

## Application of Strategies for Conflict Resolution for First-year Undergraduate Students in Yunnan Province, China

**Yanyan FAN**

*Learning Technology and Innovation Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani, 12110, Thailand  
yanyan\_f@mail.rmutt.ac.th, ORCID: 0009-0002-6533-3634*

**Thosporn SANGSAWANG**\*(Corresponding author)

*Educational Technology and Communications Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani, 12110, Thailand  
sthosporn@rmutt.ac.th, ORCID:0000-0002-7926-6949*

### ABSTRACT

The objectives of this study were to 1) investigate the efficiency of an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, 2) compare students' academic performance before and after using the application, and 3) assess students' satisfaction with the application. The sample consisted of 30 an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, selected through purposive sampling. The research instruments included the conflict resolution application, a pretest, a post-test, and a student satisfaction questionnaire. The statistics used for analyzing the data were percentage, mean, standard deviation, and the t-test for the dependent sample. The research findings revealed that the application was effective in enhancing student learning, achieving an E1/E2 efficiency score of 81.40/81.23. Expert evaluations rated the content of the application as highly appropriate ( $\bar{x} = 4.51$ ,  $SD = 0.50$ ) and the media design as excellent ( $\bar{x} = 4.78$ ,  $SD = 0.50$ ). Students' post-test scores ( $\bar{x} = 16.27$ ,  $SD = 1.48$ ) were significantly higher than their pre-test scores ( $\bar{x} = 8.80$ ,  $SD = 2.33$ ), with a t-value of 20.68 at the .05 level of significance. Furthermore, student satisfaction with the application was high, with a mean score of 4.51.

**Keywords:** conflict resolution strategies, educational application, undergraduate students

### INTRODUCTION

The pursuit of developing and promoting an academic environment conducive to reducing social conflict the inevitable conflict of social interaction requires consideration of individual identities from diverse backgrounds, values, and perspectives. Adapting to social harmony, human development, and the creation of conflict-reduction environments and strategies in higher education aim to enhance students' crucial interpersonal skills, including communication, empathy, negotiation, and problem-solving. These skills not only foster harmony in the classroom but also prepare students for future professional and social environments. Teamwork and collaboration among students are essential. Conflict is a vital and unavoidable part of human interaction, especially in educational environments where diverse opinions, academic needs, and interpersonal dynamics converge. Undergraduate students in Yunnan Province, China, face various forms of conflict, such as peer discord, group project disputes, cultural misunderstandings, and confrontations between professors and students. If left unmanaged, these conflicts can negatively impact academic achievement, mental health, and university harmony. Research on the impact of the learning environment on academic achievement at Guangdong Provincial University of Technology highlights the importance of a friendly, inclusive, and stimulating learning environment that fosters student engagement, motivation, and academic success. This research analyzed the components of a constructive learning environment, namely student unity, support, participation, collaboration, and equality. Descriptive, comparative, and correlational research methods were used to collect data from 407 students respondents. The findings indicated that age significantly impacted perceptions of student unity; gender and curriculum had no significant impact on perceptions of support, participation, collaboration, and equality. Suggestions for improvement included increasing faculty awareness and training, promoting collaborative learning, and providing ongoing support and opportunities for participation. Continuous improvement and revision are recommended to meet the diverse needs of students and promote academic and personal development (Su, C., 2024).

The integration of artificial intelligence (AI), the use of games, interactive role-playing, and peer mediation can assist undergraduate students in Yunnan Province in developing practical problem-solving skills aligned with cultural needs. Digital technology, particularly mobile applications, is used to enhance learning and skill development. However, digital tools specifically developed to teach students about conflict resolution are limited. The integration of games on language learning outcomes among Chinese students, while exploring the impact on

learner motivation, the effectiveness of games as a motivational tool, and digital literacy as a key component, provides deeper insights into individual learning experiences (Shen, Z., Lai, M., & Wang, F., 2024).

Yunnan Province, China is characterized by ethnic diversity, with over 25 ethnic groups. These groups exhibit differences in language, communication styles, and cultural values, leading to misunderstandings and inappropriate conflict resolution. Chinese students often avoid direct confrontation, posing unique challenges in conflict resolution (Hofstede, 2010). Traditional conflict resolution strategies are less effective due to Yunnan's ethnic diversity, which necessitates resolving conflicts arising from differences in language, communication styles, and cultural values. Traditional conflict resolution methods may be ineffective due to these differences. The general tendency of Chinese students to avoid direct confrontation presents challenges and mechanisms for conflict resolution. Customary law and state mediation are prevalent in areas such as Lanping County, where the Yi ethnic group relies on customary law for conflict resolution. The lack of coordination between the state and civil society contributes to disagreements and conflicts (Qi, Y., 2023). Natural multiculturalism in northwestern Yunnan is maintained through intermarriage, linguistic interaction, and shared rituals. This natural form of multiculturalism fosters empathy and unity. From the typical nation-state community model (Wu, K., 2024), cultural and educational integration and cultural and educational diversity present challenges. Integrating ethnic minorities into the broader Chinese culture poses educational challenges. Multicultural communication skills are needed to overcome cultural and communication barriers in schools, impacting the academic performance of ethnic minority students.

### 8. Preserving Cultural Identity:

Rapid urbanization and globalization have intensified cultural conflicts in Yunnan. Efforts to preserve cultural diversity depend on respecting cultural identity and improving cultural integration.

### 3. Economic and Social Dynamics:

**Tourism and Economic Resilience:** Ethnic tourism in Yunnan, driven by small family businesses, highlights the resilience and adaptability of these communities.

**Cultural Governance:** Yunnan's cultural governance is crucial for social stability and development. The province's unique cultural characteristics, influenced by its geographical location and ethnic diversity, require appropriate management strategies to effectively manage cultural resources. Yunnan's ethnic diversity necessitates constructive conflict resolution strategies, respect for cultural differences, and the natural utilization of cultural diversity. Efforts in educational and cultural integration must consider the specific needs of ethnic minorities. Economic resilience in tourism and effective cultural governance are essential for maintaining social harmony and promoting sustainable development in the region.

Conflict resolution and compromise are essential skills, but at the undergraduate level, students in Yunnan Province lack systematic training and readily available resources to effectively manage disputes. Several key factors contribute to this problem, including: inadequate conflict resolution education – most colleges in Yunnan do not offer formal conflict resolution courses in their undergraduate programs; students resort to trial-and-error approaches to problem-solving, resulting in increased tension instead of successful resolution; cultural barriers to direct conflict resolution – many students in China prefer indirect communication, avoiding direct confrontation even when challenges demand resolution, leading to lingering resentment, unresolved conflicts, and heightened tension among students; a lack of digital solutions for conflict resolution training – colleges are reliant on e-learning platforms or developing dedicated mobile or online applications designed to assist students in practicing and enhancing their conflict resolution abilities; current internet-based mediation services primarily address legal or organizational issues rather than academic and social problems; diverse student demographics and linguistic challenges – Yunnan's multilingual context hinders dispute resolution, resulting in miscommunication due to language differences; adaptive learning technologies are crucial in meeting the diverse needs of students; and unsuccessful mediation and peer support mechanisms. Student counseling and dispute resolution services face challenges due to a lack of awareness and bias regarding seeking help. Digital applications can provide a sensitive, user-friendly, and dynamic platform for students to engage in self-mediation and peer negotiation. The importance of conflict resolution is highlighted, and a conflict resolution application designed for undergraduate students in Yunnan will bridge the gap between theoretical understanding and practical application of conflict resolution. It will offer engaging and immersive teaching experiences using simulations, AI-powered mediation, and gamification, providing multilingual support to accommodate Yunnan's diverse ethnic student population. Furthermore, it will enhance students' emotional intelligence, communication skills, and negotiation skills, leading to improved academic and social interactions. Undergraduate students in Yunnan often struggle with conflict management due to insufficient resources and information, resulting in miscommunication, stress, and deteriorating relationships. Therefore, developing a conflict resolution application is crucial in equipping students with the necessary skills to resolve problems constructively and foster a more harmonious and collaborative academic environment.

Given the importance of the aforementioned problems, the researchers conducted research on the application of conflict resolution strategies for first-year undergraduate students in Yunnan Province, China. They designed learning activities on conflict reduction strategies through a digital conflict resolution application game. The

content covered included: enhancing conflict resolution abilities; systematic guidance on negotiation, mediation, and problem-solving strategies; reducing academic and social stress; assisting students in managing disputes; reducing anxiety through psychology; fostering positive university experiences; facilitating multicultural communication; supporting multilingualism and culturally relevant communication strategies for equality and teamwork; approaches to dispute resolution in the academic environment; improving collaboration and efficiency; access to ongoing learning and support; counseling to reduce prejudice and promote compromise and mediation; enhancing emotional intelligence and communication skills; helping students develop self-awareness, empathy, and the ability to listen to others; preparing students for future careers; and developing negotiation and leadership skills. Therefore, conflict resolution is crucial for undergraduate students in Yunnan Province, China, yet there is a lack of systematic training and resources to help students develop these skills. The digital conflict resolution application aims to address this problem by offering interactive, user-friendly, and culturally relevant solutions. This application helps develop students' conflict resolution abilities. To foster a creative learning environment and enhance emotional intelligence; to strengthen classroom and group dynamics; to strengthen student support services; to help overcome cultural and linguistic barriers; to promote intercultural understanding; and to prepare students for work in professional environments, thereby promoting a more peaceful society and improving mental health and quality of life; and to foster self-development, academic achievement, and professional readiness for undergraduate students in Yunnan Province.

## LITERATURE REVIEW

Relevant literature related to this research includes: the effectiveness of applying conflict resolution strategies; learning through the application of conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China; and the use of applying conflict resolution strategies.

**Conflict Resolution Applications.** This focuses on the theoretical framework, incorporating interdisciplinary theories from psychology, education, communication, and instructional technology, focusing on the design, implementation, and evaluation of a digital application aimed at enhancing students' conflict resolution abilities within academic and social contexts. Conflict Resolution of theoretical framework, shush as 1) Social constructivist theory emphasizes that knowledge and skills are constructed through social interaction and shared experiences in the context of conflict resolution. This theory highlights the importance of dialogue, collaboration, and reflection in resolving interpersonal conflicts. First-year undergraduate students transitioning from high school to university life often face diverse perspectives, cultural differences, and new social environments. Applying conflict resolution based on social constructivist theory fosters peer interaction through simulations, discussion-stimulating questions, and collaborative problem-solving tasks, enabling learners to collaboratively build understanding and develop practical conflict management skills, 2) Conflict resolution theory views conflict as a natural and potentially creative process. Effective management involves understanding the origins of conflict, recognizing different conflict types, and using appropriate strategies such as negotiation, mediation, compromise, cooperation, and avoidance. Integrating conflict reduction guidance for students and practicing strategy selection through life experiences at the Yunnan University, includes group work, dormitory life, and intercultural communication, 3) Social Learning Theory: Individuals learn behaviors and attitudes through observation, imitation, and reinforcement. Effective conflict-solving behaviors demonstrated in the application, such as respectful communication, emotional control, and empathetic listening, can influence responses to conflict. The application, role-playing, video demonstrations, and feedback mechanisms allow students to learn from demonstrated behaviors and receive reinforcement for making constructive conflict resolution choices, 4) Emotional Intelligence Theory: Emotional intelligence is the ability to recognize, understand, and effectively manage emotions in oneself and others amidst emotional conflict situations arising from stress, academic pressure, and adaptive challenges. Integrating emotional intelligence into the application framework will support students in developing self-awareness, empathy, emotional regulation, and social skills, enabling them to manage emotions constructively during conflicts, 5) Experiential learning, reflection, idea generation, and active experimentation: Presenting interactive conflict scenarios that reflect real-life situations in a university environment; engaging in decision-making processes; reflecting on outcomes; enhancing the transfer of conflict resolution skills from digital environments to real-world interactions, 6) Effective use of technology and adoption, through the design of effective applications and learning outcomes for conflict resolution within cultural contexts, ethnic diversity, and multicultural interaction (Vinokur, E., Yomtovian, A., Marom, M., Itzchakov, G., & Baron, L., 2024).

**Available Digital Conflict Resolution Tools and Application of Conflict Resolution Strategies in Diverse Environments,** Cultural Differences, Values, and Perspectives: Understanding how to manage and resolve conflict constructively, academic success, and positive social relationships are crucial. Technological advancements provide numerous digital tools to support conflict resolution by promoting communication skills, empathy, and negotiation. The use of software applications and platforms designed to foster understanding and

reduce individual differences, communication and mediation platforms, allows for expressing opinions, listening to others, and achieving mutual understanding. Mediation software facilitates step-by-step conflict resolution with pre-defined frameworks that promote empathy and fairness. In modern society, conflicts arising from inappropriate emotional expression highlight the fundamental importance of mediation technology in conflict resolution. The use of reasoning to clarify the role and responsibilities of mediators in developing conflict resolution skills ensures that parties are prepared to communicate objectively, reason effectively, and make sound decisions in resolving conflicts (Hnatyshyn, Y., Klishch, H., & Sas, L., 2024).

**Components of the Online Mediation Platform**, this digital system is designed to facilitate conflict resolution through communication, negotiation, and systematic decision-making, helping students effectively reduce dispute resolution. For first-year undergraduate students, the online mediation platform is designed to provide an accessible, flexible, and supportive environment for learning and applying conflict resolution strategies. Key components of the online mediation platform include: 1) Registration channels using student ID or verified email addresses. User profiles can include basic demographic information, role identification e.g., student, mediator, instructor, privacy settings, secure login and authentication, role-based access control, privacy protection, and data confidentiality. 2) Conflict reporting module allows users to formally report or describe conflict situations. Users can enter relevant details such as the nature of the dispute, the parties involved, duration, and desired outcome. 3) Effective communication and discussion tools for mediation. These tools support respectful and constructive dialogue among participants, including asynchronous messaging, discussion boards, private messaging and synchronous communication, chat or video conferencing. 4) Message control and conversation tracking; the message board provides guidance on mediation steps and processes, outlining procedures for identifying problems, sharing perspectives, generating alternatives, and reaching an agreement. An effective online mediation platform integrates secure user management, a structured mediation process through communication tools, and reflective learning elements. Such a platform will support constructive conflict management and skill development, particularly for first-year undergraduate students adjusting to a new academic and social environment. This study examines the modeling of conflict resolution capabilities within the context of the digital transformation of educational processes. Conflict resolution abilities impact effective collaboration and the ability to resolve complex interpersonal relationships. The study analyzes the conflict resolution capabilities of future leaders under digital conditions to achieve the objectives of analysis, synthesis, summarization, systematization, and comparison. This reveals key aspects and defines fundamental concepts of the studied issues. The model comprises knowledge, operational, and reflective components. The conflict resolution process includes the following steps: assessing foundational knowledge and skills; developing conflict resolution capabilities; identifying online resources for conflict resolution capacity building and providing technological and methodological support for effective use; planning and controlling the implementation of the conflict resolution capacity development process; and planning and managing knowledge, communication, and professional learning processes by applying digital technology for successful conflict resolution capacity development (Алькема, В., & Акініна, Н., 2025).

## METHODOLOGY

This research studies the effectiveness of applying conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, through quantitative data collection and analysis. The researcher followed a research methodology consisting of the following components. This research uses a quantitative experimental design, collecting quantitative data using a test. The researcher employed a pre- and post-test design with a single group. The design diagram is detailed as follows: Group O<sub>1</sub> x O<sub>2</sub> (O<sub>1</sub> = pre-test score measurement, x = application of conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, to improve academic achievement, O<sub>2</sub> = post-test score measurement).

**Population and sample:** The population of this research consists of 500 an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, in the 2025 academic year. The sample consists of 30 an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, in the 2025 academic year. They were selected using purposive sampling because they are students of the researcher's advisor.

**Research Instrument;** Instruments for an Application on strategies for conflict resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China. 1) Investigate the efficiency of an Application on strategies for conflict resolution, 2) Compare an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China students' achievements before and after learning through Pretest and Posttest students' achievements before and after learning through digital learning according to an Application on strategies for conflict resolution, 3) Examine an application based

on conflict resolution strategies for first- year undergraduate students in Yunnan Province, China students' satisfaction with of using the satisfaction questionnaire examines students' satisfaction with using an Application on strategies for conflict resolution.

**Procedure;** Operational Procedure 1) Study the effectiveness of applying conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, to improve academic achievement of an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China. The students 'considering the  $E1/E2 = 80/80$  value (Chaiyong Brahmawong, 2015). (E1) is the percentage of the average score or the average of all scores students received from activities or homework such as exercises, practice, projects, and formative assessments. (E2) is the percentage of the average score or the average of all scores students received from post-tests, final exams, and evaluations. The effectiveness of applying conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China. The students to improve student academic achievement was evaluated by 3 content experts and 3 media experts. The quality of the application's content regarding conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China students, to improve student academic achievement was evaluated according to the perceptions of content experts who work in the field of conflict resolution strategy planning for students. Media professionals working in conflict resolution strategy planning, Computer technology and education, or related fields were asked to evaluate the appropriateness of the content used in the application on conflict resolution strategies for students. The researcher followed these steps; *First Step*; the evaluation in this research was developed in line with the study's hypothesis. Therefore, the questionnaire was developed based on the two theories used in this study. The study showed that the use of an application on conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, improves the academic achievement of first-year undergraduate students in Yunnan Province, China. The questionnaire had two main parts. *Part 1*; the first part aimed to measure expert opinions on the use of technology, specifically the application on conflict resolution strategies for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, to improve academic achievement in Yunnan Province, China. This part was a closed questionnaire using a five (5) point Likert scale. Participants were asked to rate their agreement with each statement on a scale of 1-5. The interpretation of each numerical value is detailed below.

**Table1:** Range of mean and verbal interpretation

Range Value	Verbal Interpretation
4.50-5.00	Excellent
3.50-4.49	Good
2.50-3.49	Average
1.50-2.49	Poor
1.00-1.49	Very Poor

An open-ended questionnaire was used to ask participants to provide comments and feedback on the application of conflict resolution strategies for an application based on conflict resolution strategies for first- year undergraduate students in Yunnan Province, China, in teaching planning. *Second Step*; Three measurement and evaluation experts with expertise in education or measurement and evaluation were asked to assess the language of the questionnaire prior to evaluation. This data was used to calculate the Objective-Relevant Conformity Index (IOC). The evaluation experts assessed the content quality of the Objective-Relevant Conformity Index (IOC) and found it to be 0.93. The evaluation results are detailed below. Subsequently, the evaluation was reviewed by content experts for further evaluation. Measurement and evaluation experts assessed the outcomes as measured by the Objective-Relevant Conformity Index (IOC) and found it to be 0.93. Later, media experts conducted an evaluation to facilitate further evaluation. Therefore, a cumulative average score of the Objective-Relevant Conformity Index (IOC Index) exceeding 0.5 is considered acceptable. Objective-relevant conformity was evaluated using the following criteria, as shown in Table 2.

**Table 2:** Value of item objective congruence index (IOC) and verbal interpretation

+1	item is considered congruent with the objectives.
0	item is considered neutral in terms of whether it was congruent with the objectives.
-1	items are considered not congruent with the objectives.

The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data. *Third Step*; The experts will use the assessment of content quality aspects of Application on Strategies for Conflict Resolution for an application based on conflict resolution strategies for first- year undergraduate students in Yunnan Province, China; to enhance learning achievement of an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China for content experts and the assessment of media quality aspects of Application on Strategies for Conflict Resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China a teaching for media experts.

**The achievement assessment (Pretest and Posttest);** a pretest and posttest shared the same items. Both contained 40 questions related to Chinese reading that they had learned in class: 20 items contained Chinese reading taught using an application on strategies for conflict resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, and the other 20 items contained Chinese reading taught using a traditional teaching Approach. The students were assigned to complete the Pretest before learning Chinese through an application on strategies for conflict resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China and then take the posttest after learning Chinese in this approach. The researcher went through the following steps: *First Step*; The researcher selected the test types. Multiple-choice tests were chosen to use in the study, *Second Step*; The second section of the questionnaire has been developed to measure students' academic Achievement in an application on strategies for conflict resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, *Third Step*; Three measurement and evaluation experts who work in the field of measurement and evaluation or education were asked to check the congruence between objectives and items in the test. The data obtained were used to calculate the Item Objective Congruence Index (IOC). The evaluation criteria were used for checking the congruence between objectives and items of the test as follows the value of item objective congruence index (IOC) and verbal interpretation of achievement assessment. The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data, *Fourth Step*: both the pretest and posttest were administered to 30 first-year undergraduate students in Yunnan Province, China majors who had an Application on Strategies for Conflict Resolution subjects and were enrolled at an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China but were not part of the study sample. After the tests have been administered, they are used to determine the difficulty index, discrimination index, and reliability index of the achievement test. It was found that the difficulty index should be between 0.2 and 0.8, the discriminant index should be 0.2 or higher, and reliability should be 0.8 or higher, using Kuder-Richardson's K-R20 formula, *Fifth Step*; the pretest and posttest are used with participants to explore their vocabulary knowledge before and after learning Chinese through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China.

**The questionnaire on students' satisfaction with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China.** The questionnaire was used to gather Application on Strategies for Conflict Resolution for an application based on conflict resolution strategies for first- year undergraduate students in Yunnan Province, China. The researcher took the following steps. *First Step*; the questionnaire in this study has been developed to fit the study hypothesis. Consequently, it was developed based on both theories that have been utilized in this study. The study demonstrates that utilizing application on strategies for conflict resolution for an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, as outlined in the enhances learning achievement in the teaching of Career Development and Career Planning subjects at Yunnan Province, China. The questionnaire has two main sections, each with its own aim. *Part 1*: The first section aims to measure students' satisfaction with online learning platforms. This part was a close-end questionnaire that was based on the five (5) point Likert-type scales. The participants were asked to rate their degree of agreement with each statement on a scale of 1-5. The interpretation of each Number is described as follows (5 meaning Strongly agree; 4 meaning Agree; 3 meaning Undecided; 2 meaning Disagree; 1 meaning Strongly disagree).

**Table 3:** Range of mean and verbal interpretation

Range Value	Verbal Interpretation
4.50-5.00	Excellent
3.50-4.49	Good
2.50-3.49	Average
1.50-2.49	Poor
1.00-1.49	Very Poor

*Part 2:* This part was an open-ended questionnaire. The participants were asked to express their opinions and suggestions regarding learning through strategies for conflict resolution planning, in the context of Chinese subject teaching, in terms of achievements and satisfaction. *Second Step;* Before administering the questionnaire, three measurement and evaluation experts working in the field of measurement and evaluation or education were asked to review the appropriateness of the Chinese subject teaching used in the questionnaire. The data obtained were used to calculate the Item Objective Congruence index (IOC). The evaluation criteria were used for checking the congruence between objectives and items of the test as follows value of item objective congruence index (IOC) and verbal interpretation of questionnaire on teacher's satisfaction. The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data. *Third Step;* The participants will use the questionnaire to explore their satisfaction with learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China, as in the questionnaires were applied to first-year undergraduate students in Yunnan Province, China.

**Data collection;** 1) Introduce students to an application based on conflict resolution strategies for first- year undergraduate students in Yunnan Province, China to enhance learning achievement at Yunnan Province, China, 2) Administer the teacher's Pretest to receive the score, 3) Conduct learning activities with students by utilizing lessons through an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China, following in Strategies for Conflict Resolution Planning subject teaching. 4) Administer a post-test to students after they have studied an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China and analyze the scores using statistical methods.

**Data and Statistical Analysis;** The researcher conducted the data analysis using the following procedures. 1) Find the efficiency of an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China enhance the learning achievement of first- year undergraduate students in Yunnan Province, China, as indicated by  $E_1/E_2 = 80/80$  (Chaiyong Brahmawong, 2015). ( $E_1$ ) is the percentage of the average or means of all scores the students earn from their activities or assignments, such as drills, exercises, project work, etc., or other types of formative evaluation. ( $E_2$ ) is the percentage of the average or means of all scores the students earn from their posttest, final examinations, and other summative evaluations. 2) Compare the achievement test results before and after using an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China to enhance the learning achievement of first- year undergraduate students in Yunnan Province, China, using a dependent t-test, and 3) Study the satisfaction of students in an application based on conflict resolution strategies for first-year undergraduate students in Yunnan Province, China to enhance the learning achievement of first-year undergraduate students in Yunnan Province, China, using mean and standard deviation. The 5-Level Likert Scale; 5 meaning Strongly Agree; 4 meaning Agree; 3 meaning Neutral; 2 meaning Disagree; 1 meaning Strongly Disagree.

**Data Interpretation (Criteria);** in research, the mean is often used to summarize the overall picture, using the following class interval formula (4.21 – 5.00: Highest level; 3.41 – 4.20: High level; 2.61 – 3.40: Medium level; 1.81 – 2.60: Low level; 1.00 – 1.80: Lowest level).The basic statistics in data analysis are the formula for calculating the arithmetic mean ( $\bar{x}$ ) is:

$$\text{The formula (1)} \quad \bar{x} = \frac{\sum x}{N}$$

$$\begin{aligned} \text{Whereas} \quad \bar{x} &= \text{Average or Arithmetic Mean} \\ \sum x &= \text{Sum of all score results} \\ N &= \text{Number of students} \end{aligned}$$

The formula for calculating the standard derivation (SD.) is:

$$\text{The formula (2)} \quad SD. = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$$

$$\begin{aligned} \text{Where} \quad SD. &= \text{Standard derivation} \\ N &= \text{Number of students} \\ \bar{x} &= \text{Mean value} \\ x &= \text{Teachers' score} \end{aligned}$$

The formula used to determine the quality of the instruments was: In finding content validity of the achievement test, we conducted the IOC formula (Item Objectives Congruence) by following the formula below:

The formula (3)	$IOC = \frac{\sum R}{N}$
Whereas	$IOC$ = Index of correspondence between the test and the objective
	$\sum R$ = Sum of individual expert's value
	$R$ = Expert's rating
	$N$ = Number of experts

The formula used in finding the difficulty index of the achievement test were

The formula (4)

Whereas	$P$	=	difficulty level
	$R_H$	=	the Number of people who chose the highest option rate
	$R_L$	=	the Number of people who chose the lowest option rate
	$N_H$	=	the total Number of people in the high group
	$N_L$	=	the total Number of people in the low group

**Table 5:** Range of difficulty index and verbal interpretation

Difficulty Index	Verbal Interpretation
0.00-0.20	Very Difficult
0.21-0.40	Difficult
0.41-0.60	Average / Moderately Difficult
0.61-0.80	Easy
0.81-1.00	Very Easy

The formula for calculating the item discrimination of the achievement test is:

The formula (5)	$r = \frac{R_H - R_L}{N_H \text{ or } N_L}$
Whereas	$r$ = Discrimination index
	$R_H$ = Number of correct responses in the high group
	$R_L$ = Number of correct responses in the low group
	$N_H$ = Total Number of students in the high group
	$N_L$ = Total Number of students in the low group

**Table 6:** Range of discrimination index and verbal interpretation

Discrimination Index	Verbal Interpretation
0.40 and above	Very Discriminating / Very Good Item
0.30 to 0.39	Discriminating / Good Item
0.20 to 0.29	Moderately Discriminating Item
0.10 to 0.19	Not Discriminating / Marginal Item
Below 0.10	Poor / Questionable Item

The formula for calculating the reliability of the achievement test K-R#20 by Kuder-Richardson is:

The formula (6)

Whereas	$rtt$	=	$rtt = \frac{k}{k-1} \left[ 1 - \frac{\sum pq}{s^2} \right]$
	$k$	=	Reliability Index
	$p$	=	Number of test items
	$q$	=	The proportion of the correct answer
	$s^2$	=	The proportion of the incorrect answer
			The variation of the entire test

The formula for calculating the variability of the achievement test is:

The formula (7) 
$$S2 = \frac{n \sum fx^2 - (\sum fx^2)}{n(n-1)}$$

Whereas  $S2$  = Variance  
 $n$  = Number of students  
 $x$  = Achievement test score  
 $f$  = Data of frequency

The formula used to verify the hypothesis was: The formula used in analyzing the differences in achievement scores using the dependent t-test was:

The formula (8) 
$$t = \frac{\sum D}{\sqrt{\frac{n \sum D^2 - (\sum D)^2}{n-1}}}$$

Whereas  $\sum D$  = Sum of variance score of achievement test  
 $\sum D^2$  = Sum of different squares of achievement test scores  
 $(\sum D)^2$  = Sum of variance score of the square test  
 $n$  = Number of students  
 $D$  = Difference between pretest and posttest scores

## RESEARCH RESULT

**Table 7:** The report on the efficiency of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China.

Items	score	score	Standard	Percentage	E1/E2
Ongoing	100	85.10	80	81.40	82.40/81.33
Posttest	20	14.22	80	81.23	

From Table 1, The study found that the average mean score of ongoing assessments was 82.40, while the mean score of posttests was 81.23. These results suggest a significant improvement in learning outcomes through implementing an Application on Strategies for Conflict Resolution for first- year undergraduate students in Yunnan Province, China. The study focused on an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The findings indicate that the efficiency ratio of E1 to E2 was determined to be 81.40 to 81.23. In summary, this study focuses on developing an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The program adheres to the standard criterion of 80/80 as established.

**Table 8:** The evaluation report of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China from three content experts.

Evaluation Items	$\bar{x}$	SD.	Result Interpretation
1. Content on Strategies for Conflict Resolution learning objective consistency.	5	.00	Excellent
2. Content on Strategies for Conflict Resolution is intriguing.	4.5	.00	Excellent
3. Content on Strategies for Conflict Resolution and activities are learner-friendly.	4.67	.58	Excellent
4. Content on Strategies for Conflict Resolution is appropriate for each activity.	4.55	.58	Excellent
5. Content on Strategies for Conflict Resolution sorting is appropriate.	4.38	.58	Excellent
6. Content on Strategies for Conflict Resolution accuracy.	5.00	.00	Excellent
7. Content reading on Strategies for Conflict Resolution is appropriate for learners.	5.00	.00	Excellent
8. Activities are consistent with the content on Strategies for Conflict Resolution.	5.00	.00	Excellent
9. A presenting approach engages students for Strategies for Conflict Resolution.	4.67	.58	Excellent
10. The overview of the content on Strategies for Conflict Resolution is complete.	5.00	.00	Excellent

Total	4.78	.23	Excellent
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Table 8 an application based on conflict resolution strategies for first-year undergraduate students in Yunnan, China from three content experts. The Evaluation comprises a set of ten items, which have been developed and approved by three subject matter experts. This section represents the content experts' opinions using a 5-point rating scale. Each criterion rating is specified as depicted in the table provided below. The experts examined the quality evaluation of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. Quality was consistently high ( $\bar{x} = 4.78$ ,  $SD = .23$ ). Findings indicate excellent content consistency, interest, accuracy, appropriate English subject teaching, consistent activities, and complete overview ( $\bar{x} = 5.00$ ,  $SD = .00$ ).

**Table 9:** Results of Evaluation of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China by three media experts.

Evaluation Items	$\bar{x}$	SD.	Result Interpretation
1. Learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.67	.58	Excellent
2. The sequence of activities and content is appropriate for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.53	.58	Good
3. Easy to use, uncomplicated for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.85	.58	Excellent
4. The images are consistent with the content appropriate for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.42	.58	Good
5. The images convey the meaning for . The images are consistent with the content adorate for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.33	.58	Good
6. The activities are appropriate for first-year undergraduate students.	4.64	.58	Good
7. Interesting content an Application on Strategies for Conflict Resolution.	4.00	.00	Good
8. Interest in Learning for first-year undergraduate students.	4.33	.58	Good
9. Makes it possible to understand the content more for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.33	.58	Good
10. The details are clear and easy to understand for first-year undergraduate students.	4.85	.58	Excellent
Total	4.50	.58	Good

Table 9: an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The 10-item evaluation form is from three media experts. This section assesses media professionals' thoughts on a 5-point scale. The table below rates each criterion. Three media specialists analyzed the media quality assessment of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. Overall, quality was outstanding ( $\bar{x} = 4.50$ ,  $SD = .58$ ). According to an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China is straightforward to comprehend, utilize, and has precise details ( $\bar{x} = 4.85$ ,  $SD = .58$ ).

**Table 10:** Compare students' achievements before and after learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China

Items	n	$\bar{x}$	SD.	df	t-test	Sig. (2-tailed)
Pretest	30	8.80	2.33	29	20.86	.05
Posttest	30	16.27	1.48			

\*\*p<.05

Table 10 presents the learning achievement of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The mean score of pretests was 8.80, and the standard deviation (SD.) score was 2.33. The result after using an Application on Strategies for Conflict Resolution for

first-year undergraduate students in Yunnan Province, China, which translated into a high posttest of 16.27 and standard deviation (SD.) of 14.8 and t-test analysis before and after the treatment of 20.86 which demonstrated a considerable difference was statistically significant at the .05 level.

**Table 11:** Examine students' satisfaction with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China

Evaluation Items	$\bar{x}$	SD.	Result Interpretation
1. The Function of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China	4.60	.50	Strongly Agree
2. Rich learning resources are available for . The images are consistent with the content adorate for an Application on Strategies for Conflict Resolution for first-year undergraduate students.	4.40	.51	Strongly Agree
3. Computer use benefits from computer application knowledge on Strategies for Conflict Resolution for first-year undergraduate students.	4.50	.51	Strongly Agree
4. Basic IT applications can collaborate and communicate on Strategies for Conflict Resolution for first-year undergraduate students.	4.43	.50	Agree
5. Basic computer application allows for immediate feedback and Evaluation.	4.50	.51	Strongly Agree
6. blended teaching online according to the Super Star Learning Pass model on Basic computer applications can get multimedia teaching tools.	4.53	.51	Strongly Agree
7. Teaching blended teaching online according to the Super Star Learning Pass model on Basic computer applications can have to learn management and tracking.	4.53	.51	Strongly Agree
8. according to an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China, blended teaching online can be an innovative teaching method.	4.67	.48	Strongly Agree
9. according to . The images are consistent with the content adorate for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China, blended online teaching can be intercultural teaching.	4.37	.51	Agree
10. blended teaching online, according to . The images are consistent with the content adorate for an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China can be rethought and improved.	4.57	.50	Strongly Agree
<b>Total</b>	<b>4.51</b>	<b>.50</b>	<b>Strongly Agree</b>

Table 11 shows the results of the Evaluation of students' satisfaction with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China by 30 students. The overall students' satisfaction was a strongly agreeing level ( $\bar{x}=4.51$ , SD. = .50). When considering each item, it was found that an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China was strongly agreeing level ( $\bar{x}= 4.67$ , SD. = .48) and. combined teaching online according to an Application on Strategies for Conflict Resolution was strongly agree level ( $\bar{x}= 4.60$ , SD. = .50), respectively.

## CONCLUSION AND DISCUSSION

There are three primary objectives in the study of the effect of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The research instruments consisted of (1) investigating the efficiency of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China, (2) comparing students' achievements before and after learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China,

and (3) examine students' satisfaction with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The conclusion, discussion, and suggestion of the research are the discussion of the study on an application based on conflict an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China is as follows (1) Study the efficiency of using an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. (2) Results of evaluation efficiency of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The average mean score of the ongoing score was 81.40, and the mean score of posttests was 81.23, which indicated a substantial improvement upon an application based on conflict resolution strategies for first-year undergraduate students in Yunnan, China. The result revealed that the value of efficiency of E1/E2 was 81.40/81.23. To summarize, this an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China is developed according to the standard criteria 80/80 defined because there is a process for finding the effectiveness of lessons that are consistent with the research process that is accurate and clear. Results of Evaluation of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China by three content experts and three media experts. The results of the content quality assessment of We must meet all indices. The fifth stage is a pre- and post-test to assess vocabulary proficiency before and after an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. Based on the study hypothesis, three measurement and Evaluation specialists created and administered the questionnaire to evaluate teaching on Strategies for Conflict Resolution. Researchers assessed data alignment with aims using an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China evaluated by three content experts. The overall quality was excellent level ( $\bar{x}=4.78$ , SD. = .23). When considering each item, it was found that consistency between content and learning objectives, the content is interesting, content accuracy, the language used in the range is appropriate for the learners, activities are consistent with the content and the overview of the content is complete were excellent level ( $\bar{x}= 5.00$ , SD. = .00), respectively. The results of the media quality assessment of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China were evaluated by three media experts. The overall quality was excellent level ( $\bar{x}=4.50$ , SD. = .58). When considering each item, it was found that learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students teaching is easy to understand, easy to use, uncomplicated and the details are clear and easy to understand were excellent level ( $\bar{x}= 4.85$ , SD. = .58), respectively. This may be due to the quality assessment process of We must meet all indices. The fifth stage is a pretest and posttest to assess vocabulary proficiency before and after an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The study examined student satisfaction with technology integration in an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. and processes systematically through quality assessment from experts with actual specific There are the correct procedures knowledge.

Compare students 'achievements before and after learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. They presented the learning achievement of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The mean score of pretests was 8.80, and the standard deviation (SD.) score was 2.33. The result after using an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China translated into a high posttest of 16.27 and standard deviation (SD.) of 14.8 and t-test analysis before and after the treatment of 20.68, which demonstrated a considerable difference was statistically significant at the .05 level. This may be due to blended teaching online according to th an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China a that enable participants to learn at their own pace and help learning achievement goals. Study the satisfaction of teachers who use an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The results of the Evaluation of students' satisfaction questionnaire on learned with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China in China by 30 students. The overall students' satisfaction was a strongly agreed level ( $\bar{x}=4.51$ , SD. = .50). When considering each item, it was found that an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China was a strongly agree level ( $\bar{x}= 4.67$ , SD. = 0.48) The fifth stage is a pre-and posttest to assess vocabulary proficiency before and after an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The study examined student satisfaction with an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The students' satisfaction with online learning platforms and their attitudes toward using IT for Education. Based on the study hypothesis, three measurement and Evaluation specialists created and administered the questionnaire to evaluate teaching an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. Researchers assessed data alignment with aims using the IOC. Using questionnaire data, an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province,

China will determine whether student satisfaction with IT-based Learning can get rich learning resources was strongly agreed on level ( $\bar{x}= 4.60$ , SD. = .50), respectively.

## CONCLUSION AND DISCUSSION

The analysis result of the above an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China.1) Results of evaluation efficiency of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The average mean score of the ongoing score was 81.40, and the mean score of posttests was 81.23, which indicated a substantial improvement in an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The result revealed that the value of efficiency of E1/E2 was 81.40/81.23. To summarize, this online Learning based on an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China is developed according to the standard criteria 80/80 defined.2) Results of Evaluation of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China by three content experts. The results of the content quality assessment of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China were evaluated by three content experts. The overall quality was excellent level ( $\bar{x}= 4.78$ , SD. = .23). When considering each item, it was found that consistency between content and learning objectives, the content is interesting, content accuracy, the language used in the range is appropriate for the learners, activities are consistent with the content and the overview of the content is complete were excellent level ( $\bar{x}= 5.00$ , SD. = .00), respectively.3) Results of Evaluation of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China from three media experts. The results of the media quality assessment of an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China were evaluated by three media experts. The overall quality was excellent level ( $\bar{x}= 4.50$ , SD. = .58). When considering each item, it was found that learning through an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China is easy to understand, easy to use, uncomplicated and the details are clear and easy to understand were excellent level ( $\bar{x}= 4.85$ , SD. = .58), respectively.4) Comparison of average scores before and after of the teachers using the an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The mean score of pretests was 8.80, and the standard deviation (SD.) score was 2.33. The result after using an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China into a high post-test of 16.27 and standard deviation (SD.) of 14.8 and t-test analysis before and after the treatment .20, .68, .08, which demonstrated a considerable difference was statistically significant at the .05 level. 5) Study students' satisfaction using an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China. The results of the Evaluation of students' satisfaction with an application based on conflict resolution strategies for first-year undergraduate students in Yunnan, China by 30 students. The overall teachers' satisfaction was strongly agree level ( $\bar{x}= 4.51$ , SD. = .50). When considering each item, it was found that an Application on Strategies for Conflict Resolution for first-year undergraduate students in Yunnan Province, China can be innovative teaching methods was strongly agree level ( $\bar{x}= 4.67$ , SD. = .48) and, blended teaching online according to Super Star Learning Pass model on an Application on Strategies for Conflict Resolution can get rich learning resources was strongly agree level ( $\bar{x}= 4.60$ , SD. = .50), respectively.

## RECOMMENDATION

Integrating conflict resolution education into orientation programs, this project applies conflict resolution strategies to first-year undergraduate students in Yunnan Province, China. The aim is to mitigate the challenges of new academic pressures, navigating diverse peer groups, and understanding a changing social environment. This transformative experience fosters conflict reduction in both personal and academic relationships, enabling students to manage conflict constructively.

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