. 3. To set a **self-reflection tool** to assess personal strengths in motivating students.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment

Times	Learning Activities	Objectives (Learning Goals)	Strategy
9	Student Engagement Efficacy: Interaction in classroom (90 mins)	1. To practice **effective questioning techniques** through **role-play exercises**. 2. To conduct a **peer coaching session** to enhance active listening skills. 3. To create a **communication strategy plan** for handling common student concerns.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
10	Student Engagement Efficacy: rapport with students (90 mins)	1. To use active listening and empathy to foster a supportive classroom environment. 2. To apply effective communication strategies to engage and connect with students. 3. To implement strategies to recognize and respect diverse student backgrounds and needs.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment
11	Commencement-lesson closure (90 mins)	1. To share personal reflections on **teaching confidence** and **active learning experience** in a **final discussion forum**. 2. To develop a **personal action plan** outlining three concrete strategies for **future teaching practice**.	Collaborative Learning Experiential Learning Project-Based Learning Active Assessment

APPENDIX I

IOC of the Teaching Plan

No.	Evaluation score of experts					Total	IOC	Summary
	A	B	C	D	E			
1	1	1	1	1	1	5	1	Available
2	1	1	1	1	1	5	1	Available
3	1	1	1	1	1	5	1	Available
4	1	1	1	1	1	5	1	Available
5	1	1	1	1	1	5	1	Available
6	1	1	1	1	1	5	1	Available
7	1	1	1	1	1	5	1	Available
8	1	1	1	1	1	5	1	Available
9	1	1	1	1	1	5	1	Available
10	1	1	1	1	1	5	1	Available
11	1	1	1	1	1	5	1	Available

APPENDIX J

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 1: Orientation

1.Concept:

The first session serves as an introduction and arousal of the training with the purpose of orienting pre-service teachers to the concept of TSE and preparing them for the training. The purpose of this class is to rapport with students, motivate them, and build a shared understanding of learning objectives, potential challenges, and help them set up learning goals and strategies for the course.

It introduces key ideas of the course, including TSE and its components. When relating to pre-service English teachers, they can comprehend the idea as their belief in their ability to effectively plan, instruct, and manage a classroom in the context of English language teaching. It encompasses confidence in delivering engaging lessons, facilitating student learning, handling classroom challenges, and adapting instructional strategies to diverse learners. Strong TSE influences their motivation, persistence, and willingness to experiment with innovative teaching methods, ultimately shaping their future teaching effectiveness and professional identity. There are three components that can be measured when it comes to pre-service teachers:

1. Classroom Management Efficacy: a teacher's confidence in their ability to maintain a well-organized classroom, manage student behaviors, and to create an effective learning environment.

2. Instructional Strategies Efficacy: a teacher's belief in their ability to use effective teaching methods, adapt instruction to meet diverse student needs, and foster student learning.

3. Student Engagement Efficacy: a teacher’s confidence in their ability to motivate students, maintain their interest, and promote active participation in learning activities.

Objectives

To identify personal strengths and areas for growth in teaching and complete a questionnaire on TSE.

To discuss and summarize the importance of Teacher Self-Efficacy (TSE) through small group discussions

To set personal learning objectives for the course using a goal-setting worksheet.

Duration: 90 mins

Learning materials

Goal-Setting Worksheet

Learning process

1.Lead-in:

a) Warm-up Activities: The teacher makes self-introduction and ask students to introduce themselves.

b) Grouping: The teacher divides students into 5 groups with 5 of each in the group. Grouping will be the foundation of the class since it is the initial step for implementing active learning approach.

2.Activities Applying

a) Activity 1: Discussion: The teacher asks students the question: "What qualities make an effective English teacher?" and ask them to discuss about effective teaching qualities in group and list the responses of each group on the board.

b) Activity 2: Mini-Lecture: The teacher briefly explains the concept of Teacher Self-Efficacy (TSE) on the basis of the discussion results, and why it matters. During the explaining process, the teacher provides real-life examples to the students and guide them to think about their potential strengths and challenges in teaching. Students take notes of the mini-lecture and thinks about their potential strengths and challenges in teaching.

c) Activity 3: Facilitate Reflection: After the mini-lecture, the teacher encourages students to write a short reflection on the following questions:

What are my strengths as a teacher?

What areas do I want to improve?

d) Activity 4: Discussion Prompts: The teacher provides key questions for groups to discuss Teacher Self-Efficacy using prompts. Then the teacher walks around the class, monitor and guide discussions when needed.

Key questions for prompts:

Why is Teacher Self-Efficacy important?

How does TSE impact classroom management and student learning?

What strategies can improve TSE?

g) Activity 5: Summarizing Tasks: After discussion prompts, the teacher asks each group to write a 3-sentence summary of their key discussion points. And each group presents their summary to the class.

f) Activity 6: Goal-Setting: The teacher introduces the concept of SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound), distribute worksheets and explain how to use them by sharing an example of a well-structured personal learning goal. Then the teacher walks around to provide feedback as students use the goal-setting worksheet to draft personal learning objectives.

3.Active Assessment

Peer-assessing: The teacher asks students to share their goals in group for feedback and improvement if possible.

Self-assessing: The teacher encourages students to write a commitment statement about their goals.

Teacher-assessing: The teacher comments on learning performance and encourages students to comment on teacher activity by giving suggestions on teaching.

4.Wrap-up

Concluding: The teacher concludes the focal points of this class, emphasizing learning goals in general as the class review

Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

Evaluation (Methods of assessing the class)

Observation – Monitoring student participation, engagement, and interaction.

In-class activity: TSE mind map in group

Homework assigning: goal-setting worksheet

Appendix: Goal-setting Worksheet

Appendix:

Goal Setting Worksheet

Name: _____ **Student No.** _____

Date: _____

Step 1: Identify Your Goals

List three specific and achievable goals related to your teaching journey. These goals should align with your professional growth and development as a pre-service English teacher.

Goal 1: _____

Why is this goal important to you? _____

What steps will you take to achieve it? _____

What challenges might you face? How will you overcome them? _____

Timeline for achieving this goal: _____

Goal 2: _____

Why is this goal important to you? _____

What steps will you take to achieve it? _____

What challenges might you face? How will you overcome them? _____

Timeline for achieving this goal: _____

Goal 3: _____

Why is this goal important to you? _____

What steps will you take to achieve it? _____

What challenges might you face? How will you overcome them? _____

Timeline for achieving this goal: _____

Step 2: Action Plan & Progress Tracking

For each goal, list 3–5 actionable steps you will take and track your progress.

Goal 1 Action Plan:

Step 1: _____

Step 2: _____

Step 3: _____

Step 4 (if needed): _____

Step 5 (if needed): _____

Goal 2 Action Plan:

Step 1: _____

Step 2: _____

Step 3: _____

Step 4 (if needed): _____

Step 5 (if needed): _____

Goal 3 Action Plan:

Step 1: _____

Step 2: _____

Step 3: _____

Step 4 (if needed): _____

Step 5 (if needed): _____

Final Thoughts:

What support or resources do you need to achieve your goals?

How will you reward yourself for accomplishing each goal?

Commitment Statement: I, **(your name)**, commit to taking the necessary steps to achieve my three goals and will remain dedicated to my professional growth as a pre-service English teacher.

Signature: _____ **Date:** _____

Active learning Model for Enhancing Teacher Self-Efficacy

of Pre-service English teachers

Session 2: Classroom Management Efficacy: Classroom Organization

Concept:

This session focuses on the first component of Classroom Management Efficacy: Classroom Organization. The goal of this session is to strengthen pre-service teachers' confidence and capability to create a structured, predictable, and efficient learning environment that promotes student engagement and reduces behavioral issues.

According to relevant literature review, **Classroom Organization**, the way a teacher structures the physical environment, instructional routines, and behavioral expectations to create a productive learning atmosphere, is a major aspect of Classroom Management Efficacy. It plays a key role in promoting Classroom Management Efficacy. In this session, students are scheduled to take part in 5 activities including Ice breaking, group discussion, etc. The session will also implement active assessment among all the participants in the class (teacher and students) to make sure the learning effectiveness.

Learning Objectives:

To analyze different classroom layouts and select the most effective one for a given scenario using a case study.

To develop a classroom management plan with clearly defined routines and expectations.

To participate in a simulated classroom setup activity to arrange seating and learning materials.

Duration: 90 minutes

Learning materials:

Printed case studies and classroom layout examples.

Template for classroom management plans.

Movable desks and chairs for simulation.

Whiteboard and markers for group discussions.

Learning process

1.Lead-in: Icebreaker Discussion:

The teacher poses the question: "*What does an effective classroom layout look like?"* and then show pictures of different classroom layouts (traditional rows, clusters, U-shape, flexible seating, etc.).

2.Activities Applying:

a) Activity 1: In-class discussion: The teacher asks students to share their initial thoughts on advantages and disadvantages. after discussing, the teacher briefly introduces the importance of classroom organization in managing student behavior and engagement.

b) Activity 2: Group Work - Choosing the Best Layout:

The teacher provide groups with different classroom scenarios (e.g., a large class with limited space, a discussion-based class, a mixed-level class, etc.), and ask each group to analyze the scenario and selects the most effective classroom layout.

After sharing ideas in group, each group presents their choices and explain their choices with reasons. And the teacher concludes the discussions, highlighting key factors influencing classroom organization decisions.

c) Activity 3: Guided Planning: Developing a Classroom Management Plan

The teacher introduces key elements of a classroom management plan: routines, procedures, behavioral expectations and provide a template for creating a classroom management plan. And then each group in the class develop their own plans, ensuring they align with their chosen classroom layout.

d) Activity 4: Classroom Setup Challenge

The teacher assigns groups a physical space in the classroom by using chairs, desks, and other materials, they arrange the space according to their chosen layout. And then, all groups explain their setup and how it aligns with their classroom management plan.

3.Active assessment

Peer-assessing: Groups exchange plans and provide constructive feedback

Self-assessing: The teacher encourages each group to make a self-comment on their group performance and share key insights with the class.

Teacher-assessing: The teacher comments on group performance and provides feedback and discusses real-world implementation of classroom organization.

4.Wrap-up

a)The teacher asks students to write a short reflection: "What is the most important takeaway from today's lesson?"

b)Concluding: The teacher concludes the focal points of this class, emphasizing learning goals in general as the class review.

c)Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

d)Homework Assigning: Research additional classroom management strategies and be prepared to discuss in the next lesson.

Evaluation:

To observe participation in discussions and group activities (formative assessment).

To observe case study analysis and classroom management plan.

To observe classroom setup simulation (based on effectiveness and justification).

VII. Appendices:

Worksheet: Classroom Management Efficacy

Case studies for Classroom Organization

Classroom Layout

Photos of my group training classroom (movable desks and chairs)

Appendix 1:

Worksheet: Classroom Management Efficacy

Name: _____ Student No. _____

Date: _____

Part 1: Case Study Analysis

Read the assigned classroom scenario carefully.

Identify the key challenges related to classroom organization.

Select the most effective classroom layout for this scenario and justify your choice.

Chosen Layout: _____

Justification: _____

Part 2: Classroom Management Plan

Define 3 essential routines you will implement in your classroom.

Routine 1: _____

Routine 2: _____

Routine 3: _____

What behavioral expectations will you set for your students? Provide at least three.

Expectation 1: _____

Expectation 2: _____

Expectation 3: _____

Part 3: Simulation Reflection

Describe your classroom setup from the simulation activity. Why did you arrange it this way?

What challenges did you face during the setup process?

How did your setup align with your classroom management plan?

Appendix 2:

Case studies for Classroom Organization

Case Study 1: Overcrowded Classroom

Ms. Zhang teaches a 5th-grade class of 38 students in a small room. Students frequently bump into each other during transitions, and noise levels are high. She struggles to maintain student attention and efficient movement between activities.

Questions:

- How can Ms. Zhang reorganize the classroom to maximize space?
- What routines could help reduce transition chaos?
- How can technology or resources be positioned to improve flow?

Case Study 2: Disengaged Back Row

Mr. Li notices that students seated in the back row often disengage and do not participate. The classroom is arranged in traditional rows facing the board. He wants to create a more interactive and inclusive layout.

Questions:

- What alternative layouts could promote engagement for all students?
- How might seating impact student-teacher interaction?
- What are the pros and cons of flexible seating arrangements?

Case Study 3: Group Work Challenges

Ms. Chen organizes her desks in clusters of four to encourage collaboration. However, students often go off-task, and group noise is hard to manage.

Questions:

- What management strategies can support productive group work?
- How can the classroom layout support accountability within groups?
- What are some physical cues (e.g., anchor charts, color coding) to reinforce group norms?

Appendix 3:

Classroom Layout

Appendix 4:

Group Training Classroom with movable desks and chairs

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 3: Classroom Management Efficacy: Behavior Management & Conflict Resolution

I. Concept

This session focuses on another component of Classroom Management Efficacy: Behavior Management and Conflict Resolution. Behavior Management refers to strategies and practices used to support positive behavior and reduce or prevent disruptive behaviors, especially in group settings like classrooms, while Conflict Resolution refers to the process of resolving a dispute or a conflict by addressing the underlying issues and finding a peaceful solution acceptable to all parties.

By equipping pre-service teachers with the skills and confidence needed to handle student misbehavior and interpersonal conflicts effectively and respectfully, the session intends to develop their Classroom Management Efficacy. The general goal is to build self-belief in maintaining discipline and resolving disruptions proactively and constructively, without escalating tension or harming relationships.

II. Learning Objectives:

1. To identify common classroom behavior challenges through video analysis.
2. To role-play and apply positive reinforcement and conflict resolution strategies in classroom scenarios.
3. To develop a behavior management plan incorporating at least three preventative strategies.

III. Duration: 90 mins

IV. Learning materials:

1. Videos demonstrating classroom behavior challenges.
2. Printed behavior management plan templates.
3. Whiteboard and markers for brainstorming.
4. Role-play scenario cards.

V. Learning process

1. Lead-in:

a. **Review of last class (classroom management strategies):**

Teacher asks 2-3 groups to exhibit their results of homework from last class on "additional classroom management strategies". And then the teacher concludes their results, emphasizing the importance of "classroom management". At last, the teacher asks a question "Do you know classroom disruptive behaviors?"

b. **Warm-up:** By asking the question "Do you know classroom disruptive behaviors?", the teacher asks 1-2 students to answer the question after a short prompt discussion among groups.

2. Activities Applying:

a) Activity 1: Brainstorm & Discussion

After answering the "warm-up" question, the teacher asks students: "*What are common classroom behavior challenges you anticipate?*".

Students talks about the question in group and create a mind map. Then the teacher corporate their responses by creating a mind map on the board.

The teacher briefly introduce the importance of effective behavior management and conflict resolution based on the mind map.

b) Activity 2: Observing Classroom Behavior (Video Analysis & Identification)

The teacher shows short classroom videos demonstrating common behavior challenges, asking students to identify behaviors, possible causes, and teacher responses in group. Then each group presents their observations. During the process, the teacher facilitates discussion on alternative approaches.

c) Activity 3: Practicing Behavior & Conflict Management (Role-Play & Application)

The teacher assigns groups with different classroom scenarios involving misbehavior or conflict, asking each group to role-play the scenario and apply a positive reinforcement or conflict resolution strategy. (Peer and instructor feedback is given based on effectiveness and engagement.)

d) Activity 4: Creating a Proactive Strategy Plan

The teacher provides a behavior management template to students, and asks each group to develop their plans, incorporating at least three preventative strategies. And then each group exchange their plans for peer review and constructive feedback.

3. Active-assessment

a) **Peer-assessing:** Groups exchange plans and provide constructive feedback

b) **Self-assessing**: The teacher encourages each group to make a self-comment on their group performance and share key insights with the class.

c) Teacher-assessing: The teacher comments on group performance and provides feedback and discusses real-world implementation of conflict resolution.

4. Wrap-up

a) Students write a short reflection: *What is one key takeaway from today's lesson?*

b) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

c) Homework Assigning: Research additional conflict resolution techniques.

VI. Evaluation:

1. To observe discussions and group activities in class (formative assessment).
2. To observe and assess video analysis and role-play scenarios.
3. To grade behavior management plan.

VII. Appendices:

1. Worksheet: Behavior Management & Conflict Resolution
2. Behavior Management Plan Template
3. Scenario Cards for Role-play

Appendix 1:

Worksheet: Behavior Management & Conflict Resolution

Name: _____ Student No. _____

Date: _____

Part 1: Video Analysis

1. Identify two behavior challenges shown in the video:

   Challenge 1: _____

   Challenge 2: _____

2. What do you think caused these behaviors?

3. What was the teacher's response? Was it effective? Why or why not?

Part 2: Role-Play Reflection

1. What scenario did your group role-play?

2. What strategy did your group use to address the issue?

3. How effective was your approach? What could be improved?

Appendix 2:

Behavior Management Plan Template

Name: _____ Student No. _____

Date: _____

1. Classroom Rules

List 3–5 clear and positively stated rules you will enforce in your classroom.

1. _____

2. _____

3. _____

4. _____

5. _____

2. Classroom Procedures

Describe how you will teach and manage daily routines (e.g., entering class, turning in homework, group work).

Morning Routine:

Transitions Between Activities:

Group Work Behavior:

End-of-Day Dismissal:

3. Positive Behavior Supports

How will you reinforce and encourage appropriate behavior? (E.g., praise, reward systems, certificates.)

4. Consequences for Misbehavior

List and explain the progressive steps you will take when a student misbehaves.

1. _____

2. _____

3. _____

4. _____

5. Interventions for Ongoing or Severe Behaviors

Describe any strategies or tools (e.g., behavior contracts, parent communication, referrals) you will use.

6. Parent/Guardian Communication Plan

How will you keep families informed about student behavior and involve them in behavior support?

7. Reflection and Adjustment

How will you monitor the success of your plan and make adjustments as needed?

Appendix 3:

Scenario Cards for Role-play

Off-Task Behavior **Scenario**: A student keeps talking to peers during independent work time and distracting others. Roles: Teacher, Disruptive Student, Bystander Guiding questions - What proactive strategies could prevent this? - How would you redirect the behavior calmly? - What if the behavior continues?
Minor Conflict Between Students **Scenario**: Two students argue over shared materials and begin raising their voices. Roles: Teacher, Student A, Student B Guiding questions - How do you de-escalate the situation? - How do you guide them to resolve the conflict? - How do you follow up after?
Refusing to Follow Directions **Scenario**: A student refuses to put away their phone after being asked twice. Roles: Teacher, Defiant Student Guiding questions: - How do you maintain authority without escalating? - What consequence might be appropriate? - How could relationship-building prevent future issues?

Student Shuts Down **Scenario:** A student becomes quiet and refuses to participate after receiving critical feedback. Roles: Teacher, Withdrawn Student Guiding questions: - How do you address emotional disengagement? - What behavior management techniques apply here? - How can you encourage re-engagement?
Class is Too Noisy **Scenario:** The whole class becomes loud during group work and ignores your reminders. Roles: Teacher, Multiple Students Guiding questions: - What strategies help regain control of the class? - How do you reflect on the structure of the activity? - What expectations might need to be revisited?

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 4: Classroom Management Efficacy: Supportive Learning Environment Building

I. Concept

This session focuses on strengthening Classroom Management Efficacy, which refers to how well teachers can establish and maintain a classroom atmosphere that promotes emotional safety, mutual respect, and active student engagement, while also minimizing disruptions and maximizing learning time. The core idea is to enhance teachers' belief in their capacity to cultivate positive classroom climates that reduce behavioral issues and foster academic and social-emotional success by training pre-service teachers to intentionally design and maintain a supportive learning environment: safe, respected, valued, and motivated. Rather than focusing solely on discipline or order, this session emphasizes relationship-building, emotional safety, and inclusive practices as key elements of effective classroom management.

II. Learning Objectives:

1. To reflect on and share experiences of positive and negative teacher-student relationships in a group discussion.
2. To create a classroom climate checklist to assess inclusivity and student motivation.
3. To practice strategies for addressing diverse student needs using case study analysis.

III. Duration: 90 minutes

IV. Learning materials:

1. Case study scenarios

2. Checklist templates for classroom climate assessment
3. Whiteboard and markers for brainstorming

V. Learning process

1. Lead-in:

a)Review of last class (Conflict resolutions strategies):

The teacher asks 2-3 students to exhibit their results of homework from last class on "Conflict resolutions strategies". And then, the teacher concludes on their answers and initiate the warm-up activity.

b) Warm-up:

The teacher asks students to share personal experiences of positive and negative teacher-student relationships in group and ask 1-2 to share in class.

2. Activities Applying:

a)Activity 1: Group Discussion

The teacher guides discussion with introduction to key characteristics of a supportive learning environment on the impact of these relationships on student learning.

b)Activity 2: Creating an Inclusivity & Motivation Checklist

The teacher asks students to brainstorm factors that contribute to a positive classroom climate in groups and create a checklist to assess inclusivity and student motivation. And then each group presents their checklists and receive peer and teacher feedback.

c)Activity 3: Addressing Diverse Student Needs

The teacher provides case studies on different classroom challenges (e.g., disengaged students, language barriers, behavior issues and then ask groups to analyze their case study and propose strategies to address the issue. And then each group presents their strategies and receive peer and teacher feedback.

d)Activity 4: Implementing Supportive Strategies (Simulation & Application)

The teacher asks students to role-play scenarios in group where they apply strategies to build a supportive environment. And then the teacher asks students to discuss the role-play from the perspective of effectiveness and challenges of implementation.

3. Active-assessment

a) **Peer-assessing:** Groups exchange checklists and provide constructive feedback.

b) **Self-assessing:** The teacher encourages each group to make a self-comment on their group performance and share key insights with the class.

c) Teacher-assessing: The teacher comments on group performance and provides feedback and discusses real-world implementation of building up supportive environments in classroom.

4. Wrap-up

a) Students write a short reflection: *What is one key takeaway from today's lesson?*

b) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

c) Homework Assigning: Research additional classroom inclusivity strategies.

VI. Evaluation:

1. To observe group discussions and group activities (formative assessment).
2. To review and grade the classroom climate checklists.
3. To assess case study analysis and grade the strategy proposal with feedback.

VII. Appendices:

1. Worksheet: Supportive Learning Environment
2. Case Studies for Building Supportive Learning Environment

Appendix 1:

Worksheet: Supportive Learning Environment

Name: _____ Student No. _____

Date: _____

Part 1: Reflection & Discussion

1.Describe a positive teacher-student relationship you experienced. What made it positive?

2.Describe a negative teacher-student relationship you experienced. How did it affect learning?

Part 2: Classroom Climate Checklist

1.Identify five key elements of an inclusive and supportive classroom:

Part 3: Case Study Analysis

1.Briefly summarize the classroom challenge presented in your case study.

2.What strategies would you implement to address this challenge?

3.How do these strategies contribute to a supportive learning environment?

Appendix 2:

Case Studies for Building Supportive Learning Environment

Case Study 1: The Isolated Student

Scenario: You notice that one student, Xiaoming, sits alone during group activities and rarely participates. Other students don't seem to include him, and he appears withdrawn but not disruptive.

Reflection Questions:

- How would you respond to Xiaoming's isolation?
- What strategies could you use to help him feel included and safe?

Recommended solutions:

- Pair Xiaoming with empathetic peers in a buddy system.
- Use icebreakers and team-building activities.
- Talk to him privately to understand his feelings and interests.

Case Study 2: The Overwhelmed Learner

Scenario: Xiaowen is often anxious about completing tasks and frequently asks for reassurance. She sometimes cries when she doesn't perform well, saying she's 'not good enough.'

Reflection Questions:

- How can you create an emotionally safe environment for Xiaowen?
- How can you encourage a growth mindset in her and the class?

Recommended solutions:

- Use affirmations and emphasize effort over results.
- Provide scaffolded tasks and positive feedback.
- Normalize mistakes as part of learning through class discussions.

Case Study 3: The Disruptive Leader

Scenario: Mike is very active and popular but often distracts others during lessons. He enjoys attention and sometimes makes jokes or talks out of turn, causing laughter and loss of focus.

Reflection Questions:

- How would you balance classroom control with maintaining Mike's confidence?
- What proactive steps could redirect his leadership skills positively?

Recommended solutions:

- Give him leadership roles (e.g., group leader, class helper).
- Set clear expectations with consistent consequences.
- Use private feedback and positive reinforcement.

Case Study 4: The Language Barrier

Scenario: Two new students from a rural area are struggling with spoken English and rarely speak in class. Other students sometimes laugh when they make mistakes.

Reflection Questions:

- How can you create a linguistically safe classroom?
- What steps would you take to prevent bullying or ridicule?

Recommended solutions:

- Establish a class culture of respect and empathy (e.g., class contract).
- Use sentence frames, visual aids, and cooperative learning.
- Address harmful behavior firmly and use it as a teaching moment.

Case Study 5: The Competitive Classroom

Scenario: In a high-achieving class, students often compare grades and test scores. Some are reluctant to ask questions, fearing it will make them look 'stupid.'

Reflection Questions:

- How can you reduce pressure and promote collaboration?
- How would you encourage students to take academic risks?

Recommended solutions:

- Avoid public ranking or overemphasis on grades.
- Use anonymous question boxes or 'think-pair-share.'
- Highlight effort, creativity, and peer support as values.

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 5: Instructional Strategies Efficacy: Analysis of Related Factors

I. Concept:

This session focuses on **Instructional Strategies Efficacy: Analysis of Related Factors** including learning contexts, learners and learning objectives, all the intentional examination of key elements that influence the planning and delivery of effective instruction. By training pre-service teachers to analyze the teaching context, including the learning environment, student characteristics, and learning objectives, to select and apply the most effective instructional strategies. This session builds their analytical and adaptive thinking skills, helping them become strategic decision-makers in planning and delivering instruction.

1. Analysis of Learning Contexts:

a) **External factors** (e.g., classroom environment, resources, cultural influences, technology access).

b) **Internal factors** (e.g., student motivation, prior knowledge, cognitive abilities, emotional and social influences).

c) The importance of situational awareness in instructional planning.

2. Analysis of Learners:

a) Identifying student learning styles and preferences.

b) Differentiating instruction through scaffolding, flexible grouping, and formative assessments.

c) Implementing active learning techniques such as inquiry-based learning, cooperative learning, and technology-enhanced instruction.

3. Analysis of Learning Objectives:

a) Writing measurable learning objectives using Bloom's Taxonomy.

b) Ensuring coherence among objectives, instruction, and assessment.

c) Strategies for maintaining consistency across different levels of learning.

II. Learning Objectives

1. To assess learning contexts including external environment and internal conditions.
2. To develop clear objectives and ensure alignment with instruction and assessment.
3. To identify student needs and adapt teaching strategies for diverse learning styles.

III. Duration: 90 minutes

IV. Learning materials:

1. Case study scenarios.
2. Lesson plan templates.
3. Learning style assessment charts.
4. Bloom's Taxonomy reference guide.
5. Whiteboard and markers for brainstorming.

V. Learning process:

1. Lead-in :

a) **Preview:** The teacher asks 1-2 students to exhibit their homework: *classroom inclusivity strategies.* And then the teacher concludes the importance of supportive classroom environment, and leads to the new topic: the importance of a qualified class design by raising up a question: "*What do you think is also important in teaching a class?"*

b) Warm-up: After answering and concluding the question raised before, the teacher asks a question: *What factors impact the effectiveness of instructional strategies?*

2. Activities Applying

a) Activity 1: Brainstorming & Discussion

After the teacher poses a question in the “warm-up” step, students engage in a discussing activity in group to discuss internal and external influences in class. And then the teacher asks students to share the group results in class, summarizes responses and introduces key concepts of learning context assessment.

b) Activity 2: Case Study Review & Group Discussion (Learning Context Analysis)

The teacher assigns different case studies reflecting varied learning environments for each group and ask them to identify external and internal factors influencing instruction in their case study, and then presents their findings to the class, while the teacher facilitates discussion.

c) Activity 3: Mini-lecture and Mind Map Drawing

The teacher poses a question: *Other than analyzing learning environments, are there any other aspects/factors that are ought to be analyzed before lesson planning?* And the teachers asks 2-4 students volunteer to answer this question and write down the answers, introducing the concept of “analysis of learners”.

Then the teacher gives a lecture on “the analysis of learners” including the concept, key elements and major approach, while the students take notes, preparing for the following activity.

After the mini-lecture, the teacher asks each group to draw a mind map of “analysis of learners”, share it in class, and provide peer feedback to each other.

In the end of this session, the teacher concludes the focal points and address the importance of learners-analysis.

d) Activity 4: Writing and Aligning Learning Objectives (Developing Clear Objectives)

The teacher provides examples of well-written and poorly written learning objectives to the students, and then to draft learning objectives for a given lesson scenario using Bloom’s Taxonomy. Later, groups exchange objectives and evaluate alignment with instruction and assessment.

And then the teacher asks each group to exhibit their drafts and conclude on it.

e) Activity 5: Lesson Plan Template Designing

After introducing the three dominant factors that need to be analyzed before making lesson plans, the teacher asks students to design a lesson plan template, which can be used as a guide when designing courses. Then students share their design in group and come up with a modified model to represent the group. After modifying the plan templates, groups present their designs in class, preparing for potential peer feedback. And then the teacher provides feedback on the designs.

3. Active Assessment

a) **Peer-assessing:** Groups exchange lesson plan templates and provide constructive feedback.

b) **Self-assessing**: The teacher encourages each group to make a self-comment on their group performance and share key insights with the class.

c) Teacher-assessing: The teacher comments on group performance and provides feedback on peer teaching in class.

4. Wrap-up

a) Students write one key insight gained from the session.

b) The teacher summarizes key takeaways and provides additional resources on instructional strategy development.

c) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation:

1. To observe students participation in discussions and group activities (formative assessment).
2. To observe case study analysis and grade objective alignment exercise.
3. To assess the lesson plan templates.
4. To assess the worksheet.

VII. Appendices:

1. Worksheet: Instructional Strategies
2. Case Studies: Various Learning Environments in Classrooms
3. Bloom's Taxonomy
4. Mind Map of Lesson Plan

Appendix 1:

Worksheet: Instructional Strategies

Name: _____ **Student No.** _____

Date: _____

Part 1: Learning Context Analysis

1. Identify two external factors that may influence instruction:

   Factor 1: _____

   Factor 2: _____

2. Identify two internal factors affecting student learning:

   Factor 1: _____

   Factor 2: _____

3. How do these factors impact instructional planning?

Part 2: Developing Learning Objectives

1. Write a clear and measurable learning objective for a lesson of your choice using Bloom's Taxonomy:

2. How does this objective align with instruction and assessment?

3. What adjustments would you make if your students struggled with this objective?

Appendix 2:

Case Studies: Various Learning Environments in Classrooms

Case Study 1: Physical Learning Environment – Classroom Design

Scenario: You are assigned to teach a large class of 45 students in a small, poorly lit room with fixed desks. You find it difficult to move around, and students at the back can't see the board clearly. Some students often appear disengaged.

Reflection Questions:

- What changes can you make to optimize this physical learning space within your limitations?

- How can classroom arrangement influence student participation and attention?

Case Study 2: Psychological Learning Environment – Creating a Safe Space

Scenario: During your first few weeks of teaching, you notice that students are reluctant to speak in English, fearing embarrassment if they make mistakes. Some are hesitant even to raise their hands.

Reflection Questions:

- What classroom culture would you aim to create to reduce anxiety and fear of failure?

- What strategies can help build student confidence in using English?

Case Study 3: Social Learning Environment – Peer Relationships

Scenario: Your class includes several cliques that rarely interact with one another. When working in groups, students tend to stick with their friends, limiting exposure to diverse perspectives.

Reflection Questions:

- How can you encourage students to work collaboratively outside of their social groups?

- What role does teacher facilitation play in promoting inclusiveness?

Case Study 4: Digital Learning Environment – Online Class Challenges

Scenario: You are conducting online lessons, but many students keep their cameras off and do not participate actively. Some report connectivity issues; others remain silent throughout the class.

Reflection Questions:

- What tools or methods could improve engagement in an online environment?

- How would you ensure all students have equal access and participation in digital settings?

Case Study 5: Cultural Learning Environment – Diverse Backgrounds

Scenario: In a multicultural classroom, students have different cultural attitudes toward authority, participation, and collaboration. One group is very talkative, while others are more reserved.

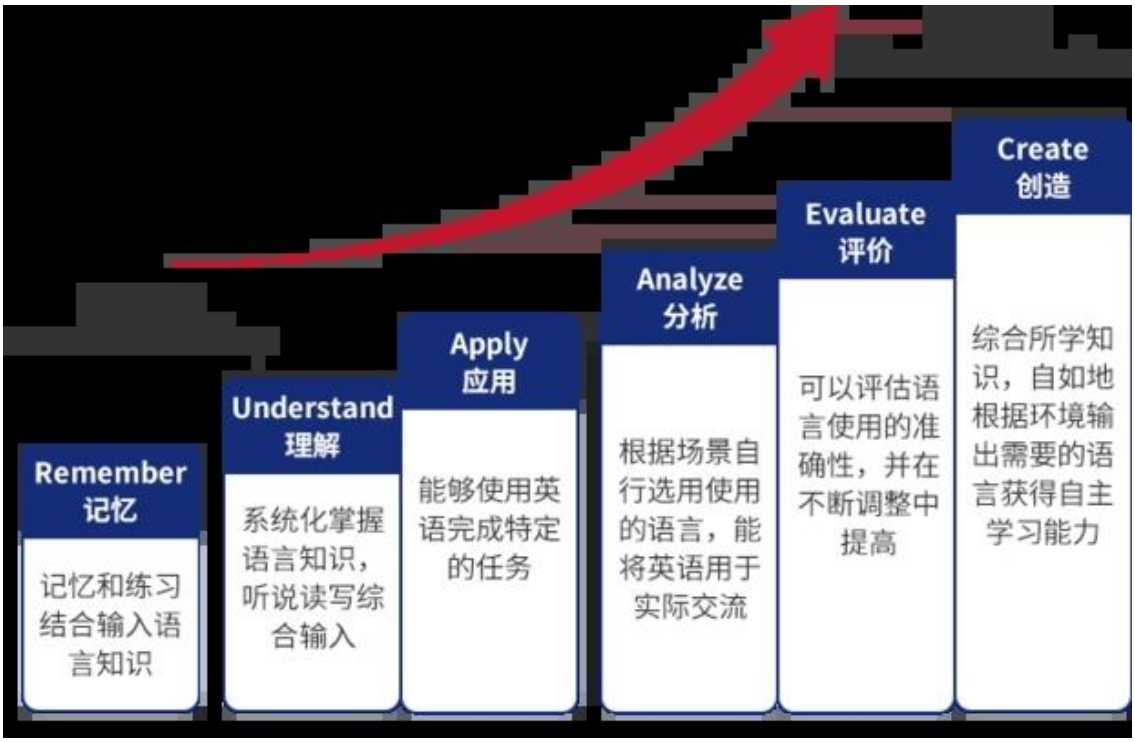
Reflection Questions:

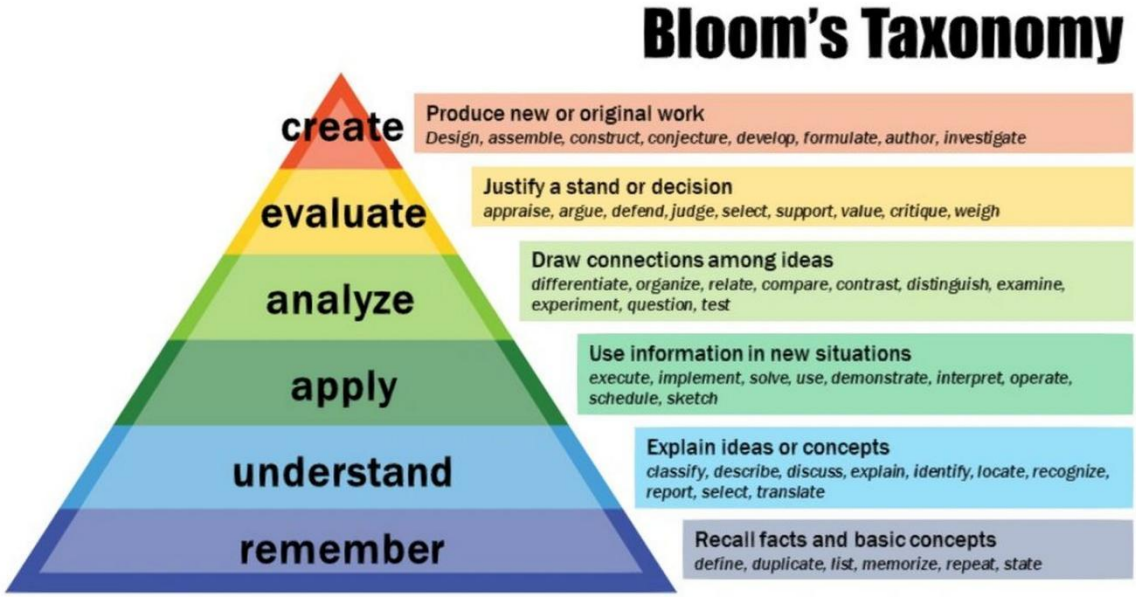
- How can you address different cultural expectations in the classroom?

- What inclusive teaching practices could support equity and respect for all students?

Appendix 3:

Bloom's Taxonomy





Appendix 4:

Mind Map of Lesson Plan

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 6: Instructional Strategies Efficacy: Curriculum Design

I. Concept:

This session aims to strengthen Instructional Strategies Efficacy by engaging pre-service teachers in the curriculum design process, helping them feel competent and confident

in the instruction. Curriculum design involves pedagogical knowledge, instructional planning, and contextual analysis converge into a structured plan for teaching and learning, referring to the intentional planning and organization of curriculum content, methods, and assessments in a way that maximizes the effectiveness of instructional strategies in achieving desired learning outcomes. This section trains participants to move beyond isolated lesson planning toward integrated, purposeful curriculum thinking.

II. Learning objectives

1. To design a detailed lesson plan using the provided template, incorporating clear objectives and active learning strategies.
2. To analyze sample lesson plans and identify strengths and weaknesses.
3. To present and justify lesson plan choices in a peer feedback session.

III. Duration: 90 minutes

IV. Learning materials:

1. Lesson plan templates.
2. Sample lesson plans for analysis.
3. Curriculum standards and instructional strategy guides.
4. Whiteboard and markers for brainstorming.

V. Learning process

1. Lead-in:

a) Preview: The teacher reviews focal points of last class, emphasizing the importance of analyzing related factors before making an effective lesson plan.

b) Warm-up: The teacher poses a question: "*What makes an effective lesson plan?*" and assign group work.

2. Activities applying:

a) Activity 1: Brainstorming and Discussion

The teacher asks students to brainstorm on the topic of *What makes an effective lesson plan?* by discussing the key components of a well-structured lesson plan, and then exhibit their results on the whiteboard. Later, the teacher introduces principles of curriculum design, focusing on alignment of objectives, instruction, and assessment.

b) Activity 2: Designing a Lesson Plan

The teacher asks students to develop a detailed lesson plan based on their design template from last class, which should include objectives, instructional strategies, and assessment methods. The teacher circulates in the class to provide guidance and answer questions.

c) Activity 3: Reviewing Lesson Plans

After students finish their plan designing, each student presents their lesson plan in groups and evaluate their strengths and weaknesses to each other. And groups exchange their plans for peer-assessing, discussing and exchanging opinions for potential improvement and modifications.

d) Activity 4: Justifying Lesson Plans

Based on the provided constructive feedback on clarity, engagement strategies, and alignment, students revise their plans under the guidance of the teacher.

3. Active Assessment

a) **Peer-assessing:** Groups exchange lesson plan and provide constructive feedback.

b) **Self-assessing:** The teacher encourages students to evaluate their own lesson plan and propose potential suggestions.

c) Teacher-assessing: The teacher comments on group performance and provides feedback on the lesson plans.

4. Wrap-up:

a) The teacher makes comment on the group activities and lesson plans, summarizing best practices for curriculum design.

b) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation:

1. To observe the group activities and in-class discussions (formative assessment).
2. To assess the quality of lesson plan development (rubric-based evaluation).
3. To observe lesson plan analysis among students and peer feedback contributions.

VII. Appendices:

1. Worksheet: Curriculum Design & Lesson Planning
2. Sample Lesson Plan

Appendix 1:

Worksheet: Curriculum Design & Lesson Planning

Name: _____ Student No. _____

Date: _____

Part 1: Lesson Plan Development

1. Write a clear and measurable learning objective for your lesson:

2. List two learning strategies you will use in the plan:

3. Describe how your assessment aligns with your lesson objective:

Part 2: Lesson Plan Analysis

1. Identify one strength in the sample lesson plan provided:

2. Identify one area for improvement and suggest a revision:

Part 3: Peer Feedback Reflection

1. Summarize the feedback you received on your lesson plan.

2. How will you revise your lesson plan based on this feedback?

Appendix 2:

Sample Lesson Plan

课题：Unit5 There is a big bed!

Lesson 1 My nice room

Part A Let’s talk & Let’s learn

语篇题目	Beautiful room.
单元主题	人与自我　人与自然
语篇类型	对话
授课时长	1 课时
语篇研读分析	**what:**语篇一是 PEP Book 5 Unit 5 There is a big bed!A 部分的对话和词汇整合课，教材通过 Sarah 和 Mike 参观张鹏卧室的情景展开学习．孩子们参观了张鹏家的卧室描述张鹏的卧室有哪些物品，进行新词学习以及对物品位置摆放的正确表达，对张鹏卧室物品摆放发表自的看法，提出自己的合理建议。 **why:**教材情景中运用邀请朋友到家参观，在实际场景中描述某人房间的物品，学会欣赏他人，为他人提出自己的合理的建议，结合学生实际生活，引导学生养成爱整洁、爱干净的良好的习惯。 **how:** 本课时是 Let’s learn 和 Let’s talk 两个板块的融合课．Let’s learn 通过参观张鹏房间内物品的情景，引导学生发现房间里面还有哪些物品，学习本节课的新词:clock，plant,water bottle,bike 培养学生的拼读能力和自主学习能力，并结合句型 There is...描述房间里面有哪些物品，整体感知张鹏的房间摆设和样貌．最后采用描述房间、布置房间活动巩固和发展语言．让学生逐步明白整理房间的重要性，形成爱家爱整洁的思想态度。
学情分析（基于自己的学生）	描述家居物品是学生很熟悉的生活场景，学生也有丰富的与家人打扫或布置房间、描述家居物品等生活经历，比较熟悉一些简单的物品名词、数量表达等，如：房间名词、学习用品、房间物品等。但是，学生对于如何进行家居美化不太熟悉，另外学生也比较少有机会自己参与装饰房子和美化周边环境，也还不太明确家居美化与自己的未来生活是息息相关的。学生在学习本课后，能在情景中灵活运用所学句型介绍房间内有什么，并用适当形容词描述房间内的物体，达到学以致用的目的，同时培养学生的英语口语表达能力及合作精神.
教学目标(体现学习活动观)	1.理解对话大意，完成听力部分的相关练习，初步感知 There is 在实际情景中的语用，了解单词 photo，clock, plant, water bottle, bike 的音形义，提升自然拼读能力，增加自主学习能力和小组合作能力；（学习理解） 2.发散思维，简要评价房间的布置和物品摆设，提出自己的建议，养成爱整洁爱干净的良好的习惯；（实践应用） 3.完成拓展部分的练习，设计自己喜爱的房间，能在实际情景中运用所学句型描述房间里面的物品。（迁移创新）
完成课时目标所需要的核心语言	核心词汇或短语：bike, clock, photo, plant, water bottle。 核心句型：There is a…/ It’s …
教学重点	能在情境中使用核心句型描述房间内的物品和位置：There is a…/ It’s … 能在情境中听、说、读、写本课时的重点词汇 bike, clock, photo, plant, water bottle。
教学难点	能在情境中正确使用句型 There is …描述房间。
教学资源	文本录音、视频、PPT

教学过程				
教学目标	教师活动	学习活动	设计意图	效果评价
理解对话大意，完成听力部分的相关练习，初步感知 There is 在实际情景中的语用，了解单词 photo，clock, plant, water bottle, bike 的音形义，提升自然拼读能力，增加自主学习能力和小组合作能力；**(学习理解)** 发散思维，简要评价房	**Step1.Warm-up** 1. Chant and do the actions with the students. 2.Show the pictures,lead the students talk about the rooms.（sofa、books、picture) **Step2.Presentation** 1. Sarah and Mike visite Zhang peng's home,listen and tick: What's in Zhang Peng's bedroom?Then check the answer together. 2.Watch the video and answer:What else are in Zhang Peng's room? (bed、photo...) 3.Meet Zhang Peng's bedroom: (1) Look at the picture,teach the new word:photo/plant/ water bottle/bike Practice the key sentences:There is..Lead the students learn more about healthy life styles. (2)Pair work: Introduce Zhang Peng's bedroom with your partner. 4.Watch and answer:What do Mike and Sarah think of Zhang Peng's bedroom? Ss:Nice... T:Nice,cool,good are nice words,they can	**Step1.Warm-up** 1. Chant and do the actions with the teacher together. 2. According the pictures,and guess the things in the rooms. **Step2.Presentation** 1. Listen and tick the right picture,then check the answer,find out the key sentence. 2. Watch the video and answer: Bed/desk/picture... 3.Meet Zhang Peng's bedroom: (1)Learn the new words: photo/plant/ water bottle/bike Practice the key sentences:There is.. (2)Pair work: Introduce Zhang Peng's bedroom with partner. 4. Watch and answer: Students talk their ideas about Zhang Peng's room.Ss:His bed room is nice... Learn to incentive others.	导入主题，创设情景，激发学生参与的兴趣，激活学生关于家居陈设的词汇、句型，感知新句型的用法。 由旧知向新知过渡，并感知 There is/are 句型。 整体感知文本，又关注文本的细节，加深对文本的理解，并有意识地学习目标句型。 深入文本探究，解决重难点词汇，加深对 There is 句型的学习， 进行情感教育：学习更多的健康生活方式。 本阶段是旨在培养学生的思维能力和表达能力，评价他人的房间,在交流、分享、感悟的过程中。引导学生学会分享，欣赏他人的住所，养	观察学生回答问题的表现，根据学生说出的具体单词，了解学生对家居陈设的词汇储备。 观察学生是否能抓住听力内容的关键词，判断其获取并记录信息的全面和准确程度。 观察学生完成匹配活动的情况，根据学生表现给予指导和反馈。 教师根据学生理解词汇、拼读单词和拓展词汇的情况，发现问题，及时提供帮助。 教师观察学生在语境中运用核心语言进行问答和交流的情况，进行情感教育。 观察学生朗读和模仿表达是否正确，把握学生对重点语言表达的学习和内化情况。 观察学生表达是否

间的布置和物品摆设，提出自己的建议，养成爱整洁爱干净的良好的习惯；**（实践应用）** 完成拓展部分的练习，设计自己喜爱的房间，能在实际情景中运用所学句型描述房间里面的物品。**（迁移创新）**	incentive others.Appreciating and praising others is a good quality. 5.(1)Listen and imitate, pay attention to the pronunciation and the tones. (2)Role-play, instruct students to evaluate each other.	 5. (1)Listen and imitate the tones. (2)Role-play, choose one role to play,and evaluate each other.	成爱整洁爱干净的良好的习惯。 通过不同形式的朗读训练，确保学生能用正确的语音、语调和意群流利地朗读对话，锻炼学生的语言表达能力，进一步内化对文本的理解。	正确，把握学生对重点语言表达的学习和内化情况。
	Step3.Production 1.Think and say Q1: What do you think of Zhang Peng's bedroom?Q2: Do you have any suggestions for Zhang Peng? Teacher summarize: We should keep our room tidy and clean. 2.Group work: Four students for a group,design a beautiful room，then stick and say! Teacher evaluate every group's room. **Homework:**  	1.Think and say Q1: S1:It's clean. S2:It's not good. ... Q2: S1:The bike should be outside the bedroom. ... 2.Group work: Design a beautiful room together, then stick and say!  Students choose tow to finish.	该活动加强学生对核心句型的理解，培养学生的综合语言运用能力。在合作过程中，锻炼了学生的组织能力和合作能力。 分层的作业设计让各个层次的学生能将所学知识和技能落到实处，真正做到关注到了每一个学生。	教师根据学生完成的情况给出指导性的评价，及时纠正 There is 句型结构的用法。 教师根据学生的作业完成情况给予有针对性的评价。

Blackboard design:

教学预反思:

本节课是一节听说课，教师引导学生通过通过学习 A 部分的语篇——参观 Zhang Peng 房间的对话，理解和获取如何谈论家居陈设,学习与房间相关的语言。

1. 本课的单词教学是结合相应的语情景，提升单词教学趣味性的同时，帮助学生加深对于单词的感知力及把控能力。

2. 立足英语单词发育规律的自然拼读法不失为高效单词学习工具，教师在教学过程中渗透白然拼读使用方法，这是便捷高效的单词学习途径。

3.不论是 Design a nice room 迁移创新的使用，还是在教学过程中的情感目标渗透，如: We should love our home and keep our home clean and nice. Learn to incentive others.这都是润物无痕的潜移默化式的情感教育。

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 7: Instructional Strategies Efficacy: Feedback & Evaluation

I. Concept

This session aims to build Instructional Strategies Efficacy by training pre-service teachers to use feedback and evaluation (involving systematically assessing whether teaching methods are achieving intended learning outcomes—and using that information to refine instruction) as powerful tools for improving student learning and guiding their own instructional decisions. Teachers who feel confident in giving effective feedback and conducting meaningful evaluations are more likely to engage learners actively, adjust instruction responsively, and foster continuous improvement.

This session helps pre-service teachers understand how to design, deliver, and respond to feedback in a way that enhances learning and strengthens teaching effectiveness.

II. learning objectives:

1. To develop a rubric for assessing student performance in a specific lesson.
2. To provide constructive feedback on peer micro-teaching sessions.
3. To compare and contrast different assessment methods through hands-on practice with sample student work.

III. Duration: 90 minutes

IV. Learning materials:

1. Sample rubrics.
2. Peer feedback guidelines.
3. Whiteboard and markers for brainstorming.

V. Learning process

1. Lead-in:

a) **Review:** The teacher reviews focal knowledge of curriculum design and introduces new class: *How to evaluate it?*

b) **Warm-up Activity:** The teacher poses a guiding question: "*How to evaluate teaching effectiveness?*" and have students implement a brainstorm activity. And then the teacher asks 2-3 groups to exhibit their results and write down on the whiteboard.

2. Activities applying

a) Activity 1: Group Discussion

The teacher introduces two concepts, "feedback & evaluation" from the Warm-up Activity, and poses the question for discussion: "*What makes feedback and evaluation effective in teaching?"* Students discuss experiences with assessment and feedback in small groups and share their discussion in class. After sharing, the teacher introduces key concepts of effective assessment and feedback strategies based on the sharing.

b) **Activity 2: Rubric Creation**

The teacher illustrates rubrics with an example of well-structured rubrics. And then students work in pairs to design a rubric for assessing a specific lesson (e.g., speaking activity, writing assignment). Later, groups exchange rubrics and provide feedback on clarity and alignment with objectives, during which, the teacher walks around the classroom to provide suggestions when needed.

c) Activity 3: Peer Micro-Teaching & Feedback Session

The teacher asks each group to conduct a short micro-teaching session (5-7 minutes each) on the basis of last class's lesson plan, and ask classmates to provide feedback and evaluation using structured guidelines. In this activity, the teacher can set an example by providing feedback and evaluating the first short micro-teaching session. After illustrating and explaining in details, the teacher asks students to implement by imitating. In the end, the teacher facilitates discussion on effective feedback strategies.

d) Activity 4: Hands-on Evaluation of Student Work (comparing assessment methods)

The teacher provides some student work (e.g., essays, presentations, quizzes) and asks students to analyze with corresponding assessment methods, and then compare how different assessment methods impact student learning.

The teacher has students discuss on "*strengths and limitations of formative vs. summative assessments*". Then each group shares their results in class, while other groups provide feedback.

3. Active assessment

a) **Peer-assessing:** Groups provide constructive feedback on the short micro-teaching.

b) **Self-assessing:** The teacher encourages students to evaluate their own micro-teaching and propose potential suggestions.

c) **Teacher-assessing:** The teacher comments on group performance and provides feedback on the micro-teaching.

4. Wrap-up

a) Students write one key takeaway from the session, while the teacher summarizes best practices for feedback and assessment.

b) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation

1. To observe the group activities and in-class discussions (formative assessment).
2. To evaluate the micro-teaching.
3. To observe peer feedback on micro-teaching sessions (peer-reviewed evaluation).
4. To evaluate the effectiveness of rubric design (instructor feedback and self-reflection).

VII. **Appendices:**

1. Worksheet: Feedback & Evaluation
2. Sample Rubrics
3. Peer Feedback Guidelines

Appendix 1:

Worksheet: Feedback & Evaluation

Name: _____ Student No. _____

Date: _____

Part 1: Rubric Development

1. Identify a specific lesson or activity you are assessing:

2. List three key criteria for assessment:

3. Define the performance levels (e.g., Excellent, Good, Satisfactory, Needs Improvement):

Part 2: Peer Feedback Reflection

1. Summarize the feedback you received during the micro-teaching session:

2. How will you adjust your teaching strategies based on this feedback?

Part 3: Assessment Comparison

1. Compare two assessment methods (e.g., test vs. portfolio) and describe their pros and cons:

Appendix 2:

Sample Rubrics (English)

This sample rubrics includes both formative and summative assessments for comprehensive evaluation.

Formative Assessment Rubric

Used during the teaching process to provide feedback and guide instructional adjustments.

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)	Score
Lesson Objectives	Clearly stated and aligned with activities.	Mostly clear and somewhat aligned.	Partially clear, loosely aligned.	Unclear or not aligned.	
Student Engagement	All students actively engaged.	Most students engaged.	Some students engaged.	Few students engaged.	
Questioning Techniques	Uses varied, open-ended questions effectively.	Uses some open-ended questions.	Mostly closed questions.	Rarely uses effective questions.	
Feedback Given	Immediate, constructive, and specific.	Generally constructive and timely.	Basic feedback provided.	Minimal or no feedback.	
Classroom Management	Smooth transitions and clear expectations.	Few disruptions, generally organized.	Some disorder or unclear expectations.	Frequent disruptions, lacks clarity.	

Total Score: _____

Comments:

_____

_____

_____

Summative Assessment Rubric

Used at the end of instruction to evaluate overall teaching effectiveness and student learning outcomes.

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)	Score
Lesson Planning	Detailed and aligns with curriculum.	Clear and mostly aligned.	Basic planning, partially aligned.	Minimal or disorganized.	
Content Delivery	Clear, accurate, and engaging.	Mostly clear and accurate.	Some inaccuracies or unclear.	Confusing or mostly inaccurate.	
Assessment Strategies	Varied, valid, and aligned to objectives.	Some variety and validity.	Limited variety or alignment.	Unclear or missing assessments.	
Learning Outcomes Achieved	Fully achieved by most students.	Achieved by many students.	Achieved by some students.	Few students achieved outcomes.	
Professionalism	Punctual, prepared, reflects and adapts.	Usually prepared and professional.	Some preparation and reflection.	Unprepared or lacks professionalism.	

Total Score: _____

Comments:

_____

_____

_____

ample Rubrics (Chinese)

评价项目和参考标准	
项目	评价参考标准
教学内容	1.教学目标明确，符合课程大纲要求，严格执行教学计划。
	2.课程内容科学、系统，层次清楚；重点明确，难点清晰；深浅适度，注重联系实际，知识点符合绝大多数学生的需求。
	3.概念准确，理论阐述清楚，注意新旧知识结合，注意同相关学科联系；重视理论联系实际，注重吸收学科最新成果，注重基础知识培养；做到传授知识、方法和培养学生能力并重。
教学方法	1.教学方法灵活，能根据教学内容合理利用多种教学方法（启发式、案例式、探究式、情景式等），注重发挥学生主体作用，启迪学生思考、联想与创新。
	2.能利用多种教学资源（如案例、影视、图片、课件等）完成教学目标。多媒体课件文字简洁、图片生动，举例恰当，提高学生学习兴趣的效果明显；语言生动，语速适中，普通话流畅。
	3.教学组织形式先进、合理。充分利用现代化信息技术手段，运用学习通等平台多形式创新课堂教学模式，能实现课前与课堂、线上与线下混合式教学的有机融合。
教学态度	1.备课充分，精神饱满，讲课有热情、有感染力、有吸引力。
	2.关爱学生，注意课程思政的体现，教书育人。
教学效果	1.教学秩序好，课堂气氛活跃，学生参与度高。
	2.学生对基础知识、理论、技能的掌握情况好（学生解决问题准确性高）。
综合评价得分	分
总体评价意见	突出优点、不足及改进建议：
后续工作意见	值得推广的地方： 是否需要持续跟踪 □是 □否

听课人：　　听课日期：　　年　月　日

Appendix 3:

Peer Feedback Guidelines

1.Preparation Before the Observation

Clarify the purpose: Is the observation for professional growth, peer coaching, or evaluation?

Agree on focus areas: Discuss what your colleague would like feedback on (e.g., classroom management, engagement, questioning).

Review the lesson plan: Understand the objectives and activities beforehand.

Set observation norms: Agree on your role—silent observer or active participant?

2.Observation: Collecting Objective Evidence

Use an observation rubric or template to guide your focus. Pay attention to the following areas:

Focus Area	What to Look For
Learning Objectives	Are they clear and communicated to students?
Student Engagement	Are students actively involved and on-task?
Instructional Strategies	Are teaching methods appropriate and varied?
Use of Questions	Are questions open-ended and thought-provoking?
Classroom Climate	Is the environment respectful, inclusive, and supportive?
Assessment for Learning	Are formative checks used during the lesson?
Use of Time and Resources	Are materials effective? Is instructional time well used?

Tip: *Write specific behaviors or quotes, not vague impressions. Avoid judgmental language.*

3.Feedback: Structure and Delivery

Choose a feedback framework:

a)Start – Stop – Continue

Start: Recommend a new practice or strategy.

Stop: Gently identify a practice that could be reconsidered.

Continue: Reinforce what's working well.

b)Feedback Sandwich

Positive – Begin with observed strengths.

Constructive – Identify an area to improve.

Positive Reinforcement – Conclude with encouragement or acknowledgment.

4.Post-Observation Reflection

Be supportive: Offer supportive and respectful dialogue.

Use evidence: Refer to specific examples you observed.

Be specific: Avoid generic comments like “It was good.”

Encourage dialogue: Ask open-ended questions, e.g., “How did that feel for you?”

Offer resources: Suggest tools, readings, or PD opportunities.

5.Documentation (Optional)

Write a short summary of key points.

Share with your colleague for their reflection or response.

6.Follow-Up (Optional)

Conduct another observation if desired.

Share improvements or progress.

Maintain a supportive, coaching relationship.

Tips:

Focus on **behaviors**, not the **person**.

Be honest and respectful.

Maintain confidentiality and professionalism.

Frame feedback as support for growth, not evaluation.

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 8: Student Engagement Efficacy: Motivating Students in Class

I. Concept

This session focuses on cultivating Student Engagement Efficacy by training pre-service teachers to develop and apply motivational strategies that stimulate student interest, persistence, and active participation in classroom learning. This goal of this session is to equip pre-service teachers with a toolkit of intrinsic and extrinsic motivational strategies to help them understand how engagement connects to autonomy, relevance, and emotional connection in the classroom.

II. Learning objectives:

1. To identify and categorize different student motivation types using real classroom examples.
2. To create a lesson segment that integrates motivational strategies and present it in pairs.
3. To set a self-reflection tool to assess personal strengths in motivating students.

III. Duration: 90 minutes

IV. Learning materials

1. Scenario worksheet for motivation analysis.
2. Whiteboard and markers for brainstorming.

V. Learning process

1. Lead-in:

a) Review of last class: The teacher concludes the importance of "qualified instructional design" and asks students to think about the relation of class and students engagement. Then the teacher asks 2-3 volunteers to answer the question. After concluding students' response, the teacher introduces the concept of "motivation" by introducing that "a good lesson can lead to engagement of students".

b) Warm-up Activity: The teacher asks volunteer students to list the importance of motivation in class and write it on board.

2. Activities applying:

a) Activity 1: Brainstorming and Group Discussion

The teacher poses another question: *What makes a student motivated in class?* Students brainstorm key factors that influence motivation in group. And then each group share their answers in class, having others evaluate their answers. After, the teacher concludes all the answers and exhibit it on the board.

The teacher then introduces types of motivation and theoretical models in general while students take notes of key points and prepare for the next activity (with Self-Determination Theory of Maslow's Hierarchy).

b) Activity 2: Categorizing Motivation Types

The teacher gives students real classroom scenarios to analyze and classify them as intrinsic or extrinsic motivation. Each student writes down their answers and discuss the results and provide peer feedback. After sharing and modifying the results, each group shares their final results in class and other groups evaluate the results.

The teacher gives feedback on each group's sharing, concluding the final results of all and then initiate a discussion on how different types of motivation can be influenced with certain strategies, consequently impact student engagement.

c) Activity 3: Designing a Motivational Lesson Plan

After the discussion, the teacher asks students to design a 10-minute lesson segment incorporating at least two motivational strategies mentioned above.

The Lesson plans must include:

A clear learning objective

Motivational strategies

Student engagement techniques

Each student presents their lesson plan to small groups. Group members provide constructive feedback on clarity, engagement, and alignment with motivation principles.

Students refine their lesson plans based on feedback and then share it in group.

Each group incorporate a plan and presents their plans and justify their choices. Other groups take notes on their presentation and give feedback later.

3. **Active Assessment:**

a) **Peer-assessing:** Groups provide constructive feedback on the motivation lesson plan.

b) **Self-assessing:** The teacher encourages students to evaluate their own plan and propose potential suggestions.

c) Teacher-assessing: The teacher comments on group performance and provides feedback on the lesson plans.

4. **Wrap-up:**

a) Students write down one key insight gained from the session.

b) The teacher summarizes best practices for motivating students.

c) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation

1. To observe students participation in brainstorming, discussions, and peer review.
2. To assess the quality of the lesson segment.
3. To assess the motivation lesson plan.
4. Self-reflection assessment by students.

VII. Appendix: Worksheet: Student Engagement & Motivation

Appendix:

Worksheet: Student Engagement & Motivation

Name: _____ Student No. _____

Date: _____

Part 1: Categorizing Motivation

Instruction: Read the following classroom scenarios and categorize them as Intrinsic or Extrinsic motivation. Explain your reasoning.

1. A student stays after class to ask more about a topic because they find it fascinating.
2. A student completes an assignment for extra credit points.
3. A student engages in a group project because they enjoy collaborating.
4. A student participates in class discussions to avoid being penalized.

Part 2: Designing Motivational Strategies

Instruction: List **two motivational strategies** you think that can be applied in a lesson. Explain how these strategies support student engagement.

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 9: Student Engagement Efficacy: Interaction in Classroom

I. Concept

This session concentrates on in **Interaction in Classroom**, a major aspect of **Student Engagement Efficacy** which refers to improving classroom interaction through questioning strategies, active listening, and effective communication. Classroom interaction is not only about participation but also dynamic process where learners construct knowledge socially, develop communication skills, and feel a stronger sense of belonging and investment in the learning process. The general goal of this session is to build Student Engagement Efficacy by training pre-service teachers' effective interaction in classroom, meaning effectively facilitate, encourage, and manage interaction in the classroom. Student engagement thrives when learners are actively involved in dialogue, collaboration, and exchange—with peers, the teacher, and the learning content.

II. Learning Objectives:

1. To practice effective questioning techniques through role-play exercises.
2. To conduct a peer coaching session to enhance active listening skills.
3. To create a communication strategy plan for handling common student concerns.

III. Duration: 90 minutes

IV. Learning materials:

1. Role-play scenario cards.
2. Peer coaching worksheets.
3. Communication strategy templates.
4. Whiteboard and markers for brainstorming.

V. Learning process:

1. Lead-in:

a) **Review:** The teacher reviews major points of motivation in class and raises a question: *How to keep students constantly engaged in class other than motivation.*

b) **Warm-up:** The teacher has students brainstorm the question and share one word in class. And the teacher writes the words down on the whiteboard.

2. Activities applying:

By carrying out warm-up activity, the teacher introduces the topic of “interaction in classroom”. And then the teacher poses a question to initiate the first activity: "*What makes a classroom interactive?*"

a) Activity 1: Group brainstorm: qualities of effective classroom interaction

The teacher asks students to brainstorm qualities of effective classroom interaction with key words and exhibit on the sheet and share it with group members. Then each group discuss about their key words and come up with a list of 3-5 key words to represent their group results. Then the teacher shares their response, concluding the common points. Based on the results, the teacher writes down three key words: questioning, listening, and communication.

b) Mini-lecture

The teacher introduces key components of questioning, listening, and communication. Students take notes and conclude focal points as guiding for further activities.

c) Activity 2: Role-Playing Effective Questioning

After the teacher lecturing questioning techniques, students work in groups to role-play teacher-student interactions. Each participant takes turns asking open-ended and probing questions. The teacher has the class discuss techniques that promoted deeper engagement by analyzing group performance.

d) Activity 3: Peer Coaching for Active Listening

Students practice active listening by responding to a peer’s classroom scenario, focusing on paraphrasing, summarizing, and providing clarifying questions. The teacher summarizes and provide constructive feedback.

e) Activity 4: Communication Strategy Development

Based on the mini-lecture and notes taken, students create a communication plan. The plan must consider and identify common student concerns that obstruct them from communicating in class. Then students share their plan in group, then develop a strategy plan for addressing these concerns in group. Then each group presents plans and discuss their effectiveness. Then the teacher comments on each presentation and the peer groups comment on the presentation.

3. Active assessment

a) **Peer-assessing:** Groups provide constructive feedback on group performance.

b) **Self-assessing:** The teacher encourages students to evaluate their own performance and propose potential suggestions.

c) Teacher-assessing: The teacher comments on group performance and provides feedback on group activities.

4. Wrap-up:

a) Students write down one key strategy that they understand best.

b) The teacher summarizes best practices for questioning.

c) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation

1. To observe and assess role-playing and peer coaching exercises.
2. To assess the effectiveness of communication plan.
3. Self-reflection on personal growth in classroom interaction after class.

VII. Appendices:

1. Worksheet: Enhancing Classroom Interaction
2. Role-play Scenario Cards
3. Peer-coaching Worksheet
4. Communication Strategy Template

Appendix 1:

Worksheet: Enhancing Classroom Interaction

Name: _____ Student No. _____

Date: _____

Part 1: Questioning Techniques

Instruction: Read the classroom dialogue below and rewrite two closed-ended questions into open-ended ones.

1. Teacher: "Did you understand the topic?" ⟶

2. Teacher: "Can you solve the problem this way?" ⟶

Part 2: Active Listening Self-Assessment

Instruction: Rate yourself on a scale of 1-5 (1 = Needs Improvement, 5 = Strong Ability) for the following:

1. I give full attention to students when they speak.
2. I use paraphrasing and summarizing in conversations.
3. I ask clarifying questions to deepen understanding.

Part 3: Communication Strategy Plan

Instruction: Identify a common student concern and outline a brief communication strategy to address it.

Student Concern: _____

Strategy: _____

Appendix 2:

Scenario Cards for Role-play

Warm-Up Discussion

Scenario: You are starting a new unit on environmental issues. Students appear distracted.

Goal: Engage students and assess prior knowledge.

Use These Question Types:

Open-ended: "What do you already know about climate change?"

Probing: "Can you give an example from your own experience?"

Clarifying Misunderstanding

Scenario: A student gives an incorrect answer about a grammar rule.

Goal: Guide them to the correct understanding without directly correcting them.

Use These Question Types:

Prompting: "Can you think of another example that might fit better?"

Leading: "What happens to the verb when the subject is singular?"

Encouraging Critical Thinking

Scenario: Students are discussing the pros and cons of social media.

Goal: Stimulate deeper thinking and multiple perspectives.

Use These Question Types:

Why/How: "Why do you think that is the case?"

Compare/Contrast: "How is this different from traditional communication?"

Checking for Understanding

Scenario: You've just finished explaining a new concept (e.g., the passive voice).

Goal: Check if students understood the explanation.

Use These Question Types:

Recall: "What is the structure of the passive voice in the past tense?"

Application: "Can you create a sentence using that structure?"

Encouraging Participation

Scenario: Only a few students are answering questions; others are silent.

Goal: Involve more students in the discussion.

Use These Question Types:

No-hands questioning: "I'd like to hear from someone who hasn't spoken yet—Maria?"

Think-Pair-Share prompt: "Talk to your partner first—what did you come up with?"

Guiding Group Work

Scenario: Students are working in groups to solve a problem, but one group is off-task.

Goal: Refocus and scaffold thinking.

Use These Question Types:

Redirecting: "What step are you on right now?"

Clarifying: "What is the main challenge your group is facing?

Promoting Reflection

Scenario: You've just finished a debate on a controversial issue

Goal: Encourage students to reflect on their learning.

Use These Question Types:

Reflective: "What did you learn from listening to the opposing side?"

Self-assessment: "What argument do you feel you presented well, and why?"

Appendix 3:

Peer-coaching Worksheet

Section 1: Pre-observation Planning

To be completed by the teacher being observed.

Your Name: _____

Date: _____

Teaching/Interaction Context (e.g., group discussion, whole class instruction):

Specific Goal for Active Listening (e.g., better paraphrasing, asking clarifying questions):

Section 2: Observation Notes: completed by the peer coach

Behavior	Observed? (√/✖)	Notes / Examples
Making eye contact		
Using verbal acknowledgments (“I see,” “Right,” etc.)		
Paraphrasing or summarizing (“So you’re saying…” etc.)		
Asking follow-up/clarifying questions		
Avoiding interruption		
Responding thoughtfully		

Section 3: Post-Observation Reflection: completed together by the peer coach and the teacher.

Strengths Observed:

Areas to Improve:

Suggestions for Practice:

☐ Try using paraphrasing to check understanding.

☐ Use more silence to allow thinking time.

☐ Ask open-ended clarifying questions.

☐ Avoid interrupting—take a breath before responding.

☐ Other: _____

Section 4: Follow-Up Goal

New personal goal for next session:

Appendix 4:

Communication Strategy Template

Name: _____ Student No. _____

Date: _____

1. Communication Objectives

What do you want to achieve through improved classroom communication?

☐ Increase student participation in class discussions

☐ Build confidence in shy or anxious students

☐ Improve student ability to express thoughts clearly

☐ Encourage respectful dialogue and peer interaction

☐ Other: _____

2. Identify Common Student Concerns

Common Concern	Observed? (√/×)	Notes / Examples
Fear of making mistakes		
Language anxiety (e.g., EFL/ESL learners)		
Lack of confidence		
Unclear expectations for participation		
Dominating peers or fear of being judged		
Not understanding the topic well enough		

Common Concern	Observed? (√/×)	Notes / Examples
Cultural/linguistic background differences		

3. Strategies to Address Each Concern

Student Concern	Planned Strategy	Resources or Tools
e.g., Fear of making mistakes	Normalize mistakes as learning opportunities; use sentence starters	Posters, sentence frames

4. Daily/Weekly Practices to Encourage Communication

☐ Use open-ended questions regularly

☐ Set clear discussion rules and expectations

☐ Encourage peer support or group sharing before whole-class speaking

☐ Create a low-pressure speaking routine (e.g., “Today’s Quick Share”)

☐ Use anonymous or written communication tools (e.g., sticky notes, apps)

☐ Celebrate small wins and effort-based participation

☐ Other: _____

5. Feedback and Reflection Plan

How will I gather feedback on the effectiveness of my strategy?

How often will I evaluate and adjust my strategy?

☐ Weekly ☐ Bi-weekly ☐ Monthly

Notes: _____

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 10: Student Engagement Efficacy: Rapport with Students

I. Concept

This session aims to enhance Student Engagement Efficacy by focusing on how building rapport with students contributes significantly to their emotional engagement, classroom participation, and overall academic motivation. Rapporti with students refers to he teacher's belief in his/her ability to establish mutual trust, respect, and emotional connection, which creates a supportive environment where students feel safe to engage, ask questions, express opinions, and take academic risks. Pre-service teachers often underestimate the power of interpersonal relationships in the learning process. This session develop their understanding of positive teacher-student rapport being foundational for creating a safe, respectful, and motivating classroom climate.

II. Learning objectives

1. To use active listening and empathy to foster a supportive classroom environment.
2. To apply effective communication strategies to engage and connect with students.
3. To implement strategies to recognize and respect diverse student backgrounds and needs.

III. Duration: 90 minutes

IV. Learning materials

1. Role-play scenario cards
2. Case study handouts
3. Whiteboard and markers for brainstorming

V. Learning process:

1. Lead-in:

a) The teacher asks students to share a story a supportive teacher based on personal experience and why they think so.

b) The teacher concludes and lists responses on the whiteboard.

c) The teacher introduces “rapport-building” and key elements.

2. Activities applying:

a) Activity 1: Empathy Practice: Role-Playing Student-Teacher Conversations

The teacher gives classroom scenarios to students and ask them to role-play Student-Teacher conversations. In group, students practice active listening and build empathy with “students” as “a teacher” in given classroom scenarios. After the role play, students provide feedback on empathy and listening skills.

b) Activity 2: Analyzing Classroom Interactions

The teacher plays a short video clips of different teacher communication styles and asks students to identify effective and ineffective strategies. And then students discuss in group on how to apply positive communication techniques.

Each group exhibit their answers in class, sharing their ideas of positive communication techniques.

The teacher concludes the effective communication techniques that helps improve classroom interactions.

c) Activity 3: Case Study Analysis (Culturally Responsive Teaching)

The teacher has groups read and analyze cases of diverse classroom challenges and asks each group to develop strategies to address student needs. And then each group presents their answers in class and receive peer feedback.

The teacher concludes the effectiveness of the activity.

3. Active assessment

a) **Peer-assessing:** Groups provide constructive feedback on the role-play and case study.

b) **Self-assessing:** The teacher encourages students to evaluate their group activities and propose potential suggestions.

c) **Teacher-assessing:** The teacher comments on group performance and provides feedback on the role-play and case study.

4. Wrap-up:

a) Students write down one key insight gained from the session.

b) The teacher summarizes best practices for classroom interaction and rapport building.

c) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation:

1. To observe students participation in role-playing and discussions.
2. To assess the effectiveness of strategies for engaging diverse students.
3. Self-reflection on personal growth in rapport-building after class.

VII. Appendices:

1. Worksheet: Building Rapport with Students
2. Scenario Cards for Role-play
3. Case Studies of Classroom Challenges

Appendix 1:

Worksheet: Building Rapport with Students

Name: _____ Student No. _____

Date: _____

Part 1: Active Listening Self-Assessment

Instruction: Rate yourself on a scale of 1-5 (1 = Needs Improvement, 5 = Strong Ability) for the following:

I maintain eye contact and show attentiveness when listening to others.

I use paraphrasing and summarizing to confirm understanding.

I avoid interrupting and allow people to express themselves fully.

Part 2: Effective Communication Strategies

Instruction: Identify a communication strategy you use or plan to use in your teaching and explain how it helps build rapport.

1. Strategy: _____
2. Explanation: _____

Part 3: Culturally Responsive Teaching Plan

Instruction: Choose a common classroom diversity challenge and outline a brief strategy to address it.

1. Diversity Challenge: _____
2. Strategy: _____

Appendix 2:

Scenario Cards for Role-play

The Quiet Student **Scenario:** Mei never volunteers in class, avoids eye contact, and works quietly. You want to encourage her without making her uncomfortable. **Your Goal:** Have a gentle one-on-one interaction to build trust and show interest in her as a person.
The Disruptive Comedian **Scenario:** Jin jokes a lot and disrupts lessons. He clearly seeks attention. **Your Goal:** Redirect his energy positively while keeping a friendly tone.
The New Transfer Student **Scenario:** Lina is a new student. She seems unsure of classroom routines and is very quiet. **Your Goal:** Welcome her warmly and help her feel part of the class community.
The Frustrated Learner **Scenario:** Chen struggles with the material and recently muttered, “This is stupid,” during group work. **Your Goal:** Approach him with empathy and help him re-engage.
The Student Who “Doesn’t Care” **Scenario:** Tao is disengaged, avoids work, and says “Whatever” when spoken to. **Your Goal:** Connect with Tao personally and understand what may be affecting his behavior.

Appendix 3:

Case Studies of Classroom Challenges

Case Study 1: The Unengaged Class

Scenario: Ms. Liu is teaching an 11th-grade English class. Despite her efforts to prepare interactive lessons, her students remain quiet and unresponsive. They rarely answer questions, and some appear distracted, looking at their phones under the desk.

Guiding Questions:

What factors might be contributing to the students' lack of engagement?

How can Ms. Liu adjust her instruction to promote more active participation?

What strategies could help build a supportive classroom culture?

Case Study 2: The Dominant Group Member

Scenario: During group work, Eric dominates discussion and interrupts his peers, discouraging their participation.

Guiding Questions:

What impact does Eric's behavior have on group dynamics?

How can his teacher intervene constructively?

What strategies foster equal participation?

Case Study 3: The Anxious Learner

Scenario: Anna avoids speaking in class due to anxiety and sometimes skips on presentation days, though her written work is strong.

Guiding Questions:

How can her teacher support her oral participation?

What scaffolds or alternatives could help reduce anxiety?

How can the class feel safer for shy students?

Case Study 4: Conflict Between Students

Scenario: Leo and Andy argued in class and now distract each other and divide the class socially.

Guiding Questions:

How should the teacher address this conflict?

How can a sense of community be rebuilt?

What long-term conflict resolution strategies can help?

Case Study 5: Inconsistent Behavior Expectations

Scenario: Students behave differently across classes, with confusion caused by inconsistent rules between teachers.

Guiding Questions:

How does inconsistency affect student behavior?

What can the teacher do to reinforce positive expectations?

How can teachers collaborate to create a consistent environment?

Active learning Model for Enhancing Teacher Self-Efficacy of Pre-service English teachers

Session 11: Commencement: Lesson Closure

I. Concept

The concept of lesson closure for the training is instructional strategy used at the end of the training session to help participants consolidate learning, reflect on key takeaways, and reinforce their sense of progress. In the context of group training on TSE for pre-service English teachers, this closure can be seen as a critical moment to connect theory to practice, build confidence, and deepen professional identity for the trainee in the future. And the closure TSE training should:

1. Reinforce key concepts of the training.
2. Encourage reflection on how participants' beliefs about their teaching abilities have changed or been affirmed.
3. Have trainees set personal teaching goals or identify strategies they will apply in future practicum or lessons.
4. Celebrate progress, promoting a sense of accomplishment and competence among participants.

II. Learning objectives:

1. To share personal reflections on teaching confidence and active learning experience in a final discussion forum.
2. To develop a personal action plan outlining three concrete strategies for future teaching practice.

III. Duration: 90 minutes

IV. Learning materials

1. Reflection and action plan templates.
2. Discussion guide with prompting questions.
3. Whiteboard and markers for group insights.

V. Learning process:

1. Lead-in:

The teacher poses a question for discussion: *Do you feel more confident in being a teacher after training?* And the teacher asks 2-3 student volunteers to share their feelings of the training.

2. Activities applying:

a) Activity 1: Reflective Writing Prompt

After student volunteers answer the question, they are encouraged to share their achievements from the training with their group members and discuss on the role of reflection in professional growth.

The teacher asks students to list out their achievements from the class.

b) Activity 2: Sharing Teaching Confidence & Learning Experiences

Students participate in a structured discussion with group members reflecting on their learning journey based on the guiding questions:

What was the most influential part of the course?

What are my biggest takeaways?

Then the teacher gives out the worksheet from the first class on setting training goals along with a worksheet on “goal progress”, and asks students to write down the progresses they have made based on the goals they set in the beginning.

c) Activity 3: Goal-Setting and Strategy Development

The teacher asks students to draft a personal action plan with three concrete strategies for future teaching. Later, students exchange their plan for peer review and constructive feedback.

Then students improve their plan based on peer feedback. And the teacher asks 2-3 students to share their plans in class.

3. Active Assessment

a) **Peer-assessing:** Groups provide constructive feedback on the action plan.

b) **Self-assessing:** The teacher encourages students to evaluate their progresses and propose potential suggestions.

c) Teacher-assessing: The teacher comments on group performance and provides feedback on the action plans.

4. Wrap-up

a) The teacher concludes the whole course with closing thoughts and encouragement for continuous improvement.

b) Students submit action plans for instructor feedback.

c) Q&A: The teacher encourages students to ask questions, especially when there is confuse and answers potential questions.

VI. Evaluation

1. To observe students participation in final discussion (qualitative assessment).
2. To evaluate the quality and feasibility of the personal action plan.
3. Self-reflection on growth and confidence in teaching practice.

VII. Appendix: Worksheet: Reflecting on Teaching Confidence & Planning Ahead

Appendix:

Worksheet: Reflecting on Teaching Confidence & Planning Ahead

Name: _____ Student No. _____

Date: _____

Part 1: Reflection on Teaching Growth

Instruction: Answer the following prompts:

1. What is one major way your teaching confidence has improved?

2. What teaching challenges have you overcome?

3. What active learning strategy was most useful for you?

Part 2: Reflection & Adjustment

1. **What progress have you made toward each goal?**

Goal 1 Progress: _____

Goal 2 Progress: _____

Goal 3 Progress: _____

2. **What challenges have you encountered?**

3. **What adjustments will you make to stay on track?**

4. **How do you feel about your progress so far?**

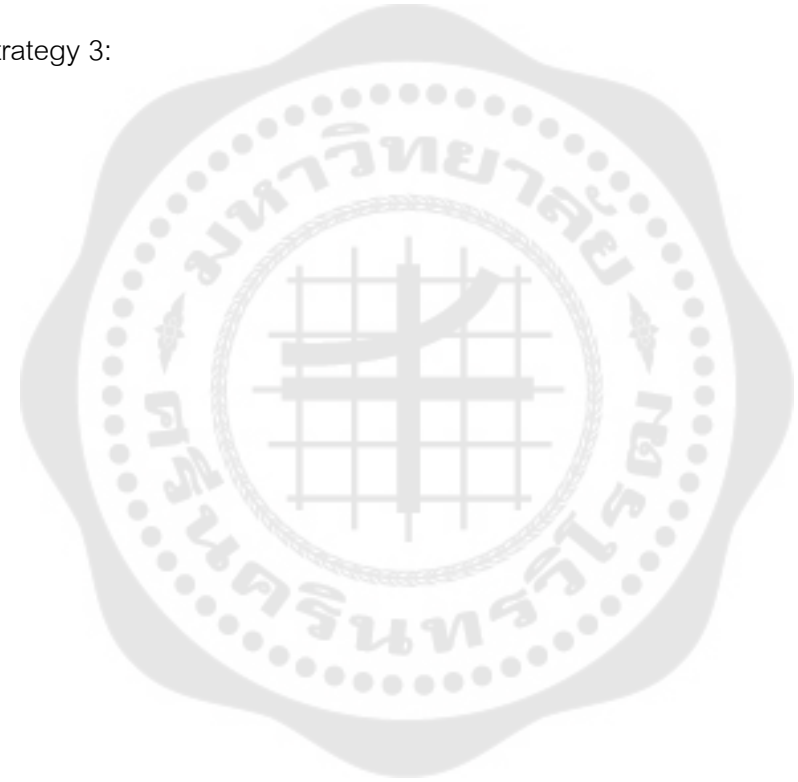
Part 3: Personal Action Plan

Instruction: Identify three concrete strategies for improving your teaching practice.

Strategy 1:

Strategy 2:

Strategy 3:



APPENDIX K

IOC Rating Table of Learning Models for Enhancing TSE of Pre-service English Teachers

Time	Learning Activities	Objectives (Learning goals)	Step/Learning Process	IOC			Comment
				+1	0	-1	
1	Orientation	1. To identify personal strengths and areas for growth in teaching and complete a questionnaire on TSE. 2. To discuss and summarize the **importance of Teacher Self-Efficacy (TSE)** through **small group discussions**. 3. To set **personal learning objectives** for the course using a **goal-setting worksheet**.	Lead-in Activities Applying Active Assessment Wrap-up				
2	Classroom Management Efficacy: classroom organization	1. To analyze different **classroom layouts** and select the most effective one for a given scenario using a **case study**. 2. To develop a **classroom management plan** with clearly defined **routines and expectations**. 3. To participate in a **simulated classroom setup activity** to arrange seating and learning materials.	Lead-in Activities Applying Active Assessment Wrap-up				
3	Classroom Management Efficacy: behaviour management & conflict resolution	1. To identify common classroom behavior challenges through **video analysis**. 2. To role-play and apply **positive reinforcement** and **conflict resolution strategies** in classroom scenarios.	Lead-in Activities Applying Active Assessment Wrap-up				

Time	Learning Activities	Objectives (Learning goals)	Step/Learning Process	IOC			Comment
				+1	0	-1	
		3. To develop a **behavior management plan** incorporating at least three **preventative strategies**.					
4	Classroom Management Efficacy: supportive learning environment building	1. to reflect on and share experiences of **positive and negative teacher-student relationships** in a **group discussion**. 2. to create a **classroom climate checklist** to assess inclusivity and student motivation. 3. to practice strategies for **addressing diverse student needs** using case study analysis.	Lead-in Activities Applying Active Assessment Wrap-up				
5	Instructional Strategies Efficacy: Analysis of related factors	1. to assess classroom conditions and identify factors affecting engagement. 2. to develop clear objectives and ensure alignment with instruction and assessment. 3. to identify student needs and adapt teaching strategies for diverse learning styles.	Lead-in Activities Applying Active Assessment Wrap-up				
6	Instructional Strategies Efficacy: curriculum design	1. to design a **detailed lesson plan** using the provided template, incorporating **clear objectives and active learning strategies**. 2. to analyze sample lesson plans and identify **strengths and weaknesses**. 3. to present and justify **lesson plan choices** in a peer feedback session.	Lead-in Activities Applying Active Assessment Wrap-up				

Time	Learning Activities	Objectives (Learning goals)	Step/Learning Process	IOC			Comment
				+1	0	-1	
7	Instructional Strategies Efficacy: feedback & evaluation	1. to develop a **rubric** for assessing student performance in a specific lesson. 2. to provide **constructive feedback** on peer micro-teaching sessions. 3. to compare and contrast **different assessment methods** through hands-on practice with sample student work.	Lead-in Activities Applying Active Assessment Wrap-up				
8	Student Engagement Efficacy: Motivating students in class	1. to identify and categorize different **student motivation types** using real classroom examples. 2. to create a **lesson segment** that integrates **motivational strategies** and present it in pairs. 3. to set a **self-reflection tool** to assess personal strengths in motivating students.	Lead-in Activities Applying Active Assessment Wrap-up				
9	Student Engagement Efficacy: Interaction in classroom	1. to practice **effective questioning techniques** through **role-play exercises**. 2. to conduct a **peer coaching session** to enhance active listening skills. 3. to create a **communication strategy plan** for handling common student concerns.	Lead-in Activities Applying Active Assessment Wrap-up				
10	Student Engagement Efficacy: rapport with students	1. to use active listening and empathy to foster a supportive classroom environment. 2. to apply effective communication strategies to	Lead-in Activities Applying Active Assessment Wrap-up				

Time	Learning Activities	Objectives (Learning goals)	Step/Learning Process	IOC			Comment
				+1	0	-1	
		engage and connect with students. 3. to implement strategies to recognize and respect diverse student backgrounds and needs.					
11	Commencement-lesson closure	1. to complete a post questionnaire on TSE. 2. to share personal reflections on **teaching confidence** and **active learning experience** in a **final discussion forum**. 3. to develop a **personal action plan** outlining three concrete strategies for **future teaching practice**.	Lead-in Activities Applying Active Assessment Wrap-up				

Name:_____ Dates:

APPENDIX L

Selection of Students' Feedback

Student A	The step-by-step structure helped me focus and engage consistently. The collaborative tasks were interactive and enjoyable. I improved my ability to organize classroom activities effectively.
Student B	Each session had a clear flow, especially the active assessment. Group work allowed me to exchange diverse teaching ideas. I gained confidence in managing student behavior.
Student C	The lead-in and wrap-up helped me reflect deeply each time. The experiential learning made complex theories easier to understand. I learned how to design supportive learning environments.
Student D	The course was well-organized and easy to follow. I enjoyed applying knowledge in practical projects. I understood key factors in curriculum design more clearly.
Student E	Active assessment was well-integrated and motivating. Learning through tasks felt realistic and teacher-centered. I became more confident in giving feedback and evaluation.
Student F	The structure encouraged active participation in all stages. Role-plays and peer feedback were very helpful. I developed skills in motivating and engaging students.
Student G	The wrap-up sessions helped connect ideas across weeks. Every group activity felt purposeful and well-prepared. I strengthened my classroom interaction strategies.
Student H	The four stages made each lesson goal-oriented and effective. Tasks were collaborative and encouraged critical thinking. I learned how to build rapport with students successfully.
Student I	The transition between activities was smooth and logical.

	Each activity was relevant and meaningful to real teaching contexts. I improved in course planning and classroom management.
Student J	The course structure gave a strong sense of progress. Projects and group discussions boosted my creativity and teamwork. I now feel more prepared for real classroom situations.

APPENDIX M

Classroom for the training: