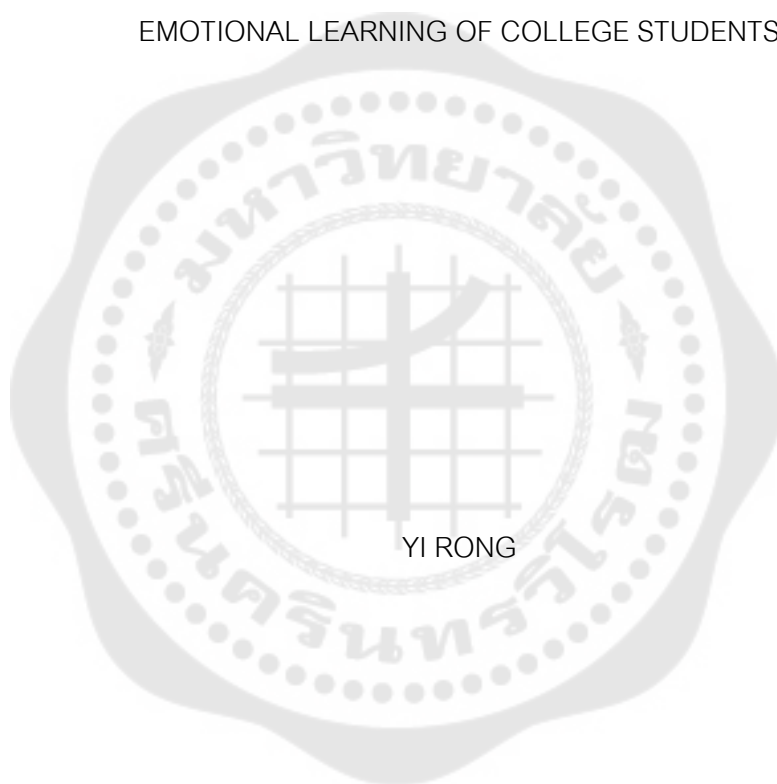




THE DEVELOPMENT OF ACTIVE LEARNING MODEL FOR ENHANCING SOCIAL
EMOTIONAL LEARNING OF COLLEGE STUDENTS



Graduate School Srinakharinwirot University

2023

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A Dissertation Submitted in Partial Fulfillment of the Requirements
for the Degree of DOCTOR OF PHILOSOPHY
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THE DISSERTATION TITLED
THE DEVELOPMENT OF ACTIVE LEARNING MODEL FOR ENHANCING SOCIAL
EMOTIONAL LEARNING OF COLLEGE STUDENTS

BY
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HAS BEEN APPROVED BY THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY
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The aims of this study are as follows: (1) to study the definition and components of social emotional learning of college students; (2) to develop an active learning model for enhancing social emotional learning of college students; and (3) to evaluate the effectiveness of the active learning model for enhancing the social emotional learning of college students. The samples were freshmen majoring in Preschool Education at Guangdong Baiyun University. In this study, the research instruments were semi-structured interview questionnaires, social emotional learning questionnaires, and an active learning model for enhancing social emotional learning. The statistical methods included mean, standard deviation (SD), and one-way and two-way repeated ANOVA analysis. Based on voluntary student participation, 40 students became the samples of this study and randomized to the experimental group (n=20) and the control group equally. The research results were as follows: (1) social emotional learning for college students consisted of five components: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making; (2) an active learning model was developed that comprised three steps: introduction, learning activity process, and conclusion; (3) an active learning model was effective in promoting the social emotional learning of college students; (3.1) the SEL of college students after receiving active learning model and after the follow up period was significantly higher than before beginning the experiment at a level of .05; and (3.2) the SEL of the college students after receiving active learning model and after the follow-up period was significantly higher than those in the control group at a level of .05.

Keyword : Active learning model, Social emotional learning, College students

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F

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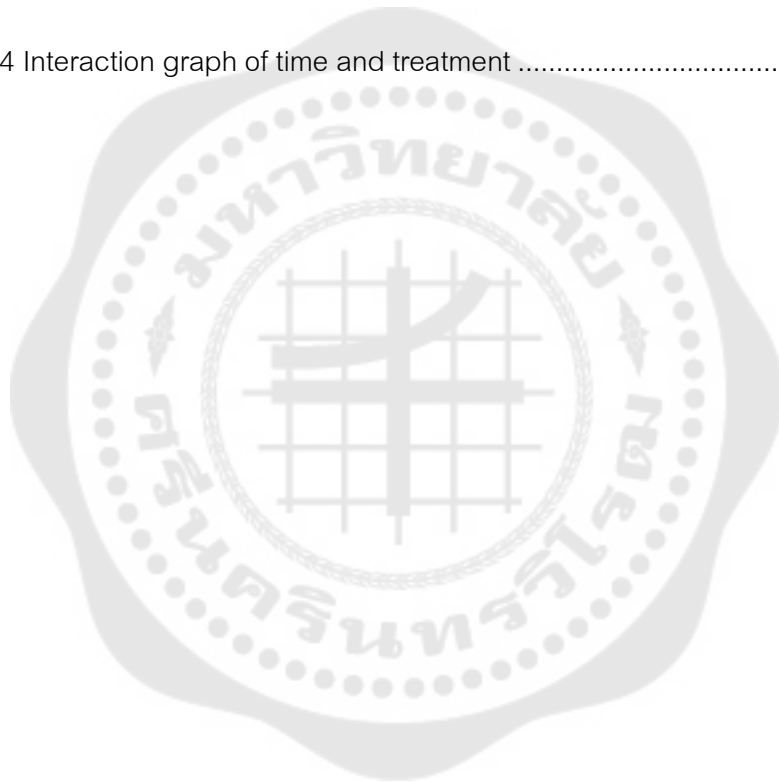
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CHAPTER 1

INTRODUCTION

1.1 Background

In today's society, higher education is undergoing unprecedented transformation, driven not only by technological advancements and societal progress but also characterized by profound features stemming from increased globalization and complexity. Traditionally, higher education has emphasized imparting disciplinary knowledge to students, considering the cultivation of professional skills as its core objective. However, with the continuous evolution of society, there is a growing recognition that possessing professional skills alone is no longer sufficient. There is a need to foster more comprehensive competencies to better equip students for future career and societal challenges. For instance, in contemporary China, the holistic connotation of comprehensive qualities in university students extends beyond the cultivation of technical proficiency. It encompasses a broader emphasis on moral and ethical qualities, scientific and cultural literacy, physical and mental well-being, as well as innovative aptitude (Ning, 2012).

The research findings from the "China National Psychological Health Development Report" reveal that among children and adolescents under the age of 17 in China, at least 30 million individuals are grappling with various psychological issues. These challenges encompass, but are not limited to, conditions such as depression, anxiety, obsessive-compulsive disorder, school aversion, internet addiction, suicidal thoughts, and self-harm. Other studies indicate that within the middle school student population, 1 in 5 individuals has contemplated suicide, with reported rates of suicidal ideation being 16.7% for males and 24.3% for females. Rates for suicide planning are reported as 5.6% for males and 7.7% for females, while suicide attempts are reported at 2.9% for males and 3.0% for females. A survey conducted in 2004 among primary and secondary school students in Shanghai showed that 5.85% of children had contemplated suicide, and 24.39% had entertained thoughts of "death being preferable to life." Numerous studies underscore the fact that many children today are facing

childhood crises, experiencing significant stressors that are challenging to comprehend and cope with, leading to sustained and intense anxiety. If the psychological health issues of children and adolescents are not promptly identified and effectively intervened, these problems may persist into adulthood, exerting a substantial impact on future work and life, and imposing a heavy burden on families and society.

In recent years, the field of Social and Emotional Learning (SEL) has gained significant attention in global education research. The concept was originally introduced by Daniel Goleman and Eileen Rockefeller Growald in 1994, which led to the creation of the Collaborative for Academic, Social, and Emotional Learning (CASEL), a non-profit organization. SEL focuses on developing social and emotional competencies in both children and adults by fostering specific skills, attitudes, and values. The SEL framework consists of five core components that have been widely recognized: Self-Awareness, Social Awareness, Self-Management, Relationship Skills, and Responsible Decision-Making.

SEL not only focuses on academic knowledge and academic achievements but also emphasizes the cultivation of students' emotional intelligence, interpersonal relationship skills, and emotional management abilities. Therefore, it underscores a comprehensive learning process designed to help individuals better adapt to the social environment, promoting overall psychological well-being, and enhancing social interaction skills. Specifically, this learning approach helps guide students in accurate self-cognition, building positive interpersonal relationships, preventing and addressing potential behavioral issues, and fostering the formation and development of positive behaviors. Social-emotional learning is the process of acquiring and applying social and emotional competencies. These competencies encompass a range of abilities and skills required in complex situations involving interaction, communication, collaboration, and conflict resolution with others. They include emotional management, empathy, self-awareness, communication skills, problem-solving abilities, and decision-making skills (Osher et al., 2016). This capacity plays a positive and significant role in multiple domains of students' development. Scientifically validated high-quality social-emotional

programs have been proven to positively impact students, leading to improvements in behavior, attitude adjustments, and academic achievement (Chernyshenko et al., 2018). A meta-analysis of 213 universal social and emotional learning (SEL) programs covering 270,034 kindergartens to high school students revealed significant improvements in social and emotional skills, attitudes, behavior, and academic performance among students participating in SEL programs compared to control groups. Overall achievement increased by 11 percentage points (Durlak et al., 2011). These cumulative effects indicate that social-emotional learning has achieved significant and effective outcomes in the field of education (Zins et al., 2004; Oberle et al., 2014; Greenberg et al., 2003). It aims to promote the comprehensive development of all students (Zins & Elias, 2007).

Research suggests (Wu, 2021; Li & Wang, 2017) that under the traditional educational evaluation system in China, emotional intelligence education has long been insufficiently emphasized. This has resulted in deficiencies and issues among college students in areas such as self-awareness and motivation, emotional management, and willpower cultivation, as well as interpersonal communication. It is recommended that more attention should be given to these aspects. Since the beginning of the new century, China has launched the eighth round of basic education curriculum reforms. This reform has incorporated emotions, attitudes, values, knowledge and skills, processes, and methods as one of the three major goals of teaching in various subjects (Lu, 2005). Within this goal system, there is a certain degree of alignment with the framework of social-emotional learning, demonstrating inherent consistency with social-emotional competencies (Du & Mao, 2019).

In this study, the researchers utilized a sample of 30 students majoring in Early Childhood Education from Baiyun University in Guangdong, China. The Professional Standards for Kindergarten Teachers (Trial) issued by the Ministry of Education in China explicitly outline requirements for the personal cultivation and behavior of preschool teachers, stating, "Optimistic and positive, cheerful and enthusiastic, with affinity; adept at self-regulating emotions, maintaining a calm mindset." For university students

pursuing this profession, possessing substantial professional knowledge is essential, and effective social-emotional competence plays a crucial role. Teachers must focus on and address the emotional needs of young children, cultivating qualities such as patience, enthusiasm, and a genuine love for both children and the field of education.

Current research findings (Cheng et al., 2022; Li & Xu, 2016) indicate a prevalent issue of emotional exhaustion leading to professional burnout among kindergarten teachers in multiple regions. There is a negative correlation between emotional intelligence and the occupational burnout of kindergarten teachers. In recent years, with the increasing occurrence of various child abuse incidents, the qualifications of some kindergarten teachers have struggled to meet the demands of talent development in the new era, drawing heightened attention from society as a whole.

Addressing this concern, existing studies (Wu, 2012) suggest that current early childhood educators face challenges in professional ethics. These challenges encompass issues such as a lack of emotional investment in the profession, inadequate professional attitudes, a weak sense of professional responsibility, and a low willingness for professional development. Another study indicates that education is a high-pressure profession, and this tension impacts the relationship between teachers and students, akin to interpersonal dynamics in other high-pressure environments. This stress may unintentionally transmit to students, negatively affecting their performance and learning, leading to decreased academic achievement and increased behavioral problems. Additionally, it may contribute to higher teacher turnover rates (Herman et al., 2017). Therefore, it becomes imperative to reflect on the challenges faced by early childhood education in contemporary higher education. Effectively implementing social-emotional learning, acquiring and mastering a range of social-emotional competencies, and enhancing academic performance while fostering positive behaviors are crucial issues that must be contemplated within higher education institutions.

Based on a plethora of evidence-supported studies (Durlak, et.al., 2018; Greenberg, 2023; Durlak, 2022; Cipriano, et.al., 2023)., the beneficial impacts brought about by Social and Emotional Learning (SEL) are self-evident. As universities and

higher education institutions strive to better prepare students for future challenges, educational researchers are delving into innovative education models to enhance the social-emotional learning of college students. The current key question faced is "how" to effectively conduct social-emotional education.

With the continual expansion of the SEL domain, corresponding practical program research and designs are increasingly prevalent. These SEL programs aim to comprehensively develop students' social-emotional skills by fostering aspects such as self-awareness, emotional regulation, empathy, and interpersonal relationships through various activities and courses. Simultaneously, a variety of SEL programs exhibit flexibility, allowing for adjustments based on specific needs of schools or educational institutions and the backgrounds of student populations, ensuring maximum alignment with their SEL objectives. Some evidence-based SEL programs showcase how strategies are implemented and ensured to be effective. However, research and intervention strategies for enhancing social-emotional learning extend beyond fixed, commonly seen SEL programs. Researchers often tailor SEL measures according to the research environment, subjects, and goals. The majority of strategies to enhance SEL are centered around or incorporate activities such as empathy training, conflict resolution skill training, cooperative games and team-building activities, emotional expression and management courses, social responsibility and volunteer activities, self-reflection and goal-setting, family involvement plans, integration of school atmosphere and culture, as well as their assessment and feedback.

Moreover, it is essential to employ high-quality, research-based teaching strategies to ensure effective Social and Emotional Learning (SEL) courses. The following activities outline a range of common teaching methods in SEL programs: Discussion, Didactic Instruction, Vocabulary Activities, Writing Activities, Book/Story Reading, SEL Tools/Handouts, Drawing Activities, Art/Creative Project, watching Video, Skill Practice, Kinesthetic Activities, Role-Play, Game, Songs or other Activities falling outside the categories mentioned above. Examples may encompass poetry, visualization exercises, meditation, and various others (Jones et al., 2017).

To better explore Social and Emotional Learning (SEL), the proactive learning model has captured the attention of researchers. Researchers have focused on social and emotional learning in Chinese higher education, particularly in an applied university that emphasizes students' active participation, exploration, and practical application. This aligns seamlessly with the proactive learning model, which addresses the shortcomings of the traditional educational model where students passively receive knowledge. Proactive learning not only emphasizes knowledge transmission but also places a greater emphasis on fostering students' critical thinking, problem-solving abilities, and teamwork skills, enabling them to better cope with the complexity and uncertainty of society. Therefore, introducing the proactive learning model into higher education, especially when combined with social and emotional learning, becomes a potential educational intervention. It is expected to provide more effective support for the comprehensive growth of university students, particularly those majoring in pre-service education. This doctoral dissertation is dedicated to in-depth research and development of the proactive learning model, aiming to facilitate the social and emotional learning of university students.

Active Learning is mostly characterized by strategies such as project-based learning, inquiry-based learning, problem-driven learning, group discussions and cooperative learning, case-based learning, role-playing, and simulations. These strategies are often used in combination, adjusted according to different subjects and teaching objectives. The core idea of active learning is to promote deep learning and the cultivation of comprehensive qualities through students' active participation and practical application. Aligned closely with the goals of Social and Emotional Learning (SEL), the utilization of active learning strategies can be observed from common strategies in social-emotional learning. The active learning model can provide a more comprehensive learning framework for SEL. Through autonomous exploration and cooperative learning, students find it easier to understand and apply core concepts of social-emotional learning, such as emotional management and interpersonal skills. The emergence of this model not only injects new vitality into educational theory but also

offers an innovative and feasible approach to enhancing college students' levels of Social Emotional Learning. In this context, this paper will delve into how to effectively integrate the active learning model into higher education and explore its specific impact on social-emotional learning, aiming to provide new ideas and methods for educational practices.

1.2 Research Questions

- 1) What are the definition and components of Social Emotional Learning of college students?
- 2) What is the Active Learning Model for enhancing Social Emotional Learning of college students?
- 3) Does the active learning model effect on social emotional learning of college students?

1.3 Objectives of Study

- 1) To study the definition and components of Social Emotional Learning of college students.
- 2) To develop the active learning model for enhancing social emotional learning of college students.
- 3) To evaluate the effectiveness of the active learning model on social emotional learning of college students.

1.4 Significance of Study

1) Filling Existing Research Gaps

Research proposals on developing active learning models address a noticeable gap in the current literature regarding effective strategies for enhancing Social and Emotional Learning (SEL) among university students. While SEL is widely recognized as a crucial aspect of holistic education, there is a need for more comprehensive and innovative approaches in the context of higher education in China, especially those incorporating active learning methods.

2) Meeting Students' Holistic Development

The responsibility of schools extends beyond knowledge dissemination to addressing students' social and emotional needs for effective teaching, positive relationships, stress relief, and overall well-being. To ensure the success of the younger generation, schools must become crucial spaces that integrate Social and Emotional Learning (SEL) into leadership, teaching practices, and student learning methods (Brackett, 2015). This study's significance lies in its potential to foster the holistic development of university students. The active learning model not only focuses on improving SEL but also emphasizes enhancing collaborative and self-directed learning abilities. By addressing these multifaceted aspects, the study aims to cultivate well-rounded individuals competent not only academically but also socially and emotionally.

3) Practical Significance of Teaching Strategies

This research provides educators and teaching practitioners with a practical active learning model that can be integrated with SEL teaching strategies. Teachers play a crucial role in implementing SEL programs, and the proposed model offers them a structured approach to effectively incorporate SEL elements into the curriculum. This, in turn, can enhance teaching methods and improve students' learning efficiency.

4) Enhancing Learning Performance

The Active Learning model is expected to contribute to improving university students' learning performance. This model, with its focus on SEL and incorporation of self-directed learning strategies, aims to create an environment that promotes engagement and effective problem-solving, thereby facilitating the enhancement of social-emotional learning. SEL has a positive impact on students' academic performance (Aji & Khan, 2019; Chiu & Cheng, 2016), promising a better learning experience for students.

5) Long-Term Impact on Student Well-being

Successful social-emotional learning plays a crucial role in career success and has a long-term impact on students' overall well-being. Social-emotional learning emphasizes the efficient interpersonal and intrinsic skills required in the workplace, including leadership, effective communication, accountability, confidence, conflict

resolution, time and stress management, and motivation, among others (Paolini, 2020). By cultivating students' social and emotional skills, the integration of the active learning model may contribute to increasing students' interest and initiative in social-emotional learning. This, in turn, will not only lead to academic success but also empower them to successfully navigate various challenges in personal and professional life. Hence, the importance of the research lies in providing comprehensive developmental support to students, enabling them to excel not only academically but also in their careers.

In conclusion, the development of an active learning model to enhance university students' social and emotional learning is significant importance. It addresses existing research gaps, promotes students' holistic development, offers practical applications for educators, enhances learning efficiency, and potentially influences students' long-term well-being. The inclusion of various references adds credibility and depth to this research.

1.5 Scope of the Research

1.5.1 Identify the population and sample

1.5.1.1 Phase I: To study the definition and components of Social Emotional Learning of college students.

The study is divided into three phases. The phase I employs qualitative research methods to explore the theories and concepts of Social and Emotional Learning (SEL) through a comprehensive literature review. In this phase, five experts are selected as participants. The researcher conducts semi-structured interviews with these experts to gather relevant information about SEL and active learning models. Additionally, during the development of the SEL survey questionnaire, 100 first-year students from Guangdong Baiyun University, who share similar backgrounds with the experimental subjects, are invited to participate in a try-out of the questionnaire.

1.5.1.2 Phase II: To develop the active learning model for enhancing social emotional learning of college students.

The phase II of the study is based on qualitative research. The researcher first conducts a literature review to understand the theories and concepts

related to Social and Emotional Learning (SEL). This foundational knowledge is then augmented by interviews with five experts, who provide insights into SEL and active learning models. These combined sources of information inform the development of an active learning model curriculum.

The proposed curriculum consists of 14 sessions, each lasting 90 minutes over a period of six weeks. To ensure the effectiveness of the curriculum, three IOC experts evaluate the content. Based on their feedback, the curriculum is refined.

Following the expert review, the researcher conducts a tryout of the curriculum with ten first-year university students who have backgrounds similar to the final experimental subjects. This trial run allows for further adjustments based on student responses, leading to the finalization of the active learning model curriculum.

1.5.1.3 Phase III: To evaluate the effectiveness of the active learning model on social emotional learning of college students.

In the third phase of the research, the theoretical and conceptual foundations of social and emotional learning (SEL) obtained from the preliminary literature review were further integrated with the theories and concepts of SEL and active learning models gathered from interviews with five experts in the first phase. These theories and concepts were subsequently combined with the active learning model curriculum plan developed in the second phase, ultimately leading to the development of a randomized controlled pre-test-post-test design in the third phase.

Population: This study included 3,612 first-year students from Guangdong Baiyun University, coming from various faculties, including the Faculty of Education, Faculty of Art and Design, Faculty of Finance and Economics, Faculty of Management, Faculty of Social and Public Management, Faculty of Foreign Languages, International College, Faculty of Architecture and Civil Engineering, Faculty of Mechanical and Electrical Engineering, Faculty of Electrical and Information Engineering, and the Faculty of Continuing Education.

Sample: The sample comprised 40 first-year students from the Department of Early Childhood Education at the Faculty of Education in Guangdong Baiyun University. Out of a total of 262 students in this department, these 40 students

were selected based on their lowest scores on the social and emotional learning questionnaire. The researchers matched these students into experimental and control groups, with 20 students in each group, to ensure that the average scores of the two groups were similar.

1.5.2 Variables

1.5.2.1 Independent variable

Active Learning Model

1.5.2.2 Dependent variable

Social Emotional Learning

1.6 Definition of Terms

1.6.1 Social Emotional Learning of college students

Social Emotional Learning of College students refers to a process enabling them to acquire and apply knowledge, competencies, and attitudes for fostering positive self-identities, regulating emotions effectively, and achieving personal and collective goals. This encompasses students' growth in empathetic understanding, demonstrating compassion, establishing and nurturing supportive connections, and making thoughtful and ethical choices.

These competencies are developed to help college students effectively understand and manage emotions, establish and maintain positive interpersonal relationships with others, set and achieve personal and academic goals, and make informed choices in the face of challenges and decisions. Through socio-emotional learning, college students are not only able to improve their academic performance, but also enhance their personal and social responsibility, and be fully prepared for their future careers and lives. They have proposed five core components of SEL:

1) **Self-Awareness** refers to the capability of students to gain a comprehensive understanding of their emotions, values, abilities, and goals through self-reflection and self-assessment. This involves recognizing their emotions, identifying their strengths, and acknowledging areas that need development. A self-aware college

student can articulate their feelings, understand how their values influence their decisions, and recognize both their strengths and areas for improvement.

2) **Social Awareness** refers to the ability of students to develop an understanding and empathy towards others, including respect for different backgrounds and cultures. This skill allows students to recognize and appreciate diversity, which contributes to the establishment of positive interpersonal relationships. A socially aware college student shows empathy, respects cultural differences, and engages constructively in a diverse community.

3) **Self-Management** refers to the capability of students to effectively manage their emotions, which includes skills such as emotional regulation, stress management, goal setting, and self-discipline. This helps students cope with various situations and maintain focus on their objectives. A college student with strong self-management skills remains calm under pressure, sets and works towards personal and academic goals, and demonstrates self-discipline in their daily activities.

4) **Relationship Skills** refers to the ability of students to build healthy, positive, and collaborative relationships through effective communication, teamwork, and conflict resolution skills. This involves active listening, empathy, and the ability to work cooperatively with others. A college student with strong relationship skills communicates effectively, works well in teams, and resolves conflicts constructively.

5) **Responsible Decision-Making** refers to the capability of students to weigh alternatives, consider consequences, and make responsible choices. This skill aids students in making wise decisions when faced with challenges and uncertainties. A college student with responsible decision-making skills carefully evaluates options, considers the impact of their decisions, and chooses actions that reflect their values and goals.

1.6.2 Active Learning Model for Enhancing Social Emotional Learning of college students

A learning model is a conceptual framework or theory used to describe and explain various factors and mechanisms that occur during the learning process. These models aid in understanding the occurrence, reasons, and influencing factors of

learning. Active learning is a teaching approach that promotes deep understanding and knowledge construction through student engagement in practical tasks and interactive activities. Bonwell and Eison, in their work "Active Learning: Creating Excitement in the Classroom," (Bonwell & Eison, 2005) proposed components of active learning, including Active Participation, Interactive Learning, Problem Solving, Real-world Application, Reflection and Discussion, Instructor's Excitement, and Guidance. Additionally, student learning outcomes can be assessed through self-assessment, peer assessment, and teacher feedback.

The active learning model employed in this study consists of three main steps: Lead-In, Learning Process Activities, and Conclusion. Implemented over approximately 14 sessions spanning about 6 weeks, the researchers utilized various methods, including project analysis, validity and reliability assessments. They designed and administered a formal survey questionnaire, assessing the research subjects before and after the implementation of the learning model. Differences between pre-test and post-test data were analyzed using SPSS software to determine the effectiveness of the learning model in enhancing social-emotional learning among university students.

1.7 Research Hypothesis

This study investigates the impact of an Active Learning Model intervention on the social and emotional learning (SEL) of college students. The following hypotheses have been formulated to guide the research and analyze the effectiveness of the intervention.

Hypothesis1: College students in the experimental group who received the Active Learning Model intervention improved their SEL before and after the experiment, and at the end of the follow-up period.

Hypothesis 2: College students in the experimental group who received the Active Learning Model intervention had a higher level of SEL than those in the control group at the end of the pre-test, post-test, and follow-up periods.

1.8 Theoretical Framework

This research is underpinned by two key educational theories: Constructivist Theory and Humanist Theory. Constructivist Theory suggests that learners build their understanding and knowledge of the world by actively engaging with experiences and reflecting on them. In contrast, Humanist Theory focuses on personal growth, self-actualization, and the cultivation of an individual's potential. These foundational theories have significantly influenced the design of the Active Learning Model utilized in this study.

The Active Learning Model is designed to facilitate engagement and deeper understanding through a structured approach consisting of three main components:

1. Lead-in: The introductory phase where learners are prepared and motivated for the learning activity.

2. Learning Process Activities: The core activities that constitute the learning experience, involving interactive and participatory methods that promote active engagement.

3. Conclusion: The final phase where learners consolidate their knowledge and reflect on what they have learned.

By systematically implementing the Active Learning Model and honing these essential skills, the primary aim is to advance Social Emotional Learning (SEL). SEL is a vital educational goal that emphasizes developing students' capacities to regulate emotions, form constructive relationships, and make prudent decisions, ultimately supporting overall well-being and success in multiple areas of life.

This theoretical framework, illustrated in Figure 1.8 provides a comprehensive overview of the interconnected elements that guide this research, from foundational theories to practical application and intended outcomes.

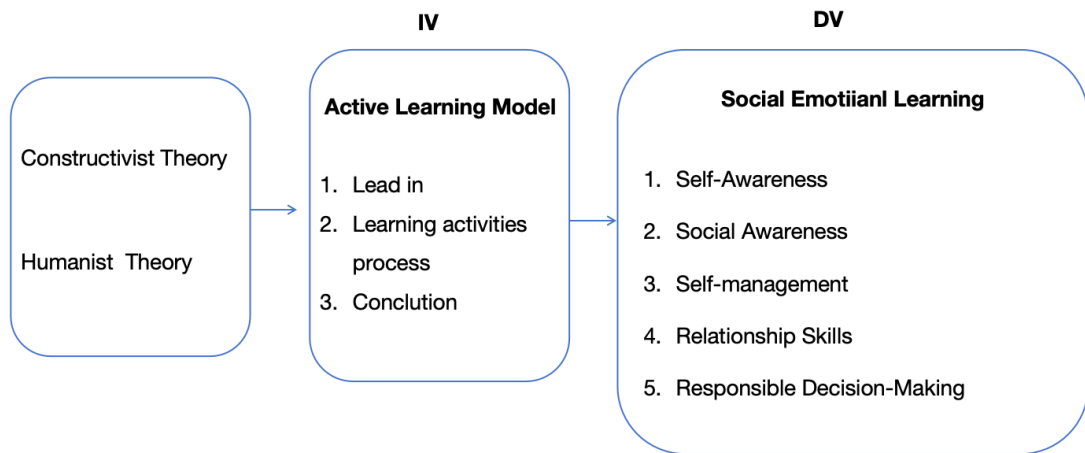


FIGURE 1 Research Theoretical Framework

CHAPTER 2

LITERATURE REVIEW

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2.1 The Research Foundation of Social Emotional Learning

2.1.1 Definition of Social Emotional Learning

The concept of social and emotional learning (SEL) originated from the research on emotional intelligence conducted by psychologists and educational scholars. During this period, scholars such as Daniel Goleman and Peter Salovey began to explore the significance of emotions and recognized the impact of emotional skills on individual development and success.

The term "social emotional learning" was introduced in 1994 at a conference organized by the Fetzer Institute. The event brought together researchers, educators, and child advocates dedicated to advancing children's positive development through educational initiatives. These early SEL proponents aimed to tackle a shared problem: the inefficiency in school planning and the poor coordination among various school-level programs.

CASEL (Collaborative for Academic, Social, and Emotional Learning) was founded in 1994 as a non-profit organization dedicated to promoting and advancing social and emotional learning. The establishment of CASEL marked the beginning of social and emotional learning as an independent field, drawing extensive attention within the education community. CASEL, being an authoritative organization, provides the following definition of social and emotional learning:

"Social emotional learning is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions." (CASEL,2023)

The OECD (2021) defines social-emotional skills as: "...a subset of an individual's abilities, attributes and characteristics that are important for individual success and social functioning. They encompass behavioural dispositions, internal states, approaches to tasks, and management and control of behaviour and feelings. Beliefs about the self and the world that characteristic an individual's relationships to others are also components of social and emotional skills."

The Department for Education and Skills (DES) in the UK runs a program called Social and Emotional Aspects of Learning (SEAL). Social and Emotional Aspects of Learning (SEAL) program. They define SEAL as: "a comprehensive, whole-school approach to promoting the social and emotional skills that underpin effective learning, positive behaviour, regular attendance, staff effectiveness and the emotional health and well-being of all who learn and work in schools." (Humphrey et al., 2010)

At the international academic seminar on "Social-Emotional Learning and the Improvement of Basic Education Quality," co-hosted by China's Ministry of Education and UNICEF, Mao Yaqing presented China's conceptualization of "Social-Emotional Learning" as follows: "SEL endeavors to cultivate interpersonal relationships and a positive atmosphere characterized by mutual respect, understanding, and support, both within and outside the school. Its objective is to assist students in acquiring the essential

awareness, knowledge, and skills related to self, others, and collective management, necessary for their development in both school and societal contexts. SEL aims to nurture students' confidence and sense of responsibility, fostering positive interpersonal relationships and cultivating emotional and moral qualities. Ultimately, it equips students with the capacity to effectively confront the challenges inherent in the process of growth, promoting comprehensive and harmonious development of their physical and mental well-being."

Social and emotional learning (SEL) has gained increasing attention and application on a global scale. The concept and practices of SEL have been incorporated into the education policies and frameworks of many countries. Simultaneously, research in the field of SEL continues to evolve, with scholars exploring new theoretical models, assessment tools, and strategies to further enhance the effectiveness and sustainability of SEL. In summary, as an independent academic discipline, social and emotional learning has made significant progress. It is not only widely recognized in the field of education but also exerts a positive impact on social and psychological well-being. By nurturing students' social skills, emotional management, and self-awareness, SEL contributes to the overall development and holistic competencies of students.

2.1.2 The Framework of Social Emotional Learning

The framework of Social Emotional Learning (SEL) provides a comprehensive approach to promoting the development of social and emotional skills in individuals. While there are different models and frameworks proposed by various organizations and researchers, I will outline a widely recognized framework developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL) and Organisation for Economic Co-operation and Development (OCDE).

2.1.2.1 CASEL's SEL Framework Consists of Five Core Competencies

- 1) Self-Awareness: This ability encompasses the recognition and understanding of one's own emotions, strengths, weaknesses, values, and objectives. It includes elements such as self-perception, self-confidence, and the capability to accurately assess one's feelings and thoughts.

2) Social Awareness: This skill involves comprehending and empathizing with the perspectives, emotions, and needs of others. It includes demonstrating empathy, respect, and appreciation for diversity, as well as understanding social norms and recognizing the impact of one's actions on others.

3 Self-Management: Self-management involves regulating one's emotions, thoughts, and behaviors in various situations. It includes skills such as self-control, stress management, impulse control, goal setting, and organizational abilities.

4) Relationship Skills: This skill encompasses the capability to build and sustain healthy, positive relationships with others. It involves communication, active listening, collaboration, conflict resolution, and the ability to function effectively within teams.

5) Responsible Decision-Making: This skill involves making ethical and responsible choices based on consideration of social norms, safety concerns, and personal values. It includes problem-solving, critical thinking, and evaluating the consequences of one's actions.

These five core competencies form the foundation of the SEL framework, which aims to support the development of students' social and emotional skills throughout their lives. By nurturing these competencies, individuals can enhance their overall well-being, academic success, and positive engagement in their personal and professional lives.

2.1.2.2 The OECD Framework of Social Emotional Skills

OECD proposed a social-emotional skill model that aligns with the Big Five taxonomy for personality. In this framework, five components are outlined as follows:

1) Task Performance: This encompasses the capacity for self-discipline, persistence, and the dedication of effort toward achieving goals and completing tasks. It aligns with the trait of Conscientiousness.

2) Emotional Regulation: This pertains to the capability to control one's emotional reactions and moods, sustaining a positive and optimistic perspective on life. It corresponds to Emotional Stability.

3) Collaboration: This involves maintaining positive relationships and displaying sympathy and understanding towards others, corresponding to the trait of Agreeableness.

4) Open-mindedness: This entails engaging with new ideas and generating innovative ways of thinking or doing things, reflecting the trait of Openness.

5) Engaging with Others: This involves interacting with others energetically and assertively, aligning with the trait of Extraversion.

2.1.2.3 The Social and Emotional Aspects of Learning (SEAL) Program

The goal of SEAL is to promote and apply the following skills in the learning process, which are categorized into the five domains of the Emotional Intelligence Model proposed by Goleman (1995).

1) Self-awareness: Recognizing and appreciating oneself while comprehending one's thoughts and emotions. When we can pinpoint and articulate our beliefs, values, and feelings, and have a positive self-regard including an understanding of our strengths and limitations, we become more effective learners and engage more positively with others.

2) Self-regulation (managing feelings): Controlling how we express our emotions, handling and modifying difficult and uncomfortable feelings, and amplifying positive and pleasant emotions. Developing strategies for expressing positive emotions and managing difficult ones enables us to focus more effectively, act appropriately, build stronger relationships, and work productively with others.

3) Motivation: Striving towards goals with persistence, resilience, and optimism. Setting goals, devising effective strategies to achieve them, and responding positively to setbacks enhances our approach to learning and maximizes our potential.

4) Empathy: Understanding and appreciating the thoughts and emotions of others while providing support. When we comprehend, honor, and value the beliefs, principles, and emotions of others, we enhance our ability to build relationships, collaborate effectively, and learn from individuals with diverse backgrounds.

5) Social skills: Establishing and sustaining relationships, and managing interpersonal disagreements. Possessing methods for creating and preserving relationships, as well as for addressing and resolving disputes, provides us with skills that enhance educational outcomes by minimizing negative emotions and disruptions, and utilizing interactions to enrich the learning process.

Among various theories of Social and Emotional Learning (SEL), the definition and core components provided by the Collaborative for Academic, Social, and Emotional Learning (CASEL) have been chosen as the theoretical foundation for this study. CASEL's theory of social and emotional learning stands out due to its outstanding comprehensiveness and practical orientation. The practicality and scientific foundation of CASEL's approach enable educators to more effectively integrate elements of social and emotional learning into their teaching practices. CASEL's methodology is widely recognized as an effective approach to enhancing students' overall competencies and academic achievements, thus serving as the theoretical basis for this research.

2.1.3 The Importance of Social Emotional Learning

Research consistently underscores the importance of Social and Emotional Learning (SEL), with both its practice and study experiencing significant growth. SEL skills play a pivotal role in assisting teachers and students in self-management, navigating interpersonal relationships, and accomplishing academic tasks (Gunter et al., 2012). Social and Emotional Learning has gained increasing recognition and application in the field of education, emerging as a crucial pathway to support students in addressing challenges and pursuing freedom, education, and comprehensive development. SEL encompasses developing cognitive and emotional competencies, setting goals, demonstrating empathy, fostering positive relationships, making informed

decisions, and effectively managing interpersonal interactions (Durlak & Weissberg, 2010).

2.1.3.1 SEL Contributes to Improved Academic Achievement

SEL programs appear to have significant long-term impacts on academic growth, akin to initiatives specifically designed to support academic learning (Mahoney et al., 2018). It has been demonstrated that implementing SEL initiatives can yield various short-term and long-term benefits, fostering students' holistic development and academic performance (Durlak et al., 2011). In school settings, the advantages of SEL are evident as it significantly enhances students' achievements by cultivating cooperation, social skills, emotional regulation, and improving learning outcomes. SEL contributes to nurturing citizens with empathy, responsibility, and compassion, providing essential support for students to acquire critical academic and social skills necessary for success (Schonert-Reichl et al., 2007; Jones & Bouffard, 2013). SEL interventions in schools have positively impacted students' performance in reading, mathematics, and science, indicating its broader applicability in public health education approaches (Corcoran et al., 2018; Greenberg et al., 2017). These interventions cover non-academic skills crucial for success in various life domains, including goal-setting, behavior management, relationship building, as well as information processing and retention (Stoker & Borman, 2022). Students participating in interventions addressing the five core competencies showed a significant improvement of 11 percentage points in academic performance compared to their peers who did not undergo Social and Emotional Learning (SEL) interventions (Durlak et al., 2011). Several years into participating in Social and Emotional Learning (SEL), students exhibited an average improvement of 13 percentage points in academic performance, maintaining this positive impact in the academic domain over an extended period compared to their non-participating peers (Taylor et al., 2017).

2.1.3.2 SEL has Contributed to the Health, Well-Being, and Safety of Schools

Participation in Social and Emotional Learning (SEL) programs is closely associated with the reduction of emotional distress, the cultivation of more positive

individual and interpersonal attitudes, as well as the decrease in external behavioral and disciplinary issues (Durlak et al., 2022). SEL contributes to the reduction of risky behaviors and lowers the student dropout rate (Kautz et al., 2014). Social and emotional learning facilitates the acquisition of essential life skills, such as learning, relationship-building, communication, empathy, and collaboration, by shaping classrooms and schools. Proficient mastery of key social and emotional learning skills, including attention concentration, active listening, emotional management, and conflict resolution, enables students to better adapt to the classroom environment, reduce disruptive behavior, and optimize learning time (Jones & Bouffard, 2013). Conversely, students facing difficulties in these aspects may encounter challenges hindering their own and others' learning time.

The enhancement of SEL contributes to the development of stronger coping skills, greater resilience, and more acute emotional recognition in young individuals, significantly alleviating symptoms of depression and anxiety in the short term (Clarke et al., 2021). From both theoretical and practical perspectives, SEL is a liberation that effectively facilitates emotional management, promoting academic improvement (Cohen, 2006). By comprehensively fostering students' social and emotional skills alongside academics, the potential for success in school and future life can be maximized (Zins et al., 2007). SEL also reinforces students' sense of safety and support, positively fostering closer interactions with teachers and further enhancing the school's sense of belonging and inclusivity (Cipriano et al., 2023). High-quality implementation of social and emotional learning programs can effectively improve academic performance, reduce problematic behaviors, enhance interpersonal relationships, establishing it as an integral part of education that combines academic knowledge with the skills necessary for success in various life domains (Elias, 2003).

Research has demonstrated that SEL can also prevent and reduce bullying and aggressive behaviors on campus (Cipriano et al., 2023; Espelage et al., 2015), fostering a more harmonious environment within the school.

2.1.3.3 SEL Fosters the Development of Skills Essential for Future Readiness

There is a growing recognition that Social and Emotional Learning (SEL) serves as a precursor to enhancing individual character, capabilities, and overall life efficiency. Students engaged in SEL programs consistently show progress in social and emotional skills, laying a more solid foundation for their future lifelong positive outcomes (Taylor et al., 2017; Greenberg, 2023).

Furthermore, SEL meets the increasing demand in the labor market for growing social skills, thereby promoting career success. Employers now acknowledge a significant skills gap in social and emotional intelligence, highlighting the growing importance of social skills in the workplace (Deming, 2017; Cunningham & Villasen, 2014). This underscores the potential of SEL in supporting professional development.

2.1.3.4 SEL Constitutes a Prudent Financial Investment.

From an economic perspective, the implementation of social-emotional education in education is estimated to yield substantial returns. For every 1 US dollar invested in social-emotional education programs and practices, an approximate return on investment of around 11 US dollars can be achieved (Belfield et al., 2015).

The effectiveness of Social and Emotional Learning (SEL) is contingent upon cultural contexts across various demographic groups, irrespective of their socioeconomic status, cultural backgrounds, and whether they reside in urban, suburban, or rural communities within and outside the United States (Jones & Kahn, 2018). In the design of interventions, Social and Emotional Learning (SEL) approaches take into account specific contextual or cultural factors, ensuring their optimal effectiveness in the design process (Wigelsworth et al., 2020).

2.1.3.6 SEL Benefits Adults

The evolving educational landscape emphasizes that academic and social-emotional learning are crucial benchmarks for children's fundamental knowledge (Elias, 2003). Simultaneously, an increasing body of evidence suggests that SEL also supports the development of adults, such as enhancing the social and emotional competencies of educational professionals, contributing to increased teacher well-being

(Jones & Kahn, 2018). Educators who exhibit proficiency in social and emotional competencies report higher job satisfaction and lower levels of fatigue (Brackett et al., 2010). Focusing on social-emotional learning (SEL) can assist educators in establishing closer connections with students and effectively managing classroom atmospheres (Jennings & Greenberg, 2009). SEL teachers report feeling more efficient in their professional domains, with relatively lower levels of work-related anxiety (Greenberg et al., 2016).

In conclusion, SEL skills not only contribute to educational advancement but also enhance individual well-being and overall happiness (Schonert-Reichl et al., 2007). It is a critically important educational strategy for fostering the comprehensive development and success of children, adolescents, and even adults. By improving academic performance, social skills, emotional regulation, and decision-making abilities, social-emotional learning plays a transformative role in the lifelong development and happiness of students, solidifying its undisputed significance in education.

2.1.4 The Strategies to Enhance Social Emotional Learning

Given the benefits of SEL in emotional education and relationship management, research on how to better practice SEL is becoming increasingly mature and comprehensive. Many combinations of strategies have formed effective SEL projects based on empirical research projects, and there are many common projects about SEL projects, which is the embodiment of how to design and implement effective SEL plans. Many of the SEL programs based on outcome evidence have become fixed on-campus and off-campus training programs to help better improve social and emotional learning in children and adults, or to provide guidelines for teachers to choose SEL programs that are more suitable for their own students. Here are the more common SEL program (Jones et al., 2017), each method has its own unique advantages:

The 4Rs Program (Reading, Writing, Respect & Resolution)

The 4Rs Program is a curriculum designed for preschool through fifth grade, focusing on social-emotional skills and language arts through diverse children's literature. Its curriculum structure involves at least one weekly session covering areas such as community building, emotional management, active listening, self-confidence,

problem-solving, diversity appreciation, bullying prevention, and cooperation. The uniqueness of the program lies in its primary teaching method of discussions, emphasizing the development of social-emotional skills in adults and providing extensive family engagement resources. An empirical study, conducted through a randomized controlled trial, demonstrated positive improvements in cognitive regulation, emotional and interpersonal skills, character development, and mindset processes. (Jones et al., 2017),

Mind UP

MindUP is a Social Emotional Learning (SEL) initiative tailored for students from PreK to 12th grade, offering educators a structured framework and curriculum for classroom use. This program blends elements from social emotional learning, neuroscience, mindfulness, and positive psychology. The primary objective is to assist students in cultivating abilities related to self-control, concentration, and prolonged attention, all while alleviating stress and anxiety. The elementary school program comprises 15 sessions distributed across the school year, with each session requiring 2-3 weeks for completion. Usually, each session spans 40 minutes and includes a recap, an opening, classroom exercises, potential subject incorporation or practical applications, and evaluations. The curriculum also features related activities, ranging from brief 5-minute tasks to multi-week projects, often involving reflection and journal writing. Furthermore, adults support students in practicing MindUP's core exercises outside the classroom, which include short auditory and breathing exercises performed three times daily to enhance focus through extracurricular practice. MindUP functions not only as a pedagogical approach but also as a teaching style, emphasizing discussions and visual techniques (Jones et al., 2017),

PATHS

The PATHS program is a curriculum tailored for PreK-6th grades, aiming to enhance social and emotional competence and diminish aggressive behaviors and conduct problems. The curriculum includes introductory segments, reviews, discussions, activities, and summaries. Additionally, it offers optional courses and supplementary activities. The main instructional strategies involve discussions, visual

presentations, books and stories, role-playing, skill exercises, and the use of SEL (Social and Emotional Learning) tools and manuals. The program focuses on emotional processes, particularly emotional knowledge and expression, emotional behavior regulation, and conflict resolution. (Jones et al., 2017),

Second Step

The Second Step program is designed for PreK-8th grade students, aiming to aid children in understanding and managing their emotions, controlling their reactions, empathizing with others, and developing problem-solving and responsible decision-making abilities. This is achieved through interactive activities such as games, stories, and songs. For grades 3-5, the curriculum provides a structured teaching outline with 22-25 weekly lessons, each lasting between 20-45 minutes, along with four additional follow-up activities of 5-10 minutes each week.

Each initial lesson begins with an overview of the fundamental concepts, followed by a "Brain Builder" activity aimed at improving cognitive regulatory abilities. Students subsequently engage in conversations on narratives or multimedia content focusing on themes related to social-emotional learning (SEL), apply newly acquired skills, and conclude with a brief recap of the lesson's concepts. The subsequent activities, varying by lesson, may involve additional "Brain Builder" games, skill reinforcement sessions, songs, and creative activities like writing or sketching.

The program's main outcome measures are the Devereux Student Strengths Assessment: Second Step Edition (DESSA-SSE) and evaluations of student work, including drawings and writings, homework, and performance in Brain Builder games, to assess their comprehension and progress throughout the program (Jones et al., 2017).

Conscious Discipline

Conscious Discipline is an early childhood program aimed at merging social-emotional learning with effective classroom management strategies. Its objective is to foster a classroom and school environment based on safety, connection, and problem-solving by transforming the behaviors of both educators and students. This approach involves a comprehensive philosophy, a common language, and a range of

behavior management techniques and positive discipline practices. It assists adults in managing their thoughts, emotions, and actions under daily stress while imparting these crucial skills to children.

The program is organized around seven fundamental components, each corresponding to a core skill of Conscious Discipline. These skills, taught sequentially over seven months, include Calming, Encouragement, Assertiveness, Choices, Positive Intent, Empathy, and Consequences. Instructional methods encompass songs, visual aids, skill practice, discussions, and role-playing. The primary focus is on developing emotional processes, particularly emotional and behavioral regulation and awareness, with less emphasis on verbal discourse. Additionally, Conscious Discipline includes a progress assessment scorecard to measure the mastery of key emotional intelligence skills within the program (Jones et al., 2017).

RULER

RULER (Recognizing, Understanding, Labeling, Expressing, and Regulating emotions) is a comprehensive social-emotional learning approach tailored for PreK-12 education. Its primary aim is to foster emotional intelligence among both students and adults, empowering adults to model these skills effectively. The ultimate goal is to cultivate a supportive and nurturing emotional environment that enhances student development. The specific implementation involves integrating emotional intelligence into regular practices through a structured curriculum comprising 16 lessons annually. This curriculum includes a vocabulary program with five weekly lessons, each lasting 10-20 minutes. (Jones et al., 2017),

Among various social-emotional learning programs like 4Rs, RULER, Conscious Discipline, and others, they share a common objective of supporting adults in developing social-emotional learning competencies. Furthermore, SEL research outcomes aren't solely derived from standardized SEL programs; researchers also design activities tailored to specific subjects and contexts, yielding notable improvements in SEL outcomes. In addition to the aforementioned social and emotional

learning (SEL) programs, there have been studies that reflect and explore strategies to enhance social and emotional learning.

In addition to the aforementioned social and emotional learning (SEL) programs, there have been studies that reflect and explore strategies to enhance social and emotional learning. Chung & McBride (2015) conducted research on employing a service-learning model to promote students' social and emotional learning within secondary school curricula. The study was conducted by implementing the Teen Outreach Program (TOP) in a social studies course at a city high school in St. Louis. The Teen Outreach Program (TOP) endeavors to cultivate social and emotional skills for all seventh-grade students in a city high school in St. Louis through social learning courses, service-learning activities, club events, and counselor support. Specifically:

1. Social Learning Courses: Covering topics such as emotion management, decision-making, interpersonal relationships, and communication skills.
2. Service-Learning Activities: Students can choose projects of interest, such as volunteer work, environmental conservation, and community service.
3. Club Events: Organizing various activities regularly, such as games, discussions, and team-building exercises to foster interaction and friendships among students.
4. Counselor Support: Trained professional TOP counselors regularly engage in individual sessions with students, assisting them in problem-solving, goal setting, and self-development.
5. Community Partnerships: Collaborating closely with local youth development organizations, schools, and community partners to provide volunteer opportunities, training, funding, etc., to support the implementation of TOP.

The research findings indicate that through service-learning, students were able to achieve positive outcomes in the social and emotional domains. In terms of implementation, the TOP curriculum in the study was conducted jointly by trained college students and social studies teachers. The curriculum included discussions and interactive activities, encouraging students to participate in discussions and express

their viewpoints. The study also mentioned specific service-learning projects, such as assisting the military, engaging with the elderly, and aiding immigrants and refugees. The results suggest that service-learning can foster students' social and emotional learning, and the study highlights some challenges, future research questions, and implications for practice and policy.

Stillman et al. (2018) enhanced social-emotional learning through the utilization of social-emotional assessment tools in their study. The research employed assessments from students, teachers, and the overall school context. By comparing the assessments of students and teachers, educators gained a better understanding of the classroom dynamics and student needs. This facilitated the adjustment of teaching methods and support measures accordingly. Teachers, by adapting to students' strengths and challenges, improved classroom management and fostered closer connections through class dashboards. The assessment tools also aided teachers in building relationships with students, parents, and external service providers, reducing teacher frustration and contributing to the enhancement of teaching quality. Ultimately, through in-depth dialogues with students and families to understand their characteristics, teachers and school staff could finely adjust teaching and support based on assessment results, comprehensively elevating the level of social-emotional learning.

In their study on enhancing social-emotional learning, Ee & Ong (2013) implemented the following strategies and interventions:

1. Organization of Outdoor Camp Activities: The camp activities conducted in the outdoor environment spanned a duration of two days and one night. Students engaged in various activities outdoors, fostering the development of their social-emotional competencies.

2. Individual Participation and Reflection: Students were afforded the opportunity for individual involvement in camp activities, with ample time provided for personal reflection on their thoughts and experiences. This individual participation and

reflection were deemed conducive to the development of students' social-emotional competencies.

3. Camp-Specific Social-Emotional Learning Approach: The study employed a purposeful camp-specific social-emotional learning approach, where teachers, serving as facilitators, offered substantial support and guidance during camp activities. This approach was identified as a potential factor in enhancing students' social-emotional competencies.

4. Teacher Assessment and Observation: Teachers assessed and observed students' social-emotional competencies during camp activities. Teachers observed students' performance in areas such as self-awareness, self-management, social awareness, and responsible decision-making, providing feedback and guidance.

In summary, the researchers enhanced students' social-emotional learning abilities through strategies and interventions including the organization of outdoor camp activities, individual participation and reflection, a camp-specific social-emotional learning approach, and teacher assessment and observation.

2.1.5 The Measurement of Social Emotional Learning

SEL is a comprehensive learning process encompassing a broad spectrum of social and emotional competencies. While the definition provided by CASEL is frequently utilized in empirical studies to characterize SEL, it remains an overarching concept. Consequently, the tools used for measuring SEL are diverse and intricate. Currently, the primary methods for measuring SEL include observation (including teacher reports on students), assessment scales (utilizing questionnaires, surveys, and performance assessments), report cards, as well as interviews or focus groups.

Ee & Ong (2013) employed a survey questionnaire named the SEL Camp Questionnaire to assess students' social-emotional learning abilities. The questionnaire consisted of a set of questions focusing on self-awareness, social understanding, self-control, interpersonal skills, and making responsible decisions. Students were required to evaluate their responses on a six-level Likert scale (1 indicating "completely incorrect," and 6 indicating "very correct"). Additionally, teacher assessments were

utilized by researchers to observe students' behavior and performance in various contexts. Teachers used a four-level Likert scale (1 indicating "strongly disagree," and 4 indicating "strongly agree") to assess students' performance in various social-emotional learning abilities.

Elliott et al. (2018) developed a universally applicable screening assessment tool called the Social Emotional Learning Assessment (SELA). This tool measured five narrow social-emotional domains based on the CASEL theory: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. It also covered academic domains such as reading and mathematics. The tool was designed for comprehensive evaluation of social-emotional learning difficulties among 268 students from an Australian primary school. Additionally, the study employed other measurement tools like SSIS PSG and SSIS rating scales for comparison and validation. The research measured students' social behavior, academic abilities, and risk categories.

In 2014, Jenkins and colleagues conducted an extensive evaluation of instruments used for social-emotional and behavioral screening. They examined five prominent tools and identified two more through academic literature and publisher websites. The seven widely recognized SEL screening tools include the Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007), the Behavior Intervention Monitoring Assessment System (BIMAS; McDougal, Bardos, & Meier, 2011), the Devereux Student Strengths Assessment (DESSA; LeBuffe, Shapiro, & Naglieri, 2009/2014), the Social, Academic, and Emotional Behavior Risk Screening Tool (SAEBRS; Kilgus & von der Embse, 2015), the Social Skills Improvement System Performance Screening Guide (SSIS PSG; Gresham & Elliott, 2008), the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), and the School-Based Behavioral Disorder Screening (SSBD; Walker & Severson, 1992). Additionally, Naglieri et al. (2011) highlighted the DESSA-mini as a valuable tool for universal screening and assessing social-emotional skills, particularly resilience.

de Carvalho et al. (2016) utilized a variety of measurement instruments to gather data on Social and Emotional Learning (SEL). For instance, they employed the Portuguese version of PANAS-C (Positive and Negative Affect Schedule for Children) to collect data on positive and negative emotions. Emotion regulation abilities were assessed using the Emotional Regulation Questionnaire—Children and Adolescents (ERQ-CA) and the Emotion Regulation Questionnaire (ERQ). The self-compassion section utilized both the Self-Compassion Scale—Children (SCS—C) and the Self-Compassion Scale (SCS).

Shi & Cheung (2022) utilized the Social and Emotional Skills Scale (SESS) as a tool for measuring social-emotional skills. This scale is the first student-reported tool that aligns entirely with the five aspects defined by CASEL, assessing social and emotional skills in self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The SESS scale comprises five subscales, namely self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, with a total of 38 items. Students are required to respond on a 5-point Likert scale based on frequency, including 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often). Sample items include "demonstrating awareness of one's strengths" in the self-awareness subscale, "maintaining calmness in the face of challenges" in the self-management subscale, and "demonstrating the ability to make ethical judgments" in the responsible decision-making subscale. Higher scores, both overall and in each subscale, indicate better social-emotional skills. The scale underwent validation research with nearly 4000 Chinese elementary school students, demonstrating good reliability and validity through confirmatory factor analysis (CFA).

Qureshi & Iqbal (2023) utilized the KM TOM SEL scale from 2012 as their research tool. This scale aims to assess social-emotional learning in students aspiring to become teachers and self-report evaluations in adults concerning their behavior, social, and emotional aspects. The design of the scale is based on measurements of social-emotional learning, self-awareness, self-management, relationship management, and responsible decision-making.

It is evident that there is a wide variety of tools for measuring SEL, and there is no fixed form. This is because social-emotional learning does not have a one-size-fits-all approach, as each classroom, school, after-school program, and region has unique characteristics. The needs of each school and each student also vary greatly. Therefore, researchers often collect relevant data on SEL based on the focus of their own research, leading to variations in the measurement tools used. Most studies primarily use self-report surveys in the form of questionnaires. High-quality SEL assessment strategies enable educators to determine which teaching strategies are most effective, ensuring the success of social-emotional learning. Whether collecting SEL data through student assessments, classroom observations, or staff surveys, it is crucial for those encouraging or guiding data collection to have a clear understanding of the purpose of data collection (Hamilton & Schwartz, 2019). This study aims to enhance students' social-emotional learning. To achieve this, we have chosen the Student Emotional and Social Skills (SESS) scale as the benchmark measurement tool, aligning with the five aspects defined by CASEL. Our goal is to develop a more suitable measurement tool for social-emotional learning among Chinese university students and assess the sample based on this foundation.

2.1.6 The Review of Social Emotional Learning Researches

2.1.6.1 The Impact of Social-Emotional Learning on Academic Performance

Panayiotou and colleagues (2019) explored the link between Social and Emotional Learning (SEL) and academic achievement using a prolonged latent variable approach. The study explored the relationships among students' social-emotional competence, school belongingness, and academic achievement by collecting data over three waves (T1, T2, T3) from 1626 students aged 9-12. Data collection spanned from the summer of 2012, with assessments conducted every May to July in subsequent school years. Academic data were gathered through standardized pencil-and-paper tests, while social-emotional data were electronically collected via a secure online survey platform. The study also employed a cluster-randomized trial design, randomly assigning schools to different intervention groups (PATHS and UP) to assess the impact of interventions on outcomes.

The findings demonstrated a notable, favorable association among social-emotional competence, school connectedness, and academic achievement. This underscores the potential benefits of developing students' social-emotional skills and promoting a strong sense of school affiliation in enhancing academic outcomes.

In a study led by Kuo et al. (2019), the researchers concluded that Social and Emotional Learning (SEL) factors play a moderating role in academic enhancement. The study found that SEL factors such as motivation, social engagement, and self-regulation positively influenced high school academic performance. Specifically, high-achieving students exhibited greater growth in motivation and social engagement, while self-regulation had a positive impact on high-achieving female students. Additionally, the study revealed that SEL factors only exerted a positive influence on the academic performance of low-achieving students in high school after they had established foundational knowledge and skills during middle school.

The study employed a multiple regression model to investigate the moderating effects of social-emotional learning factors on academic performance improvement. Researchers conducted a standardized college readiness assessment and measured social-emotional learning factors through self-reports from 3,281 students in grades 7-9. Subsequently, they utilized a multiple regression model to analyze the moderating effects of these factors in predicting academic performance in grades 11-12. Ultimately, the study concluded that social-emotional learning factors play a moderating role in enhancing academic performance.

2.1.6.2 The Impact of Social and Emotional Learning on Positive Social Behaviors

Ahmed and colleagues (2020) conducted research to evaluate the impact of utilizing social-emotional learning (SEL) techniques on the social-emotional skills of eighth-grade students. Employing a quasi-experimental pre-test/post-test non-equivalent design, 207 students took part in the study. The participants were assigned to either an experimental group, which received instruction based on SEL methods, or a control group that underwent conventional teaching approaches. The evaluation of

students' social-emotional competencies was conducted through a structured questionnaire survey.

The findings from the analysis of covariance indicated significant improvements in social-emotional competencies among students in the experimental group compared to those in the control group, who were exposed to traditional teaching methods. Specifically, the implementation of the RULER approach within SEL demonstrated substantive benefits in enabling students to effectively incorporate and utilize RULER strategies, thereby enhancing their overall social-emotional competencies.

2.1.6.3 The Impact of Social Emotional Learning on Mental Health

LaBelle (2019) discussed in a study how Social Emotional Learning (SEL) programs promote students' adaptability and address mental health issues. The focus of the research was on a SEL program called Positive Action (PA), designed to improve academic achievement, reduce problem behaviors, and enhance students' adaptability. The PA program places a significant emphasis on mental health, effective self-management competencies, social skills, and techniques for goal-setting and attainment. Central to its curriculum is the enhancement of individual well-being, aiming to augment students' self-esteem and cultivate a positive mindset through the instruction of constructive behaviors, thereby bolstering their adaptability in demanding contexts. Comprising six principal modules, the program covers a spectrum of strategies designed to enhance students' adaptability. Furthermore, it includes supplementary modules focused on themes such as prevention of bullying, education on substance abuse, conflict resolution, and fostering a positive campus environment. The research methodology involved on-site investigation and data collection of the Positive Action (PA) program, utilizing questionnaire surveys and qualitative analysis to assess the effectiveness of the program. The study supported the perspective that the PA program can improve students' character development, reduce problem behaviors, and promote adaptability. The researchers encourage practitioners to utilize evidence-based SEL programs to enhance students' adaptability and increase positive mental health.

Kim and colleagues (2021) conducted research to explore the effectiveness of trauma-informed training and mindfulness-based social-emotional learning (SEL) initiatives in improving teacher attitudes and reducing burnout among educators. The research involved a total of 112 participants, categorized into three groups: 26 individuals participated in SEL programs for two consecutive years (referred to as the "involved-twice" group), 45 participated for one year (referred to as the "involved-once" group), and 41 served as a comparison group. The study aimed to provide empirical support for the beneficial impact of SEL interventions on psychological well-being within educational settings.

The research aimed to investigate how trauma-informed training and mindfulness-based social-emotional learning interventions impact the perceptions and experiences of burnout among education professionals. A mixed-methods approach, combining quantitative and qualitative data collection and analysis, was utilized. The study collected data through surveys and focus group discussions, analyzing changes in the attitudes and burnout feelings of education professionals following training and the implementation of mindfulness programs. The findings revealed that education professionals in the intervention groups demonstrated greater improvements in trauma-informed attitudes and burnout feelings, while those in the control group did not exhibit similar changes.

The main discovery of the research emphasizes the beneficial effects of trauma-aware training and mindfulness-oriented social-emotional learning initiatives on teacher perspectives and alleviation of exhaustion. Specifically, the research demonstrates a significant decrease in emotional exhaustion and substantial enhancements in attitudes and overall evaluations among educators who engaged in the MindUP program over a span of two years. These results are further substantiated by qualitative insights gathered from focus group deliberations. Consequently, the integration of trauma-informed training with mindfulness-based social-emotional learning not only fosters the adoption of trauma-sensitive attitudes among teachers but also mitigates fatigue and facilitates the cultivation of psychological well-being.

2.2 The Research Foundation of Active Learning

2.2.1 Theoretical Foundation

Active learning is grounded in various theories, with its primary theoretical foundation rooted in constructivist learning theory. This theory emphasizes the formation of new understanding through individuals establishing connections between new ideas and existing knowledge, thus constructing knowledge (Bransford et al., 2000). Scholars such as Piaget have proposed this theory, asserting that learners have the ability to absorb new information and modify existing frameworks to accommodate new insights. Approaches that facilitate active learning require students to actively connect with their existing mental models to expand their understanding. Cooperative learning groups are a component of active learning methods, grounded in constructivism, highlighting the positive impact of social interaction on learning. Vygotsky's sociocultural development theory supports this perspective, suggesting that learning occurs when students engage in solving problems beyond their current developmental level under the guidance of a mentor or peers. Therefore, active learning methods leverage both constructivist learning theory and its sociocultural branch, promoting the development of expanded and accurate mental models through peer interaction.

Humanists perceive individuals as autonomous entities and emphasize that learning should be a self-directed process. This implies that students should have a degree of autonomy in deciding the content and mode of their learning. Humanistic education is often associated with student-centered teaching methods, including differentiated curriculum, self-paced learning, and inquiry-based learning (Lucas, 1996). Various forms of self-directed learning exist, but generally, teachers play the role of guides, while learners have the right to autonomously determine their learning responsibilities.

Similar to constructivism, social constructivism places the learner's experiences and participation at its core, viewing teachers as facilitators or guides. Pierre Bourdieu and Lev Vygotsky are two prominent theorists of social constructivism, emphasizing the crucial role of interaction with others in knowledge construction (Saunders & Wong, 2020).

2.2.2 Definition of Active Learning

Active learning is an instructional approach centered around the core idea of engaging students actively in the learning process, encouraging their active involvement rather than mere passive reception of information. This teaching methodology promotes student participation in discussions, problem-solving, collaborative learning, and the practical application of knowledge. Moreover, active learning is a concept widely employed in the field of education, and different scholars may present their own definitions from various perspectives.

In the early 1990s, Bonwell & Eison (1991) conducted systematic research and summarization of active learning in their work "Active Learning: Creating Excitement in the Classroom." They proposed practical recommendations on how to design classroom activities to stimulate student interest and active participation. Their understanding of active learning is characterized by several general features typically associated with the use of strategies that facilitate active learning in the classroom:

- 1) Students are involved in activities beyond passive listening.
- 2) The focus is on cultivating students' abilities rather than just imparting information.
- 3) Students are involved in advanced cognitive processes, such as analysis, synthesis, and evaluation.
- 4) Students participate in a variety of activities such as reading, discussing, and writing.
- 5) There is a greater focus on encouraging students to explore their personal attitudes and values.. Delete a (.) period

In the context of university classrooms, they defined active learning as "involves students in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991). This suggests that active learning can be characterized as any teaching approach that involves students in the educational process. Essentially, active learning necessitates students participating in significant learning tasks and contemplating their actions.

Felder & Brent have provided a definition for active learning that is restricted to in-class activities: "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." (Felder & Brent, 2009).

In Collins & O'Brien's *The greenwood dictionary of education* (2011), Active Learning is defined as: Active learning involves students participating in activities that prompt reflection on ideas and their application, fostering continuous self-assessment of understanding and competence within a discipline. It emphasizes engagement through mental and often physical involvement in tasks such as information gathering, critical thinking, and problem-solving.

Matsushita (2019) posits that active learning involves participation in various activities such as writing, discussion, and speaking, whereby individuals externalize their cognitive processes inherent in these activities. This characterization delineates active learning as fundamentally centered on engaging in and verbalizing the cognitive operations involved in these tasks. Active learning includes diverse learning approaches beyond conventional lecture-based classes, where knowledge is typically received passively. It involves engaging students through activities like writing, discussions, and presentations, prompting them to externalize cognitive processes during these interactions.

Freeman et al. (2014) conducted a study encompassing 338 participants from universities in the United States and Canada to formulate a definitive definition and framework for active learning. The consensus definition they established concerning active learning as a active learning involves students in the learning process through class activities or discussions, contrasting with passive listening. It promotes higher-order thinking and frequently includes collaborative work.

Handelsman et al. believe in the importance of science instruction, including active participation in lectures and inquiry-based labs, and they argue that: "Active learning implies that students are engaged in their own learning. Active teaching

strategies have students do something other than taking notes or following directions...they participate in activities...[to]construct new knowledge and build new scientific skills.” (Handelsman et al., 2007).

The AUSSE/NSSE defines active learning as "students' efforts to actively construct their knowledge" (Australian Council for Educational Research, 2007).

“Active learning does not negate the need for lectures, but provides opportunities for students to reflect, evaluate, analyze, synthesize, and communicate on or about the information pre- sented.” (Fink, 2003).

Vanhorn et al. (2019), in their research on the definition and theoretical foundations of active learning, echo Chickering & Gamson's (1987) encapsulation of active learning: Learning is not a passive endeavor. Students do not acquire deep understanding simply by attending lectures, memorizing assignments, and regurgitating answers. They must engage in discussions, write about their learning, connect it to prior experiences, and apply it to their daily lives. Learning must become integrated into their personal understanding.

Millis & Cottell (1997) provide a more detailed explanation: learning occurs when students actively engage with material through reading, writing, discussions, and problem-solving.

Waldeck and Weimer (2017) define active learning as follows: "student learning not disrupted by the teacher."

In general, scholars have varied definitions of active learning, often conceptualizing it as activities in which students participate to construct knowledge and understanding. The fundamental concept underlying these definitions is to actively engage students in the learning process, necessitating higher-order thinking and replacing passive reception of information.

2.2.3 The Steps of Active Learning

A proactive learning model is proposed by Fink (2013), advocating that all learning involves a combination of experience and dialogue, with experience

encompassing "observing" and "doing," and dialogue involving "dialogue with self" and "dialogue with others." Specifically:

(1) Dialogue with self:

Promoting reflection on a topic involves considering both cognitive and emotional aspects, encouraging learners to contemplate thoughts and feelings, with strategies like journaling or creating a learning portfolio.

(2) Dialogue with Others:

Encompassing passive information absorption to active group discussions, active learning encourages dynamic, positive dialogue for mutual exchange, extending beyond students to involve practitioners, experts, or external dialogues through various mediums.

(3) Observing:

Active learning through observation encompasses real or simulated scenarios, involving direct witnessing of actions or surrogate experiences like simulations, providing valuable insights into topics such as observing teachers, professionals, or relevant phenomena through mediums like movies or stories.

(4) Doing:

Active learning entails learners actively engaging in subject-related activities, with a focus on real-world applications or simulations like case studies and role-playing.

This model emphasizes the importance of integrating these elements in educational approaches to ensure a comprehensive learning experience that combines self-reflection, interpersonal dialogue, observation, and practical application.

The following are the three elements of active learning according to L. Dee Fink (2013):

Receiving Information and Ideas:

- Involves gathering information from various sources such as primary and secondary sources, lectures, seminars, and online resources.
- Active engagement in the process of receiving information is essential for effective learning.

(5) Experiences:

- Requires active participation in hands-on activities like research and presentations.
- Observing and learning from the experiences of classmates and teachers also contribute to active learning.

(6) Reflection:

- Involves thinking critically about what and how one is learning.
- Reflecting on the reasons behind the learning process enhances understanding and helps connect new information with existing knowledge.

These three elements work together to create a dynamic and engaged learning experience. Active learning is an educational method that centers on students, urging them to assume accountability for their own learning journey, thereby fostering a more profound comprehension and retention of knowledge.

Schadt (2021) proposes 4 key components of Active Learning:

(7) Talking and Listening:

Active engagement in discussions, coupled with meaningful listening and periodic breaks from passive lectures, is crucial for students to organize, reinforce understanding, and enhance absorption, particularly when encouraged by thought-provoking questions.

(8) Writing:

Especially in large classrooms and for independent learners, facilitates the processing of new information in students' own words, offering an avenue for personalized comprehension and expression.

(9) Reading:

Students, despite relying heavily on reading for learning, often lack effective reading instruction; incorporating active learning exercises like summaries and note checks aids in processing information and developing the ability to focus on key points.

(10) Reflecting:

In traditional lecture classes, the abrupt end often leaves students without time to reflect, connect new knowledge with existing understanding, or apply gained knowledge; incorporating pauses for thought, peer teaching, or addressing questions can significantly enhance retention.

In this study, an exploration and investigation of active learning were conducted through various research studies, literature, materials, and textbooks. Definitions and key components of active learning were examined comprehensively. The research focused on the design of an active learning model, delineating three essential steps: lead-in, learning activities process, and conclusion.

2.2.4 The Strategies of Active Learning

In today's education field, the application of active learning strategies has attracted increasingly paid attention and has become an important means to stimulate students' interest and improve their learning effect. By adopting a series of innovative teaching methods, educators can enhance not only students' critical thinking and problem-solving skills but also encourage students to engage more deeply in the process of knowledge construction. Here are some strategies for active learning:

Questions and discussions

Compared to traditional lecture-based teaching, the utilization of interactive teaching techniques is more likely to yield richer learning outcomes. For instance, students actively engaging in discussions and experiments within the classroom setting has been identified as a valuable approach (Von Korff et al., 2016). In pedagogy, questioning stands out as a common and effective strategy. By posing questions, instructors can assess students' background knowledge, diagnose their level of comprehension, and prompt active engagement in knowledge construction. Questioning contributes to effective communication and knowledge transfer, aiming to enhance learning and student experiences. The objectives of this strategy include providing teachers with data on students' learning levels, mastered knowledge, knowledge connections, and preferences for course elements. For students, questioning serves as a stimulus for explanations, synthesis of interdisciplinary knowledge to provide

unique answers, and an opportunity to explore integrating new information into existing knowledge frameworks.

Questioning can be applied in various ways in teaching, such as inserting knowledge probe questions at the beginning and end of a class, or periodically conducting brief Q&A discussions during lectures. Types of questions include background knowledge probe questions, connection questions, purposeful questions, and feedback questions. Teachers should select appropriate question types based on the purpose of the learning event and desired learning outcomes (Linsenmeyer, 2021).

The advantages of this strategy include providing valuable data about students' knowledge, enhancing students' communication skills, helping students identify learning gaps, stimulating information recall, and consistently guiding students to reflect on course topics. However, some drawbacks exist, such as students lacking knowledge may feel discouraged, questioning may require a significant amount of time, and teachers may struggle to understand the reasons behind students choosing certain answers.

Think-Pair-Share

Think-Pair-Share (TPS) is an effective interactive teaching strategy widely employed in traditional education settings, aimed at fostering organized group participation. Initially described by Millis, Lyman, and Davidson (1995) and rooted in the work of Lyman (1981), TPS commences with students receiving information through reading, brief lectures, or video presentations. Subsequently, the teacher poses a question, prompting students to engage in individual reflection and provide written responses. Following this, students engage in paired discussions to exchange their answers, with the option to share with the entire class or another group. This collaborative learning approach proves effective in large class settings, encouraging reflective thinking, allowing the formation of individual ideas before sharing, and cultivating higher-order thinking skills.

The strategy comprises three key steps: individual reflection, paired discussions with classmates, and sharing ideas with the class and teacher. Aligned with the constructivist paradigm, TPS emphasizes students constructing knowledge through social interaction (Vygotsky, 1978). It finds diverse applications, such as introducing concepts, formative assessment in the classroom, or summative assessment after lessons (Yuretich et al., 2001; Greer and Heaney, 2004). Research indicates positive student responses to TPS, with increased participation and proficiency, particularly when integrated into an active learning environment (Yuretich et al., 2001).

TPS requires minimal classroom resources, relying on prompts for student engagement. Teachers can transfer the responsibility of elucidating content characteristics to students, fostering thoughtful and frequent responses. The intuitive nature of student engagement in TPS emphasizes interactions between peers and students and between students and teachers. Often used for formative assessment, it provides teachers with an effective opportunity to model and analyze content. The low time investment for each task, flexibility in class size, and adaptability for multiple uses within a class make TPS a valuable strategy for assessing student learning.

In conclusion, TPS stands out as an efficient, low-effort strategy supporting student learning without requiring additional resource demands. While there is relatively limited research on its impact on student learning outcomes, its adaptability to existing lecture resources makes it an attractive choice for enhancing classroom engagement and understanding.

Cooperative learning

Collaborative learning is a method of knowledge construction through social interaction (Dennen, 2000). The advantages of collaborative learning methods include engaging students in the generation of knowledge, requiring them to possess critical and creative thinking skills to identify problems and propose solutions. It serves as an excellent approach to involve students in discussions, explanations, critical evaluations, and in-depth processing of classroom content.

These strategies offer alternative approaches to traditional lecture methods, aiming to enhance student engagement in the learning process. Although initially designed for physical education practitioners, these strategies are universal and applicable to various content areas (such as health, science, mathematics) and educational levels (such as college/university). Once these strategies are mastered, they can be integrated with more advanced active learning strategies, which carry higher potential risks, empowering students with greater control over the learning process.

Cooperative Learning

Collaborative learning is one of the most critical active learning strategies and serves as the foundation for many other proactive learning approaches. It involves the use of group-based instructional methods, encouraging students to work together to maximize individual and collective learning efforts (W. Johnson & T. Johnson, 2019). Compared to students engaged in competitive or individualistic learning activities, those involved in collaborative learning exhibit a greater willingness to participate in various task behaviors, demonstrating higher behavioral involvement, cognitive engagement, and emotional investment (W. Johnson & T. Johnson, 1989).

The terms "collaborative" and "cooperative" are often used interchangeably, but they carry distinct meanings. "Cooperative" implies joint effort or collective action to achieve common goals, with a tendency to downplay the contributions of specific individuals. Collaborative learning entails organized group activities aimed at achieving shared educational goals, while also involving individual evaluations (Millis & Cottell, 1998; Feden & Vogel, 2003).

Problem-based learning

Problem-Based Learning (PBL) has the potential to cultivate a more proactive attitude in students, foster more profound learning methods, and assist students in retaining knowledge for extended periods (Prince, 2004).

Minute Papers

The Minute Paper is typically conducted in the final minutes of a class, where the instructor poses a series of questions, including inquiries about the most

crucial concepts learned by students that day and the concepts that remained unclear at the conclusion of the session (Anderson and Burns, 2013). It is recommended that instructors address frequently mentioned areas of confusion at the beginning of the next class or resolve these issues in subsequent lectures (Chizmar and Ostrosky, 1998; Barnes, 2008) to better leverage this strategy and promote deeper learning.

The Pause Procedure

Every 12 to 18 minutes, a pause of two minutes is recommended, encouraging students to engage in discussions and revise their notes. Through this approach, students have the opportunity to reflect on the lecture material, including its organizational structure, pose questions, and clarify uncertainties. It has been demonstrated that incorporating pauses into lectures significantly enhances learning effectiveness compared to uninterrupted lectures.

Retrieval practice

Incorporate a brief pause of two to three minutes every 15 minutes, during which students are required to articulate all components of the preceding class segment from memory. Employing this approach facilitates information retrieval from memory, thereby enhancing long-term retention, fostering the ability to comprehend subsequent materials, and promoting the transfer of acquired knowledge to novel domains.

Decision-making activities.

Inviting students to assume the role of decision-makers, facing a complex issue requiring difficult choices and advocating for their decisions. By providing a brief description of a challenging scenario, encouraging students to form groups for decision-making, and subsequently sharing their decisions along with explanations for the choices made. This engaging approach stimulates students to engage in critical thinking about challenging problems, prompting them to demonstrate creativity in seeking solutions. The "real" nature of the problem helps foster students' desire for in-depth investigation of the issue (Handelsman et al., 2007).

In general, the implementation of these strategies has not only expanded the boundaries of traditional teaching but also provided students with more

specific and personalized learning experiences. In future educational practices, continuing to research and draw inspiration from active learning strategies will contribute to the creation of a more inspiring and innovative learning environment, igniting students' endless enthusiasm for knowledge exploration.

In this research, researcher have integrated several of these active learning strategies to enhance the learning experience of college students. Specifically, researcher have utilized decision-making activities, minute papers, cooperative learning, think-pair-share, and questions and discussions. These strategies have proven effective in fostering critical thinking, encouraging active participation, and promoting deeper understanding among students. Researchers aim to utilize these approaches to establish a dynamic and captivating classroom atmosphere conducive to fostering students' social and emotional learning (SEL) abilities.

2.2.5 The Review of Active Learning Researches

Kustyarini (2020) investigates the educational outcomes of students in the field of Indonesian language and literature education, focusing specifically on the influence of student perceptions regarding active learning methodologies on self-efficacy, emotional intelligence, and overall learning achievements. The study reveals that the implementation of active learning methods yields favorable impacts on student learning outcomes, with student self-efficacy and emotional intelligence identified as pivotal factors contributing to this effect. Employing structural equation models for data analysis, the research sample was drawn from 160 students enrolled in Indonesian language and literature education programs within the East Java region.

An intervention employing an active learning approach was executed for the participating students. This involved active expression of opinions, engagement in group discussions, fostering effective classroom interactions, and similar activities. The investigation revealed that the integration of active learning methodologies significantly enhances students' engagement in learning activities and contributes to the amelioration of learning outcomes. Consequently, the study intervenes in the students' learning

processes through the incorporation of active learning methods with the aim of enhancing overall academic achievement.

The research employed a Structural Equation Model (SEM) for data analysis, utilizing questionnaires to collect data. Following this, the replies were documented, processed, and assessed. Hypothesis testing utilized the Critical Ratio (CR) coefficient, resulting in null hypothesis rejection when the p-value was ≤ 0.05 . The investigation delved into indirect effects by comparing total and direct effects. If the total effects surpass the direct effects, it suggests that self-efficacy and emotional intelligence act as mediators in the impact of active learning methods on students' learning outcomes. The study ultimately posited that active learning methods contribute to the enhancement of students' self-efficacy, while also establishing a positive relationship between emotional intelligence and students' academic achievement.

Freeman et al. (2014) conducted a study to explore how active learning impacts student performance in science, technology, engineering, and mathematics (STEM) disciplines. By analyzing 225 studies in a thorough meta-analysis, the researchers found that active learning significantly improves student performance over traditional lecture-based methods, as indicated by both test scores and concept assessments.

Specifically, active learning was associated with a notable increase of approximately 6 percent in students' test scores, in contrast to the traditional teaching approach. Students undergoing traditional teaching were found to face a 1.5 times higher probability of failure compared to those engaged in active learning. The study additionally emphasized that active learning yielded a more pronounced impact on concept tests, displaying favorable outcomes across diverse class sizes, particularly in smaller classes with no more than 50 students.

Employing a meta-analysis methodology, the researchers scrutinized students' performance in terms of test scores and concept tests. The application of a random-effect model and an effect size calculation method enhanced the reliability and interpretability of the research findings. These methodologies were instrumental in

mitigating potential confounders, providing a more precise assessment of intervention effects, and facilitating the determination of their generalizability under varied conditions.

The results of the analysis showed a statistically significant beneficial impact of active learning on student achievement in science, engineering, and mathematics. Active learning was found to augment students' test scores by nearly half a standard deviation, while traditional teaching methods were associated with an increased likelihood of student failure. These findings were consistent across various STEM subjects, class sizes, course types, and course levels, with a particular emphasis on the efficacy of active learning in smaller classes and its positive impact on concept test performance.

2.3 Definition of the Learning Model

Learning is characterized by the enduring transformation in an individual's knowledge or behavior resulting from experiences or practice. De Houwer et al. (2013) conceptualize learning as the process by which experiences exert influence on behavior, thereby instigating behavioral modifications rooted in those experiences. Similarly, Lave (2009) views learning as the acquisition and exposure to novelty, culminating in entirely new learning experiences. Consequently, the definition of where meaningful learning can transpire is no longer confined, as opportunities for learning abound in various contexts of everyday life. Human learning is an actively constructive process, wherein learners are not passive recipients of external information. Instead, they actively and selectively perceive external information based on their pre-existing cognitive structures, thereby constructing meaning in the current context. The inherent nature of human learning can be succinctly captured through an "interact-construct-assess" model (Zhang Xiaorong, 2009). A model is a way of conceiving, representing, or explaining objects, systems, or concepts, usually through simplified or idealized representations (Dakhi et al., 2020). The role of models can encompass various entities, including objects, phenomena, processes, thoughts, and their systems. Moreover, models can be viewed as a link or intermediary between theory and the real world, as

they aid in deriving theories from data and applying these theories to the natural world (Chamizo, 2011).

A pedagogical model is a systematically structured form or framework designed to accomplish specific learning objectives, grounded in established learning theories or tailored to individual student learning styles. It comprises components focused on establishing the learning environment and facilitating interactive processes, all directed towards enhancing students' achievement of more favorable learning outcomes (Dakhi et al., 2020).

Learning models function as theoretical frameworks or paradigms employed for the elucidation and depiction of the learning process. Several prominent learning models exist, including the behaviorist learning model, which accentuates learning through stimuli and feedback to mold and fortify behavior; the cognitive learning model, which centers on individual cognitive processes, underscoring the significance of perception, attention, memory, thinking, and meta-cognition; the social learning model, which underscores the impact of the social environment on learning, particularly through the observation and imitation of others' behaviors; the constructivist learning model, proposing that learning involves a mutual interaction and building process between the individual and the surroundings, emphasizing the active creation of knowledge and comprehension by the individual; and the connectionist learning model, grounded in neural networks and brain structure theories, emphasizing that learning is accomplished through the connections and reinforcement of neurons. These diverse learning models furnish us with varied perspectives and methodologies for comprehending the intricacies of the learning process.

"A Comprehensive Literature Review"

Through a comprehensive literature review, this paper meticulously analyzes the theoretical and empirical foundations of social and emotional learning (SEL) and active learning, laying a solid groundwork for subsequent research. This chapter systematically explores various dimensions of SEL, from its definition and framework to its crucial importance in educational settings. Research indicates that

social emotional learning (SEL) includes fostering self-awareness, self-regulation, empathy, interpersonal skills, and effective decision-making, all essential for students' overall well-being and academic achievement.

As previously mentioned, the framework of SEL is multifaceted, involving schools, families, and communities to cultivate a supportive environment. The positive impacts of SEL on academic performance, mental health, and interpersonal relationships underscore its significance. Additionally, the literature reviews various active learning strategies, including but not limited to decision-making activities, minute papers, cooperative learning, think-pair-share, and discussions. These strategies are pivotal in creating an engaging and supportive learning atmosphere.

Measurement of SEL is another critical area addressed in this report. Various tools and methods are discussed, emphasizing the need for reliable and effective measures to accurately assess SEL competencies. A review of existing SEL research provides insights into the effectiveness of different intervention measures and highlights current research gaps. This study will employ the four-point Likert scale to measure and collect data on social-emotional learning, supported by multiple studies validating the questionnaire's objectivity and effectiveness.

Simultaneously, a thorough exploration of the research foundation of active learning is conducted. Defined as a teaching approach that actively engages students in the learning process, active learning is rooted in constructivist theory. Detailed discussions cover the steps and strategies of active learning, such as collaborative activities, problem-solving tasks, and interactive discussions. The literature review emphasizes the efficacy of active learning in enhancing student engagement, critical thinking, and knowledge retention.

This study aims to develop and evaluate a specifically designed active learning model to enhance SEL among college students. Building upon the theoretical foundations proposed in this literature review, the study adopts strategies validated in previous research. By integrating SEL into an active learning framework, this research

endeavors to create a comprehensive educational approach that promotes not only academic achievement but also emotional and social well-being.

In conclusion, the literature review of this paper provides a solid theoretical and empirical foundation for current research. It ensures that the research is grounded in existing knowledge while addressing identified gaps, thereby advancing discourse on SEL and active learning in higher education.



CHAPTER 3

RESEARCH METHODOLOGY

In this study objective evaluates the changes in active learning model for enhancing social emotional Learning of college students. The objectives of this study are to:

- 1) To study the definition and components of SEL of college students.
- 2) To develop the active learning model for enhancing SEL of college students.
- 3) To evaluate the effectiveness of the active learning model on SEL of college students.

Therefore, the researcher divided the study into 3 phases, as detailed below:

Phase 1: To Definition and Components of Social and Emotional Learning (SEL) in College Students

This study employed comprehensive qualitative and quantitative research methods. Researcher conducted a literature review and in-depth interviews with five senior experts in psychology and education to gather key data. Through thorough analysis of these data, researcher identified professional terminology, practical definitions, and the constituent elements of social and emotional learning (SEL) among college students. Subsequently, a survey questionnaire was designed to assess SEL in college students, ensuring its reliability through rigorous quality checks.

Phase 2: To Development of an Active Learning Model to Enhance SEL in College Students

Researcher aimed to expand an active learning model to enhance college students' social and emotional learning capabilities. Utilizing data collected in Phase One, along with comprehensive literature reviews, relevant theoretical research, and interviews with the five senior experts, researcher established guiding principles for developing the active learning model. Based on these principles, a series of 14 sessions, each lasting 90 minutes, were designed to enhance SEL. This study seeks to construct an active learning model that effectively promotes social and emotional

learning among college students. This step prepared for the assessment of the active learning model.

Phase 3: To evaluate the effectiveness of the active learning model on SEL of college students.

To evaluate the effectiveness of the active learning model in practical application, the model was applied to a specific sample group. Researcher used measurement tools developed in Phase One (the survey questionnaire) to conduct pre-tests, post-tests, and follow-up tests on the sample. The evaluation aims to comprehensively understand the impact of the active learning model in real-world applications and systematically analyze and validate its effectiveness.

Conclusions from the Three Phases of Research:

- 1 In the initial stage of the research, the researchers clarify the definition and essential components of social and emotional learning among college students.
2. During the subsequent phase of the study, a dynamic learning framework is formulated to bolster social and emotional learning in college students.
3. In the final phase of the study, the efficacy of the dynamic learning framework in enhancing social and emotional learning among college students is evaluated.

The results from these three research phases will be discussed in detail in subsequent chapters.

3.1 Phase 1: To Definition and Components of Social and Emotional Learning (SEL) in College Students

In the initial phase of the study, researcher employed a combined approach of qualitative and quantitative data, adhering to the following procedural steps.

3.1.1 The Collection of Qualitative Data

3.1.1.1 Literature review study

The first stage of research is divided into three steps, the first is literature review. This step aims to obtain theoretical and conceptual information about SEL by

systematically analyzing and synthesizing existing academic literature and research findings. As the starting point of the research, the literature review is helpful to understand the definition and scope of SEL and its development in the fields of education and psychology.

In the literature review study, the researcher will collect a wide range of relevant literature on SEL, including but not limited to academic journal articles, books, research reports and other relevant publications. Through systematic screening, analysis and summary of these literatures, researchers can identify different scholars' viewpoints and definitions of SEL theory and concept, as well as the application of these theories in practical education and social environment.

3.1.1.2 The Development of Semi-Structured Interview Questionnaire

(1) The pertinent literature and research on Social Emotional Learning (SEL) were comprehensively examined utilizing qualitative research methods. This comprehensive review served as a foundation for crafting a semi-structured interview guide, characterized by open-ended questions, tailored to engage qualified interviewees within the field. The guide encompasses inquiries centered around the following key issues:

- 1) Expert Basic Information;
- 2) Constituent Components of Social Emotional Learning in College Students;
- 3) Formulating Guidelines for Developing a Proactive Learning Model to Enhance College Students' Social Emotional Learning;
- 4) Methods or Criteria for Measuring or Evaluating College Students' Social Emotional Learning (Refer to Appendix C for Details).

(2) Expert Information

Five experienced experts with expertise in the field of psychology and education make up the team of information providers. The first four experts are distinguished faculty from Srinakharinwirot University in Thailand. They have doctorates in psychology or education and have rich professional knowledge in education and

psychology. Professor Yang Ning is a respected professor in the School of Education of Guangdong Baiyun University. He holds a doctorate in Education with a strong academic background and extensive experience working in higher education. These experts all have deep expertise in their respective fields. They are:

- 1) Assoc.Prof.Dr.Jirea Dudsdeemaytha
- 2) Instructor Dr. Kanchit SanuBon
- 3) Assoc.Prof.Dr. Sittipong Wattananonsakul
- 4) Dr. Sittiporn Kramnnon
- 5) Professor Ning Yang

(3) The qualification criteria for experts encompass the following aspects:

- 1) Possession of a doctoral degree or professorship in the fields of education, psychology, educational psychology, or related domains.
- 2) Employment in an academic capacity at a university or relevant institution in the fields of education, psychology, or educational psychology for a minimum of five years.

(4) Creation and Quality Assurance Steps of Interview Questionnaire

The tool employed for data collection is semi-structured interviews, with the following steps undertaken for their creation and quality assurance:

- 1) Comprehensive review of literature in the field of social and emotional learning: Researchers conducted an in-depth review of relevant literature on social and emotional learning, carefully studying methods for creating semi-structured interview protocols and providing information for designing questions.

- 2) Clarification of interview objectives and question design: Clearly define the objectives of semi-structured interviews, meticulously design the thematic framework of questions, and ensure comprehensive coverage across relevant domains.

3) Development of open-ended questions: Designing open-ended questions ensures consistency with the predetermined objectives, systematically organizing the content of semi-structured interviews into clear and coherent questions.

4) Validation of interview guide: The developed semi-structured interview guide underwent content review by professionals to ensure accuracy and relevance.

5) Revision and refinement: Based on feedback from professionals, the semi-structured interview guide was revised and refined to enhance its quality and applicability. See the process of creating the semi-structured interview guide in detail in the diagram.

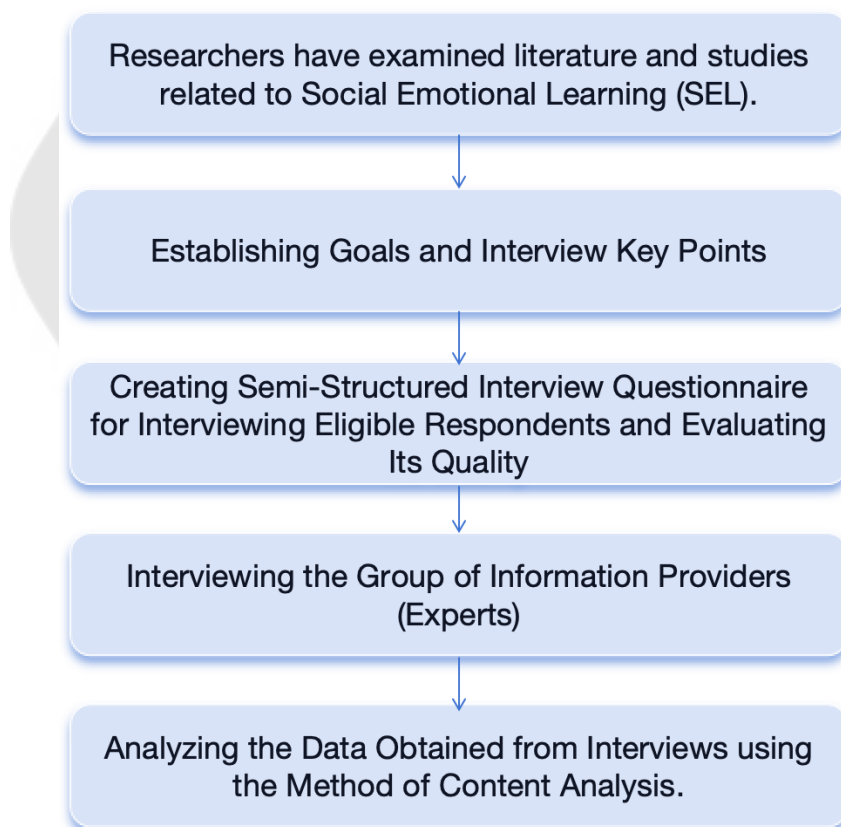


FIGURE 2 Steps in the developing process of a Semi-Structured Interview Guideline

Semi-Structured Expert Interview Questionnaire

This semi-structured interview questionnaire is designed to explore the definition and components of social emotional learning among college students in China, provide guidelines for developing an active learning model to enhance social emotional learning, and establish research measurement instruments to evaluate social emotional learning among college students in China.

The questionnaire consists of two main sections:

Section 1: General Information

This section collects basic information about the expert including name, educational background, work experience, position, organization, specialized field, and the date and time of the interview.

Section 2: Problem Orientation

This section addresses three key questions:

1. Definition and Components of Social Emotional Learning: This part investigates the expert's perspective on the definition of social emotional learning for college students in China, and assesses the suitability of the widely recognized CASEL framework's five core components for Chinese college students.

2. Guidelines for Developing an Active Learning Model: Experts are asked to define an active learning model for college students and provide guidelines on how such a model can be structured to enhance social emotional learning among Chinese college students. This includes discussing characteristics, steps, and potential psychological techniques or activities that could be integrated.

3. Guidelines for Developing Research Measurement Instruments: This segment focuses on the selection of appropriate research measurement tools to evaluate social emotional learning among college students in China. Experts are prompted to consider the suitability of existing questionnaires like the Social Emotional Learning for College Students Questionnaire and suggest alternative measurement tools if applicable.

The questionnaire is intended to be used in face-to-face semi-structured interviews with experts, allowing for comprehensive coverage of the topics while maintaining flexibility to delve into detailed expert insights. Its design facilitates in-depth exploration and gathering of data and information regarding the definition, development, and evaluation of social emotional learning among college students in China from the perspective of experts.

3.1.1.3 Developing of Social Emotional Learning Questionnaire for college students

Researcher is needed to create a survey aimed at measuring and collecting data on college students' social-emotional learning (SEL) for the third stage of their study. Drawing inspiration from the Washoe County School District Social and Emotional Competence Assessment (WCSD-SECA Long), the researchers have designed a tool specifically tailored to assess SEL in college students. The WCSD-SECA Long is designed to evaluate students' social and emotional competencies, aligning with the five SEL competency clusters proposed by the Collaborative for Academic, Social, and Emotional Learning (CASEL). This tool was developed collaboratively with the Washoe County School District, CASEL, and the University of Illinois at Chicago.

The initial draft questionnaire covered the five components of SEL. Researchers submitted this draft to three Subject Matter Experts (SMEs) for evaluation, scoring 1.0. Subsequently, the questionnaire was tested on a sample of 100 college students with similar backgrounds, achieving a reliability score of 0.963. Based on these preliminary test results, the questionnaire was refined, resulting in a final version consisting of 35 questions, encompassing the five components of social-emotional learning. This final questionnaire will be used in phases two and three of the study to survey students from the Early Childhood Education Department at Guangdong Baiyun University, collecting baseline data reflecting their current levels of social-emotional learning.

There is extra space here, please help me adjust, thank you teacher

Steps in Questionnaire Construction

This study employed a questionnaire on college students' social-emotional learning as a research tool to gain in-depth understanding of their social-emotional learning characteristics and levels. The following steps were taken during the tool's development and quality assurance process:

1. Extensive literature review conducted by the researcher, including research papers, textbooks, and global and domestic studies on social-emotional learning. Researcher referenced the clear definitions and concepts of social-emotional learning provided by CASEL. Additionally, a research framework for college students' social-emotional learning was constructed through in-depth interviews with five professionals, integrating their perspectives. The comprehensive review detailed elements of college students' social-emotional learning, including: 1) self-awareness; 2) self-management; 3) social awareness; 4) relationship skills; and 5) responsible decision-making.

2. Researcher developed a college student social-emotional learning questionnaire consisting of 35 items. The questionnaire comprehensively covers the aforementioned elements of social-emotional learning, including:

- 1) A self-awareness section with 6 items;
- 2) A self-management section with 6 items;
- 3) A social awareness section with 8 items;
- 4) A relationship skills section with 8 items;
- 5) A responsible decision-making section with 7 items.

These items are formulated using professional terminology and operational definitions. Responses to these items are categorized into four levels, ranging from "Not like me at all" to "Like me very much".

3. Submission of the college student social-emotional learning questionnaire to three SMEs, including the following experts:

- 1) Associate Prof. Dr. Monthira Jarupang

2) Instructor Paradee Kambhu Na Ayudhaya

3) Instructor Dr. Kanchit SanuBon

These experts were responsible for reviewing the accuracy of the tool's content, appropriateness of language use, and suitability of questions to each element's operational definition. Furthermore, they assessed the empirical validity (content validity) of each element. The consistency index (IOC) calculated from the experts' ratings was 1.0 for all 35 questions. Subsequently, researcher revised and modified questionnaire items based on expert recommendations to enhance the questionnaire's quality.

1. Use of the revised college student social-emotional learning questionnaire to survey 100 first-year undergraduate students with similar backgrounds. Data collection was conducted using the validated "College Student Social-Emotional Learning Questionnaire". A total of 100 questionnaires were distributed, with a 100% response rate achieved. Subsequently, a completeness check was performed on all questionnaires to ensure each question was answered without omissions. Ultimately, 100 complete questionnaires were used for analysis. Using this dataset, a thorough computation of Cronbach's Alpha coefficient yielded a reliability score. The overall reliability coefficient for the questionnaire was 0.963 (see Appendix F for details).

Similar to the WCSD-SECA Long survey, our tool also utilizes a four-point Likert-type scale, with scoring criteria based on the following ranges:

- 1.00-1.74: Low
- 1.75-2.49: Moderate Low
- 2.50-3.24: Moderate-High
- 3.25-4.00: High

In subsequent steps, a scale for assessing college students' social-emotional learning was created based on charts.

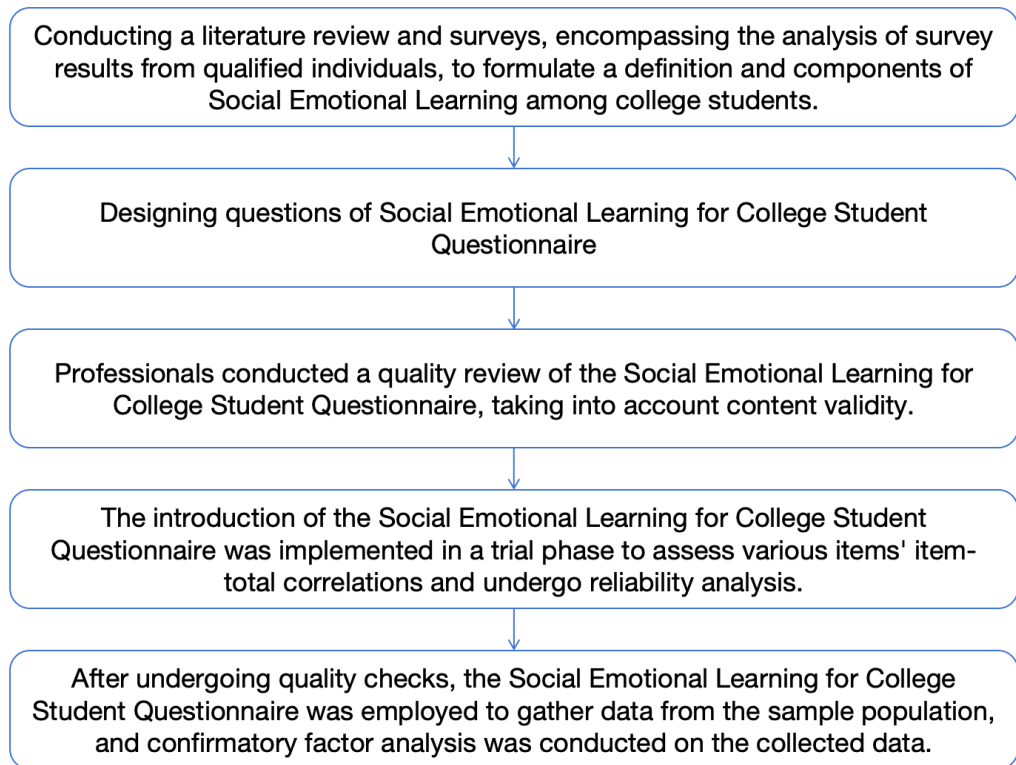


FIGURE 3 Development of the Social Emotional Learning questionnaire for College Students

These criteria are used to assess participants' performance levels across various dimensions of social-emotional competencies

Presenting the construction steps of the Social Emotional Learning (SEL) survey questionnaire for university students. Below is a sample table for measuring university students' SEL:

Guidance Instructions: Students are requested to carefully review and thoroughly comprehend each item in the questionnaire and mark the corresponding check (✓).

In describing characteristics relevant to you, please rate each question.

The rating is divided into four levels, as follows:

1	2	3	4
Very unlike me	Somewhat unlike me	Somewhat like me	Very like me

NO	Questions	Choice			
		Very unlike me	Somewhat unlike me	Somewhat like me	Very like me
1	know my own strengths and weaknesses.				
2	I don't know how to stay calm in the face of stress.				
3	Before I make a decision, I fully consider all possible circumstances.				
4	Understand other behavior by considering their feelings and thoughts				
5	I will finish my job even if I am in a bad mood				
6	I don't think violating the school rules is a very serious matter.				

3.2 Phase 2: To Development of an Active Learning Model to Enhance SEL in College Students

The second phase of the research aims to address the second and third research objectives: developing an active learning model to enhance college students' social emotional learning and evaluating the outcomes of this model. This phase of the study is divided into two parts.

3.2.1 Development of An Active Learning Model to Enhance Social Emotional Learning of College Students

Researcher undertook the following steps:

Step 1: Expert Interviews

Researcher conducted interviews with three experts to gain insights into the fundamental steps of the active learning model. These interviews provided valuable information on the components of social-emotional learning (SEL) within the Chinese social context, including self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. This foundational data informed the theoretical framework for the active learning model, which draws heavily on Bonwell and Eison's 1991 concept of active learning.

Step 2: Design of Active Learning Lesson Plans

Researcher designed a set of 14 lesson plans aimed at enhancing college students' social-emotional learning through active learning methods. Each lesson plan, lasting 90 minutes, was structured around three main steps: Lead-In, Learning Activity Process, and Conclusion. The lesson plans were centered on student engagement and collaborative learning, with activities tailored to address the five SEL components: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making.

Step 3: Expert Evaluation of Lesson Plans

The 14 lesson plans were submitted to 3 Item Objective Consistency (IOC) experts for evaluation. The experts, whose credentials are detailed in Appendix G, reviewed the lesson plans to ensure they met the research requirements. The evaluations yielded consistency scores is 1.0, indicating a reasonable alignment with

the intended learning objectives. Based on the experts' feedback, further refinements were made to improve the lesson plans.

Step 4: Active learning model teaching plans Try-Out

From the experimental group, 10 students were randomly selected to participate in a try-out phase, which spanned two days with sessions lasting one hour each. This phase involved implementing portions of the lesson plans to observe students' reactions and acceptance of the activities. Insights from this try-out phase were used to make additional adjustments to the lesson plans to enhance their effectiveness.

By systematically progressing through these steps, the researcher aimed to develop, implement, and evaluate an effective active learning model that enhances the social-emotional learning of university students. Details of the study are as follows:

3.3 Phase 3: To evaluate the effectiveness of the active learning model on SEL of college students.

3.3.1 Research design

The researchers applied the improved active learning mode to the sample group, and conducted experiments on the experimental group and the control group respectively. The researchers adopted the randomized control-group pretest-posttest design. It is divided into four steps. The experimental mode is shown in Table 2:

TABLE 1 Randomized Control-Group Pretest-Posttest Design

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

The meanings of the symbols are as follows:

E Experimental Group

C Control Group

R Random Allocation

T1 Pre-Test

T2 Post-Test

T3 Follow up test

X Experiment

_ No Experiment

3.3.2 Identify population and sample size

Population

This study aims to explore the impact of active learning models on college students' social-emotional learning. The sample selected for this study consists of all first-year students at Guangdong Baiyun University, totaling 3,612 individuals.

Sample

The samples were taken from 40 first-year undergraduates majoring in preschool education in the School of Education of Guangdong Baiyun University. The questionnaire of Social Emotional learning for college students was adopted with voluntary participation. The selection method is that the researchers rate the participants from high to low based on their predicted questionnaire results, and then select the 40 individuals with the lowest scores as the study sample. The researchers divided 40 students into an experimental group and a control group of 20 students each. The grouping principle is designed to ensure that there are no significant differences in social-emotional learning ability between the two groups of students.

3.3.3 Research procedure

According to the above experimental design, the experiment was divided into four stages.

1) Pre-test period

The researcher employed a questionnaire on social-emotional learning (SEL) targeted at university students as the measurement instrument, followed

by a pre-test. A questionnaire survey was administered to 262 university students to assess their levels of social-emotional learning. Subsequently, the survey responses were ranked, and the lowest scoring 40 students were selected as the research sample.

2) Experiment period

During the teaching stage, researcher conducted teaching activities according to the specified timetable and employed an active learning mode. This stage lasted for 6 weeks, comprising a total of 14 classes, each lasting 90 minutes. The control group did not receive any learning mode

3) Post-test period

Following completion of the experiment by the experimental group, researcher administered the "Social Emotional Learning Survey for College Students." Subsequently, both experimental and control groups underwent repeated experimental trials, followed by post-experimental assessments.

4) Follow up period

The researcher conducted the Social Emotional Learning Questionnaire for college students again one month after the teaching activities. Subsequently, this set of follow up data is collected and analyzed.

3.3.4 Data Analysis

In this section, the researcher conducts a thorough classification and quantitative analysis of the data to achieve the research objectives. The analysis process includes the following steps:

1. Preliminary Statistical Analysis:

- Perform basic statistical analysis on the raw data, including calculations of mean values and standard deviations.
- Conduct t-tests and F-tests to evaluate significant differences in social-emotional learning (SEL) levels among the participants.

2. Quality Checks in Active Learning Model:

- Implement quality checks within the active learning model to ensure the promotion of social-emotional learning among college students. This includes analyzing the accuracy of the content delivered through the model.

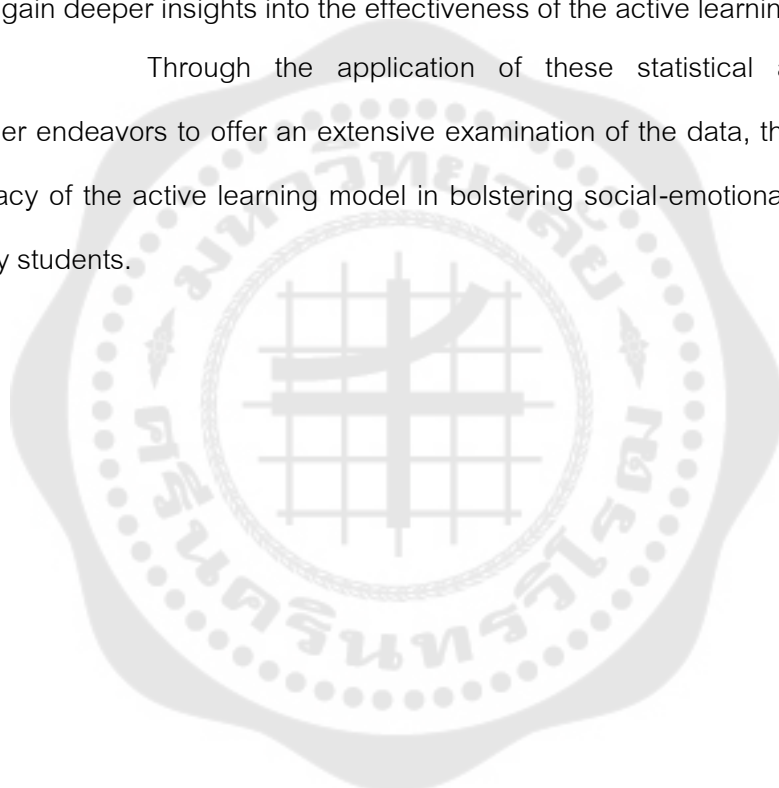
- Derive a consistency index based on expert opinions to assess the reliability and validity of the active learning strategies employed.

3. Comparative Analysis:

- Apply one-way and two-way repeated measures ANOVA to compare the mean values and standard deviations of the social-emotional learning levels of the experimental group pre- and post-intervention.

- Examine the interactions between different factors affecting SEL levels to gain deeper insights into the effectiveness of the active learning model.

Through the application of these statistical approaches, the researcher endeavors to offer an extensive examination of the data, thereby confirming the efficacy of the active learning model in bolstering social-emotional learning among university students.



CHAPTER 4

RESEARCH RESULTS

Research Topic: "The Development of Active Learning Model for Enhancing Social Emotional Learning of College Students"

The research aims to investigate the social emotional learning of college students, focusing on the development and evaluation of an active learning model aimed at enhancing social emotional learning among this demographic. The study establishes symbols and letters for data analysis and presents corresponding data analysis results as follows:

Symbols and Letters Used in Data Analysis

Researcher have defined symbols and letters used in data analysis as follows:

- N represents the number of individuals in the sample.
- M represents the mean.
- t represents the statistical value (t-test).
- p represents the level of statistical significance.
- D. represents the standard deviation.
- df represents the degrees of freedom
- MS represents the Mean Square
- η^2 represents the eta-squared

Data Analysis Result

In this study, researcher delineate four phases of data analysis as follows:

Phase 1: Constituent Analysis of Social Emotional Learning

Phase 2: Development of an Active Learning Model to Enhance Social Emotional Learning Among College Students

Phase 3: Evaluation of the Active Learning Model for Enhancing Social Emotional Learning Among College Students

Phase 1: Definition and Components of Social Emotional Learning

When defining the elements of social-emotional learning (SEL), researchers have utilized the description offered by the Collaborative for Academic, Social, and Emotional Learning (CASEL). Simultaneously, they engaged in interviews with five experts to explore their viewpoints regarding the definition and components of SEL. Below are the detailed findings

(1) Definition of Social Emotional Learning

At the same time, interviews with experts reveal that the purpose of SEL for college students is to better understand and manage their emotions, build positive social relationships, and cultivate responsible decision-making in a rapidly changing and challenging social environment. *"SEL involves the ability to guide social integration, manage personal emotions and participate in interpersonal dynamics."* (Expert A). *"It's a way for young people to understand how to get along with society and others, a learning ability, learning how to control their behavior, how to regulate their emotions, and how to interact with others."* (Expert B) In addition, an associate professor of psychology added, *"SEL needs the ability to understand emotions, including self-awareness and empathy for others."* (Expert C).

Simultaneously, interviews with experts revealed unanimous consensus regarding the aim of social emotional learning (SEL) for college students, which is to facilitate a better understanding and management of one's own emotions, the establishment of positive social relationships, and the cultivation of responsible decision-making amidst the rapidly changing and challenging societal landscape. For instance, *"SEL encompasses the capacity to navigate societal integration, manage personal emotions, and engage in interpersonal dynamics"* (Expert D). *"SEL is a way for young people to know how to link with society and with others, and a learning ability to learn how to control their behaviour, how to adapt to their emotions and how to interact with others."* (Expert A). Additionally, an associate professor in psychology added that: *"SEL entails the aptitude to comprehend emotions, encompassing both self-awareness and empathy towards others."* (Expert E).

Based on a review of literature and interviews with experts, we can define college students' social emotional learning as a process enabling them to acquire and

apply knowledge, competencies, and attitudes for fostering positive self-identities, regulating emotions effectively, and achieving personal and collective goals. This encompasses students' growth in empathetic understanding, demonstrating compassion, establishing and nurturing supportive connections, and making thoughtful and ethical choices.

(2) Components of Social-Emotional Learning

These experts concur that the constitution of social-emotional learning (SEL) among college students can be predicated upon the CASEL (Collaborative for Academic, Social, and Emotional Learning) framework. Through scrutiny of extant literature and consultations with subject matter specialists, the constituent elements of social-emotional learning have been distilled to five, delineated as follows:

Component 1: Self-awareness

According to CASEL (2023), self-awareness is defined as follows: "Self-awareness refers to the ability to recognize and understand one's own emotions, strengths, weaknesses, values, and goals, including self-perception, self-confidence, and the ability to accurately assess one's own feelings, though." In the interview, experts offer their own understanding of self-awareness. *"self-awareness encompasses not only the accurate understanding of one's emotions but also the comprehension of one's own behavior."* (Expert C).

In summary, within the framework of social emotional learning among university students, self-Awareness refers to the capability of students to gain a comprehensive understanding of their emotions, values, abilities, and goals through self-reflection and self-assessment. This involves recognizing their emotions, identifying their strengths, and acknowledging areas that need development. A self-aware college student can articulate their feelings, understand how their values influence their decisions, and recognize both their strengths and areas for improvement.

Component 2: Self-management

CASEL (2023) defines self-management as follows: "Self-Management refers to the ability to regulate one's emotions, thinking, and behavior in

different situations, including skills such as self-control, coping with stress, goal setting, and organizational skills."

"self-management also encompasses impulse control, necessitating regulation of both positive and negative emotions." (Expert D). Simultaneously, two Professors, one in Counseling Psychology and the other in Guidance Psychology, contend that: the term "organizational skills" might be more appropriately aligned with the realm of Social Awareness, given its inclination towards interpersonal dynamics.

In summary, self-management denotes the capability of students to effectively manage their emotions, which includes skills such as emotional regulation, stress management, goal setting, and self-discipline. This helps students cope with various situations and maintain focus on their objectives. A college student with strong self-management skills remains calm under pressure, sets and works towards personal and academic goals, and demonstrates self-discipline in their daily activities.

Component 3: Social Awareness

According to CASEL (2023), Self-Management is defined as "the ability to regulate one's emotions, thinking, and behavior in different situations, including skills such as self-control, coping with stress, goal setting, and organizational skills."

In light of the above, and in conjunction with recommendations from experts during interviews regarding the categorization of organizational skills, Social Awareness is defined as: the ability of students to develop an understanding and empathy towards others, including respect for different backgrounds and cultures. This skill allows students to recognize and appreciate diversity, which contributes to the establishment of positive interpersonal relationships. A socially aware college student shows empathy, respects cultural differences, and engages constructively in a diverse community.

Component 4: Relationship Skills

The definition of Relationship Skills, as provided by CASEL (2023), entails the capacity to cultivate and sustain wholesome and constructive relationships with peers. This incorporates proficiency in communication, active listening, collaboration, conflict resolution, and adeptness in collaborative endeavors. Both an

Assistant Professor and an Associate Professor with a Ph.D. in Counseling Psychology underscored the significance of collaboration and synergistic efforts, suggesting that such connotations be encompassed within the definition to better articulate and encapsulate the constitutive elements of undergraduate social emotional learning. Accordingly, we have delineated the definition of Relationship Skills, which is the ability of students to build healthy, positive, and collaborative relationships through effective communication, teamwork, and conflict resolution skills. This involves active listening, empathy, and the ability to work cooperatively with others. A college student with strong relationship skills communicates effectively, works well in teams, and resolves conflicts constructively.

Component 5: Responsible Decision-Making

According to CASEL (2023), Responsible Decision-Making is defined as the capability of students to weigh alternatives, consider consequences, and make responsible choices. This skill aids students in making wise decisions when faced with challenges and uncertainties. A college student with responsible decision-making skills carefully evaluates options, considers the impact of their decisions, and chooses actions that reflect their values and goals.

Based on literature reviews and expert interviews, Social Emotional Learning (SEL) aims to assist university students in enhancing their comprehension and control of emotions, fostering constructive social connections, and making thoughtful choices within a dynamic and demanding social context. Based on a study of the existing literature, SEL includes five core components: self-awareness, self-management, social awareness, interpersonal skills, and responsible decision making. According to interviews with experts, these skills enable students to develop a healthy self-identity, regulate emotions, establish and maintain supportive relationships, and make compassionate and responsible decisions. Ultimately, we come to the conclusion that SEL helps students achieve their personal and community goals.

(3) Reliability test of social-emotional learning questionnaire for college students

Appendix F presents the reliability analysis of the social emotional learning (SEL) questionnaire administered to college students. Reliability denotes the stability of a measurement, playing a vital role in verifying the credibility and accuracy of research results. Cronbach's alpha coefficient was utilized to assess the reliability of the SEL survey, evaluating its internal coherence.

As shown in Table 1, each item of the SEL questionnaire exhibits a reliability coefficient (r) greater than 0.5, indicating a moderate to strong level of internal consistency across the items. The individual reliability coefficients range from 0.502 to 0.726, all of which fall within the acceptable range for psychological and educational testing instruments.

The overall reliability coefficient value for the SEL questionnaire is 0.963, which is considered excellent. This high level of reliability suggests that the items within the questionnaire consistently measure the intended constructs of social-emotional learning among college students. Consequently, the questionnaire can be deemed a reliable tool for assessing the social-emotional competencies of this population.

Phase 2: Development of an Active Learning Model to Enhance College Students' Social Emotional Learning

Researcher have systematically developed an active learning model aimed at enhancing college students' social and emotional learning. This model is implemented through 14 instructional sessions. In the process of developing this active learning model to improve college students' social and emotional learning, two main aspects are included: the first part concerns the ideas and principles of developing the active learning model, and the second part pertains to the specific active learning model. The details are as follows:

1) The Concept and Principles of Active Learning Model Development

In the process of developing an active learning model to enhance college students' social-emotional learning, researchers first clarified the definition and

components of social-emotional learning for college students. In the initial phase of the study, researchers reviewed literature and studies related to active learning and social-emotional learning, drawing on the theoretical perspectives of CASEL (2023) and Bonwell & Eison (1991), and incorporating findings from expert interviews. They summarized five components of social-emotional learning for college students: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

There are various programs designed to enhance learners' social-emotional learning (SEL). Numerous evidence-based SEL programs have become established as both in-school and out-of-school training initiatives to improve social and emotional learning for children and adults. These programs also provide guidance for educators in selecting the most suitable SEL programs for their students. Some of the more common SEL programs include The 4Rs Program, Mind UP, PATHS, among others (Jones et al., 2017). In this study, the researchers have adapted the RULER program to better suit college students. RULER is specifically designed for pre-K to 12th-grade students as a method for social-emotional learning. The aim is to promote emotional intelligence in both students and adults, allowing adults to demonstrate these abilities. Furthermore, establishing a nurturing and positive emotional environment to support student growth is also a focus of this research. The specific implementation of RULER involves consolidating emotional intelligence through 16 lessons per year, integrated into daily practice. The curriculum includes weekly vocabulary lessons, with each session lasting 10-20 minutes.

In the first phase of the research, five experts were interviewed to explore methods for developing an active learning model aimed at enhancing social-emotional learning among university students. The experts' opinions are summarized as follows:

1. In the context of China, an active learning model designed to enhance university students' social-emotional learning should include three steps: Lead In, Learning Activities Process, and Conclusion. These steps are consistent with the theory

of Bonwell & Eison (1991) and serve as the primary theoretical basis for researchers when designing autonomous learning activities or models.

2. Experts recommend employing a variety of activities to engage students in the learning process. These activities should be based on Constructivism Theory and Active Learning Theory, with a "student-centered" approach. Additionally, psychological principles should be utilized to design activities that foster student participation and enthusiasm. Examples include mutual listening and sharing among students, case studies, discussions, and teamwork.

By reviewing relevant literature and research, as well as information from expert interviews, the researchers identified three key components of autonomy in the Chinese social context, namely Lead In, Learning Activities Process, and Conclusion. Therefore, this study aims to enhance university students' social-emotional learning by designing and implementing teaching practices based on these three components.

Theoretical Foundations: Constructivism and Humanism

In developing the active learning model to enhance college students' social-emotional learning, researchers extensively utilized Constructivism Theory and Humanism Theory. Constructivism Theory, which emphasizes learners constructing their own understanding through experience and reflection, guided the design of interactive and participatory activities. These activities, such as case studies and discussions, encouraged students to engage with and reflect on their social and emotional experiences, deepening their understanding of SEL concepts. Additionally, the principles of scaffolding and support inherent in Constructivism were applied to create structured learning experiences that gradually increased in complexity, allowing students to build their knowledge progressively. Collaborative learning strategies were also employed, enabling students to work together in groups, solve problems collectively, and develop social skills and relationship-building competencies.

Humanism Theory, with its focus on the holistic development of the individual and the importance of addressing both cognitive and emotional needs, played a crucial role in creating a supportive and empathetic learning environment.

Researchers designed activities that promoted self-awareness and self-management within a safe and nurturing setting, aligning with the goals of the RULER program to foster emotional intelligence. This approach ensured that the learning model addressed the overall well-being of the students by encouraging them to explore and express their emotions. The student-centered approach of Humanism Theory led to activities tailored to meet the unique needs and interests of each student, promoting autonomy and intrinsic motivation. By integrating Constructivism and Humanism, the active learning model provided a comprehensive framework that effectively enhanced college students' social-emotional learning.

2) Development of an Active Learning Model to Enhance Social Emotional Learning of College Students

When developing the active learning model, researcher based their approach on Bonwell & Eison's (1991) concept of active learning, incorporating expert interviews and learner-centered teaching principles to design a series of learning activities. These activities provided opportunities for student-teachers to engage in three steps of teaching practice: Lead In, Learning Activities Process, and Conclusion. Specific methods included role-playing, demonstrations, and group discussions.

Through hands-on practice and learning about social-emotional learning, students shared and exchanged knowledge with their peers, fostering higher-order thinking processes. Students played a crucial and central role in their learning, actively participating and freely expressing their ideas and feelings. These activities were conducted in a relaxed, warm, safe, enjoyable, and dynamic environment, where students established good relationships, respected each other's opinions, and offered mutual help and care.

1) Development Goals of the Active Learning Model in this Study

In the present research, the active learning paradigm aims to enhance the social emotional learning levels of university students. It encompasses a series of meticulously designed and developed learning activities by researcher, intended to augment the self-awareness, adaptability within the university milieu, establishment of

robust interpersonal relationships, as well as the enhancement of comprehensive competencies and social adaptability among participating students. The model comprises five constituent components, each delineated by the following objectives:

- a) To enable university students to possess self-awareness while engaging in learning and significant campus activities or work.
- b) To enable university students to possess social awareness while engaging in learning and significant campus activities or work.
- c) To enable university students to possess self-management while engaging in learning and significant campus activities or work.
- d) To enable university students to possess relationship skills while engaging in learning and significant campus activities or work.
- e) To enable university students to make responsible decisions while engaging in learning and significant campus activities or work.

The active learning model is designed to elevate the social emotional learning levels of college students and is composed of fourteen pedagogical plans. Each plan/session integrates student-centered pedagogical principles with psychological techniques to optimize learning outcomes.

2) The stages of active learning model activities comprise three steps, as follows:

- a) The initial stage of the activity involves recognizing its importance, being able to explain its significance, fostering a positive mindset, and associating it with learning activities. It entails identifying which activities are beneficial for learning, sharing interests with peers during each participation, and being prepared to review their understanding after engaging in the activity.
- b) The execution stage of the activity aims to enhance social-emotional learning through various learning methods or activities. This stage includes three steps as follows:

i. Lead-in refers to the teacher guiding students into the theme or content of the learning activity, stimulating their interest, setting learning objectives, and laying the groundwork for subsequent learning activities.

ii. Learning activities process signifies that students actively participate in the construction and sharing of knowledge through engaging in various interactive learning activities such as group discussions, role-playing, and case analysis, continually developing and enhancing their social-emotional learning skills.

iii. Conclusion means that students summarize and generalize the content learned through participation and reflection on the learning activities, deepening their understanding and application of knowledge, thereby promoting personal growth and development.

The summary stage involves summarizing the outcomes derived from each participation in the activity and discussing the learned content to reinforce the understanding of the knowledge and the learning process.

3) The learning activity materials used in this course

In this discussion, we addressed students' social-emotional learning, which refers to the emotional, social, and self-regulation characteristics of university students. These characteristics tend to manifest in specific behavioral patterns and responses in various social and emotional contexts. This includes understanding one's own and others' emotions, managing one's emotions, and recognizing oneself as a social member, encompassing empathy, communication skills, and conflict resolution abilities. There are five components: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. Therefore, when designing learning activities, the instructional activities and materials used should be closely related to these five components of university students' social-emotional learning and based on active learning theory, which includes three steps: introduction, learning activity process, and summary.

1) Time (Lesson plan)

There are 14 programs/sessions, each lasting 90 minutes for 6 weeks.

2) Principles of learning activities in research

a) Provision of Role-Playing Opportunities: Create opportunities for university students to engage in role-playing within authentic contexts, enabling the application of acquired knowledge in simulated environments.

b) Promotion of Higher Order Thinking Processes: Offer students opportunities to engage in higher-order thinking processes such as analysis, problem-solving, and evaluation.

c) Encouragement of Mutual Understanding and Sharing: Provide opportunities for students to understand and share their ideas with each other.

d) Facilitation of Interaction and Collaboration: Encourage interaction and collaboration among students to enhance the effectiveness of collective learning.

e) Stimulating Active Engagement: Foster students' enthusiasm through various activities to enhance their sense of participation.

f) Utilization of Positive Reinforcement: Employ measures of positive reinforcement to promote students' success in learning and activities, thereby stimulating their motivation for effortful thinking and problem-solving.

g) Provision of an Environment of Freedom and Intellectual Liberty: Cultivate a learning environment that is open and accepting of diverse opinions, respects others' viewpoints, refrains from making judgments of right or wrong, thus enabling students to confidently showcase their thoughts, emotions, and abilities.

h) Provision of Positive Feedback: Researcher will offer specific and constructive feedback regarding skills, processes, and specific behaviors, assisting students in adjusting, improvements, and practical developments.

3) Roles of Researcher in the Implementation of Learning Activities

In the execution of activities aimed at enhancing socio-emotional learning among university students, researcher assume multiple crucial roles, including but not limited to the following aspects:

a) Research and Understanding: Delve into understanding and thoroughly research active learning models aimed at enhancing social emotional learning among university students.

b) Activity Design and Preparation: Pre-design and prepare learning activities in advance to ensure the structure of activities is rational and objectives are clear.

c) Cultivating a Learning Atmosphere: Foster an atmosphere and environment conducive to learning, enabling students to enjoy the learning process within a pleasant ambiance.

d) Observation and Support: Closely monitor students' performance during activities; if any issues are identified, researcher should promptly offer appropriate assistance and advice.

e) Goal and Role Guidance: Guide students in understanding the objectives of each activity and their roles within them. Through observing student behavior and providing recommendations, ensure alignment between students' actions and activity objectives.

f) Practical Opportunities: Provide students with opportunities for expressing ideas, cultivating communication skills, engaging in intellectual exchanges, and collaborating with others. Avoid assessments or judgments of right or wrong, focusing instead on fostering experiential learning.

Roles of Participants in Learning Activities

University students play pivotal roles in learning activities, the fulsome fulfillment of which is crucial for the enhancement of their socio-emotional learning. The following are the key roles that university students undertake in learning activities:

1. Enthusiastic Participants: It is imperative to engage in each learning activity with high enthusiasm and proactivity to ensure smooth proceedings and foster ample collaboration with others.

2. Autonomous Expressers: Proficiency in expressing opinions freely is essential, leveraging learning activities as platforms to showcase personal interests and insights.

3. Respect for Others: Respect for the opinions and viewpoints of fellow learning activity participants is paramount in fostering a conducive learning environment.

4. Attentive Supporters: Diligently listening to others' opinions and offering support and encouragement when appropriate are instrumental in fostering the development of the learning community.

5. Active Collaborators: Actively collaborating during discussions and exchanges, offering constructive suggestions to propel the achievement of learning objectives.

6. Compassionate Observers: Observing and caring for the behaviors of others, providing sincere assistance when needed, to uphold harmony within the learning community.

7. Diligent Participants: Adherence to the regulations and procedural steps of learning activities, participating with a conscientious attitude in every learning endeavor.

8. Summarizers and Record Keepers: Meticulously documenting the summaries and takeaways of each learning activity to facilitate better reflection and improvement of learning outcomes.

This study aims to enhance the socio-emotional learning of college students by active learning model, comprising 14 learning plans/sessions, detailed contents of which are provided in Appendix H. The key points will be thoroughly incorporated into each learning plan to drive comprehensive improvement in university students' social emotional learning.

Lesson 1 Orientation to Learning Model and SEL

The inaugural session serves as an initiation and an exposition of the instructional plan revolving around the significance of Social and Emotional Learning (SEL) through interactive and participatory means. By fostering a conducive atmosphere, our endeavor is to establish a robust teacher-student rapport and interconnectivity among students, laying a sturdy groundwork for subsequent sessions.

Through the employment of diverse activity formats such as PowerPoint presentations, video clips, group discussions, and role-playing scenarios, we underscore the fundamental concepts of SEL and active learning modalities. These activities are designed to incite introspection among students regarding their personal experiences, facilitate a deeper comprehension of the core tenets of SEL, and explore its practical application in everyday life. Particularly emphasized are self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, all integral components of SEL. Encouraging active participation in discussions, reflection, and a commitment to personal learning journaling and assessment, we urge students to proactively engage with their social-emotional development throughout the course, thus fostering holistic growth. The course accentuates the imperative of integrating SEL into education to foster comprehensive student development.

Lesson 2 Self-awareness (1)

In the journey of personal growth and development, self-awareness stands as a pivotal stage. It necessitates individuals to comprehend their emotions, thoughts, strengths, weaknesses, and values. The significance of this self-awareness lies in providing a clear direction and purpose to one's life. By cultivating self-awareness, individuals can make wiser decisions, foster healthier interpersonal relationships, and effectively manage emotions and behaviors. In this learning module, researcher notably emphasize the criticality of self-awareness in personal growth, striving to aid college students in gaining deeper insights into themselves. Through the utilization of various self-assessment tools such as peer interviews, reflective cards, emotional mapping, SWOT analysis, and cognitive habit assessments, students will embark on a journey of self-exploration, enhancing self-awareness, thereby laying a solid foundation for future personal and academic success.

Lesson 3 Self-awareness (2)

The concept of self-awareness is crucial in enhancing socio-emotional learning among students by fostering a profound understanding of their emotional states and effectively managing their responses. Activities such as journal writing, emotional awareness exercises, and role-playing scenarios guide students to recognize and

articulate their emotions, comprehend the triggering factors behind these emotions, and learn to accept and constructively regulate them. This concept underscores the significance of introspection and mindfulness, enabling students to cultivate a heightened self-awareness, thus enabling them to navigate various social and emotional situations with resilience and empathy. Through engaging in reflective practices and sharing strategies for emotional management, students not only enhance their emotional intelligence but also foster a supportive classroom environment wherein they can learn from each other's experiences and perspectives. In sum, nurturing self-awareness lays a solid foundation for students' overall socio-emotional development, furnishing them with valuable skills for personal growth and interpersonal relationships.

Lesson 4 Self-management (1)

Self-management is a crucial skill in social-emotional learning, enabling students to maintain emotional stability and effectively cope with stress and challenges. By understanding and cultivating self-management skills, students can set clear goals and devise feasible plans to tackle various situations in academics, social interactions, and life. With guidance and encouragement from teachers, students will learn how to stay calm in the face of challenges and utilize effective emotion regulation techniques, such as deep breathing relaxation, to alleviate anxiety and tension. The importance of this concept is evident in enhancing students' learning efficiency, promoting emotional well-being, and fostering self-control and adaptability, thereby laying a solid foundation for their future development.

Lesson 5 Self-management (2)

This stage emphasizes further enhancing students' self-management capabilities within the context of socio-emotional learning. This is crucial for students to effectively navigate challenges and adapt to constantly changing environments, essential skills for success in both academic and personal domains. Through the analysis of success stories, such as Steve Jobs' strategies at Apple, and engagement in group discussions to formulate solutions to challenging situations, students not only acquire practical self-management techniques but also cultivate teamwork and problem-solving abilities. By encouraging self-reflection and setting personal goals,

students are guided to apply these skills to their daily lives, fostering resilience in adversity, a positive attitude, and the ability to generate effective solutions when faced with difficulties. Overall, this stage aims to equip students with the necessary tools to effectively manage stress, time, and tasks, promoting their overall well-being and success.

Lesson 6 Social Awareness: Emotional Recognition and Empathy

This section emphasizes the cultivation of social awareness and the development of emotional recognition and empathy. Students will utilize short films, images, and real-life cases to comprehend the emotions and perspectives of others. Through role-playing, case analysis, and empathy exercises, they will experience different emotions in various contexts. The culminating empathy circle activity facilitates students to share and listen to each other's experiences, underscoring the importance of understanding others in social awareness and interpersonal relationships. These activities enhance emotional intelligence, social skills, empathy, and respect, laying a solid foundation for future social interactions and life experiences.

Lesson 7 Social Awareness: Respect for Multiculturalism and Different Views.

Social Awareness refers to the capacity to comprehend and honor diverse cultures and perspectives. Typically, university students are expected to possess a mindset of openness and inclusivity, capable of appreciating and embracing diversity while respecting varying cultural backgrounds and viewpoints. Social Awareness constitutes a significant component of socio-emotional learning. Thus, educators should systematically impart skills related to Social Awareness to students and provide opportunities for them to practice these skills. This is because students require such skills to effectively navigate and engage within an increasingly diverse and globalized society. Therefore, the objective of the seventh learning module is to cultivate in students an appreciation of the importance of Respect for Multiculturalism and Different Views within Social Awareness, to acquaint them with relevant knowledge or processes associated with Social Awareness, and to foster the Social Awareness of university students through diverse training methodologies.

Lesson 8 Social Awareness: Reflecting on Social Skills and Perspectives

The notion of "Reflecting on social skills and perspectives" within Social Awareness pertains to a thorough examination of one's personal social competencies and viewpoints, thereby gaining deeper insights into one's conduct in social interactions, as well as attitudes and perspectives towards others. Through introspection into one's behavior, attitudes, and values across various social contexts, individuals can better comprehend their roles and influences within interpersonal dynamics, while acknowledging the potential for divergent opinions and sentiments among others. Social Awareness constitutes a vital component of socio-emotional learning. Consequently, by fostering Social Awareness, college students can enhance their comprehension of and respect for others, foster positive interpersonal relationships, and navigate complex social scenarios with heightened sensitivity. By recognizing the impact of their emotions and actions on others, they can communicate more effectively, resolve conflicts, and facilitate teamwork and collaboration. Whether in academic settings, professional environments, or familial contexts, students can utilize this self-awareness to address challenges and pursue their objectives more effortlessly. By understanding the needs and emotions of others, they can adeptly lead teams, coordinate cooperation, and troubleshoot issues. Simultaneously, they can adapt to diverse social circumstances, maintaining flexibility and inclusivity, thereby adeptly tackling challenges across various interpersonal and societal contexts.

Lesson 9 Relationship Skills: Understanding Healthy Relationships

In accordance with theories of socioemotional learning, relationship skills encompass a spectrum of abilities and competencies individuals exhibit when interacting with others. These skills include but are not limited to communication prowess, conflict resolution acumen, and the capacity to establish and sustain healthy connections. Relationship skills constitute a pivotal facet of autonomy, closely intertwined with emotional intelligence. Consequently, education should foster relationship skills among college students, aiding in the development of social acumen, emotional cognition, and interpersonal prowess. By acquiring proficiency in relationship

skills, students stand to cultivate more robust interpersonal bonds, a crucial asset for both their future professional trajectories and personal lives.

Within the realm of education, the ninth curriculum installment places significant emphasis on nurturing students' relationship skills. This endeavor aims to equip them with the capacity to adeptly navigate social challenges, forge resilient interpersonal networks, and exhibit heightened leadership and collaborative aptitudes across diverse domains.

Lesson 10 Relationship Skills: Building Cooperation

Within the realm of social-emotional learning, Relationship Skills stand out as pivotal competencies. Possessing such aptitudes signifies that college students are equipped to navigate interpersonal dynamics adeptly, fostering harmonious relationships and facilitating effective collaboration. Hence, the endeavor of Building Cooperation serves to catalyze the refinement of college students' interpersonal communication abilities, cultivate their capacity for teamwork, and bolster their aptitude for communication and coordination. These proficiencies are not only integral to personal growth and development but also paramount for future success in professional or societal contexts.

Lesson 11 Relationship Skills: Cultivating Respect and Boundaries

The proficiency of an individual's relationship skills is intimately intertwined with the cultivation of respect and boundaries. If one holds sufficient respect and establishes boundaries with others, they can forge healthy and stable interpersonal connections. Relationship skills encompass the abilities and techniques demonstrated by individuals in their interactions with others, including but not limited to effective communication, active listening, conflict resolution, and trust-building. These skills aid university students in fostering positive interpersonal relationships in campus life, enhancing their social aptitude, and facilitating the establishment of constructive collaborative relationships with colleagues, clients, and superiors in future professional settings. Therefore, for university students, relationship skills are paramount, as they navigate various social interactions and interpersonal challenges both in the academic environment and in their prospective careers. Understanding and acknowledging the

significance of relationship skills, nurturing students' social and communicative competencies, and fostering their conflict resolution abilities are thus crucial endeavors.

Lesson 12 Responsible Decision-Making: Understanding Responsibility and Decision-Making

Responsible decision-making constitutes a pivotal component within the realm of social-emotional learning. It delineates the capacity to deliberate and act in a responsible and mature manner when confronted with diverse circumstances and choices. Engaging in responsible decision-making facilitates the cultivation of attitudes and behaviors conducive to assuming accountability, alongside comprehending the ramifications of one's choices on both oneself and others. Understanding responsibility and decision-making endeavors to empower university students with enhanced comprehension and practical application of responsible decision-making. These proficiencies encompass the assessment of situations, deliberation of consequences, weighing of pros and cons, and the formulation of decisions aligned with ethical and value-based considerations. Given the indispensability of these skills in both collegiate life and subsequent professional endeavors, they stand as pivotal pillars for the personal growth and success of students. Within the curriculum, students will assimilate the significance of responsible decision-making and become cognizant of its pertinence, not solely within their personal spheres but also as a critical competency within societal and occupational domains.

Lesson 13 Responsible decision-making: Understanding responsibility and decision-making

Emphasizing the significance of understanding responsibility and decision-making characterizes the focus of Section 13. Cultivating responsible decision-making within the curriculum holds paramount importance for students, as these skills are indispensable for navigating both daily life and professional careers. This necessity stems from the students' imperative to learn the art of weighing alternatives, assessing consequences, and making decisions aligned with ethical and societal expectations when confronted with various choices and challenges. Engaging in responsible decision-making fosters the development of self-awareness, self-regulation, and moral

discernment among students, equipping them to navigate diverse situations and adversities more effectively.

The acquisition of such skills is particularly pivotal within the framework of the Section 13 curriculum. Through activities such as case studies, role-playing, and group discussions, students delve into various decision-making scenarios, acquiring strategies for addressing these situations. This training in responsible decision-making encompasses aspects ranging from ethical considerations, risk assessment, problem-solving, to conflict management, while also encompassing the application of responsible decision-making principles and techniques across different settings such as schools, communities, and workplaces.

Lesson 14 Reflection and Conclusion

In this instructional program, the conceptualization of the reflection and conclusion section is crucial for consolidating students' learning experiences and fostering individual growth in social-emotional learning (SEL). Through reflective practices, students not only review the course content but also assess their development in areas such as self-awareness, self-management, social awareness, relationship skills and responsible decision-making. This process enables students to recognize their progress, identify areas for improvement, and set future goals for enhancing their SEL skills. Through individual reflection and group sharing, students gain deeper insights into themselves and interpersonal relationships while also establishing a supportive learning community. Additionally, post-assessment surveys serve as an evaluative tool, providing students with feedback on their SEL abilities and guiding them on their ongoing learning journey. In summary, the reflection and conclusion section play a pivotal role in facilitating continuous improvement in self-awareness, self-assessment, and social-emotional learning, enabling students to tackle life's challenges with adaptability and empathy.

The active learning model aims to enhance social-emotional learning among college students. The curriculum consists of 14 learning management plans,

summarized as shown in Table xxx. Table xxx illustrates the active learning model for enhancing social-emotional learning among college students.

Phase 3: Evaluate an active learning model to enhance college students' social emotional learning

In order to evaluate the effect of the active learning model on improving college students' social emotional learning, the researcher proposed two hypotheses: (1) The level of college students in the experimental group receiving the active learning model increased after teaching practice compared with that before the experiment; (2) After the experiment, college students in the experimental group who received the active learning model increased their social emotional learning level compared with those in the control group who did not receive the active learning model. The specific data analysis results are as follows.

Results of date analysis for experimental group

In this part, the researcher used a one-way repeated measures ANOVA to compare the social emotional learning of college students in the experimental group before the experiment, after the experiment and follow up.

TABLE 2 Evaluation scores of the experimental group before and after the experiment (n = 20)

Experimental stage	M	S.D.	Implication
Pretest	2.01	0.035	Moderate low
Post-test	3.15	0.16	Moderate-high
Follow-up	3.14	0.17	Moderate-high

According to the results of the analysis of variance shown in Table 3, it can be observed that there were significant changes in social-emotional learning scores among college students in the experimental group before and after the experiment. Prior to the experiment, the social-emotional learning of the experimental group ($M=2.01$,

S.D.=0.04) was at a moderately low level. However, post-experiment, the scores significantly increased ($M=3.15$, $S.D.=0.16$), reaching a moderately high level. Subsequent follow-up surveys indicated that the scores remained stable ($M=3.14$, $S.D.=0.17$), still at a moderately high level. This suggests that the experiment had a positive and enduring impact on the social-emotional learning of college students.

Analysis of Variance Results on the Ratings of Various Constituent Elements by Experimental Group Students at Different Time Points (Pre-Experiment, Post-Experiment)

TABLE 3 Experimental group pre-test, post-test, tracking correlation test ($n = 20$)

Experimental stage		Pre-experiment	Post-experiment	Follow-up
	M	2.01	3.15	3.14
Pre-experiment	2.01	-	0.483*	0.615**
Post-experiment	3.15		-	0.577**
Follow-up	3.14			-

* $p < .05$, ** $p < .01$

From Table 4, it can be observed that the paired comparison test results of the social-emotional learning (SEL) average scores of university students in the experimental group before and after the experiment show significant differences. Before the experiment, the students' average SEL score was 2.01, which increased to 3.15 after the experiment. This difference is statistically significant ($p < .05$), indicating a significant improvement in the students' SEL scores after the experiment. This suggests that the experimental intervention effectively enhanced the students' social-emotional learning abilities. Additionally, the results of the paired comparison test show that the average difference between the pre-experiment and post-experiment scores is 0.43. This further supports the significant progress in students' SEL after the experiment. The correlations between pre-experiment, post-experiment, and follow-up stages show significant relationships. Specifically, the correlation between pre-experiment and post-

experiment is 0.483 ($p < .05$), between pre-experiment and follow-up is 0.615 ($p < .01$), and between post-experiment and follow-up is 0.577 ($p < .01$). These results indicate a consistent relationship over time among the experimental measures.

TABLE 4 ANOVA results of each component score of the experimental group students at different time points (before and after the experiment) ($n = 20$)

Experimental stage	M	S.D.	Implication
Self-awareness			
Pre-experiment	1.72	0.21	Low
Post-experiment	3.21	0.31	Moderate-high
Follow up	3.17	0.30	Moderate-high
Social awareness			
Pre-experiment	2.30	0.18	Moderate low
Post-experiment	3.13	0.26	Moderate-high
Follow up	3.05	0.22	Moderate-high
Self-management			
Pre-experiment	1.85	0.11	Moderate low
Post-experiment	3.08	0.23	Moderate-high
Follow up	3.12	0.26	Moderate-high
Relationship skills			
Pre-experiment	1.67	0.11	Low
Post-experiment	3.12	0.25	Moderate-high
Follow up	3.11	0.26	Moderate-high
Responsible decision-making			
Pre-experiment	2.49	0.14	Moderate low
Post-experiment	3.21	0.26	Moderate-high
Follow up	3.24	0.26	Moderate-high

Based on the table 5, we observe the changes in students' scores in various elements before and after the experiment. In terms of self-awareness, the pre-experiment score was 1.72 (M=1.72, S.D.=0.21), indicating a low level, which improved to 3.21 (M=3.21, S.D.=0.31), reaching a moderate-high level post-experiment. Regarding social awareness, the score was 2.30 (M=2.30, S.D.=0.18) before the experiment, indicating a moderate-low level, which increased to 3.13 (M=3.13, S.D.=0.26), reaching a moderate-high level post-experiment. In terms of self-management, relationship skills, and respectable decision-making, students scored moderately low before the experiment, but significantly improved post-experiment, reaching moderate-high levels. These results suggest that the experiment had a significant positive impact on enhancing students' self-awareness, social awareness, self-management, relationship skills, and respectable decision-making abilities.

TABLE 5 Intervention Effects on Social Emotional Learning Abilities: Analysis of Improvements in Self-awareness, Social Awareness, Self-management, Relationship Skills, and Responsible Decision-making

Component	Stage	M	S.D.	F	Sig	LSD
Self-awareness	Pre-test	1.72	0.21	195.429***	.001	1 > 2
	Post-test	3.21	0.31			1 > 3
	Follow up	3.17	0.30			2 > 3
	Total	2.70	0.27			
Social awareness	Pre-test	2.30	0.18	116.151***	.001	1 > 2
	Post-test	3.13	0.26			1 > 3
	Follow up	3.05	0.22			2 > 3
	Total	2.83	0.22			

TABLE 6 (continued)

Component	Stage	M	S.D.	F	Sig	LSD
Responsible decision-making	Pre-test	2.49	0.14	82.402***	.001	1 > 2
Self-management	Pre-test	1.85	0.11	243.385***	.001	1 > 2
	Post-test	3.08	0.23			1 > 3
	Follow up	3.12	0.26			2 > 3
	Total	2.68	0.20			
Relationship skills	Pre-test	1.67	0.11	336.515***	.001	1 > 2
	Post-test	3.12	0.25			1 > 3
	Follow up	3.11	0.26			2 > 3
	Total	2.63	0.21			
	Post-test	3.21	0.24			1 > 3
	Follow up	3.24	0.26			3 > 2
	Total	2.98	0.21			

***p < 0.001

This study presents the results of repeated measures ANOVA for five variables: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. Significant improvements were observed across all variables from pre-test to post-test and follow-up, with F-values ranging from 82.402 to 336.515 and p-values < 0.001. The LSD post hoc analysis confirmed that all pairwise comparisons between pre-test, post-test, and follow-up stages were statistically significant ($p < 0.001$), indicating that post-test and follow up stage showed marked improvements over the pre-test, and post-test stage was higher than follow up stage (except for Responsible decision-making). Specifically, post-test and follow-up scores were significantly higher than pre-test scores, and follow-up scores were generally maintained at the post-test levels. These findings suggest that the interventions were effective in

enhancing the social emotional learning abilities, with sustained effects observed over time.

Analysis of Mauchly's Sphericity Test Results in Research

TABLE 6 Results of Mauchly's Sphericity Test for Within-Subjects Effects

Measure	Mauchly's W	Approx. Chi- Square	df	p- value	Greenhouse- Geisser	Huynh- Feldt	Lower- bound
Time	0.925	2.871	2	0.238	0.931	1.000	0.500

Note. df = degrees of freedom.

According to Table 6, Mauchly's W value of 0.925 serves as a statistical measure to assess the sphericity assumption, evaluating whether the covariance matrix of the measurements is equal to the identity matrix. The result showed that the significance (p-value) associated with Mauchly's W is greater than the chosen level of significance, set at 0.05, which indicates insufficient evidence to reject the sphericity assumption. This implies that the data can be trusted when conducting repeated measures analysis of variance.

For the experimental group and the control group followed up before, after and after the experiment, the ANOVA results of test scores of college students are as follows:

TABLE 7 Social emotional learning score table of 40 college students, involving the experimental group and the control group, before and after the experiment, and follow up results (n = 40)

Stages	Groups	M	S.D.	Implication
Self-awareness				
Pre-experiment	Experimental group	1.72	0.21	Low
	Control group	1.68	0.19	Low
Post-experiment	Experimental group	3.21	0.31	Moderate-High
	Control group	1.69	0.15	Low
Follow up	Experimental group	3.17	0.30	Moderate-High
	Control group	1.63	0.17	Low
Social Awareness				
Pre-experiment	Experimental group	2.30	0.18	Moderate-Low
	Control group	2.29	0.25	Moderate-Low
Post-experiment	Experimental group	3.13	0.26	Moderate-High
	Control group	2.36	0.18	Moderate-Low
Follow up	Experimental group	3.05	0.22	Moderate-High
	Control group	1.90	0.14	Moderate-Low

TABLE 8 (Continue)

Stages	Groups	M	S.D.	Implication
Self-Management				
Pre-experiment	Experimental group	1.85	0.11	Moderate-Low
	Control group	1.88	0.18	Moderate-Low
Post-experiment	Experimental group	3.08	0.23	Moderate-High
	Control group	1.93	0.16	Moderate-Low
Follow up	Experimental group	3.12	0.26	Moderate-High
	Control group	2.26	0.21	Moderate-Low
Relationship Skills				
Pre-experiment	Experimental group	1.67	0.11	Low
	Control group	1.67	0.24	Low
Post-experiment	Experimental group	3.12	0.25	Moderate-High
	Control group	1.71	0.18	Low
Follow up	Experimental group	3.11	0.26	Moderate-High
	Control group	1.69	0.16	Low

TABLE 8 (Continue)

Stages	Groups	M	S.D.	Implication
Responsible Decision-Making				
Pre-experiment	Experimental group	2.49	0.14	Moderate-Low
	Control group	2.48	0.24	Moderate-Low
Post-experiment	Experimental group	3.21	0.26	Moderate-High
	Control group	2.52	0.14	Moderate-High
Follow up	Experimental group	3.24	0.25	Moderate-High
	Control group	2.50	0.17	Moderate-High

In terms of self-awareness, the experimental group had a low score before the experiment ($M=1.72$, $S.D.=0.21$), and the control group also had a low score ($M=1.68$, $S.D.=0.19$). After the experiment, the experimental group's score significantly increased to a moderately high level ($M=3.21$, $S.D.=0.31$), while the control group's score remained almost unchanged ($M=1.69$, $S.D.=0.15$). During the follow-up phase, the experimental group's score slightly decreased but remained at a moderately high level ($M=3.17$, $S.D.=0.30$), while the control group's score slightly decreased ($M=1.63$, $S.D.=0.17$).

In terms of social awareness, before the experiment, both the experimental group and the control group had moderately low scores (experimental group $M=2.30$, $S.D.=0.18$; control group $M=2.29$, $S.D.=0.25$). After the experiment, the experimental group's score significantly increased to a moderately high level ($M=3.13$, $S.D.=0.26$), while the control group's score only slightly increased ($M=2.36$, $S.D.=0.18$). During the

follow-up phase, the experimental group's score remained at a moderately high level ($M=3.05$, $S.D.=0.22$), while the control group's score decreased ($M=1.90$, $S.D.=0.14$).

In terms of self-management, before the experiment, both groups had moderately low scores (experimental group $M=1.85$, $S.D.=0.11$; control group $M=1.88$, $S.D.=0.18$). After the experiment, the experimental group's score significantly increased to a moderately high level ($M=3.08$, $S.D.=0.23$), while the control group's score did not change much ($M=1.93$, $S.D.=0.16$). During the follow-up phase, the experimental group's score slightly increased ($M=3.12$, $S.D.=0.26$), while the control group's score slightly improved but remained low ($M=2.26$, $S.D.=0.21$).

In terms of relationship skills, both groups had low scores before the experiment ($M=1.67$, $S.D.=0.11$; control group $M=1.67$, $S.D.=0.24$). After the experiment, the experimental group's score significantly increased to a moderately high level ($M=3.12$, $S.D.=0.25$), while the control group's score did not change much ($M=1.71$, $S.D.=0.18$). During the follow-up phase, the experimental group's score remained at a moderately high level ($M=3.11$, $S.D.=0.26$), while the control group's score slightly decreased ($M=1.69$, $S.D.=0.16$).

In terms of responsible decision-making, both groups had moderately low scores before the experiment (experimental group $M=2.49$, $S.D.=0.14$; control group $M=2.48$, $S.D.=0.24$). After the experiment, the experimental group's score significantly increased to a moderately high level ($M=3.21$, $S.D.=0.26$), while the control group's score slightly increased ($M=2.52$, $S.D.=0.14$). During the follow-up phase, the experimental group's score remained at a moderately high level ($M=3.24$, $S.D.=0.25$), while the control group's score slightly decreased but still remained at a moderately high level ($M=2.50$, $S.D.=0.17$).

The above tables can be simplified to obtain a more intuitive change and comparison of the following three groups of data (control group, control group, follow up).

TABLE 8 Mean and standard deviation of social emotional learning in pre-test, post-test and follow-up of control group and control group

Group	n	Mean	Std. Deviation	Implication
Pretest				
Experimental	20	2.01	0.035	Moderate low
Control	20	2.00	0.036	Moderate low
Post-test				
Experimental	20	3.15	0.16	Moderate -high
Control	20	2.03	0.06	Moderate low
Follow-Up				
Experimental	20	3.14	0.17	Moderate -high
Control	20	2.00	0.07	Moderate low

Table 9 presents the mean values and standard deviations of social emotional learning (SEL) for the experimental group, control group, and follow-up group across the pretest, post-test, and follow-up test phases, along with the implications of these results.

During the pretest phase, the SEL mean values for the experimental and control groups were 2.01 and 2.00, with standard deviations of 0.035 and 0.036, respectively. Both groups' SEL levels were classified as moderately low. In the post-test phase, the experimental group's SEL mean value significantly increased to 3.15, with a standard deviation of 0.16, indicating a moderately high level of SEL. In contrast, the control

group's SEL mean value only slightly increased to 2.03, with a standard deviation of 0.06, remaining at a moderately low level.

In the follow-up test, the experimental group's SEL mean value was 3.14, with a standard deviation of 0.17, continuing to reflect a moderately high level of SEL. Meanwhile, the control group's SEL mean value was 2.00, with a standard deviation of 0.07, still at a moderately low level.

Overall, these data indicate that the experimental group, which received the intervention, showed a significant improvement in SEL, and this improvement was sustained in the follow-up test. In contrast, the control group showed little to no change in SEL levels, consistently remaining at a moderately low level throughout the testing phases.

The results of a mixed-design repeated measure of ANOVA for Social Emotional Learning in college students

Mixed design repeated analysis of variance for the tests of within-subjects effect and between-subjects effects of the treatment

TABLE 9 Within-Subjects Effects Analysis

Measure: Social emotional learning							
Source		III Sum of Squares	df	MS	F	p	Partial η^2
Time	Hypothesized	8.796	2	4.398	596.759	0.001	0.940
	Sphericity						
	Assumed						
Time * group	Hypothesized	8.447	2	4.224	573.115	0.001	0.938
	Sphericity						
	Assumed						
Error (Time)	Hypothesized	0.560	76	0.007			
	Sphericity						
	Assumed						

***p< 0.001

η^2 - effect size

The effect of "Time" on the measure (presumably student performance) is highly significant ($p < 0.001$), with a large effect size ($\eta^2 = 0.940$). This suggests that there are significant differences in the measure across different time points. The interaction between "Time" and "group" is also highly significant ($p < 0.001$), with a large effect size ($\eta^2 = 0.938$). This indicates that the effect of time on the measure varies significantly depending on the group to which the subjects belong.

In conclusion, both time and the interaction between time and group have a substantial impact on the measure under consideration, with significant differences observed across time points and among different groups.

TABLE 10 Between-Subjects Effects Analysis

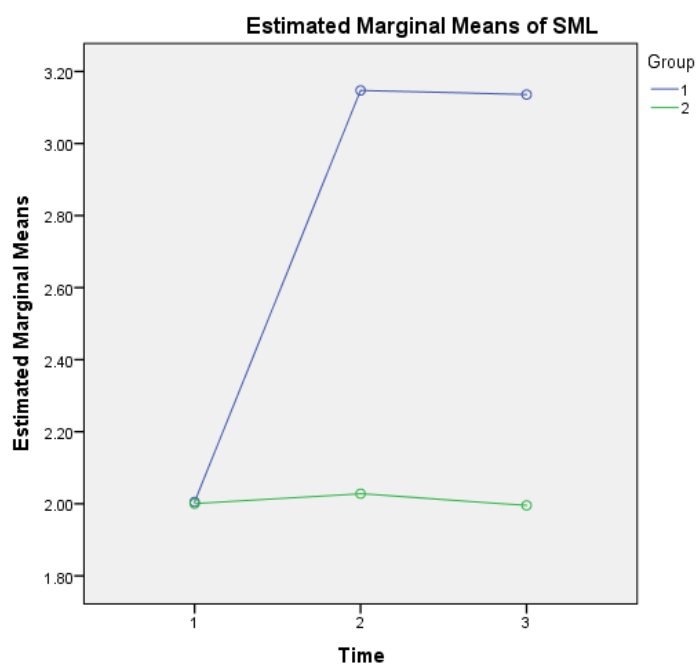
Measure: Social emotional learning						
Source	III Sum of Squares	df	MS	F	p	Partial η^2
Intercept	682.826	1	682.826	40417.828	0.001	0.999
Group	17.093	1	17.093	1011.781	0.001	0.964
Error	0.642	38	0.017			

*** $p < 0.001$

 η^2 - effect size

Both the intercept and the group factor have statistically significant effects on the dependent variable (student performance). The intercept explains almost all the variance ($\eta^2 = 0.999$), while the group factor also explains a very large portion of the variance ($\eta^2 = 0.964$).

These results indicate that the group factor has a substantial and significant impact on student performance.



Group 1 = Experimental group

Group 2 = Control group

Time 1 = Pretest

Time 2 = Posttest

Time 3 = Follow up

FIGURE 4 Interaction graph of time and treatment

A comparative analysis of socio-emotional learning ability between experimental group and control group

TABLE 11 Pairwise Comparison 1

Measure: Social emotional learning

(I) Group	(J) Group	Mean Difference (I-J)	Standard Error	p	95% Confidence Interval for Difference
Experimental Group	Control Group	.755*	0.024	0.001	[.707, .803]
Control Group	Experimental Group	-.755*	0.024	0.001	[-.803, -.707]

***p< 0.001

The difference in mean values between the experimental group and the control group is 0.755, with a standard error of 0.024, and a significance level of 0.001. The 95% confidence interval is [0.707, 0.803].

The difference in mean values between the control group and the experimental group is -0.755, with a standard error of 0.024, and a significance level of 0.001. The 95% confidence interval is [-0.803, -0.707].

Based on these results, we can draw the following conclusions: There is a significant difference in social-emotional learning ability between the experimental group and the control group because their mean difference is significant, and the p-value is less than the set significance level (usually 0.05). Specifically, the mean social-emotional learning ability of the experimental group is higher than that of the control group, and this difference is statistically significant. In conclusion, based on these results, we can conclude that group membership significantly influences social-emotional learning ability, with the experimental group exhibiting significantly higher social-emotional learning ability than the control group.

An analysis of the influence of time factors on social-emotional learning ability

TABLE 12 Pairwise Comparison 2

Measure: Social emotional learning

(I) Time	(J) Time	Mean Difference (I-J)	Standard Error	Significance	95% Confidence Interval for Difference
1	2	-.585*	0.020	0.001	[-.626, -.544]
	3	-.563*	0.021	0.001	[-.605, -.521]
2	1	.585*	0.020	0.001	[.544, .626]
	3	0.022	0.016	0.187	[-.011, .055]
3	1	.563*	0.021	0.001	[.521, .605]
	2	-0.022	0.016	0.187	[-.055, .011]

***p< 0.001

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

The average difference between pretest and post-test is -0.585, with a significance level of 0.001 and a 95% confidence interval of [-0.626, -0.544]. This indicates that the social-emotional learning ability in the pretest is significantly lower than in the post-test.

The average difference between pretest and follow-up test is -0.563, with a significance level of 0.001 and a 95% confidence interval of [-0.605, -0.521]. This suggests that the social-emotional learning ability in the pretest is significantly lower than in the follow-up test.

The average difference between post-test and follow-up test is 0.022, with a significance level of 0.187 and a 95% confidence interval of [-0.011, 0.055]. This indicates that the difference in social-emotional learning ability between post-test and follow-up test is not significant.

In summary, time factor significantly influences social-emotional learning ability. Specifically:

1) Students' social-emotional abilities are significantly lower in the pretest compared to the post-test and follow-up test.

2) Social-emotional learning ability in the post-test is significantly higher than in the pretest.

3) Social-emotional learning ability in the follow-up test is significantly higher than in the pretest, with no significant difference compared to the post-test.

The following feedback highlights students' reflections and insights after participating in SEL lessons focused on orientation, social awareness, and relationship skills. Each comment underscores the impact of these lessons on personal growth and interpersonal development.

TABLE 13 Student Feedback on active learning model Lessons

Lessons and Objectives	Student feedback after class
Lesson 1: Orientation to SEL Objective: Introduce the entire learning model and course plan; establish good teacher-student and student-student relationships; introduce the concept and significance of SEL.	<p>Student A: "The orientation session really set the stage for understanding what SEL is all about. I appreciated the clarity in the course structure."</p> <p>Student B: "The activities helped us bond as a group right from the start. It made me feel comfortable sharing in discussions."</p> <p>Student C: "Learning about SEL's importance early on was eye-opening. It helped me see how it applies to both academic and personal growth."</p>

TABLE 14 (Continue)

Lessons and Objectives	Student feedback after class
<p>Lesson 4: Social Awareness: Emotional recognition and empathy</p> <p>Objective: Understand the importance and definition of social awareness; develop empathy and respect for others.</p>	<p>Student D: "I found the empathy exercises very insightful. They've made me more considerate of others' feelings."</p> <p>Student E: "Learning about emotional recognition has improved my ability to understand different perspectives."</p> <p>Student F: "Exploring empathy has changed how I approach interactions. I now try to understand others better before reacting."</p>
<p>Lesson 6: Social Awareness: Reflect on social skills and perspectives</p> <p>Objective: Understand social influence; develop empathy; reflect on the consequences of behavior.</p>	<p>Student G: "Reflecting on social skills has made me more aware of my impact on others. It's encouraging me to be more mindful in social settings."</p> <p>Student H: "Understanding social influence has broadened my perspective. I now think about how my actions affect my social environment."</p> <p>Student I: "The lesson on empathy and social skills has helped me see the importance of considering others' feelings. It's changing how I approach teamwork."</p>
<p>Lesson 10: Relationship skills: Building Cooperation</p> <p>Objective: Promote teamwork and communication skills; enhance problem-solving in interpersonal relationships.</p>	<p>Student J: "The teamwork activities were engaging and showed me the importance of collaboration. I feel more confident working with others."</p> <p>Student K: "Learning peaceful ways to resolve conflicts has improved my communication skills. I'm better at finding solutions together."</p> <p>Student L: "Developing cooperation skills has made me more aware of the dynamics in group settings. I now contribute more effectively to team tasks."</p>

CHAPTER 5

CONCLUSIONS AND DISCUSSION

This study investigates and develops an active learning model to enhance social emotional learning for college students in Chinese. The research results are summarized as follows:

5.1 A Brief Summary of the Study

5.1.1 Objectives of the Study

- 1) To study the definition and components of Social Emotional Learning of college students.
- 2) To develop the active learning model for enhancing social emotional learning of college students.
- 3) To evaluate the effectiveness of the active learning model on social emotional learning of college students.

5.1.2 Population and Sample

Phase I

Participants:

(1) Qualitative Research and Expert Interviews

The initial phase of the research was based on qualitative methods. Following a comprehensive literature review, the study established the concept and theoretical framework of social-emotional learning (SEL). A semi-structured interview questionnaire was then designed based on the literature review.

An expert group consisting of five members, including four psychology experts and one education expert, was invited for in-depth interviews to further explore the definition and components of SEL for college students. The details of the five experts are as follows:

- 1) Four psychology expert consultants.
- 2) One education expert.

(2) Questionnaire Development and Reliability Testing

Using the information gathered from the literature review and semi-structured interviews, a four-point Likert scale SEL questionnaire was developed. To test the reliability of this questionnaire, it was administered to 100 undergraduate students from universities in Guangdong Province. These students were randomly sampled and shared similar backgrounds to those who would participate in the subsequent experimental courses. Based on expert feedback and reliability testing, the questionnaire was finalized.

Phase II

Participants:

Based on the literature review and research of phase I, the research of phase II establishes the concept and theory of SEL. In order to develop an active learning model for improving SEL in college students, the researchers combined the opinions collected from five experts through a semi-structured interview questionnaire. The researchers then invited three IOC experts to evaluate 14 lesson plans for the active learning model. Based on expert feedback, the lesson plan was adjusted. After the adjustment, the researchers invited 10 first-year students with backgrounds similar to those of the final experiment subjects to try out the course for two times. According to the results of the try out, the researchers made the final adjustment to the lesson plan of the active learning model.

Phase III

Population

This study encompassed 3,612 first-year students from Guangdong Baiyun University, spanning various faculties including the Faculty of Education, Faculty of Art and Design, Faculty of Finance and Economics, Faculty of Management, Faculty of Social and Public Management, Faculty of Foreign Languages, International College, Faculty of Architecture and Civil Engineering, Faculty of Mechanical and Electrical Engineering, Faculty of Electrical and Information Engineering, and the Faculty of Continuing Education.

Sample

From this broad population, a sample of 40 first-year students was drawn specifically from the Department of Early Childhood Education within the Faculty of Education at Guangdong Baiyun University. These 40 students were chosen from a total of 262 students in the department, based on their lowest scores on the social and emotional learning questionnaire. To ensure comparability, the researchers divided these students into experimental and control groups, each consisting of 20 students, ensuring that the average scores of the two groups were closely matched.

5.1.3 Research Tools

1) "Social Emotional Learning Questionnaire for College Students" is utilized to assess students' conditions prior to the development of teaching models, aiming to ascertain the baseline and issues of students before experimentation. Simultaneously, this tool serves as a scale for pre-test, post-test, and follow-up testing, facilitating data comparison and analysis.

2) The "Semi-Structured Expert Interview Questionnaire" is employed to interview experts before the development of teaching models, aiming to determine the components included in the definition of social-emotional learning, its constituent elements, and the model components within the framework of active learning.

3) The "Active Learning Model" is essential for confirming the arrangements during the instructional process. It encompasses teaching times, content, activities, tools, and schedules, ensuring smooth progress and effectiveness. This structured approach enhances students' learning outcomes.

4) The "Expert Evaluation Form for Enhancing Social-Emotional Learning through Active Learning Models" is employed to confirm the usability and effectiveness of the teaching model.

5) The "Expert Evaluation Form for the Social-Emotional Learning Questionnaire for College Students" is utilized to confirm the usability and effectiveness of the survey questionnaire.

5.1.4 Research Methodology

Phase 1: Investigation of the Definition and Components of Social and Emotional Learning (SEL) of College Students

Step 1: Literature review study

Research, analyze, and synthesize relevant literature and research findings, including (but not limited to) social and emotional learning, active learning, theoretical frameworks, assessment methods, learning status, learner problems, etc.

Step 2: Develop a semi-structured interview questionnaire

Design semi-structured expert interview questionnaire. Through open-ended questions and interviews with 5 experts, the definition, components, steps and measures of social and emotional learning were summarized.

step 3: Develop the questionnaire of college students' social emotional learning

Based on the opinions of literature review and expert interview, the questionnaire of college students' social emotional learning was developed. The original questionnaire of 51 questions will be submitted to IOC measurement experts to determine the IOC consistency indicators and determine the accuracy and applicability of the tool.

Step 4: Questionnaire try out

The fourth step involved conducting a reliability test on a 4-point Likert scale social-emotional survey questionnaire for college students. Initially administered to 100 students with backgrounds similar to those in the experimental group, the questionnaire underwent expert evaluation, resulting in the removal of items with low reliability. The final version comprises 35 items, achieving a reliability coefficient of 0.963

Phrase II: Development of an Active Learning Model to Enhance Social-Emotional Learning of College Students

Step 1: Literature Review

Based on constructivist and humanistic theories, the researcher developed an active learning model to enhance social-emotional learning (SEL) among

college students. Through semi-structured interviews with 5 experts, core components of SEL for college students were defined as: 1) self-awareness, 2) social awareness, 3) self-management, 4) relationship skills, and 5) responsible decision-making. Building on the literature review and expert interviews, each session of the active learning model was structured into three steps: 1) lead-in, 2) learning activities, and 3) conclusion. Subsequently, a six-week syllabus and detailed plan for 14 sessions were developed, each session lasting 90 minutes.

Step 2: IOC Expert Evaluation

When IOC measurement experts evaluated the course outline, they focused primarily on the clarity of instructional objectives, coherence and logical flow of course content, effectiveness of teaching activities, and alignment with the core components of SEL. The evaluation results indicated high scores in these aspects, demonstrating that the course design meets the requirements of scientific validity and feasibility for instructional implementation.

Step 3: Active Learning Model Course Try Out

Ten first-year students with backgrounds similar to the experimental group were invited to participate in a two-day try out of the active learning model course. Observing student reactions allowed for adjustments to the course content, finalizing the course plan in preparation for the formal experiment with the experimental group.

Phrase III: The Evaluation of The Active Learning Model to Enhancing College Students' Social Emotional Learning

Step 1: Pre-test Period

Conduct a social and emotional learning questionnaire test on 262 first-year students majoring in Early Childhood Education at Guangdong Baiyun University. Select the lowest scoring 40 students and randomly assign them into two groups, ensuring the experimental and control groups have similar and averaged questionnaire scores.

Step 2: Experimental Period

Organize a six-week structured teaching experiment for 20 students in the experimental group, aiming to enhance social-emotional learning through active

learning models. This involves 90-minute sessions two to three times per week, with pre- and post-testing conducted before and after the experiment. The control group will not receive any active learning model courses during this period.

Step 3: Post-test Period

After the teaching experiment concludes, administer the "College Students' Social-Emotional Learning Questionnaire" as a post-test to both experimental and control groups to evaluate their levels of social-emotional learning.

Step 4: Follow-up Period

One month after the teaching experiment ends, conduct follow-up assessments with both groups to evaluate any sustained effects. This follow-up period provides additional insights into the long-term impacts of the experimental intervention.

Step 5: Data Analysis

Utilize one-way repeated ANOVA and two-way repeated ANOVA to analyze the performance of the experimental and control groups in social-emotional learning across pre-test, post-test, and follow-up assessments.

5.2 Research hypotheses

The intervention of active learning model can promote the social affective learning of college students. Through participation in the classroom based on the active learning model intervention, the social emotional learning of college students is improved.

1) College students in the experimental group who received the intervention of active learning model had improved their social emotional learning before the experiment (pre-test), after the experiment (post-test) and at the end of follow-up (1 month later).

2) College students in the experimental group who received the active learning model intervention had higher social-emotional learning before, after and at the end of follow-up (1 month later) than those in the control group.

5.3 Conclusion

5.3.1 Phase I: Summary the Definition and Components of Social and Emotional Learning of College Students

The summary is as follows:

Based on the first research objective, the findings reveal that the social and emotional learning (SEL) of college students encompasses five components: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. The Social and Emotional Learning Scale comprises 35 items, rated on a 4-point scale ranging from "Not Like Me At All" to "a Lot Like Me" with a response time of 30 minutes. The reliability of the scale was 1.00, yielding an overall reliability coefficient of 0.963.

5.3.1.1 Definition of Social Emotional Learning

By synthesizing literature reviews and insights from interviews with five experts, the definition of **Social Emotional Learning of college students** can be summarized as follows: a process enabling them to acquire and apply knowledge, competencies, and attitudes for fostering positive self-identities, regulating emotions effectively, and achieving personal and collective goals. This encompasses students' growth in empathetic understanding, demonstrating compassion, establishing and nurturing supportive connections, and making thoughtful and ethical choices.

5.3.1.2 Components of College Students' Social Emotional Learning

By reviewing the literature and drafting an expert interview protocol, the researcher compiled and summarized the experts' opinions through discussions and exchanges. The components of social emotional learning (SEL) for college students can be aligned with CASEL's (2023) theoretical framework, which comprises five core components. However, the specific definitions can be refined to better fit the actual context of college students. The SEL of college students consists of self-awareness, social awareness, self-management, relationship skills, and responsible decision-making.

It comprises the following 5 components:

1) Self-Awareness refers to the capability of students to gain a comprehensive understanding of their emotions, values, abilities, and goals through self-reflection and self-assessment. This involves recognizing their emotions, identifying their strengths, and acknowledging areas that need development.

2) Self-Management refers to the capability of students to effectively manage their emotions, which includes skills such as emotional regulation, stress management, goal setting, and self-discipline. This helps students cope with various situations and maintain focus on their objectives.

3) Social Awareness refers to the ability of students to develop an understanding and empathy towards others, including respect for different backgrounds and cultures. This skill allows students to recognize and appreciate diversity, which contributes to the establishment of positive interpersonal relationships.

4) Relationship Skills refers to the ability of students to build healthy, positive, and collaborative relationships through effective communication, teamwork, and conflict resolution skills. This involves active listening, empathy, and the ability to work cooperatively with others.

5) Responsible Decision-Making refers to the capability of students to weigh alternatives, consider consequences, and make responsible choices. This skill aids students in making wise decisions when faced with challenges and uncertainties.

5.3.1.3 Developing a semi-structured interview questionnaire

Through in-depth interviews and exchanges with experts, experts' opinions are collected and analyzed to create an active learning model to enhance social and emotional learning (SEL). The researcher conducted semi-structured interviews with five experts in education and psychology. The questionnaire includes three aspects: the definition and composition of social emotional learning, the development of active learning model and the measurement method of social emotional learning. Using the concept of active learning theory proposed by Bonwell &

Eison(1991), researcher developed an active learning model aimed at improving SEL of college students. This learner-centered design uses psychological techniques and incorporates information from expert interviews to guide the design of learning activities. These activities are designed to promote greater participation and active learning among university students. According to the results of literature research and interviews, relevant information and data were finally collected, which provided effective help for determining the definition of choice and formulating the active learning model.

5.3.1.4 Development of social-emotional learning questionnaire

Based on the data collected by the expert interview protocol, the researcher developed a social-emotional learning questionnaire. The questionnaire contains a definition of social-emotional learning and its 5 components, consisting of 35 questions designed to assess the student's overall level of social-emotional learning and the level of each component. The researcher invited three IOC experts to evaluate the questionnaire and 100 university students to test it. The data show that the IOC expert score of the Social Emotional Learning Questionnaire for College Students is 1.0 and the reliability score is 0.963. The questionnaire is divided into two parts :1) basic information; 2) Issues related to SEL components.

5.2.2 Phase II: Development of an Active Learning Model to Promote Social and Emotional Learning in College Students

5.3.2 Phase II: Development of an active learning model to improve college students' social-emotional learning

5.3.2.1 Interview stage

Through literature review and in-depth interviews with experts, the researcher developed and designed an active learning model, which includes 14 lesson plans, each consisting of three stages :(1) Lead-in (2) Learning activity process; (3) Conclusion. Each session lasts 90 minutes. The results show that the consistency index between research objectives and active learning activity design ranges from 0.66 to 1.00. The course lasts for 6 weeks, with 2-3 90-minute sessions per week. This arrangement allows students to develop an in-depth understanding of the material, ensures full participation in each lesson, and promotes the improvement of their SEL skills.

(1) Lead-in: The introduction includes an introduction to the teaching topic and basic background knowledge to provide students with the necessary prior knowledge and learning motivation. The purpose of this section is to attract students' attention and stimulate their interest in learning.

(2) Learning activity process: Learning activity process is concerned with specific learning activities and processes. Five experts surveyed suggested that this step could leverage a variety of active learning strategies for specific SEL skills.

(3) Conclusion: The summary stage should focus on reflecting and consolidating the learning content, including reviewing the learning objectives and providing feedback. At this stage, students need to review what they have learned and reflect on their own experiences to ensure a deep understanding and application of what they have learned.

Instructional materials used include slides, video and audio, online resources, drawings, and various formats. The organization of these educational materials enhances the learning environment and effectively enhances the impact and efficacy of the instructional approach.

5.3.2.2 Assessment and adjustment stage

The researcher invited three experts from the International Olympic Committee (IOC) to assess the specific content of the lesson plan, and the findings indicated that all the elements were suitable. And based on expert advice, appropriate adjustments were made to ensure the effectiveness of the teaching experiment.

Before starting the teaching experiment, 10 students from the same background were invited to conduct try-out of the course, and the researcher observed the students' reactions and understood their feedback. And make the final course plan adjustment. In order to achieve the best effect of teaching experiment.

Overall, the active learning model curriculum developed includes the implementation of relevant courses and activities, the provision of professional guidance and support, and the creation of a learning and living environment conducive to SEL development. The results of this research stage lay a foundation for the next empirical

research. The model focuses on cultivating students' self-management, social awareness, self-awareness and interpersonal skills, aiming to help students better adapt to society, face various challenges and lay a more solid foundation for future development. The next research will conduct an empirical test to evaluate the actual effect of active learning model and further optimize and improve the curriculum design.

5.3.3 Phase III: To evaluate the effect of an active learning model to improve college students' social-emotional learning.

5.3.3.1 Pre-test results of social-emotional learning questionnaire

Using the Social and Emotional Learning Questionnaire of College students to conduct pre-test, post-test and follow-up test as evaluation methods, it can objectively, comprehensively and accurately evaluate the changes of students after using active learning mode. This evaluation can confirm whether expected teaching and research objectives are being met. Before the implementation of the active learning model, 262 college students were pre-tested with the Social Emotional Learning Questionnaire. The results showed: Overall, students' performance was moderate low. Among them, the High level of responsible decision-making is moderately High, but the other aspects of the performance is relatively poor, both moderate low. The average level of self-management was lower than expected, indicating that students faced challenges in controlling their own behavior and emotions. Performance in social awareness and self-awareness was also unsatisfactory, reflecting the need to improve students' awareness and understanding of themselves and their surroundings. Most worrying was the worst performance in interpersonal skills, which highlighted a key area for focused improvement.

5.3.3.2 Survey results of Social-emotional learning

Prior to the implementation of the teaching model, a survey of 262 students showed that their level of social-emotional learning was generally low, indicating that there was much room for improvement. Post-course evaluation showed that SEL level of the experimental group improved to moderate high in general. Improvements and advances were observed in all sel components, especially in interpersonal skills and self-awareness. Follow-up tests performed on the experimental

and control groups one month later showed that the experimental group maintained moderately high SEL levels. It shows that intervention has obvious effect on improving students' SEL level. However, it is important to note that there are currently no specialized courses focused on improving SEL or any specific SEL skills. Students lack sufficient SEL support and resources in campus life and study, and need more attention and help. Teachers need to provide targeted guidance and support to create an environment conducive to SEL and help students develop these critical skills. Through the implementation of specially designed teaching activities and curricula, teachers can help students quickly improve their SEL capabilities, so that they can better cope with various challenges in their academic and personal lives.

1) Implementation of active learning model

An experiment involving 40 students (20 in the experimental group and 20 in the control group) explored the impact of active learning patterns on five dimensions of self-awareness, social awareness, self-management, interpersonal skills, and responsible decision-making. The course consists of 14 lessons, each lasting 90 minutes, designed to ensure depth of instruction and broad student participation. The practical aspects of the curriculum require teachers to carefully design interactive activities to ensure active participation, using methods such as group discussions, role playing and case studies.

2) The effectiveness of active learning model in promoting social emotional learning

Based on the data analyzed in this study, the results showed that the experimental group showed significant improvement in all five dimensions after the intervention and during follow-up, while the control group showed little change or decline. The improvement in self-awareness and interpersonal skills was particularly significant, rising from a low level to an intermediate level. This suggests that the intervention had a positive impact on students' personal development and social skills, enhancing their self-awareness, social interaction, problem-solving and responsible decision-making. The results of this study provide an important reference for further

promotion and improvement of similar intervention programs to promote the overall development and healthy growth of students. The findings indicate that the active learning approach notably enhances college students' social emotional learning (SEL) capabilities. Particularly, the SEL proficiency of the experimental group showed significant advancements in both post-intervention and follow-up assessments compared to the control group, underscoring the efficacy of this approach in fostering SEL among students. In addition, the passage of time also significantly affects SEL capabilities, showing significant progress over time. The differences between the experimental and control groups were not only significant over time, but also between groups, further verifying the validity and applicability of the active learning model. Notably, the experimental group performed relatively consistently after the test and in subsequent tests, suggesting that the model had a lasting effect. To sum up, the active learning model has a significant and lasting impact on the improvement of SEL ability of college students, and provides important theoretical and empirical support for educational practice.

5.4 Discussion

5.4.1 Summary of Major Findings

1) Overall Level of Social Emotional Learning Among College Students

The overall level of social emotional learning among college students is moderately low ($M=2.28$, $S.D.=0.41$). Among the various skills, relationship skills ($M=2.04$, $S.D.=0.58$) and self-awareness ($M=2.10$, $S.D.=0.57$) scored the lowest, indicating significant room for improvement.

2) Significant Effectiveness of the Active Learning Model

After the implementation of the active learning model, the social emotional learning of students in the experimental group significantly improved ($M=3.15$, $S.D.=0.16$), compared to the control group ($M=2.03$, $S.D.=0.06$). This demonstrates that the active learning model has a significant effect on enhancing the social emotional learning of college students.

3) Improvement in Specific Social Emotional Learning Skills

Following the active learning model intervention, the most notable improvements in the experimental group were seen in self-awareness ($M=3.21$, $S.D.=0.31$) and relationship skills ($M=3.12$, $S.D.=0.25$), followed by self-management ($M=3.08$, $S.D.=0.23$), social awareness ($M=3.12$, $S.D.=0.25$), and responsible decision-making ($M=3.21$, $S.D.=0.26$).

4) Long-term Effects of the Active Learning Model on Social Emotional Learning

Based on the scores of the experimental group in the pre-test ($M=2.01$, $S.D.=0.035$), post-test ($M=3.15$, $S.D.=0.16$), and follow-up test ($M=3.14$, $S.D.=0.17$), it can be concluded that the active learning model has a significant and stable long-term effect on the social emotional learning abilities of college students.

5.4.2 Discussion of the Definition and Components of Social and Emotional Learning of College Students

5.4.2.1 Defining Social and Emotional Learning for College Students

The first phase of our research focused on establishing a precise definition and identifying the key components of Social and Emotional Learning (SEL) specifically for college students. Our findings confirm that SEL for this demographic consists of five core components: self-awareness, social awareness, self-management, relationship skills, and responsible decision-making. This section will discuss why these components are particularly suited to college students and the implications of our findings. Our definition of Social Emotional Learning for college students, derived from comprehensive literature reviews and expert interviews, encapsulates SEL as a holistic process. This method enables students to acquire and apply the necessary knowledge, abilities, and mindsets required to cultivate positive self-perceptions, regulate their emotions, achieve personal and collective objectives, demonstrate empathy towards others, establish and sustain supportive connections, and exercise prudent judgment.

The integration of cognitive and emotional competencies is crucial at the college level, where students face significant academic and social challenges. This

comprehensive definition underscores the importance of SEL in fostering resilience, adaptability, and overall well-being among college students. It also aligns with existing theories while addressing the specific developmental needs and contexts of higher education.

5.4.2.2 Components of Social Emotional Learning

Each of the five identified components of SEL plays a vital role in the holistic development of college students:

1. **Self-awareness:** This involves students' recognition of their strengths, goals, values, behaviors, and emotional states. In the college context, self-awareness is crucial as it helps students navigate the new and often stressful environment of higher education. Understanding their emotions and responses enables students to manage their academic and personal lives more effectively.

2. **Self-management:** The ability to regulate emotions, behaviors, and thought processes, particularly under stress, is essential for college students. Effective self-management skills help students set and achieve goals, handle academic pressures, and adapt to changing circumstances. This component is integral to their success in both academic and extracurricular activities.

3. **Social awareness:** Sensitivity to and understanding of others' emotions, needs, and social contexts is vital in a diverse college environment. Social awareness fosters empathy and respect for different cultures and perspectives, which are essential for building inclusive and supportive campus communities. This competency also enhances students' ability to engage in collaborative learning and social interactions.

4. **Relationship skills:** The ability to establish and maintain positive interpersonal relationships is crucial for college students. Strong relationship skills, including effective communication, cooperation, and conflict management, contribute to successful teamwork and leadership in academic and social settings. These skills are fundamental for creating a supportive network that enhances students' overall college experience.

5. Responsible decision-making: The ability to make ethical and constructive choices about personal and social behavior is particularly important in the college context. Students must navigate complex social and academic environments, and responsible decision-making skills help them consider the consequences of their actions, respect others' rights, and contribute positively to their communities. This component is essential for fostering a sense of accountability and ethical behavior.

5.4.2.3 Implications and Applications

The findings from Phase I have significant implications for both theoretical understanding and practical applications of SEL in higher education. The tailored definition and components provide a nuanced framework for developing and implementing SEL programs specifically designed for college students. These programs have the potential to improve students' social and emotional skills, thereby supporting their academic achievement and overall welfare. Subsequent studies should investigate the enduring effects of SEL interventions on students' individual and academic results, and pinpoint successful approaches for embedding SEL within the college syllabus. In conclusion, this phase of the research highlights the critical importance of SEL in the holistic development of college students. By establishing a clear definition, identifying key components, and developing reliable measurement tools, we have laid the groundwork for future research and practice in this field. The integration of SEL into higher education can significantly enhance students' abilities to navigate the challenges of college life, promoting their success and well-being.

5.4.3 Development of an Active Learning Model to Improve College Students' Social-Emotional Learning

5.4.3.1 Interview Stage: Designing the Active Learning Model

The development of an active learning model for enhancing social-emotional learning (SEL) among college students was initiated through a thorough literature review and in-depth expert interviews. The model comprises 14 lesson plans, each structured into three stages: Lead-in, Learning Activity Process, and Conclusion. Each session, lasting 90 minutes, is designed to maximize student engagement and facilitate comprehensive learning. The course spans six weeks, with 2-3 sessions per

week, ensuring ample time for students to internalize the material and improve their SEL skills.

1) Lead-in: The introductory segment of each lesson is critical for setting the stage for learning. It includes an overview of the topic and relevant background information, which primes students for the session and sparks their interest. This initial engagement is crucial, as it aligns with educational theories that emphasize the importance of motivation in learning (Schunk, Pintrich, & Meece, 2008).

2) Learning Activity Process: This core component of the lesson involves specific activities designed to develop SEL skills. Drawing on active learning strategies, such as collaborative projects, role-playing, and case studies, this stage leverages diverse methods to engage students actively. Experts recommended this approach as it caters to different learning styles and promotes deeper understanding (Bonwell & Eison, 1991).

3) Conclusion: The final stage of each lesson focuses on reflection and consolidation of learning. Reviewing objectives and providing feedback help students solidify their understanding and reflect on their experiences. This reflective practice is essential for SEL, as it encourages self-awareness and continuous improvement (Gibbs, 1988).

The instructional materials, including slides, videos, audio, online resources, and drawings, are strategically selected to create an optimal learning environment. These resources not only support diverse learning preferences but also enhance the overall effectiveness of the teaching model (Mayer, 2009).

5.4.3.2 Assessment and Adjustment Stage: Refining the Teaching Model

To ensure the active learning model's efficacy, the researcher engaged three IOC experts to evaluate the lesson plans. The feedback confirmed the appropriateness of the components, leading to minor adjustments that enhanced the teaching experiment's overall quality.

A preliminary try-out of the course was conducted with 10 students from similar backgrounds to those of the study participants. This pilot phase allowed

researcher to observe student reactions and gather feedback, facilitating final adjustments to the course plan. This iterative process of design, evaluation, and refinement is fundamental in educational research, ensuring that the model is both effective and responsive to student needs (Design-Based Research Collective, 2003).

The active learning model's curriculum includes relevant courses and activities, professional guidance and support, and a conducive learning and living environment for SEL development. The comprehensive approach ensures that students can cultivate self-management, social awareness, self-awareness, and interpersonal skills. This holistic development is critical for helping students navigate societal challenges and prepare for future endeavors.

5.4.3.3 Benefits of the Active Learning Model

The active learning model's development was guided by the principles of active learning theory, which emphasizes student engagement and participation as key factors in effective learning (Freeman et al., 2014). By incorporating active learning strategies, the model promotes deeper cognitive processing, greater retention of information, and improved SEL outcomes.

Enhanced Engagement: Active learning strategies are known to increase student engagement, which is directly linked to better learning outcomes (Prince, 2004). The interactive nature of these activities ensures that students do not merely receive information passively but actively engage as participants in their learning process.

Development of Critical SEL Skills: The model specifically targets the development of SEL skills, which are crucial for students' academic and personal success. By engaging in activities that require self-reflection, empathy, and collaboration, students can better understand and manage their emotions, build strong relationships, and make responsible decisions (Zins et al., 2004).

Adaptability and Flexibility: The active learning model is designed to be flexible and adaptable, allowing it to be tailored to different educational contexts and

student needs. This adaptability ensures that the model can be effectively implemented in various settings, enhancing its overall impact (Kolb, 1984).

In conclusion, the development of the active learning model for improving college students' SEL represents a significant advancement in educational practice. By integrating theoretical insights with practical applications, the model provides a robust framework for fostering SEL in higher education. Future empirical research will evaluate the model's effectiveness and further refine the curriculum, contributing to the ongoing enhancement of SEL education.

5.4.4 Effectiveness of Active Learning Model to enhance components of Social-Emotional Learning

The effectiveness of the active learning model in enhancing each component of SEL among participating students can be examined in detail:

1) **Self-Awareness:** Active learning activities, such as reflective exercises and self-assessment tasks embedded within the curriculum, encouraged students to explore their strengths, values, and emotional responses. By engaging in activities that prompted introspection and self-evaluation, students developed a deeper understanding of themselves, thereby enhancing their self-awareness.

2) **Social Awareness:** Collaborative group discussions and role-playing scenarios facilitated students' sensitivity to others' emotions, perspectives, and social contexts. These interactive experiences provided opportunities for students to practice empathy, interpret non-verbal cues, and appreciate cultural diversity, fostering heightened social awareness.

3) **Self-Management:** The active learning model incorporated strategies for stress management, goal-setting, and adaptive coping mechanisms. Through simulations and real-life scenarios, students learned to regulate their emotions, prioritize tasks effectively, and navigate challenges with resilience, thereby improving their self-management skills.

4) **Interpersonal Skills:** Group projects and cooperative learning activities promoted teamwork, communication, and conflict resolution skills among students. By working collaboratively towards common goals and negotiating

interpersonal dynamics, students developed stronger interpersonal skills, which are essential for building and maintaining positive relationships.

5) Responsible Decision-Making: Case studies and ethical dilemmas presented in the active learning model encouraged students to analyze situations critically, consider multiple perspectives, and evaluate the consequences of their decisions. This structured approach to decision-making fostered responsible behavior and ethical reasoning among students.

The observed enhancements in each SEL component underscore the active learning model's efficacy in addressing specific developmental needs identified in the pre-test phase. By actively engaging students in experiential learning activities, the model effectively cultivated a range of social and emotional competencies critical for personal and academic success.

1) **Self-awareness** was fostered through reflective practices that prompted students to identify and articulate their emotions, strengths, and areas for growth.

2) **Social awareness** was heightened through interactive exercises that promoted empathy, cultural sensitivity, and a deeper understanding of social dynamics.

3) **Self-management** skills were strengthened by equipping students with practical strategies for emotional regulation, stress management, and goal attainment.

4) **Interpersonal skills** improved as students engaged in collaborative projects that required effective communication, teamwork, and conflict resolution.

5) **Responsible decision-making** capabilities were developed through activities that challenged students to consider ethical dilemmas and make informed choices aligned with personal values and societal norms.

In conclusion, the findings underscore the active learning model's effectiveness in enhancing college students' SEL across multiple dimensions. By providing structured opportunities for engagement and skill development, this study contributes to the growing body of research supporting active learning as a

pedagogical approach that nurtures students' holistic development. Future research should continue to explore optimal strategies for integrating SEL into educational practices, thereby fostering environments that support students' social, emotional, and academic growth.

5.4.5 Discussion on The Effectiveness of Active Learning Model

The experimental group showed significant improvement in social-emotional learning ($M=3.15$, $S.D.=0.16$), while the control group showed little change ($M=2.03$, $S.D.=0.06$). This result significantly supports the effectiveness of active learning model in improving college students' social-emotional learning. Specifically, the experimental group scored significantly higher on average than the control group, demonstrating the strong potential of the active learning model in promoting students' social-emotional skills.

The success of active learning can be attributed to a number of factors:

(1) The model usually emphasizes students' active participation and active learning experience, which is not only lacking in traditional teaching models, but also can stimulate students' interest and understanding of the learning content more deeply. Through active participation in class activities, group discussions, and practical application tasks, students are able to more effectively use social-emotional learning skills such as self-awareness, emotion management, and effective communication.

(2) The reflective nature of the active learning model can help students think deeply and understand their own emotional state and the way they interact with others. This kind of reflective learning is not only a simple knowledge transfer, but also a teaching method that can promote individual internalization and development. Through this deep learning process, students can more consciously explore and improve their emotional skills, thereby elevating their social-emotional learning.

(3) The supportive learning environment created by the active learning model is also one of the key factors for its success. In such an environment, students feel supported and encouraged by teachers and classmates, and they can express and

share their emotional experiences more freely, thus promoting the development and maturity of emotional skills.

To sum up, the experimental results not only prove the significant effect of active learning mode in improving college students' social-emotional learning, but also emphasize the importance and feasibility of this teaching method in educational practice. Future studies can further explore the effect of active learning model in different types and application scenarios, as well as its universality in different age groups and cultural backgrounds, to provide more in-depth theoretical support and guidance for educational reform and practice.

5.4.6 Discuss the Reasons of Active Learning Model Can Maintain Its Enhanced Social-Emotional Learning Effect in The Long-Term

The active learning model closely aligns with scholarly definitions and concepts, as articulated by Bonwell and Eison (1991), Handelsman et al. (2007), Freeman et al. (2014), and Carr et al. (2015). These definitions emphasize that active learning involves instructional activities where students are actively engaged in constructing their own knowledge and understanding through hands-on activities, discussions, and reflective practices. This approach contrasts with traditional methods where students passively receive information.

By actively participating in their learning, students in active learning environments not only acquire knowledge but also develop higher-order thinking skills and the ability to apply their learning in real-world contexts. This process of active engagement fosters a deeper understanding and internalization of social-emotional learning (SEL) skills. Through activities such as group work, role-playing, and reflective exercises, students actively explore and construct their understanding of emotions, relationships, and self-awareness.

Moreover, the continuous interaction and feedback loop inherent in active learning environments allow students to receive timely guidance and adjust their understanding and behaviors accordingly. This feedback mechanism is crucial for reinforcing SEL skills and ensuring their long-term retention and application. By

integrating cognition, emotion, and behavior in their learning experiences, students are better equipped to maintain and further develop their SEL abilities over time.

Thus, the design principles of active learning, which prioritize active engagement, reflective practices, and continuous feedback, provide a robust framework for enhancing and sustaining students' social-emotional learning abilities in the long run. This approach not only supports immediate gains in SEL but also fosters enduring improvements by empowering students to become proactive learners and adaptable practitioners of social-emotional skills in diverse contexts.

Through the data analysis of the experimental group in the pre-test, post-test and follow-up tests, we can see that the active learning model has a significant and stable long-term effect on improving college students' social-emotional learning. Specifically, the experimental group had a mean social-emotional learning score of 2.01 (S.D.= 0.035) in the pre-test phase. In the post-test stage after the implementation of the active learning model, this score increased significantly to the mean value of 3.15 (S.D.=0.16), indicating that the active learning model has a significant effect on the improvement of social-emotional learning ability in the short term.

More importantly, the follow-up test results showed that the long-term stability score of the experimental group after the implementation of the active learning mode was 3.14 on average (S.D.= 0.17), which was close to the result in the post-test. This indicates that the active learning model not only effectively improves the level of social-emotional learning in the short term, but also maintains a stable improvement effect in the subsequent period without a significant decline trend.

These findings have important practical implications, especially for educational practice and policy making. Educators can consider adopting an active learning model to promote students' social-emotional learning development, as it can not only bring about significant improvements in the short term, but also ensure the long-term stability of these improvements. This lasting educational effect may have a profound impact on the overall development and growth of students, helping them to be more confident and mature in the face of complex social and interpersonal relationships.

The reasons why the active learning model can maintain its enhanced social-emotional learning effect in the long run may involve the following aspects:

(1) The active learning model encourages students to acquire knowledge and skills through exploration, discussion and practice, rather than simply transferring and memorizing information. This deep learning promotes a deep understanding and internalization of social-emotional learning content, enabling students to maintain these learning outcomes more sustainably.

(2) Active learning mode usually includes reflection and feedback mechanism. Students can constantly receive feedback from peers and teachers during the learning process, so that they can timely adjust and improve their social emotional learning skills. This feedback loop helps to consolidate learning outcomes and maintain their effectiveness over the long term.

(3) Real active learning mode emphasizes the application of learning content to real situations, and helps students connect abstract social-emotional learning skills with real life situations through simulation, case analysis and role playing. This practical application not only enhances the practicability of learning, but also enhances the ability of students to maintain these skills in the long term.

(4) Active learning mode emphasizes students' autonomy and motivation. Students are more active in learning, and they are more willing to actively explore and learn social emotional skills. This process of independent learning enables students to maintain interest and involvement in social emotional learning in the long run, so as to maintain the long-term stability of their learning results.

(5) Active learning models often involve the integration of cognition, emotion and behavior, rather than simply the transfer of knowledge. Such comprehensive learning styles help students to develop more comprehensive and lasting social-emotional learning abilities in the long run, because they involve the study and practice of multiple aspects such as the cognition of emotions and the regulation of emotions.

Taken together, the active learning model can maintain its enhanced social-emotional learning effect in the long run mainly because it promotes deep learning, provides continuous feedback and adjustment mechanisms, encourages practical application, stimulates students' self-learning motivation, and integrates cognitive and emotional factors. These factors work together to enable students to maintain and develop their social-emotional learning ability under the influence of active learning mode.

5.5 Research Recommendation

5.5.1 Further study on the definition and components of SEL in college students

In order to further study the definition and components of SEL in college students, first of all, an extensive systematic literature review should be carried out to collect and analyze the domestic and foreign researches on the definition and components of SEL. By systematically combing and summarizing the definition of SEL by different researcher, the generally accepted definition as well as the existing disputes and differences are identified. This will provide a solid theoretical basis for further empirical research. At the same time, using the research results of psychology, pedagogy, sociology and other disciplines for reference, the connotation and extension of SEL are expounded from different perspectives. The interdisciplinary research method can fully reveal the complexity and multi-dimensional characteristics of SEL, which is helpful to build a more comprehensive and accurate SEL conceptual model.

Secondly, qualitative research methods such as semi-structured interviews and focus group interviews should be adopted to deeply explore college students' cognition and experience of SEL dimensions in real life and study. Through qualitative data analysis, the core elements of SEL and its specific manifestation are extracted. On this basis, a large-scale questionnaire survey was designed and implemented to quantitatively measure SEL of college students. Through factor analysis and other statistical methods, the multi-dimensional structure of SEL is verified, and the relative importance and interrelationship of each component element are determined. This

comprehensive research method will help to fully reveal the internal structure and external performance of SEL in college students.

In addition, the influence of individual differences such as gender, grade, professional background and cultural background on SEL was discussed, and the key factors affecting SEL development of college students were identified through statistical methods such as multiple regression analysis, so as to provide basis for targeted intervention. At the same time, this paper studies the influence of family, school, society and other environmental factors on SEL of college students, paying special attention to the promoting or inhibiting effect of educational environment such as campus culture, teacher-student relationship and peer relationship on SEL development. Through field investigation and case analysis, the complex influence mechanism of environmental factors on SEL was revealed.

In order to evaluate SEL of college students better, a comprehensive assessment tool for SEL of college students should be developed based on the existing assessment tools and combined with the research results. The tool should have good reliability and validity, and can measure the SEL level of college students comprehensively and accurately. At the same time, SEL dynamic evaluation mechanism is established to evaluate SEL development status of college students regularly. Through longitudinal research, tracking the change trend of SEL in college students, identifying its development law, and providing empirical support for SEL education intervention.

Finally, based on the research results, a SEL theoretical model suitable for college students is constructed. The model should fully cover the definition, core components and influencing factors of SEL, and can explain the internal mechanism and external conditions of SEL development of college students. The validity and universality of SEL theoretical model was verified through empirical research, and the model was modified and improved by combining empirical data under different backgrounds to ensure its scientificity and applicability. These studies will provide a

solid theoretical foundation and empirical support for further exploration and practice of SEL education.

5.5.2 Further develop a positive learning model to enhance SEL for college students

When developing an effective active learning model, we should first pay attention to the theoretical basis and practical application of the model to ensure that it can comprehensively improve the social emotional learning ability of college students. The results show that after the implementation of the active learning model, SEL of students in the experimental group significantly improves, especially in the aspects of self-awareness and relational skills. Therefore, it is recommended that special emphasis be placed on the development of these key skills during model design. The model should include systematic self-reflection and peer interaction activities to promote students to deeply understand the emotions and needs of themselves and others, so as to improve their self-management and relationship management skills.

In addition, the design of active learning model should focus on diversified teaching strategies and methods. Based on the research findings, the improvement of students in different SEL skills is not the same, which indicates that different skills may require different teaching strategies. For example, improvements in relationship skills can be achieved through activities such as team work projects and role playing, while improvements in self-awareness can be facilitated through journal writing and meditation practices. Therefore, it is suggested to introduce a variety of teaching activities into the model to meet the development needs of different SEL skills.

Further research should also consider the sustainability and long-term effects of the model. Although the results show that the active learning model has a significant long-term effect on SEL, it is recommended to incorporate regular evaluation and feedback mechanisms into the model design in order to ensure that this effect is sustained. This will help to timely discover and solve students' problems in SEL development and ensure continuous improvement and optimization of the model.

Finally, the active learning model should be adaptable across cultures and disciplines. Due to the diversity of college students, students from different cultural

backgrounds and subject areas may have significant differences in SEL demand and performance. Therefore, it is recommended to conduct extensive cultural and disciplinary adaptation studies during the model development process to ensure the validity and applicability of the model in different contexts.

Through the above suggestions, the active learning model can not only effectively improve the SEL ability of college students, but also be widely applied and verified in different cultural and disciplinary backgrounds, providing a solid foundation for further research and practice.

5.5.3 Further develop the assessment of social-emotional learning.

Aiming at the third research objective, which is to evaluate the effectiveness of active learning model on SEL of college students, it is suggested to conduct in-depth discussion and evaluation from multiple perspectives to fully understand the mechanism of action of this model and its application effect in different contexts. The research results show that after the implementation of the active learning model, the SEL of the experimental group students is significantly improved, especially in the aspects of self-awareness and relational skills, and its long-term effect is relatively stable. Based on these findings, further longitudinal studies are recommended to track and evaluate the persistent effects of active learning models on student SEL over time. This will help to determine the long-term benefits of the model, assess changes in its effect at different time points, and explore potential influencing factors.

In addition, it is suggested to conduct cross-cultural comparative studies in different cultural backgrounds and educational environments to evaluate the universality and adaptability of the active learning model. Since SEL of college students is affected by many factors, including cultural background, education system, social and economic status, cross-cultural research can help identify the effectiveness of the model and its optimization strategy in different contexts. In addition, group studies of different groups, such as students of different genders, subject majors and grades, should be considered to understand the differentiated impact of the model on different student groups.

In order to improve the scientific nature of the study and the reliability of the results, it is recommended to adopt a mixed method of research design, combining quantitative and qualitative data collection and analysis. For example, a large amount of data was collected through questionnaire survey, and the effectiveness of the model was tested by statistical analysis. At the same time, students' subjective experience and feelings were deeply understood through interviews and focus group discussions, so as to reveal the potential impact mechanism of the model on SEL and the challenges and suggestions in the specific implementation process.

In addition, it is suggested to further optimize and refine the specific implementation strategies of the active learning model. The different degrees of improvement of SEL skills found in the research suggest that some modules or activities can be strengthened specifically to maximize the overall effect of the model. Through continuous practice and feedback, the model is constantly adjusted and refined to make it more flexible and targeted, and able to adapt to the needs of different student groups.

Finally, it is recommended to strengthen cooperation with educational policy makers and practitioners to translate research findings into applied guidance and policy recommendations in actual teaching. This will not only help to make educational practices more scientific and effective, but also provide strong support for promoting educational reform and students' all-round development.

In general, through multi-angle and all-round in-depth research, we can comprehensively evaluate and optimize the implementation effect of the active learning model, and ensure its maximum effectiveness in improving the social emotion of college students.

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APPENDIX A

Table 1 List of Interviewed Experts and Experts for Research Tool Review

Experts Name	Resume/Positions
Jitra Dudsdeemaytha	Assistant Professor, Ph.D. in Counseling Psychology
Sittiporn Kramnnon	Instructor Dr. In Applied Psychology
Kanchit Saenubol	Professor, Ph.D. in Psychology
Sittipong Wattananonsakul	Assoc.Prof.Dr. in Psychology
Ning Yang	Professor, Ph.D. in Education

Table 2 List of IOC review experts assessing the Socio-emotional Learning questionnaire for college students

Experts Name	Resume/Positions
Monthira Charupheng	Associate Prof., PhD in educational psychology
Paradee Kambhu Na Ayudhaya	Instructor, PhD in educational psychology
Kanchit Saenubol	Instructor, PhD in Guiding psychology

Table 3 Active Learning Model 14 lesson program IOC review expert list

Experts Name	Resume/Positions
Ajarn Dr. Natchawadee chanforng	PhD in educational technology
Asst. Prof.Dr Jaemjan Sriarunrasmee	PhD in educational technology
Assoc.Prof.Dr.Khwanying Sriprasertpap	PhD in educational technology





APPENDIX B

Sample of Semi-Structured Expert Interview Questionnaire

STATEMENT: This semi-structured interview questionnaire is a tool used to interview respondents for the following purposes.

Purpose of the Interview:

- 1.To define the definition and components of social emotional learning among college students in China context.
- 2.To gain the guidelines for developing an active learning model to enhance social emotional learning among college students in China.
- 3.To gain the guidelines for developing research measurement instruments to evaluate social emotional learning among college students 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

Question1) The meaning and components of social emotional learning among college students in China context.

1.1 In your opinion, what is the definition of social emotional learning for college students?

1.2 According to the literature review, CASEL has five core components social emotional learning (Self-Awareness, Self-Management, Social Awareness, Relationship Skills, Responsible Decision-Making). Do you think social emotional learning with these five components is suitable for Chinese college students?

1.2.1 Self-Awareness refers to the ability to recognize and understand one's own emotions, strengths, weaknesses, values, and goals, including self-perception, self-confidence, and the ability to accurately assess one's own feelings and thoughts.

1.2.2 Self-Management refers to the ability to regulate one's emotions, thinking, and behavior in different situations, including skills such as self-control, coping with stress, impulse control, goal setting, and organizational skills.

1.2.3 Social Awareness refers to the ability to understand and empathize with the perspectives, feelings, and needs of others, to demonstrate care, respect, and appreciation for diversity, and to understand social norms and the impact of one's own behavior on others.

1.2.4 Relationship Skills includes the ability to establish and maintain healthy and positive relationships with others and encompasses the ability to communicate, actively listen, collaborate, resolve conflict, and work effectively in teams.

1.2.5 Responsible Decision-Making refers to the ability to make ethical and responsible choices, including problem solving, critical thinking, and the ability to evaluate the consequences of one's actions, taking into account social norms, safety concerns, and personal values.

1.3 In addition to the five components mentioned above, do you think there are other components that reflect the social-emotional learning of college students in China context? What are they?

1.4 In response to if there are additional components, what should the behaviors guided by those components you mentioned look like?

Question 2) Guidelines to develop Active Learning Model for enhancing Social Emotional Learning among college students in China.

2.1 In your opinion, what is the definition of Active Learning Model for college students?

2.2 Could you provide me with the guidelines for developing an active learning model to enhance social emotional learning among college students in China?

2.3 What characteristics or steps to provide the contents and activities of Active Learning Model to enhance social emotional learning among college students?

2.4 In your opinion, are there psychological techniques or other activities that can be used to enhance social emotional learning among college students in developing an Active Learning Model? If so, what kinds of techniques or activities?

Question 3) Guidelines for developing research measurement instruments to evaluate social emotional learning among college students in China.

1.1 In your opinion, it is suitable to use the Social Emotional Learning for College Students Questionnaire to evaluate the social emotional learning among college students in China?

1.2 Are there other measurements can be used to evaluate the social emotional learning of college students in China? If so, what are the measurements?





APPENDIX C

Summary of the main contents and suggestions of the expert interviews

In the initial phase of the study, researcher conducted interviews with five experts in the fields of psychology and education. The purpose of these interviews was to gather information to define and construct the meaning and components of social-emotional learning (SEL) among college students. Additionally, insights from the interviews aimed to guide the development of assessment tools for college student SEL and provide direction for the creation of an active learning model to enhance college students' social-emotional learning. Key findings from the expert interviews can be summarized as follows:

Question1) The definition and components of social emotional learning among college students in China context.

1.1 The definition of social emotional learning for college students

The definition of Social Emotional Learning (SEL) among college students encompasses various dimensions, as evidenced by insights from several experts. Firstly, SEL assists college students in acquiring the ability to control and regulate their behaviors and emotions, enabling them to maintain equilibrium in dynamic social environments. This regulatory capacity extends beyond self-management to encompass adapting one's behavior within groups to meet collective needs. Secondly, SEL emphasizes how individuals effectively establish connections and interact with others, including understanding and responding to others' emotions, adhering to social norms, and fostering meaningful interpersonal relationships. Additionally, SEL is not solely about cultivating emotional and social competencies but also entails an integration of cognition and experience, facilitating cognitive transformations and behavioral adjustments through specific social and emotional experiences. Lastly, SEL constitutes a systemic learning process embedded within college students' daily lives and studies, aiming to foster their competency across diverse contexts, including academic, social, and personal development domains. Through a synthesis and analysis of insights from

four experts, it is evident that the definition of SEL among college students embodies multidimensional and multilevel characteristics, spanning from individual to collective and from emotional to cognitive realms.

1.2 Experts unanimously agree that "components of social-emotional learning" should encompass the following five aspects:

1.2.1 Self-Awareness refers to the ability to recognize and understand one's own emotions, strengths, weaknesses, values, and goals, including self-perception, self-confidence, and the ability to accurately assess one's own feelings, thoughts and behaviour.

1.2.2 Self-Management refers to the ability to regulate one's emotions, thinking, and behavior in different situations, including skills such as self-control, coping with stress, impulse control (including positive and negative impulses), goal setting.

1.2.3 Social Awareness refers to the ability to understand and empathize with the perspectives, feelings, and needs of others, to demonstrate care, respect, and appreciation, organizational skills. for diversity, and to understand social norms and the impact of one's own behavior on others.

1.2.4 Relationship Skills includes the ability to establish and maintain healthy and positive relationships with others and encompasses the ability to communicate, actively listening, collaborate, cooperation, negotiations, resolve conflict, and work effectively in teams.

1.2.5 Responsible Decision-Making refers to the ability to make ethical and responsible choices, including problem solving, critical thinking, and the ability to evaluate the consequences of one's actions, taking into account social norms, safety concerns, and personal values.

These five aspects align with CASEL's (2023) SEL theory and constitute the primary theoretical framework for this study. Experts believe this framework and definition are suitable for the Chinese context. Specifically, as Chinese college students face rapidly changing societal and workplace environments, these core elements of social-emotional learning can help them better cope with challenges and enhance their

personal and professional qualities. Experts unanimously agree that systematic social-emotional learning can empower Chinese college students to become more confident, self-disciplined, and capable of cross-cultural communication and collaboration, laying a solid foundation for their holistic development.

Question 2) Guidelines to develop Active Learning Model for enhancing Social Emotional Learning among college students in China.

2.1 The definition of Active Learning Model for college students?

Experts provided comprehensive insights into the definition of the active learning model for college students. They unanimously agreed that the model emphasizes students' active engagement in the learning process through various methods such as rehearsal, role-playing, simulation, observation, peer feedback, and self-reflection. Learning occurs in real-life contexts, with instructors guiding students to set and achieve their own learning goals, fostering greater proactivity. The keywords "active" and "learning" highlight that this model not only diversifies learning activities but also promotes interaction, communication, and peer learning, creating a participatory and interactive learning environment. Overall, the active learning model aims to encourage students to actively engage in knowledge comprehension and construction, moving away from rote memorization and cultivating autonomous learning and deep learning habits.

2.2 The guidelines for developing an active learning model to enhance social emotional learning among college students in China

The experts' responses reveal a systematic framework to enhance Chinese university students' active learning in social-emotional learning (SEL). First, warm-up activities help students get to know each other and learn from shared experiences. Demonstrations, such as storytelling, examples, and case studies, provide concrete learning references. Group debates foster critical thinking and collaboration, while reflection sessions consolidate learning outcomes.

The experts emphasize understanding the five core components of SEL, setting instructional goals, and designing relevant activities with attention to session length, content volume, and compactness. The learning process should be interactive, ensuring students' active participation.

The teaching process includes three main steps: introduction, learning activities, and summary. The introduction should spark interest and engagement, promoting active participation rather than passive reception. The summary should guide students in self-reflection and reinforce knowledge. Overall, this framework advocates a student-centered, interactive teaching model, enhancing university students' SEL experiences through structured steps and activities.

Question 3) Guidelines for developing research measurement instruments to evaluate social emotional learning among college students in China.

Experts generally agree that common methods for measuring social-emotional learning include questionnaires, authentic assessments, and observation. Questionnaires are widely used and recommended. Authentic assessments involve qualitative data collection through open-ended questions and student responses, supplemented by quantitative data to enhance research reliability. Observational methods utilize behavioral observation sheets to determine if students meet learning objectives. Together, these methods provide a comprehensive approach to evaluating social-emotional learning.



Social Emotional Learning Questionnaire for College Students

Dear students,

This is a questionnaire about college students' social and emotional learning, the purpose of which is to understand the basic situation of contemporary college students' emotional learning, which is divided into two parts. The first part of the question to investigate your basic situation, please follow your actual situation in the box. Each question in the second part is A project of social emotional learning, each question has four options from "Not Like me at all" to "A lot like me", please answer each question according to your actual situation, and select your corresponding box "✓" in the options. Providing your answers will provide a valuable foundation for my research and will also provide an important aid to the social and emotional learning of college students! The questionnaire does not require a name, the answer is not right or wrong, only for research use, your answer we are absolutely confidential! Therefore, there is no need to have any concerns, please feel free to answer, please do not miss the question, thank you for your cooperation!

Part One: Basic Information

1. Your gender: Male Female
2. Your student ID:

Part Two: Measurement Answer Statement

Please read and understand the questions carefully, and mark the box that best

1 2 3 4
 Not Like me at all A little like me Somewhat like me A lot like me

NO.	Items	Not Like me at all	A little like me	Somewhat like me	A lot like me
1.	I know my own strengths and weaknesses.				
2.	I don't know how to stay calm in the face of stress.				
3.	Before I make a decision, I fully consider all possible circumstances.				
4.	Understand other behavior by considering their feelings and thoughts.				
5.	I will finish my job even if I am in a bad mood				
6.	I don't think violating the school rules is a very serious matter.				
7.	When I am in a bad mood, I know how to calm myself down.				

8.	I don't realize if my classmates need help.				
9.	I don't know what it's like for a group to feel like belonging.				
10.	When I am happy, I am happy to share my feelings				
11.	In the team, I did not show my leadership skills				
12.	When I will upset my friends, I will apologize and try to repair the relationship.				
13.	I tend to seek for help when I encounter difficulties with interpersonal stress.				
14.	I will set out a clear implementation steps for the goal.				
15.	I will adjust my words and deeds in order not to hurt others.				
16.	When I'm not happy, it's hard to concentrate.				

17.	I can keenly sense the emotional changes of the people around me.				
18.	I am a responsible person.				
19.	I'm not sure if my classmates like me.				
20.	I know what I can't control.				
21.	I will seek advice from people who hold different views.				
22.	I get well with my teacher.				
23.	As a college student, I do not think that adhering to the academic integrity standards should be overemphasized.				
24.	Know that when you are in different emotional states, you will treat others differently.				
25.	Even if the homework is hard, I will try to finish it.				
26.	I know how my behavior will affect my classmates around me.				

27.	I don't like to ask others for help.				
28.	After listening to someone else's advice, but still screwed it up, I feel that the person who made the advice should take responsibility.				
29.	I know how I feel emotionally in the face of success.				
30.	I will finish what I don't like.				
31.	I am good at listening and providing timely feedback.				
32.	I will make constructive suggestions when dealing with class affairs				
33.	I prefer to work independently rather than cooperate in group tasks.				
34.	I am willing to accept the challenges and difficulties encountered in my study or tasks, and strive to complete them.				
35.	It's hard to concentrate when I study.				

Thank you



APPENDIX E

Review of Research Instruments: Social Emotional Learning Questionnaire for College Students

NO.	Experts' Evaluation Score			Total	IOC	Summary
	1	2	3			
1	+1	+1	+1	3	1.0	Available
2	+1	+1	+1	3	1.0	Available
3	+1	+1	+1	3	1.0	Available
4	+1	+1	+1	3	1.0	Available
5	+1	+1	+1	3	1.0	Available
6	+1	+1	+1	3	1.0	Available
7	+1	+1	+1	3	1.0	Available
8	+1	+1	+1	3	1.0	Available
9	+1	+1	+1	3	1.0	Available
10	+1	+1	+1	3	1.0	Available
11	+1	+1	+1	3	1.0	Available
12	+1	+1	+1	3	1.0	Available
13	+1	+1	+1	3	1.0	Available
14	+1	+1	+1	3	1.0	Available
15	+1	+1	+1	3	1.0	Available
16	+1	+1	+1	3	1.0	Available
17	+1	+1	+1	3	1.0	Available
18	+1	+1	+1	3	1.0	Available
19	+1	+1	+1	3	1.0	Available
20	+1	+1	+1	3	1.0	Available
21	+1	+1	+1	3	1.0	Available

22	+1	+1	+1	3	1.0	Available
23	+1	+1	+1	3	1.0	Available
24	+1	+1	+1	3	1.0	Available
25	+1	+1	+1	3	1.0	Available
26	+1	+1	+1	3	1.0	Available
27	+1	+1	+1	3	1.0	Available
28	+1	+1	+1	3	1.0	Available
29	+1	+1	+1	3	1.0	Available
30	+1	+1	+1	3	1.0	Available
31	+1	+1	+1	3	1.0	Available
32	+1	+1	+1	3	1.0	Available
33	+1	+1	+1	3	1.0	Available
34	+1	+1	+1	3	1.0	Available
35	+1	+1	+1	3	1.0	Available

APPENDIX F



Reliability of Indicators for Measures of Social Emotional Learning in College Students

Items	r	Appliance	Items	r	Appliance
1	0.552	Applicable	18	0.599	Applicable
2	0.547	Applicable	19	0.601	Applicable
3	0.523	Applicable	20	0.685	Applicable
4	0.580	Applicable	21	0.661	Applicable
5	0.575	Applicable	22	0.646	Applicable
6	0.547	Applicable	23	0.636	Applicable
7	0.525	Applicable	24	0.655	Applicable
8	0.638	Applicable	25	0.726	Applicable
9	0.534	Applicable	26	0.691	Applicable
10	0.563	Applicable	27	0.683	Applicable
11	0.524	Applicable	28	0.595	Applicable
12	0.520	Applicable	29	0.591	Applicable
13	0.502	Applicable	30	0.646	Applicable
14	0.640	Applicable	31	0.634	Applicable
15	0.582	Applicable	32	0.632	Applicable
16	0.651	Applicable	33	0.662	Applicable
17	0.630	Applicable	34	0.586	Applicable
24	0.580	Applicable	35	0.629	Applicable
25	0.623	Applicable			

As can be seen from the above table, the reliability coefficient value is 0.963

APPENDIX G



Review Results of the 14-Session Teaching Plan for the Active Learning Model

Lesson Plan for the Topic		Expert rating			
		1	2	3	
1	Orientation to SEL and learning model	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
2	Self-awareness (1)	+1	0	+1	0.6
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
3	Self-awareness (2)	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				

4	Social Awareness: Emotional	+1	+1	+1	1.00
	recognition and empathy				
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
5	Self-management	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
6	Self-management	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
7	Relationship skills: Understanding	+1	+1	+1	1.00
	Healthy Relationships				
	1) Concept				

	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
8	Social Awareness: Respect for multiculturalism and different views	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
9	Social Awareness: Reflect on social skills and perspectives	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
10	Relationship skills: Building Cooperation	+1	+1	+1	1.00
	1) Concept				

	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
11	Relationship skills: Cultivating Respect and Boundaries	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
12	Responsible decision-making: Understanding responsibility and decision-making	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
13	Responsible decision- making: Evaluate choices and decisions	+1	+1	+1	1.00

	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				
14	Reflection and conclusion	+1	+1	+1	1.00
	1) Concept				
	2) Objective				
	3) Time				
	4) Learning materials				
	5) Steps				
	6) Evaluation				

Note: The criterion for passing and eligibility for use is considered to be a satisfactory index value of 0.50 or above.

APPENDIX H



Learning Model Format

Lessons	Learning Activities	Objective
1	Orientation to SEL	<ol style="list-style-type: none"> 1. Introduce the entire learning model and course plan. 2. To establish good teacher-student and student-student relationships for subsequent courses. 3. Introduce the concept and significance of SEL.
2	Self-awareness: Who am I right now?	<ol style="list-style-type: none"> 1. To understand the concept and importance of self-perception. 2. To develop self-awareness.
3	Self-awareness: Emotion Recognition and Management	<ol style="list-style-type: none"> 1. To help students to identify different emotions. 2. To improve students' ability to manage their emotions
4	Social Awareness: Emotional recognition and empathy	<ol style="list-style-type: none"> 1. To understand the importance and definition of social awareness 2. To explore and understand the emotions and opinions of others 3. To develop empathy and respect for others
5	Social Awareness: Respect for multiculturalism	<ol style="list-style-type: none"> 1. To understand the social differences in different cultural backgrounds and promote cross-cultural understanding and respect. 2. To develop students' ability to listen, understand

	and different views	and accept. 3. To cultivate students' understanding and respect for multiculturalism.
6	Social Awareness: Reflect on social skills and perspectives	1. To understand the meaning of social influence. 2. To develop empathy in students. 3. To understand the consequences of their behaviour on their social environment. 4. To promote reflection on the importance of social awareness among students.
7	Self-management	1. To understand the concept and importance of self-management. 2. To develop students' ability to respond effectively to challenges and manage their emotions. 3. To develop a positive attitude towards accepting challenges and seeking solutions.
8	Self-management	1. To further understand the concept and importance of self-management. 2. To reflect on past behavior and coping styles, and look for improved self-management strategies. 3. To develop the ability of self-awareness and self-reflection to better understand one's behavior and emotional responses.
9	Relationship skills: Understanding Healthy Relationships	1. To understanding Healthy Relationships 2. To cultivate students' good interpersonal skills. 3. To improve students' teamwork ability.

10	Relationship skills: Building Cooperation	<ol style="list-style-type: none"> 1. To promote student teamwork and communication skills. 2. To improve students' ability to handle problems in interpersonal relationships in a peaceful way.
11	Relationship skills: Cultivating Respect and Boundaries	<ol style="list-style-type: none"> 1. To understand the importance of respect in interpersonal relationships. 2. To identify personal boundaries in different situations. 3. To developing confident communication skills.
12	Responsible decision-making: Understanding responsibility and decision-making	<ol style="list-style-type: none"> 1. To understand the concept of responsible decision-making. 2. To foster students' ability to solve problems using various methods.
13	Responsible decision-making: Evaluate choices and decisions	<ol style="list-style-type: none"> 1. To further develop students' ability to make responsible decisions. 2. To cultivate students' awareness of and appreciation for responsible decision-making.
14	Reflection and conclusion	<ol style="list-style-type: none"> 1. To review the course content and learning experience. 2. To reflect on personal growth and development. 3. To gain the results of a student's SEL post-test



An active learning model to enhance college students' social emotional learning

Learning Model for Enhancing Social Emotional Learning

Section1 Orientation to Learning Model and SEL

Concept

The concept of this learning model revolves around introducing students to Social Emotional Learning (SEL) through an interactive and engaging approach. By establishing a positive and supportive atmosphere from the beginning, the orientation aims to foster strong teacher-student and student-student relationships, laying a foundation for subsequent courses. The significance of SEL and the Active Learning Model is highlighted through various activities, including a PowerPoint presentation, video clips, group discussions, and role-playing scenarios. Through these activities, students are prompted to reflect on their own experiences, understand the core components of SEL, and explore its practical applications in real-life situations. Emphasis is placed on self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, all crucial aspects of SEL. By actively participating in discussions, reflections, and committing to personal improvement in their individual learning diaries, students are encouraged to take ownership of their social-emotional development throughout the course. The concept underscores the importance of integrating SEL into education to promote holistic development and equip students with essential life skills for personal and academic success.

Objective

- 1.To introduce the entire learning model and lesson plan.
- 2.To establish good teacher-student and student-student relationships for subsequent courses.
- 3.To introduce the concept and significance of SEL and Active Learning Model

Time: 90 minutes

Learning Materials

- 1.Power Point
- 2.Video of SEL theory and concept
- 3.Group discussion question sheet
- 4.Individual learning dairy

Step/ Learning Process

1.Lead-in:

1.1 The researcher and 20 students form a circle. The researcher first introduces herself and says her name, then the students next to her repeat the names of all the others in turn and add their own names. This helps everyone to remember each other's names and promotes communication and interaction.

1.2 The researchers divided the students into pairs and asked them to share an experience that made them feel proud and explain why. We work together to create a positive and supportive atmosphere that promotes discussion of social-emotional learning.

2. Learning Activities Process:

2.1 The researcher will use a PowerPoint presentation to introduce the learning model and the 14 lesson plans. The researcher will then utilise interactive elements such

as polling questions in order to get a sense of the students' prior knowledge and engage them in a discussion about their expectations of the course.

- A. "Did you learn about our learning topics and content through the presentation?"
- B. "What part of this are you most looking forward to?"
- C. "What do you know about the concept of social-emotional learning (SEL)?"

The researcher will encourage students to discuss their responses with their peers and share any prior experiences or knowledge related to SEL.

2.2 The researcher will show a video clip introducing the theory of social-emotional learning, the component parts, the importance of SEL and practical applications. Pause the video at key points and ask reflective questions such as.

- A. "How would you define self-awareness?"
- B. "Can you point to a challenging situation where self-awareness helped you?"

The researcher will encourage students to discuss their answers in pairs before sharing them with the class.

2.3 The researchers divided the students into four groups of five. Then provide each group with a list of questions related to SEL core components, success factors, importance, and areas for improvement.

-Sample Discussion Questions.

- A. "How does self-management contribute to personal and academic success?"
- B. "Can you think of a situation in which social awareness contributed to group dynamics?"
- C. "What strategies can you adopt to improve your interpersonal skills?"

The researchers assign roles in each group (facilitator, recorder, timekeeper) to ensure active participation and collaboration.

2.4 The researchers put the students through a scenario in which two classmates were in the school library arguing about borrowing the same popular book.

Student A wants to borrow the book because he has been waiting for a long time and is very eager to read it. Student B is also interested in the book and thinks he has a right to borrow it. The goal of the scenario is to give students the ability to experience the five components of SEL.

Following the role play, the researcher can lead the following discussions and reflections:

- A. You are student A/B, if a person with strong self-awareness, what kind of awareness would be in this situation?
- B. Did the students demonstrate active listening and empathy during the role play? Do these skills contribute to conflict resolution?
- C. What emotional information can you read from student A/B's language and expressions?
- D. Can students suggest alternative conflict resolution strategies? Are these strategies more effective or appropriate for the situation?

The researchers then led the students to discuss their observations in pairs and share them with the class.

3. Conclusion

3.1 The researchers will have students sit in a circle to lead a structured reflection session. Then, ask specific, open-ended questions about the valuable insights gained, the enjoyable parts of the activity, and areas that need improvement.

- A. "What valuable insights did you gain from social-emotional learning today?"
- B. "What did you enjoy the most about today's event?"
- C. "What do you think you need to improve in terms of social-emotional learning?"

3.2 The researchers will invite each student to write a commitment in their individual learning diary to improve one aspect of their SEL throughout the course. They will

be encouraged to share their commitment with the class to increase a sense of responsibility and support.

Evaluation

1. Observe the degree to which students participate in learning activities, including ice-breaking activities, group discussions and sharing sessions.
2. Record students' ability to interact and collaborate, including with teachers and classmates, and how often they ask questions and share ideas in group discussions.
3. At the end of the course, collect students' personal reflection logs and give feedback on their learning engagement based on their records.
4. Assess the feasibility and measurability of the student's commitment, and their attitude towards participation in the course, based on their commitment.
5. Observe whether students have fulfilled their commitments at the end of the course and document their progress and challenges in this regard.

Annex A

SEL's power point presentation

SEL Presentation BACKGROUND



Purpose



by CASEL



Slides

Purpose

Social and emotional learning (SEL) has a powerful combination of [strong evidence](#) and [strong demand](#).

[This powerpoint deck can help you share accurate information and make the case for SEL.](#)

Developed by CASEL

Developed by CASEL, the leader in SEL research, policy, and implementation, the deck cites research and data from various credible sources and disciplines.

Table of Contents

- Slides 3-17: What is [SEL](#)?
- Slides 18-27: SEL [Outcome](#) Data
- Slides 28-32: [Support](#) for SEL
- Slides 33-34: Connection to [Key Priorities](#)
- Slides 35-41 Addressing [Misconceptions](#)
- Slides 42-44: SEL [Resources](#)





Annex B

Panel discussion question sheet

Discussion Topic: Self-Management

1. What role does self-management play in personal and academic success?
2. Can you share an example of a time when you overcame a challenge through self-management?
3. What strategies do you think have helped you better manage your emotions and behavior?

Discussion Topic: Social Awareness

1. How does social awareness affect teamwork and group dynamics?
2. In what situations have you found social awareness particularly important?
3. What do you think are some effective ways to cultivate social awareness?

Discussion topic: Relationship Skills

1. How do you think good relationship skills contribute to your personal and professional life?
2. Tell me about a time when you resolved conflict through good relationship skills.
3. What strategies do you think can help you improve your interpersonal skills?

Discussion topic: Responsible Decision-Making

1. What do you think is responsible decision making? Please give an example.
2. What factors do you consider when making important decisions?
3. How do you make responsible decisions under pressure?

Discussion Topic: Self-Awareness

1. How do you define self-awareness? Why is it important?

2. Please share an example of a time when you improved yourself through self-awareness.

3. What methods do you think have helped you understand yourself better?

Discussion rule

1. Grouping: Students are divided into four groups of five.

2. Role allocation: Assign a moderator, a recorder, and a timekeeper to each group to ensure that everyone can actively participate in the discussion.

3. Time management: Each discussion topic is allocated 10 minutes, and the total discussion time is 50 minutes.

4. Sharing and summary: Each group chooses a representative to share the main views and conclusions of the group discussion after the discussion, and the sharing time for each group is 2 minutes.

Matters needing attention

1. Active listening: Respect what others have to say, don't interrupt, and respond positively.

2. Speak clearly: Express your ideas clearly and make sure the group understands what you mean.

3. Constructive feedback: Make constructive comments and suggestions on others' points of view and avoid negative criticism.

By using this group discussion questionnaire, students can explore various aspects of social-emotional learning in greater depth and improve their understanding and application skills in the interaction.

Learning Model for Enhancing Social Emotional Learning

Section 2 Self-awareness (1)

Concept:

The concept of self-awareness is foundational in the journey of personal growth and development. It entails understanding one's own emotions, thoughts, strengths, weaknesses, and values. This concept is crucial as it empowers individuals to navigate through life with clarity and purpose. By fostering self-awareness, individuals can make informed decisions, build healthier relationships, and effectively manage their emotions and behaviors. In this learning module, we aim to highlight the importance of self-awareness and facilitate university students in gaining a deeper understanding of themselves. Through various activities such as mutual interviews, reflection cards, emotion mapping, and self-assessment tools like SWOT analysis and thinking habits assessment, students will embark on a journey of self-discovery, enhancing their self-awareness and laying a solid foundation for personal and academic success.

Objective

1. To understand the concept and importance of self-awareness.
2. To help university students understand their personal characteristics, strengths and values.
3. To develop students' ability of self-awareness.

Time: 90 minutes

Learning Materials

1. Thinking Habits Assessment Sheet
2. Self-Awareness Concept Introduction Video
3. Emotion Map and Color Pens
4. Self-Awareness Reflection Card
5. SWOT Analysis Sheet

Step/ Learning Process

1. Lead-in:

1.1 The researcher divided the students into groups of two by two and each student had 2-3 minutes to interact with a partner in an interview. Student A could ask questions through the interview to find out from Student B what kind of person they are. Students were interviewed to find out about themselves as seen by others and could ask questions about various aspects of their personality, abilities and interests.

1.2 The researchers will give small cards to each student. Each student chooses a question to think about and answer according to the questions in the self-cognition reflection card.

- A. "What emotions have I been experiencing lately?"
- B. "How do I feel in my relationships?"
- C. "What challenges or difficulties have I faced recently?"
- D. "How do I feel about my physical and emotional state?"
- E. "Have you discovered anything new about yourself lately?"
- F. "What are your hopes and concerns for the future?"

Through these questions, students can gain a deeper understanding of their emotional states, thoughts and behavior patterns, thereby increasing their level of self-awareness. Students take turns sharing the results of their reflections within the class, and other students can ask questions or provide feedback. During the discussion, the researchers will guide the students to notice the similarities and differences between each other and encourage them to learn from each other.

2. Learning Activities Process:

2.1 The researcher will present a short video introducing the concept and importance of self-awareness. Give students a quick understanding of self-awareness. After watching the videos, the researchers will ask questions that lead students to think and discuss, "How do you think self-awareness has affected your life?"

2.2 The researchers divided the students into groups of four to five. Each group was given an emotion map on which they could label different emotions, such as happiness, anxiety, anger, and so on, and use different colors to distinguish them. After the drawing is completed, students discuss and explain their reasons for choosing a particular emotion, sharing their recent emotional experience. Students will be encouraged to listen to and understand each other, promoting communication and empathy between them.

2.3 Researcher will use the thinking Habits assessment form (Annex I) to let students evaluate their own thinking patterns, so that students can better understand their thinking habits. Upon completion, the students were instructed to share their thinking characteristics in small groups of 4-6, discuss each other's thinking tendencies, and think about how to improve negative thinking habits. Students can share personal experiences and strategies, as well as how they think they can cultivate positive thinking patterns.

2.4 The researcher will ask the students to think independently as the students complete a personal SWOT analysis sheet (Appendix II) to analyse their strengths, weaknesses, opportunities and threats. Once completed, the researcher will divide the students into groups of 4 and will be asked to share the results of their SWOT analysis within the group. Students shared the results of their analyses and discussed how they could use their personal strengths and opportunities to overcome weaknesses and threats and achieve their personal goals and growth.

3. Conclusion:

3.1 The researchers will invite students to share the gains and growth of this class in 4-6 groups, which can be the improvement of self-cognition, the creation experience of emotional maps, and the understanding of thinking habits.

3.2 Students conduct personal reflection, summarize their own learning experience and next learning plan, which can be written on the independent learning diary as personal feedback at the end of the course.

Evaluation

1. Observe students' participation and enthusiasm in the class. Evaluate based on overall performance.
2. At the end of the class, assess students' learning by having them share their experiences and takeaways from the learning activities. By listening to students' sharing, teachers can gauge whether students' self-awareness has improved.
3. At the end of all classes, students' independent learning diaries are collected. Assess student engagement, attitude, growth and progress based on feedback.



Thinking Habits Assessment Form

Please mark your answer (Yes/No) next to each statement:

- (1) I often find myself worrying or feeling anxious, even when there are no obvious problems.
- (2) I tend to focus on problems and difficulties, ignoring solutions and opportunities.
- (3) I doubt my abilities and worth, or lack self-confidence.
- (4) I find it hard to recover from failure or setbacks, often getting stuck in feelings of frustration.
- (5) I frequently criticize myself, being overly harsh on myself.
- (6) When I think, I often only focus on the negative aspects of things, neglecting the positive.
- (7) I find myself frequently caught in cyclic patterns of negative thinking.
- (8) I often feel confused or misunderstood about my emotions and feelings.
- (9) I rarely spend time reflecting on my thinking habits or emotional states.
- (10) I often describe myself using phrases like "I can't" or "I'm not capable."



APPENDIX II

Personal SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
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1. Strength 1	1. Weakness 1	1. Opportunity 1	1. Threat 1
2. Strength 2	2. Weakness 2	2. Opportunity 2	2. Threat 2
3. Strength 3	3. Weakness 3	3. Opportunity 3	3. Threat 3
4. Strength 4	4. Weakness 4	4. Opportunity 4	4. Threat 4
5. Strength 5	5. Weakness 5	5. Opportunity 5	5. Threat 5

Active Learning Model for Enhancing Social Emotional Learning

Section 3 Self-awareness (2)

Concept

The concept of self-awareness in enhancing social-emotional learning is crucial for students to develop a deep understanding of their emotional states and effectively manage their reactions. Through activities such as journaling, emotional awareness exercises, and role-playing scenarios, students are guided to recognize and articulate their emotions, understand the triggers behind them, and learn to accept and regulate them constructively. This concept emphasizes the importance of introspection and mindfulness, enabling students to cultivate a heightened sense of self-awareness that empowers them to navigate various social and emotional situations with resilience and empathy. By engaging in reflective practices and sharing strategies for emotional management, students not only enhance their own emotional intelligence but also foster a supportive classroom environment where they can learn from each other's experiences and perspectives. Overall, fostering self-awareness lays a solid foundation for students' overall social-emotional development, equipping them with invaluable skills for personal growth and interpersonal relationships.

Objective

1. To develop students' self-awareness so that they can recognise and understand their emotional states.
2. To provide effective emotion management and regulation skills so that they can better handle emotional reactions and improve emotional stability.

Time: 90 minutes

Learning Materials

1. Individual learning dairy
2. Soft Music

Step/ Learning Process

1. Lead-in:

1.1 The researcher will guide the students to review the events of the day and ask open-ended questions, "Did anything happy, anxious, or frustrating happen today and how did you deal with those emotions?" . Students will share their emotional experiences of the day in a free talk format. The researcher will facilitate students to think about their own emotional states and relate them to what they have learnt in previous lessons through questioning and guidance.

2. Learning Activities Process:

2.1 The researcher will explain the purpose of the emotion journal, which is to help students record and understand their emotional experiences. The students then learned to record their emotions, the events that triggered those emotions, and their responses. As students record their emotions, researchers will provide guidance and cues to help them analyze the causes and triggers behind their emotions. After the students complete the record, they have 4-6 group discussions to share each other's observations and reflections. They can share their emotional experiences with each other and their understanding of their own and others' emotional responses.

2.2 Before starting the exercise, the researcher will briefly introduce the importance of emotional awareness exercises. This exercise teaches students to observe and accept their emotions instead of trying to suppress them. Researchers need to ensure that the classroom is quiet, comfortable, and free from distractions. The lights may be

dimmed or soft music played. Then, guide the student to sit in a comfortable position, close their eyes, pay attention to their breathing, and return their attention to their body, becoming aware of any sensations such as physical tension or relaxation, mood swings, etc. The researcher will remind students that meditation is not a process of eliminating thoughts and emotions, but a process of observing and accepting them.

2.3 Researcher will choose common scenarios, such as facing criticism. Students will then be assigned roles in these scenarios, such as challenger, critic, empathizer, and provided with some background information and a description of the relevant emotions. After making sure the students understood their task and the character's expected behavior, the researchers divided the students into groups of four, and each group role-played in a scenario. Students should act authentically in their roles, interacting based on events and dialogue in the scene. Then, at the end of the activity, the researchers would ask questions like:

- A. How did each character perform?
- B. What emotions are involved?
- C. How do they control their emotions?
- D. How do they express their values?

Students can share their observations and experiences and learn from each other's perspectives. Finally, the researcher will summarize the main lessons of the activity and encourage students to reflect on their own performance. Discuss successful strategies for managing emotions and self-expression in situations and how to apply these techniques in everyday life.

3. Conclusion:

3.1 Students are asked to develop a personal emotional management action plan, including specific steps and strategies they intend to take, as well as guidelines on how

to react in different emotional states. Students can share these plans with fellow students and give each other advice and feedback.

3.2 Students will be invited to share the emotional management strategies they have learned in this course and to explore which strategies have had the greatest impact on them. This session helps students summarize the course content and motivates them to apply the skills they have learned to real life situations.

Evaluation

1. Assessing students' level of active participation and interaction during classroom activities. This includes observing their performance in role-play, group discussions, and sharing sessions, as well as their ability to actively listen and respond to classmates' viewpoints.
2. Encouraging students to reflect on their performance in the course, including whether their strategies for managing emotions have been effective, and whether they have been able to apply the skills learned in class to real-life situations. This can be achieved through personal reflection in notebooks, individual discussions, or group sharing.

Annex A

Guide words for meditation and emotional awareness

Step 1 Prepare

Please find a quiet place to sit where you feel comfortable. You can choose to close your eyes or stare slightly ahead at the floor to keep your gaze relaxed. Start breathing deeply, inhaling and exhaling slowly.

2. Feel the body

Now start focusing on your body. Notice how you sit and feel your body in contact with the chair or floor. If you feel tension or relaxation, try not to judge, just accept that the feeling exists.

3. Watch your breathing

Focus on your breathing. Feel the breath enter your body and then slowly leave. You can try counting to three on the inhale and then to five on the exhale. Let every breath bring a sense of relaxation.

4. Be aware of emotions

Now turn your attention to your emotions. Be it positive or negative emotions, try to accept them. Don't try to change them, just watch how they behave in your body.

Step 5 Summarize

Slowly, become aware of your surroundings again. When you are ready, gently open your eyes and move your body slowly. Before you return to class, set aside a moment to reflect on your feelings.

Annex B

Example role-playing scenario cards

Scenario 1: Facing criticism

Background information: You are a middle school student. You recently gave a speech in class at school, but some of your classmates criticized your performance.

Characters:

- Challenger (your role) : You are proud of your presentation, but disappointed and frustrated by the criticism.
- Critic: A classmate who thinks your presentation is not clear or specific enough.
- Empathizer: Another classmate who tries to understand your feelings and offers support and advice.

Missions:

- Each character prepares dialogue and emotional expression based on their character's background.
- In role play, try to represent the emotions and attitudes of the character as truthfully as possible.
- After the walkthrough, discuss the following questions:
 - o How does each character perform?

o What emotions are involved?

o How to control emotions?

o How to express values?

Scenario 2: Teamwork challenge

Background information: You are a member of a school club and are involved in a team project. As the project progresses, team members have different opinions and need to find a consensus.

Characters:

- Project Leader: You coordinate the team and make final decisions.
- Technologist: a team member with technical knowledge and professional insights.

Idea innovator: another team member who comes up with some novel ideas but is questioned.

Conflict resolver: Another team member who tries to mediate differences between the parties.

Missions:

- Characters prepare their positions and dialogue based on background information.
- In role play, try to resolve differences within the team through cooperation and communication.

• Discuss the following questions at the end:

o How to reconcile different views?

o How to maintain emotional stability during conflict?

o How to build consensus and move the project forward?

Annex C

Personal Emotion Management Action Plan template

Name: _____

Date: _____

Emotion management Goals: _____

Specific steps and strategies:

1. Identify emotions:

Describe the main emotions you usually experience (e.g., anger, anxiety, sadness, etc.).

2. Emotional awareness skills:

o What methods do you use to become more aware of your emotions? (e.g., breathing exercises, mindfulness meditation, etc.)

3. Emotion Management strategies:

Make a list of effective emotional management techniques and strategies that you have learned or plan to use.

4. Address your emotional triggers:

o Identify the factors that may trigger your mood swings and consider how to deal with them.

5. Action Plan:

Create a daily or weekly emotional management plan that includes specific action steps and a timeline for implementation.

6. Feedback and adjustments:

Plan how to evaluate the effectiveness of your emotional management and make necessary adjustments and improvements.



Active Learning Model for Enhancing Social Emotional Learning

Section 4 Self-management (1)

Concept

Self-management is a crucial skill in social-emotional learning, enabling students to maintain emotional stability and effectively cope with stress and challenges. By understanding and cultivating self-management skills, students can set clear goals and devise feasible plans to tackle various situations in academics, social interactions, and life. With guidance and encouragement from teachers, students will learn how to stay calm in the face of challenges and utilize effective emotion regulation techniques, such as deep breathing relaxation, to alleviate anxiety and tension. The importance of this concept is evident in enhancing students' learning efficiency, promoting emotional well-being, and fostering self-control and adaptability, thereby laying a solid foundation for their future development.

Objective

1. To understand the concept and importance of self-management in SEL.
2. To develop students' ability to set clear goals.
3. To develop students' ability to respond effectively to challenges and manage their emotions.

Time: 90 minutes

Learning Materials

1. Power Point

2. Video
3. Planning sheets
4. Soft music
5. Blank paper

Step/ Learning Process

1. Lead-in:

1.1 The researchers will use PowerPoint to present a specific scenario: the anxiety, stress and nervousness of college students before the exam. Students are then encouraged to share and explore strategies and the importance of self-management in the face of stress and challenges.

2. **Learning Activities Process**

2.1 The researcher will introduce the concept and importance of self-management in SEL through a short video. Then the question will be asked, "How does self-management help you when facing final exams and social pressure?" The researcher will arrange the students into groups of five and share their views and experiences through group discussions and how they apply self-management to their studies and life.

2.2 The researcher will distribute the planner, and students are asked to set a specific goal, such as an academic goal, a social goal, improving their grades in a certain subject, or strengthening their relationship with roommates. The researcher then guides each student to develop a specific plan and strategy, which should include clear steps, timelines, and resource utilization. Through this process, students learn how to make plans for themselves and take the time to execute them.

2.3 Researcher introduce students to a common emotion-management technique: deep breathing to relax. The researchers then guided the students to sit comfortably and encouraged them to close their eyes to reduce external distractions and focus on

their minds. They breathe in deeply, allowing the abdomen to expand, and then exhale slowly and thoroughly. The focus is on breathing in slowly through the nose and exhaling slowly through the mouth. Students count to four when they breathe in and six when they breathe out. Students are encouraged to pay attention to the sensations of their breathing as they breathe deeply. This deep breathing relaxation exercise helps reduce tension, relieve anxiety, and promote physical and mental relaxation. Once students have mastered this technique, they can use it any time they are faced with stress or mood swings.

3. Conclusion

3.1 The researcher will remind students of the importance of self-management through a short summary that highlights the key points and skills covered in today's lesson.

3.2 Students will be invited to summarize their understanding and gains from today's lesson in a one-minute paper. The researcher will quickly hand out blank sheets of paper, and students will quickly jot down their thoughts, reflections, or questions about today's lesson. Finally, the researcher will take the paper back for feedback at the next class.

Evaluation

1. Assess students' understanding of self-management concepts and their ability to apply these concepts to solve real-life problems through classroom discussions, group sharing, and individual plan development.
2. Evaluate whether students' set goals are clear, feasible, and include clear steps, timelines, and resource utilization plans.
3. Collect feedback from students through one-minute papers to understand their understanding and gains from the lesson, and to identify any unresolved questions

or concerns. Track students' actual behaviors and attitudes in the next class or future sessions to assess the long-term impact of the course on their self-management abilities.



Annex A

Students were given blank post-it notes on which they could write goals, strategies, or reflections, and then share and organize their thoughts.



Annex B

Goal Setting and Planning Template

Student Name: _____

Date: _____

Goal Type (Academic/Social): _____

Specific Goal Description:

1. Goal Clarity

- **Goal Statement:** (Clearly describe your goal)

- **Why this goal is important:** (Explain why this goal is important to you personally or to your team)

2. Plan and Strategies

- **Specific Steps:** (List specific steps to achieve the goal, each step should be measurable and actionable)

1. _____
2. _____
3. _____
4. _____

(Add more steps as needed)

- **Timeline:** (Set deadlines or completion dates for each step)

1. Step 1: _____

2. Step 2: _____

3. Step 3: _____

4. Step 4: _____

(Add more timelines as needed)

- **Resource Utilization:** (List resources or support needed, such as teacher guidance, library resources, etc.)

1.

2.

3.

(Add more resources as needed)

3. Action Plan

- **Start Date:** _____
- **Expected Completion Date:** _____
- **Key Milestones:** (Mark key milestones in the plan)
 - _____
 - _____
 - _____

(Add more key milestones as needed)

4. Evaluation and Adjustment

- Evaluation Criteria: (Describe how you will evaluate the completion of the goal)

- Strategies for Adjusting the Plan: (How will you handle obstacles or adjust if needed)



Active Learning Model for Enhancing Social Emotional Learning

Section 5 Self-management (2)

Concept

The concept of this lesson focuses on enhancing students' self-management skills within the context of social-emotional learning. This is crucial as it empowers students to effectively navigate challenges and adapt to changing circumstances, essential skills for success in both academic and personal realms. Through analyzing success stories like Steve Jobs' strategies at Apple and engaging in group discussions to develop solutions for challenging situations, students not only learn practical self-management techniques but also cultivate teamwork and problem-solving abilities. By encouraging self-reflection and the formulation of personal goals, students are guided towards applying these skills in their daily lives, fostering resilience, positive attitudes, and the ability to generate effective solutions in the face of adversity. Overall, this concept aims to equip students with the necessary tools to manage stress, time, and tasks efficiently, promoting their overall well-being and success.

Objective

1. To develop students' ability to deal with challenges so that they can cope with various situations.
2. To develop students' adaptation skills so that they can respond flexibly to changing circumstances.

Time: 90 minutes

Learning Materials

1. Power Point

Step/ Learning Process

1. Lead-in:

1.1 The researcher provided feedback and answered questions based on the one-minute paper from the previous class.

1.2 The researcher will show power point describing a challenging situation: how a team reacts when faced with an urgent task. At the end of the video, the researchers asked the students questions to guide them to think: What attitude would you take when facing a challenge? Students are encouraged to actively participate in discussions and share their ideas and perspectives.

2. Learning activities process:

2.1 The researchers provide some success stories: discuss how Jobs responded to Apple's troubles, what strategies he adopted to address the challenges, and what successes he achieved. Students conduct case studies, analyze the success factors and self-management strategies involved, and discuss them.

2.2 The researchers arranged the students to be divided into groups of five, and each group chose a challenging situation to discuss and jointly develop a solution. For example: a stressful academic situation, and then work together to develop a solution, including time management, stress relief strategies. In the process of discussion, students need to give full play to the ability of teamwork and explore the solution of the problem together.

3. Conclusion:

3.1 Students will be asked to reflect independently and develop a specific personal goal to improve their self-management skills. Such as a weekly study plan, or a goal to

improve your communication skills. Such goals need to be concrete and practical to help students better cope with future challenges.

3.2 The researcher will lead the class in a discussion that summarizes the self-management skills learned today and explores how they can be applied to everyday life. Discuss how to maintain a positive attitude in the face of challenges, how to develop effective solutions, etc.

Evaluation

1. Observe and assess the level of participation of each student within their respective groups during the group discussion activity. Evaluate their contributions, engagement, and ability to collaborate effectively with others.
2. Assess the depth of understanding demonstrated by students in analyzing the success stories presented, such as Steve Jobs' strategies in addressing challenges at Apple. Evaluate their ability to identify key success factors and self-management strategies.
3. Evaluate the solutions proposed by each group for their chosen challenging situation. Assess the creativity, feasibility, and effectiveness of the solutions in addressing the problem and promoting adaptation skills.

Annex A

Case Study: Steve Jobs at Apple

Background

Steve Jobs was one of the co-founders of Apple Inc. During the mid-1990s, Apple faced significant financial and market challenges. Steve Jobs returned to Apple in 1997 and embarked on a remarkable journey of revitalizing the company.

Challenges

1. **Financial Troubles:** Apple experienced consecutive years of losses and a declining market share before Jobs' return.
2. **Product Confusion:** The company had an overly complex product line with too many models and no clear focus.
3. **Company Culture:** Employee morale was low, and there was a lack of innovation drive within the company.

Jobs' Strategies

1. **Product Line Simplification:** Jobs significantly reduced the number of products, focusing on a few high-quality offerings. He introduced the "Four Quadrant Product Matrix," simplifying products into four categories: consumer desktop, consumer portable, professional desktop, and professional portable.
2. **Innovative Design:** Jobs emphasized design and user experience, leading to the launch of the iMac. The iMac's unique design and user-friendly interface gained widespread market acceptance.
3. **Brand Rebuilding:** Jobs launched the "Think Different" advertising campaign, rebranding Apple as an innovative and unique company.

4. **Team Building:** Jobs restructured the management team, bringing in talented executives and engineers, and fostered a culture of creativity and innovation.

Results

1. **Financial Recovery:** Under Jobs' leadership, Apple's financial health improved rapidly, returning to profitability.
2. **Market Response:** The successful launch of the iMac brought significant attention to Apple and helped regain market share in the personal computer market.
3. **Brand Rejuvenation:** The repositioning of the Apple brand and its marketing strategies significantly enhanced the company's public image and brand value.
4. **Innovation Culture:** Jobs' management and motivational strategies created a thriving culture of innovation and creativity within the company.

Analysis and Discussion

1. What were the main challenges Steve Jobs faced at Apple?
2. What specific strategies did he implement to address these challenges?
3. What impacts did these strategies have on Apple?
4. How do you think self-management and team management played a role in Jobs' success?
5. What lessons can you learn from Jobs' story about handling challenges and adapting to change?

Active Learning Model for Enhancing Social Emotional Learning

Section 6 Social Awareness: Emotional recognition and empathy

Concept

This lesson emphasizes social awareness and the development of emotional recognition and empathy. Students will use short films, images, and real-life examples to understand others' emotions and perspectives. Through role-playing, case studies, and empathy exercises, they'll experience different emotions in various situations. The final empathy circle activity allows students to share and listen to each other's experiences, highlighting the importance of understanding others for social awareness and interpersonal relationships. These activities enhance emotional intelligence, social skills, empathy, and respect, laying a strong foundation for future social interactions and life experiences.

Objective

1. To understand the importance and definition of social awareness.
2. To explore and understand the emotions and perspectives of others.
3. To develop empathy and respect for others.

Time: 90 minutes

Learning Materials

1. Social Awareness Concept Video
2. Short Video or Image
3. Case Study

4. Documentary

Step/ Learning Process

4. Lead-in:

1.1 The researcher will present a set of images depicting interactions and expressions in various social situations. Make sure the material you choose is emotionally resonant and reflective. After the video or pictures were shown, the students were asked the following questions:

- A. - What are these people thinking?
- B. - How are they feeling?
- C. - How would you feel if you were one of them?

5. Learning activities process.

2.1 The researcher divided the students into groups of 3-4, with one student as the initiator and the other as the responder. Present different scenarios, such as one person being ignored in public and another person starting a conversation with someone else. Students alternate between these two roles, experiencing the feelings and emotions associated with different roles and situations.

2.2 Students are divided into groups of five and each group is assigned a case study.

- A. Case study: Communication problems in teamwork
- B. Situation Description: During a team project, five members are facing serious communication problems. One member is always dictatorial and unwilling to listen to the opinions of other members, resulting in inefficient team cooperation. Other members feel frustrated and helpless, and do not know how to effectively communicate with this member to improve the team atmosphere.

They read cases and discuss how different individuals feel and behave, as well as possible solutions. Students are encouraged to come up with novel and diverse perspectives and guided to effective discussion and collaborative techniques.

2.3 Students will be shown a true documentary or read a true story describing an individual or group life experience. Students are asked to think, imagine, and describe the possible emotions and challenges of these people from their own perspective. Students may choose to express their thoughts and feelings through writing, drawing, or group discussion.

3. Conclusion :

3.1 At the end of the course, the researcher will organize an empathy circle activity. Students sit together and share their experiences and feelings during the learning process. Students are encouraged to listen to and respect each other's views and to ask questions or offer support. Emphasize the importance of empathy in fostering social awareness and relationships through understanding the emotions and perspectives of others.

Evaluation

1 Observe students' responses to others' shared experiences and feelings, assessing their understanding and support towards others. Encourage students to ask constructive questions or provide positive feedback, evaluating their social skills and emotional intelligence in this context.

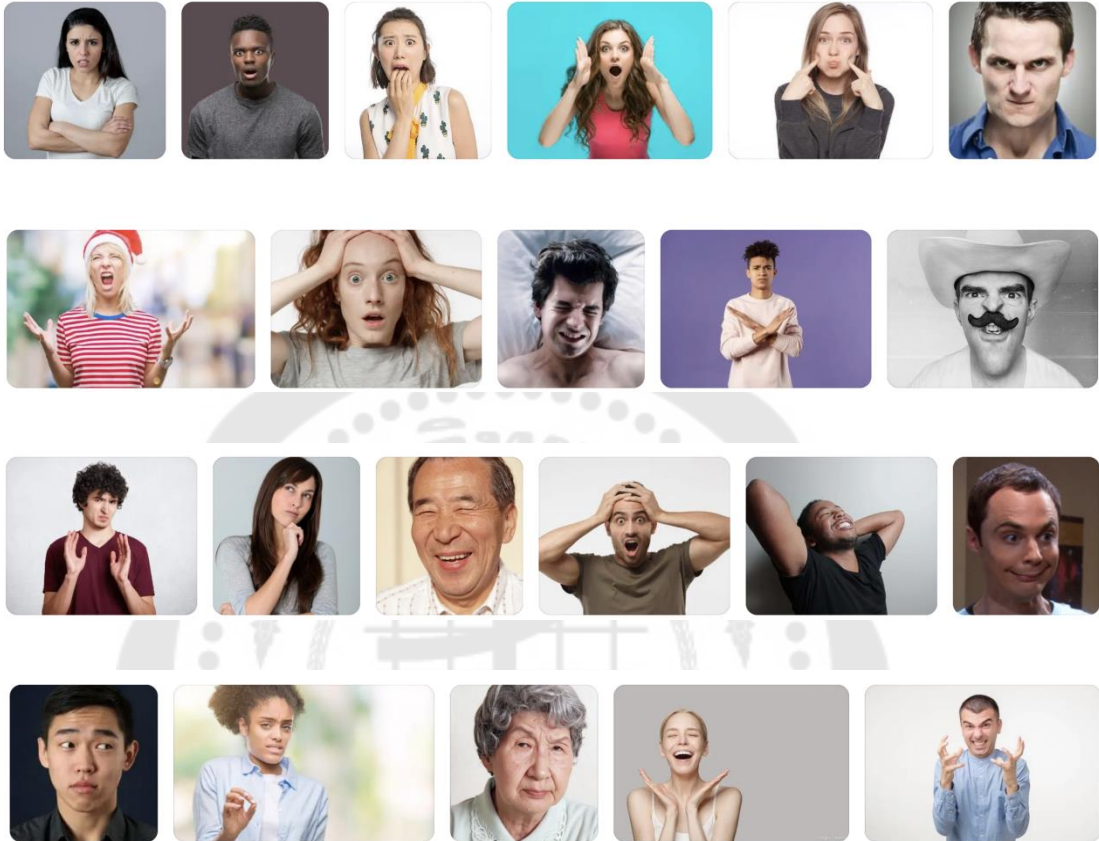
2 Observe and assess students' performance in role-play activities, including their expression of feelings and emotions in different scenarios, as well as their understanding and response to others' behaviors. Assessment criteria may include the accuracy and appropriateness of facial expressions, language, and non-verbal communication.

3 Require students to create a mind map or concept map about social awareness, emotional recognition, and empathy, demonstrating their understanding of the relationships between these concepts. Evaluate the completeness, clarity, and accuracy of the diagrams.



Annex A

Emoticons: Share your feelings when you see emoticons and interpret them.



Annex B

Case Study Material

Case: Communication Problems in Teamwork

Situation Description:

In a small group project, five members need to work together to complete a task. However, the team is experiencing serious communication problems. The details are as follows:

- One member, A, is always dictatorial and unwilling to listen to the opinions of other members.
- Other members (B, C, D, E) feel frustrated and helpless because their opinions and suggestions are often ignored.
- As a result, the team's cooperation is inefficient, the project progresses slowly, and the team atmosphere becomes tense and unharmonious.

Task:

Each group should carefully read the situation description above and then engage in a discussion to answer the following questions:

Discussion Questions

1. Emotional Analysis:

- How do you think member A's behavior impacts the emotions of the other members (B, C, D, E)? Please describe in detail.

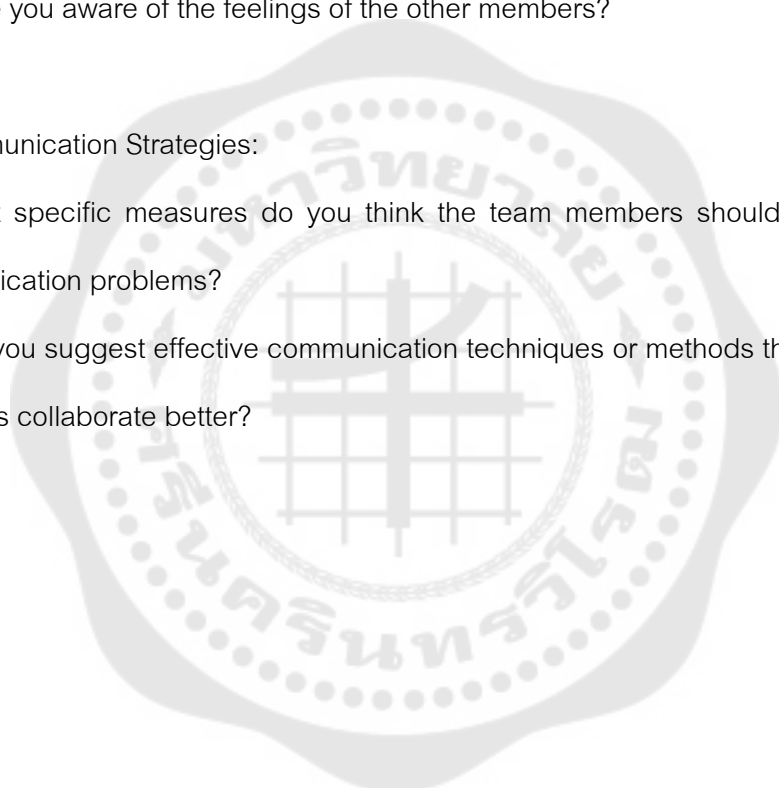
- How might the emotions and behaviors of the other members affect the overall team atmosphere?

2. Role Perspectives:

- If you were member B, how would you feel? How would you respond to this situation?
- If you were member A, what positive or negative impacts do you think your behavior has? Are you aware of the feelings of the other members?

3. Communication Strategies:

- What specific measures do you think the team members should take to improve communication problems?
- Can you suggest effective communication techniques or methods that can help team members collaborate better?



Annex C

Sample circle of empathy activity



Active Learning Model for Enhancing Social Emotional Learning

Section 7 Social Awareness: Respect for multiculturalism and different views

Concept

The concept of fostering social awareness and respect for multiculturalism and diverse viewpoints within the learning model is crucial for nurturing inclusive and empathetic individuals in today's globalized world. By engaging students in activities such as culture collages, interactive presentations, fishbowl discussions, and role-play scenarios, the objective is to develop their ability to actively listen, understand, and accept differing perspectives. Through these experiences, students not only gain a deeper appreciation for the richness of multiculturalism but also learn essential skills for navigating and resolving conflicts arising from cultural differences. Encouraging reflection on these experiences reinforces the importance of embracing diversity and equips students with the tools needed to promote understanding and respect in their everyday lives.

Objective

1. To develop students' ability to listen, understand and accept.
2. To cultivate students' understanding and respect for multiculturalism.

Time: 90 minutes

Learning Materials

1. Power point

Step/ Learning Process

6. Lead-in:

1.1 Students were asked to bring in images representing their cultural background or identity, presented in PowerPoint in groups of 6-8 people. Groups are encouraged to discuss the importance of each object, what cultural context it represents, and how it contributes to the students' sense of identity and belonging.

7. Learning Activities Process

2.1 Researcher will use PowerPoint to demonstrate the concept of multiculturalism in depth and emphasize the importance of understanding and respecting different viewpoints. By showing how people from different cultural backgrounds celebrate festivals, hold different values and maintain different traditions, it illustrates the richness of a multicultural society.

2.2 The researcher divided the students into an inner circle and an outer circle. Each inner circle student faces an outer circle student. The researcher will ask a question related to multiculturalism, such as "How to resolve misunderstandings and conflicts caused by cultural differences?" . Students in the circle begin to discuss issues, while students outside the circle observe their discussions, paying attention to their opinions and communication styles. After 15 minutes, the students were reminded to switch roles. The outer circle students become the inner circle students, the inner circle students become the outer circle students, and a new round of discussion begins. After the discussion, the students were invited to share their views and experiences. Finally, the researcher will summarize the main points of the discussion and emphasize the importance and value of multiculturalism.

2.3 Researcher divided the students into groups of four or five. Assign each group a scenario involving cultural differences or misunderstandings. Topic: "In an international cooperation project, team members come from different cultural backgrounds, leading

to misunderstandings in communication and differences in working styles." Each group member plays a different role in the scene, engaging in dialogue and interaction according to the situation and assigned role. As students role-play, they discuss and think about how to resolve conflicts in the scenario while promoting understanding and respect. The researcher can provide necessary guidance and feedback in a scene. Students try to resolve conflicts in scenarios through active communication and cooperation, seeking common solutions. Following the role play, the researcher engages in discussions with the students, emphasizing the importance of understanding and respecting different cultural backgrounds. Students share the experiences and lessons they have learned from role-playing and how they can apply these lessons to real life situations.

8. Conclusion:

3.1 The researcher gathered the students in a circle and asked reflective questions, such as "What surprised you most about today's discussion?" "How are you going to apply what you've learned to your daily life?" Students took turns sharing their ideas and experiences and answering questions raised. Researchers summarize students' reflections and sharing, emphasizing the importance of learning about multiculturalism and respecting different perspectives.

Evaluation

1. Observe and evaluate students' performance in role-play scenarios. Assessment criteria may include their ability to cooperate, problem-solving skills, understanding of different cultural backgrounds, and their effectiveness in conveying and respecting diverse viewpoints.
2. Evaluate students' performance in group discussions, including their level of participation, frequency of speaking, degree of respect for others' viewpoints, and

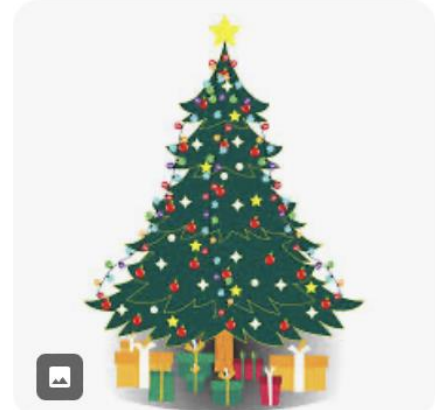
their ability to engage in constructive discussions and resolutions regarding cultural differences.

3. Require students to complete a reflection assignment, reviewing the knowledge and experiences they have gained in class. They can write about their perspectives on multiculturalism and diverse viewpoints, as well as their plans for applying this knowledge to daily life.



Annex A

Pictures that represent different cultures





Annex B

Discussion topic

Card 1

In your opinion, what are the effects of cultural differences on people's communication and cooperation? Please give an example.

Have you ever encountered a misunderstanding caused by cultural differences? How did you solve it?

Card 2

Topic: How to promote understanding and respect for multiculturalism through education and publicity?

Question Lead: What can a school or community do to promote cultural diversity?

Card 3

Topic: In today's globalized world, what is the balance between maintaining cultural traditions and accepting new cultures?

Which cultural traditions do you think must be preserved and which can be kept up with The Times?

Card 4

Topic: In a multicultural context, how can we resolve conflicts in a team more effectively?

Question Lead: What are some practical ways to promote understanding and collaboration among team members?

Card 5

Question: What do you think can help people better understand and respect different cultures in their daily life?

Have you ever participated in cross-cultural communication activities? How have these activities affected you?

Card 6

Topic: How to deal with the differences in working and communication styles brought by different cultures in cross-cultural cooperation projects?

Question Guide: Please share your or someone you know's successful experience in cross-cultural cooperation.

Card 7

Topic: What role do you think the media play in shaping people's perceptions of multiculturalism?

What films or news stories do you think have had a positive impact on the understanding of multiculturalism?

Card 8

Among the festivals of different cultures, which festivals do you think are the most interesting or meaningful? Why?

Question Lead: Have you ever participated in the celebrations of festivals in other cultures? How was your experience?



Active Learning Model for Enhancing Social Emotional Learning

Section 8 Social Awareness: Reflect on social skills and perspectives

Concept

The concept of this lesson revolves around fostering social awareness among students, a crucial component of social-emotional learning. By engaging in activities such as brainstorming, case studies, role-playing scenarios, and reflective journaling, students are guided to recognize and understand the various social influences present in their lives. Through analyzing case studies and embodying different perspectives in role-play scenarios, students develop empathy, critical thinking skills, and a deeper understanding of how individual actions impact the broader social environment. The interactive reflection journal encourages students to introspectively explore their own experiences with social influences, fostering self-awareness and personal growth. The emphasis on group discussions, peer feedback, and action planning empowers students to actively contribute to creating a supportive and inclusive social community. Overall, this concept aims to equip students with the skills and mindset necessary to navigate complex social dynamics, make informed decisions, and positively influence their social environments.

Objective

1. To understand the meaning of the social influence.
2. To cultivate students' understanding the consequences of their actions on the social environment.
3. To promote students to reflect on the importance of social awareness.

Time: 90 minutes

Learning Materials

1. Case study information sheet
2. Individual learning dairy

Step/ Learning Process

9. Lead-in:

1.1 Students will be asked to list examples of social influences they have experienced or observed in their lives. They are also encouraged to think about positive and negative influences, such as peer pressure, cultural norms, media images, etc. This activity will activate prior knowledge and lay the foundation for discussing the meaning of social impact.

10. Learning Activities Process:

2.1 Case Study: Divide students into groups of five and provide them with case studies describing various social situations. Each group will analyze the case studies, identify influential social factors, and discuss the potential consequences of different actions individuals might take in these scenarios. Afterwards, each group will present their findings to the whole class, fostering discussion and critical thinking about the impact of individual behavior on the social environment.

A. Case One: Controversy Sparked by Social Media

Scenario: A student posts a controversial statement on social media, sparking intense debate and controversy. Some people support the statement, while others strongly oppose it. This leads to division and hostility on social media.

B. Case Two: Campus Bullying Incident

Scenario: A student is being bullied by a group of classmates on campus, including verbal insults and physical intimidation. Other students witness the incident, but most choose to stand by and do nothing to stop the bullying behavior.

2.2 Role-play Scenario: Engage students in role-playing activities where they act out different social situations, focusing on how their actions impact others and broader social dynamics. Students role-play scenarios, allowing them to embody different perspectives and deepen their understanding of social awareness.

- A. Scenario One: Facing Peer Pressure with Courage
- B. Setting: At a college party, the protagonist, Jack, and his friends receive an invitation from a group of classmates to attend an illegal gathering. However, Jack knows that this gathering may involve unlawful activities and could pose risks to their reputation and safety.
- C. Roles: Jack (the protagonist), his friends, classmates inviting them to the party.
- D. Task: Students take on different roles to discuss how Jack can courageously resist peer pressure and suggest safe alternative activities. They can explore and demonstrate Jack's communication skills, problem-solving strategies, and how his friends react to his decision.

2.3 Interactive Reflection Journal: Teachers offer guiding prompts for students to individually reflect on their social awareness. They can write about moments when they became aware of social influences, how they responded, and the outcomes of their actions. Encourage self-reflection on the importance of social awareness and its role in fostering a positive social environment.

11. Conclusion:

3.1 Gallery Walk: Researcher creates a gallery walk activity where students display their reflections from the journaling exercise. As they walk around the room, they can read each other's reflections and leave comments or questions on sticky notes. This

allows for peer feedback and further discussion on the importance of social awareness in creating a supportive community.

3.2 Group Discussion and Action Plan: Facilitate a whole-class discussion where students share insights gained from the case studies, role-playing, and reflection activities. Encourage them to identify actionable steps they can take to enhance their social awareness and positively impact their social environments. Guide them in developing an action plan outlining specific strategies they can implement in their daily lives.

3.3 Closing Reflection: End the class with a final reflection where students revisit the initial objectives of the lesson. Ask them to consider how their understanding of social influence has evolved and how they plan to apply their learning moving forward. Emphasize the importance of ongoing self-awareness and proactive engagement in fostering a socially aware community.

Evaluation

1. **Reflection Evaluation:** Assess students' understanding and application of social impact by observing their final reflections at the end of the course. Focus on their understanding of course objectives and their plans and willingness to apply the knowledge learned in the future.
2. **Role-play Assessment:** Evaluate students' social awareness by observing their performance in role-play activities. Focus on whether they can appropriately portray behaviors and thinking patterns of different roles, as well as their understanding of social interactions.

Annex A

Gallery Walk: Researcher creates a gallery walk activity where students display their reflections from the journaling exercise. (Demonstration picture).



Active Learning Model for Enhancing Social Emotional Learning

Section 9 Relationship skills: Understanding Healthy Relationships

Concept

The concept of understanding healthy relationships within the Social Emotional Learning (SEL) framework is crucial for fostering students' interpersonal skills and emotional intelligence. By comprehending the components of a healthy relationship, such as respect, trust, communication, and support, students can develop the necessary skills to navigate various social interactions effectively. This concept emphasizes the significance of cultivating positive relationship skills to promote harmonious connections with peers, family, and the broader community. Through interactive activities like role-playing, group discussions, and reflective exercises, students not only grasp the theoretical aspects but also engage in practical applications of conflict resolution, active listening, empathy, and boundary setting. By integrating these skills into their daily lives, students can foster healthier relationships, leading to enhanced well-being and social cohesion. This concept serves as a foundation for students to build meaningful connections, resolve conflicts constructively, and contribute positively to their social environments.

Objective

1. To understand the concept and importance of relationship skills of SEL.
2. To understand what a healthy relationship is.
3. To cultivate students' good interpersonal skills.

Time: 90 minutes

Learning Materials

1. Video
2. An Infographic
3. Power Point
4. Paper And Pens
5. Individual Learning Dairy

Step/ Learning Process

1. Lead-in:

1.1 Icebreaker Relationship Skills Game: Encourage students to reflect on their interpersonal skills. Provide each student with a social scenario, such as "Facing disagreements in a team project" and "Meeting strangers at a social gathering." Pair students up and ask them to discuss how they would use effective relationship skills to handle these situations. Students can imagine how they would behave, communicate with others, and resolve potential conflicts in these scenarios. This activity will engage students and pave the way for subsequent course content.

2. Learning Activities Process:

2.1 Group Role-Play Scenarios: Divide the whole class into four groups and assign each group a different role-play scenario depicting various interpersonal interactions. Allow time for each group to discuss and plan their scenes, then have them perform in front of the whole class. After each performance, organize a debrief session for students to reflect on the interpersonal skills demonstrated and discuss alternative approaches.

A.Scene One: Conflict Resolution

Student A and Student B have a disagreement over their roles in a group project. Students will act out the roles and demonstrate an effective conflict resolution method.

B.Scene Two: Active Listening

Student C is expressing their concerns to Student D. Student D will demonstrate active listening skills including eye contact, body language, and providing feedback.

C.Scene Three: Showing Empathy

Student E shares a personal challenge with Student F. Student F will demonstrate understanding, sympathy, and offer support and encouragement.

D.Scene Four: Setting Boundaries

Student G faces online harassment and seeks support from Student H. Student H will demonstrate how to maintain personal boundaries and support others.

2.2 Interactive Presentation on Healthy Relationships: The teacher will play a video describing characteristics of healthy relationships, such as respect, trust, communication, and support. Students can watch and share their views and observations during discussions. The teacher will provide an infographic illustrating key components of healthy relationships in a visual format. Students will interpret and discuss the content of the infographic together to deepen their understanding of healthy relationships.

2.3 Pairing and Sharing Reflection: Pair students and provide them with prompts related to the concept of healthy interpersonal relationships. Reflection Question 1: What do you think are the characteristics of a healthy relationship? Share your thoughts with your partner and discuss the agreements and differences between you. Reflection Question 2: What good examples of interpersonal relationships have you encountered in real life? Share your experiences with your partner and consider what you can learn from them. Reflection Question 3: How do you maintain healthy interpersonal relationships in your daily life? Share your strategies and experiences with your partner, and listen to their advice and feedback. The teacher encourages students to share their thoughts and insights with their partners, promoting peer learning and meaningful dialogue. Afterwards, invite several pairs of students to share their reflections with the whole class to foster a collaborative learning atmosphere.

3. Conclusion:

3.1 Interactive Mind Mapping: Provide students with large sheets of paper or digital tools to create a collaborative mind map summarizing key concepts and strategies for cultivating good relationship skills and fostering healthy relationships. Encourage them to use visuals, keywords, and examples discussed throughout the lesson to enhance understanding and retention.

3.2 Role Reversal Activity: Divide the class into pairs and assign each pair a role-play scenario related to a common interpersonal challenge. After they perform the scenario, ask them to switch roles and try again, encouraging them to apply the insights and skills discussed during the lesson. This activity promotes empathy, perspective-taking, and skill application in real-life situations.

3.3 Reflective Journal: Allocate time for students to individually reflect on their learning experiences during the class. Provide guiding prompts such as "What did you learn about relationship skills today?" or "How do you plan to apply these skills in your own life?" Encourage students to write down their thoughts and insights in their journals, fostering meta-cognition and self-awareness.

Evaluation

1. Use questions to check if students understand the concept and importance of healthy relationships introduced in the lesson.

2. Observe students' performance in role-play and group discussions to see if they can effectively demonstrate skills like conflict resolution, active listening, expressing empathy, and setting personal boundaries.

3. Ask students to describe what they've learned and how they plan to apply relationship skills learned in everyday life in their reflective journals after class.

Annex A

Personal Reflection Journal

Date: _____

Name: _____

Course/Topic: _____

Today's class taught me a lot about relationship skills and knowledge. Please write your reflections based on the following questions:

1. What did you learn today about relationship skills?

Answer:

2. Which qualities of healthy relationships do you think are most important to you?

Why?

Answer:

3. What challenges did you encounter in today's role-plays or group discussions?

How did you handle them?

Answer:

4. How do you plan to apply the relationship skills you learned today in your life?

Answer:

5. What insights did today's class activities provide you with?

Answer:

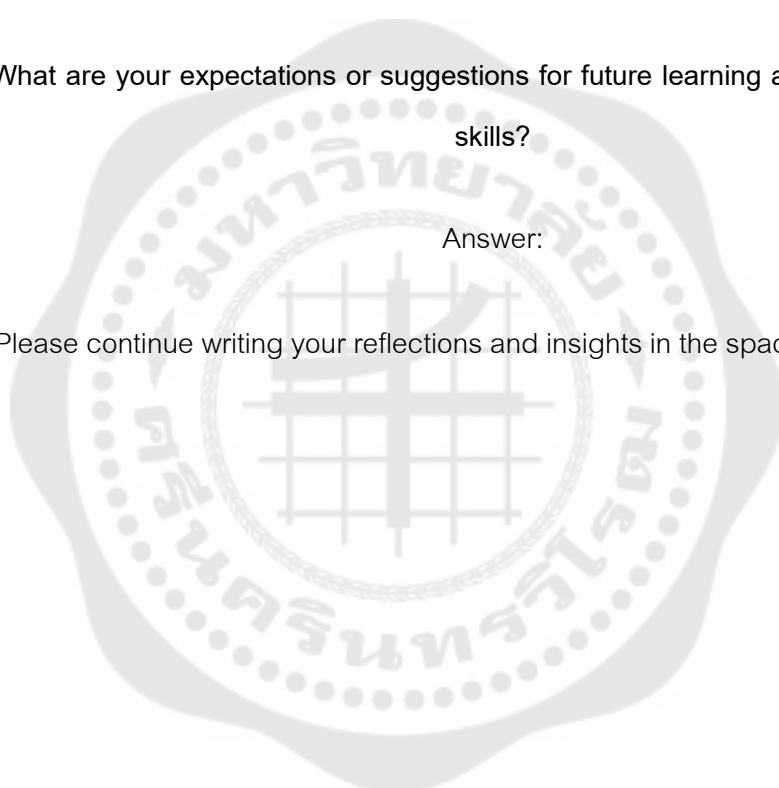
6. If you could change anything about today's class activities, what would you adjust?

Answer:

7. What are your expectations or suggestions for future learning about relationship skills?

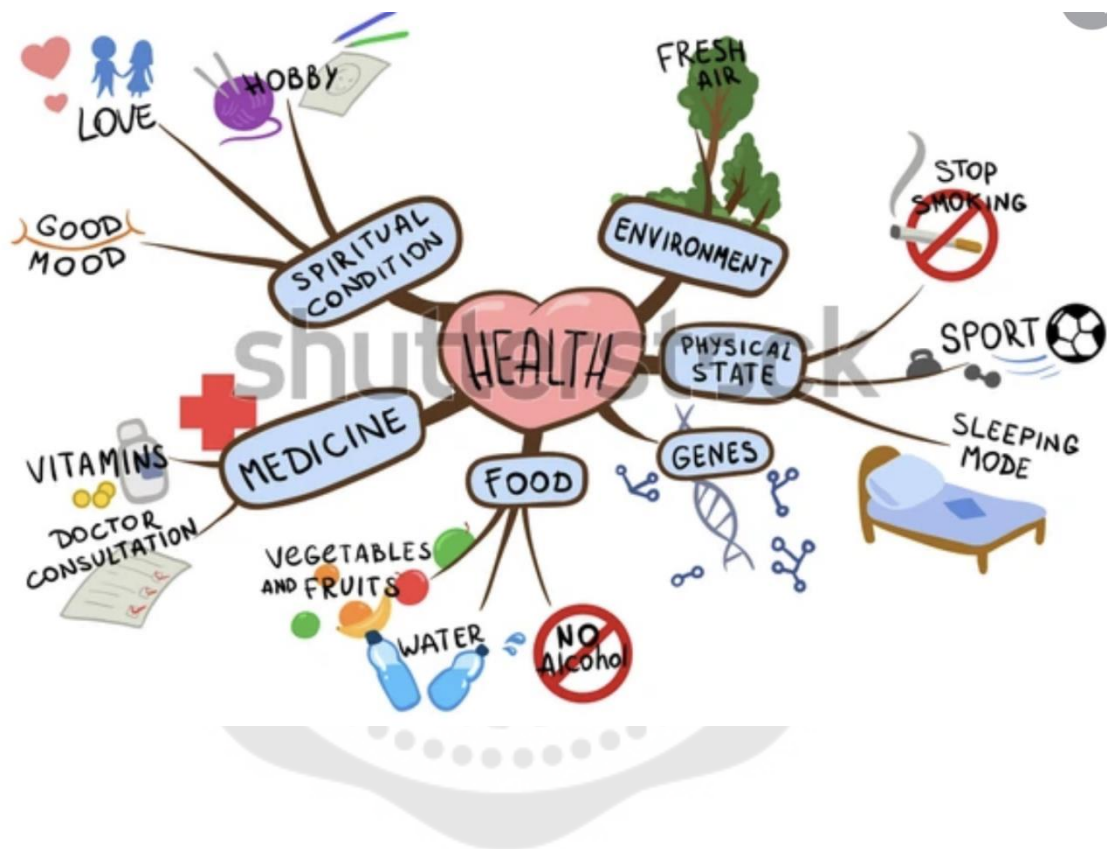
Answer:

Please continue writing your reflections and insights in the space below:



Annex B

Mind Mapping of Healthy Relationships (Example)



Active Learning Model for Enhancing Social Emotional Learning

Section 10 Relationship skills: Building Cooperation

Concept

In this section, concepts revolve around cooperation as a fundamental aspect of interpersonal skills within the broader framework of social-emotional learning. Recognizing the importance of co-operation in a variety of situations, activities are designed to inculcate important competencies such as effective communication, problem solving and collaboration. Through engaging experiences such as team-building games, role-playing scenarios and collaborative projects, students are encouraged to actively participate, share ideas and work together to achieve common goals. This approach not only creates a mutually supportive classroom environment, but also equips students with essential life skills outside of the academic environment. By fostering a spirit of co-operation, the program enables students to address interpersonal challenges with empathy, respect and constructive communication, thus laying the foundation for healthy relationships and developing a sense of community and understanding.

Objective

- 1.To promote students' teamwork and communication skills.
- 2.To improve students' ability to deal with interpersonal problems peacefully.

Time: 90 minutes

Learning Materials

- 1.Props for the event (blindfold, rope)
- 2.Scenario cards
- 3.Discussion guides sheet
- 4.Reflective question lists

Step/ Learning Process

12. Lead-in:

1.1 Team Building Game: Start the class with a team-building game to energize students and foster cooperation. Researcher could have students participate in a trust fall exercise where they must work together to accomplish a task within a time limit. This will set the tone for the importance of teamwork and communication in building relationships.

13. Learning Activities Process:

2.1 Role-play scenarios: Students are divided into groups of five and provided with different interpersonal conflict scenarios related to college life: "Roommate disagreement". Each group role-plays and practices effective communication and problem-solving skills to resolve the conflict peacefully. Afterwards, a discussion is organized for students to reflect on their experiences and share the strategies they used.

2.2 Students work in teams of 10 to create a promotional video aimed at raising awareness about environmental protection. They choose an environmental theme, write a script, assign roles and film footage, and eventually present the results in class. This creative task promotes teamwork and communication skills, while deepening understanding of environmental issues and fostering creativity and expression.

2.3 Peer Feedback Session: Have students participate in a peer feedback session where they provide constructive feedback to their classmates on their teamwork and communication skills during the collaborative project. This will give students the opportunity to reflect on their own strengths and areas for improvement while also learning from their peers' experiences.

14. Conclusion:

3.1 Reflection and Goal Setting: Lead a guided reflection session where students reflect on what they've learned about teamwork and communication skills throughout the class. Ask them to identify specific strategies or techniques they found most helpful and how they plan to apply them in future interpersonal interactions.

Encourage students to set personal goals for improving their relationship skills based on their reflections.

3.2 Closing Circle: Form a closing circle where students come together to share their reflections on the class and express gratitude for their classmates' contributions. Encourage students to acknowledge each other's efforts and reaffirm their commitment to fostering positive relationships through teamwork and communication.

Evaluation

Assess students' level of active participation in classroom activities, including discussion, role play, sharing of ideas, etc. It can be assessed by observing students' performance, listening to their answers, and observing their interactions with their partners.

Assess students' understanding of healthy relationships through class discussion, sharing and reflection. It is possible to observe whether students have a clear understanding of the definition of relationship skills, their importance, and the characteristics of healthy relationships.

Assess students' performance in collaborative activities, including their degree of cooperation with partners, communication skills, and ability to complete tasks together. Students can be observed in group discussions, shared reflections, and collaborative mind mapping.

Students' understanding and application of the course content are assessed through their personal reflective diaries. It can focus on students' understanding of relationship skills, how to apply them to real life and future learning plans.

Annex A

Trust game demonstration (eye mask and tie rope provided by students)



Annex B

Provide students with work flow templates for shooting promotional videos to help students quickly do work assignment Promotional Video

Production Template

1. Theme Selection:

- **Environmental Theme:** [Specify the environmental issue chosen by students, such as plastic pollution, forest conservation, renewable energy, etc.]

2. Script Writing:

- **Setting:**
 - Brief description of the initial and main scenes of the promotional video.
- **Dialogue Content:**
 - List the dialogue for each major scene or key information to be conveyed.

3. Role Assignment:

- **Main Roles:**
 - List the main roles in the promotional video and their responsibilities, e.g., narrator, spokesperson, background voices.
- **Supporting Roles:**
 - If applicable, list additional supporting roles and their responsibilities.

4. Shooting Schedule:

- **Dates and Times for Shooting:**
 - Schedule for filming each scene.

- **Locations:**
 - Specify the filming locations for each scene.

5. Video Editing and Post-Production:

- **Video Editing Software:**
 - Specify the software to be used for video editing, such as iMovie, Adobe Premiere, etc.
- **Editing Sequence:**
 - Outline the sequence of video editing and any special effects or music to be added.

6. Final Presentation and Showcase:

- **Presentation Date:**
 - Determine the date for presenting the promotional video in class.
- **Presentation Format:**
 - Describe how the presentation will be organized, including any subsequent discussions or evaluations.

Active Learning Model for Enhancing Social Emotional Learning

Section 11 Relationship skills: Cultivating Respect and Boundaries

Concept

The concept of cultivating respect and boundaries within relationship skills is essential for fostering healthy interpersonal dynamics. This segment of the curriculum aims to underscore the significance of mutual respect in relationships, highlighting the necessity of acknowledging and honoring personal boundaries in various contexts. Through engaging activities like boundary-setting icebreakers, role-playing scenarios, and interactive discussions, students will develop a deeper understanding of their own boundaries and communication styles while learning to navigate respectful interactions with others. By honing confident communication skills and promoting a culture of respect, students can cultivate more harmonious relationships and establish a foundation for positive social interactions both within academic settings and beyond.

Objective

- 1 To understanding the importance of respect in interpersonal relationships.
- 2 To identify personal boundaries in different situations.
- 3 To developing confident communication skills.

Time: 90 minutes

Learning Materials

- 1 Video
- 2 Whiteboard and colored pens
- 3 Sticky note
- 4 Situational information sheet
- 5 Individual learning dairy

Step/ Learning Process

1. Lead-in:

1.1 Boundary Setting Ice Breaking activity: Have students participate in a boundary setting ice breaking activity. Each student receives a post-it note to write down a personal boundary in a social or academic setting. They then put their sticky notes on a whiteboard or wall and discuss their boundaries with their classmates, emphasizing the importance of respecting each other's boundaries.

2. Learning Activities Process:

2.1 Role-play Boundaries: Divide the class into pairs and provide them with scenarios involving setting boundaries and respect. Each pair takes turns playing different roles.

A Scenario One: In a college dorm, two roommates have different sleeping schedules, causing one roommate to be frequently noisy late at night, disturbing the other's rest. One student needs to communicate their sleep boundaries, while the other needs to respect their roommate's sleep needs.

B Scenario Two: In a group project, one member keeps shifting responsibilities onto others, making other group members feel unfair. One student needs to assertively communicate their responsibility boundaries, while other group members need to respect everyone's responsibilities.

After the role-play, discussions can be held to explore the effectiveness of communication strategies adopted by each role-player and the importance of respecting boundaries. Emphasize the use of affirmative and honest language when asserting one's boundaries, while respecting others' boundaries can foster more harmonious relationships.

2.2 Interactive Boundary Maps: Provide students with large sheets of paper or a whiteboard and ask them to create visual representations of their personal boundaries in different contexts (such as academic, social, family). Encourage them to use symbols,

colors, and text to depict their boundaries and influencing factors. Afterwards, students share and discuss their boundary maps, identifying common themes and challenges.

2.3 Interactive Presentation: Use multimedia presentations, videos, and interactive quizzes to reinforce key concepts related to respect, boundaries, and communication skills.

3. Conclusion:

3.1 Roundtable Discussion: Bring the class back together for a roundtable discussion on the importance of respect, boundaries, and confident communication in interpersonal relationships. Encourage students to share insights gained from the activities and how they plan to apply these skills in their own lives.

3.2 Personal Action Plan: Have students create a personal action plan outlining specific steps they will take to cultivate respect, set boundaries, and improve communication skills. This could include setting boundaries with friends or family, practicing assertive communication techniques, or seeking out opportunities for personal growth.

3.3 Closing Reflection: End the class with a moment of reflection where students share one key takeaway from the lesson. Encourage them to consider how their understanding of respect, boundaries, and communication skills has evolved and how they plan to continue developing these skills moving forward.

Evaluation

Reflective Writing assessment: Students' reflective writing is collected and assessed on the ideas raised, reflections, and measures applied to real life. The focus is on students' understanding of respect, boundaries and communication skills, as well as their self-perception.

Role play assessment: Observe the student's ability to demonstrate boundary setting and confident communication in role play and provide feedback. Assess whether

students are able to effectively express their own ideas, needs, and feelings, and whether they are able to respect the boundaries and feelings of others.

Round table discussion assessment: In round table discussion, students are observed to participate actively and deeply, and their understanding and thinking about the subject matter of the course is assessed. The focus is on students' ability to use the skills learned in the course to participate in discussions, share insights, and establish effective communication with others.



Annex B

Personal Action Plan

- **Name:** [Your Name]
- **Date:** [Date]

Goal: To cultivate respect, establish boundaries, and enhance communication skills in interpersonal relationships.

Specific Steps:

1. Identify Personal Boundaries:

- Reflect on different areas of life (social, academic, family) and clearly define personal boundaries.
- Use examples from past experiences to identify where boundaries were unclear or violated.

2. Practice Assertive Communication:

- Learn and practice assertiveness techniques such as "I" statements and active listening.
- Role-play scenarios to assert boundaries effectively without being aggressive.

3. Seek Opportunities for Growth:

- Attend workshops or seminars on effective communication and conflict resolution.
- Read books or articles on building healthy relationships and setting boundaries.
-

Timeline:

- **Month 1:** Identify and define personal boundaries in various contexts.
- **Month 2:** Practice assertive communication techniques in daily interactions.
- **Month 3:** Attend a workshop or read a book/article on boundary-setting and communication skills.

Resources Needed:

- Books/articles on assertiveness and communication skills.
- Access to workshops or online courses related to interpersonal skills.
- Support from friends, family, or mentors to provide feedback and encouragement.

Assessment and Feedback:

- Regularly review progress against goals and adjust action steps if necessary.
- Seek feedback from peers or mentors on improvements in communication and boundary-setting.

Reflection:

- Reflect on experiences and adjustments made to improve respect, boundaries, and communication skills.
- Celebrate achievements and identify areas for further growth in maintaining healthy relationships.

Active Learning Model for Enhancing Social Emotional Learning

Section 12 Responsible decision-making: Understanding responsibility and decision-making

Concept

The concept of responsible decision-making is crucial in fostering students' ability to navigate complex situations effectively and ethically. By understanding the importance of considering factors such as personal values, consequences, and moral standards, students develop critical thinking skills necessary for making informed choices. This concept empowers students to assess risks, weigh options, and ultimately choose actions that align with principles of integrity and accountability. Through interactive discussions, case studies, and reflective activities, students gain practical insights into applying responsible decision-making in various contexts, from social gatherings to academic integrity. By engaging with real-life scenarios and learning from guest speakers' experiences, students not only enhance their decision-making skills but also cultivate a sense of responsibility towards themselves and their communities. Encouraging reflection and goal setting further reinforces the concept by prompting students to internalize lessons learned and commit to applying them in their lives. Ultimately, fostering responsible decision-making equips students with essential life skills that contribute to their personal growth and ethical development.

Objective

1. To understand the concept of responsible decision making.
2. To cultivate students' awareness of responsible decision making and appreciate ability.

Time: 90 minutes

Learning Materials

Step/ Learning Process

4. Lead-in:

1.1 Scenario Discussion: Present students with a real-life scenario where they must make responsible decisions. The teacher prompts students to discuss in pairs how to handle the situation and what factors to consider when making decisions.

A. Scenario: You are a college student. Your friend invites you to a party, but you know the party might violate the school's social distancing regulations and could increase your risk of contracting COVID-19. How would you decide?

B. During the group discussion, students can explore the following questions:

- What do you think are the most important factors in this situation?
- How would you weigh the pros and cons of attending the party?
- Do you think it's worth taking the health risk to attend the party? Why?

1.2 Interactive Poll: Use the "Learning Tong" app's polling feature to ask students questions related to responsible decision-making.

A. Question 1: What do you think is the most important factor when making responsible decisions?

A. Personal values and moral standards

B. Influence from others

C. Consequences and risk assessment

D. Current emotional state

B. Question 2: Have you ever faced situations where you needed to make difficult decisions? How did you handle them?

A. Yes, I have faced such situations before.

B. No, I haven't experienced such situations yet.

1.3 Reflective Journaling: Provide students with a few minutes to individually reflect on their own experiences with responsible decision-making. Prompt them to write about a time when they made a decision they were proud of and why it was important to them.

5. Learning Activities Process:

2.2 Case Study: Divide students into 2 groups and provide each group with a case study related to responsible decision-making. Ask them to analyze the scenario, identify the decision to be made, consider possible consequences, and discuss the most responsible course of action. Afterwards, bring the whole class together again to share and compare their analyses.

- A. Scenario: A student discovers a classmate cheating during an exam. The student is faced with the decision of whether to report the classmate.
- B. Decision: The student needs to decide whether to report the classmate's cheating behavior to the teacher.
- C. Possible Consequences: Reporting the classmate may lead to severe punishment and could affect their academic and social standing. However, not reporting could result in unfair exam results, violating the school's principles of honesty and integrity.
- D. Responsible Action: Discuss and negotiate a decision considering the interests of all parties involved, finding the best solution to uphold exam fairness while respecting the dignity and future development of the classmate.

2.2 Guest Speaker or Panel Discussion: Invite an outstanding alumni to share one of their experiences of responsible decision-making during their time at university—specifically, their experiences with academic integrity, how they dealt with challenges such as cheating or plagiarism, and discuss the impact of these decisions on their learning and future. During the discussion, students can ask questions and engage with the alumni to gain insights and advice to help them navigate similar situations.

6. Conclusion:

3.1 Reflection and Goal Setting: The teacher asks students to reflect on what new insights or perspectives they have learned about responsible decision-making. Ask, "What new insights or perspectives did you learn?" , "How do you plan to apply what you learned to your own life?" Encourage students to set one or two specific goals for themselves related to responsible decision-making. And write them down.

3.2 Peer Feedback Circles: Organise students into groups of 4 and ask them to share their goals with a partner. Peers give each other constructive feedback and support, focusing on how they can help each other achieve their goals.

Evaluation

3. Group Discussion Performance: Observe students' level of participation and contribution to the group discussion, including their understanding of the scenario discussion and the comprehensiveness of their thinking about responsible decision-making. Each student's performance and their acceptance of and response to their peers' ideas can be recorded.
4. Feedback from guest speakers: Gather feedback from students on guest speakers or group discussions, including their understanding of and inspiration from the experiences shared by alumni. Design a verbal feedback session to find out what students thought of the session and whether they gained new insights and inspiration from it.

Active Learning Model for Enhancing Social Emotional Learning

Section 13 Responsible decision-making: Understanding responsibility and decision-making

Concept

The concept of responsible decision-making is crucial in fostering students' abilities to solve problems effectively, cultivate a sense of accountability, and evaluate choices in various scenarios. By engaging in activities that simulate real-life decision-making situations, students not only enhance their problem-solving skills but also learn to consider the consequences of their actions. This concept emphasizes the importance of understanding personal responsibility and the impact of decisions on oneself and others. Through guided discussions, case studies, and interactive activities, students develop critical thinking skills, learn to weigh different options, and make informed choices. Moreover, reflecting on the learning process and applying these skills to their own lives helps students internalize the concept of responsible decision-making and prepares them for future challenges. By focusing on this concept, educators aim to empower students to navigate complex situations with confidence and integrity, ultimately contributing to their personal and academic success.

Objective

1. To develop students' ability to solve problems in a variety of ways.
2. To cultivate students' sense of responsibility.
3. To develop students' ability to evaluate choices and make decisions.

Time: 90 minutes

Learning Materials

1. Individual learning dairy
2. Power point
3. Decision matrix template

Step/ Learning Process

1. Lead-in:

1.1 Case Discussion: Present a real-life case study related to responsible decision-making, Case: A student is challenged by a decline in his academic performance while in college, and he may be faced with choices such as dropping certain classes, seeking help, and adjusting his approach to learning. Divide students into groups of five and have them discuss the situation, identify potential options, and brainstorm different ways to solve the problem. Encourage them to consider the consequences of each decision.

1.2 Think-Pair-Share: Encourage students to think about the qualities they believe a responsible leader should possess, discuss with peers how these qualities manifest and their importance in real life. Give them a few minutes to think independently, then pair them up to discuss their thoughts. Finally, facilitate an open discussion for the whole class to share insights and viewpoints.

1.3 Interactive Poll: Ask students by a show of hands or a vote what they think responsible decision-making is and what they think about leadership. This can help the teacher to understand pupils' perspectives and lead to subsequent discussions and activities. This can be used as a starting point for further discussion and exploration of the topic.

2. Learning Activities Process:

2.1 Students will be faced with the situation of choosing a university major. Teachers provide a "decision matrix template" for students to guide students to evaluate each major option by considering various criteria such as personal interest, employment prospects and salary levels, course difficulty and academic requirements, as well as contribution to society and value consistency. Students will be divided into groups of 4 to discuss and fill out forms together, and then evaluate and rank each option based on the results of the discussion. Ultimately, they will choose the major that best meets their needs, based on their chosen criteria, and state the reasons for their decision.

2.2 Through the "decision-making" experience accumulated from the previous teaching activity, in this activity. Students will work in teams of 3-5 to make decisions in a budget-constrained scenario to ensure the success of a large event. They need to consider the various possible risks and challenges and work together within the team to work out the best allocation of funds. Each group will record their choices and reasons, and then send a representative to present their decision to the class. After sharing with the class, a discussion will be organized where students will evaluate the strengths and weaknesses of different decisions and explore the possible consequences and challenges. Finally, by summarizing and sharing lessons learned, students will deepen their understanding of responsible decision making and think about how these lessons can be applied to real life situations.

3. Conclusion:

3.1 Ask students to think independently and answer the following questions in their journals:

-What did you learn in today's lesson about the importance of responsible decision making?

-How would you assess that the ability to make choices and decisions has improved?

-How will you apply what you learned to your own life?

Allow time for students to meditate and encourage them to share their reflections and insights.

Evaluation

5. **Decision Matrix Completion and Interpretation:** Students are assessed on their accuracy and comprehensiveness in completing the decision matrix. This is assessed by observing the various criteria they chose as well as their final decision, and by explaining their decision in a class discussion.
6. **Teamwork and Communication Skills:** assesses students' performance in team decision-making activities, including how they allocate resources, resolve conflicts, and coordinate opinions. This can be assessed by observing interactions during team discussions and performance when presenting on behalf of the team.
7. **Reflection and application skills:** Assess students' ability to reflect on what they have learnt in class and to apply it in their daily lives. This can be assessed by collecting students' summaries of learning outcomes in their journals, their responses to questions posed, and their sharing in class discussions.

Annex A

Decision Matrix Template

Criteria	Option 1	Option 2	Option 3	Option 4
Personal Interest				
Job Prospects				
Course Difficulty				
Contribution to Society				
Consistency with Values				

Rating Guidelines:

- **Personal Interest Rating (1-5):** Rate based on the student's level of interest in the major. 1 indicates low interest, 5 indicates high interest.
- **Job Prospects and Salary Level Rating (1-5):** Rate based on the career prospects and salary level associated with the major. 1 indicates poor prospects, low salary, 5 indicates strong prospects, high salary.
- **Course Difficulty and Academic Requirements Rating (1-5):** Rate based on the difficulty of courses and academic requirements for the major. 1 indicates low difficulty, lenient requirements, 5 indicates high difficulty, rigorous requirements.
- **Contribution to Society Rating (1-5):** Rate based on the major's contribution to society. 1 indicates low contribution, 5 indicates high contribution.
- **Consistency with Values Rating (1-5):** Rate based on alignment with the student's personal values. 1 indicates inconsistency, 5 indicates strong alignment.
- **Total Score (Sum of Ratings):** Sum of all individual ratings, used for comparison and ranking of different major options.
- **Final Choice Justification:** Briefly explain why the final major option was chosen based on the chosen criteria and overall ratings.

Active Learning Model for Enhancing Social Emotional Learning

Section 14 Reflection and Conclusion

Concept

The concept of the Reflection and Conclusion section in this teaching plan is crucial for consolidating students' learning experiences and fostering personal growth in social-emotional learning (SEL). By engaging in reflective practices, students not only review the course content but also assess their own development in areas such as self-awareness, self-management, social awareness, relationship management, and responsible decision-making. This process allows students to recognize their progress, identify areas for improvement, and set future goals for enhancing their SEL skills. Through individual reflection and group sharing, students cultivate a deeper understanding of themselves and their interpersonal dynamics, while also building a supportive learning community. Furthermore, the inclusion of a post-test questionnaire serves as an evaluative tool, providing students with feedback on their SEL competencies and guiding their ongoing learning journey. Overall, the Reflection and Conclusion section plays a pivotal role in promoting self-awareness, self-assessment, and continuous improvement in social-emotional learning, empowering students to navigate life's challenges with resilience and empathy.

Objective

1. To review the course content and learning experience.
2. To reflect on personal growth and development.
3. To measure students' level of social-emotional learning

Time: 90 minutes

Learning Materials

1. Individual learning dairy
2. Social-emotional learning cards
3. Power point
4. Social Emotional Learning post-test questionnaire

Step/ Learning Process

7. Lead-in:

1.1 The teacher hides cards in the classroom, each with a word or phrase related to social-emotional learning, such as 'friendship', 'teamwork', 'challenge', "emotional management," "self-management," "relationship skills," "goal setting," and so on. Students were divided into 2 groups and were asked to find as many cards as possible within 5 minutes. Once the cards were found, the group members were asked to share in turn their understanding of the word or phrase, as well as any experiences they had encountered or applied the concept in their lives. This activity was designed to kick-start students' thinking about the course topic and help them make an emotional connection.

8. Learning Activities Process:

2.1 Students were divided into five groups, each of which was responsible for discussing one of the core components covered in the course: self-awareness, self-management, social awareness, relationship management and responsible decision-making. Within their groups, students share their understanding of these concepts, discuss important ideas they have learnt in the course, and explore how they can apply these ideas to their daily lives. One group might share how they manage their emotions and behaviour by setting goals and creating a timetable when discussing self-management. Another group might discuss how they develop effective communication

skills in teamwork. Students should be encouraged to share their personal experiences with each other and to support and listen to each other.

9. Conclusion:

3.1 Students are asked to go through their individual learning notebooks that they have recorded throughout the programme. They will spend some time reviewing their notes, reflecting on and recording their greatest progress and achievements during their social-emotional learning. Students may consider the following questions:

- A. -What new knowledge or skills did they learn during the course?
- B. -What are the areas in which they have made the most progress?
- C. -What are some specific examples of growth?
- D. -What challenges did they encounter in the course and how did they respond?

Next, students will share their reflections and growth insights. Each student will have the opportunity to share their personal experiences and receive encouragement and support from the rest of the class. The teacher acts as a facilitator in this process, encouraging students to think and share deeply.

At the end of the personal sharing, the teacher will guide the students in their future planning. Pupils are asked to think about and record plans for future enhancements in social-emotional learning. They may consider the following questions:

- E. -What are their own goals for social-emotional learning?
- F. -How can they improve further in the future in response to the progress they have already made?
- G. -What specific action plans are in place to help achieve the goals?
- H. -Do they need to seek external support or resources?

Pupils will have the opportunity to share their future plans in groups of 5 and provide feedback and advice to each other. Teachers will provide guidance and support where needed, encouraging students to set specific, achievable goals and develop realistic

plans to achieve them. Finally, teachers can encourage students to continue the habit of reflection and planning for personal growth and development after the programme.

3.2 Teachers will distribute the Social Emotional Learning post-test questionnaire to students. This questionnaire is designed to help students assess the social-emotional learning knowledge and skills they have acquired during the course, as well as their perceptions of their social-emotional competence. Students will have 30 minutes to complete the questionnaire. The questionnaire includes questions about self-awareness, emotion management, social awareness, relationship management and responsible decision-making. Upon completion of the questionnaire, students can either hand it in to their teacher or submit it via the online platform within the allotted time. This post-test questionnaire will be used as an assessment tool for students' personal social-emotional learning, helping them to understand their own growth and development, and informing them to set goals and plans for their future learning and development.

Evaluation

8. Individual Learning Diary Assessment: students will be asked to record their reflections on course content and personal growth in their Individual Learning Journals. The teacher will design a short assessment form (including an evaluation of the topic, depth, and coherence of the content of the student's reflections) that will be used to assess the student's level of reflection, their understanding of the course content, and their growth in social-emotional learning. Students are also assessed and given feedback on their learning and engagement throughout the course through their individual learning diaries.

9. Post-course questionnaire: the post-course questionnaire will be used as a tool to assess students' knowledge and skills in social-emotional learning. The questionnaire covers core concepts covered in the course such as self-awareness, emotion management, social awareness, relationship management and responsible decision-making. to promote their knowledge and understanding of their own growth.



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