Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Province, China

Lanxi LUO
Learning Technology and Innovation Division, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi, Pathum Thani, 12110, Thailand
email: lanxi_l@mail.rmutt.ac.th, ORCID:0009-0004-1543-6971

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

ABSTRACT
The objectives of this study were to 1) investigate the efficiency of an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China, 2) compare students' achievements before and after learning through intelligent education management platform on encouraging the creative thinking habits, and 3) examine students' satisfaction of using intelligent education management platform on encouraging the creative thinking habits. The sample comprised 30 Grade 4 undergraduates in Yunnan Province, China, selected through purposive sampling. The instruments used for collecting the data were 1) an intelligent education management platform on encouraging the creative thinking habits for Grade 4 undergraduates in Yunnan Province, China, for advancing learning achievement, a student's pretest and a post-test, and a teacher satisfaction form. The statistical measures used to examine the data were percentages, mean, standard deviation, and the dependent-samples t-test. The results showed that 1) the efficiency of the intelligent education management platform on encouraging the creative thinking habits for Grade 4 undergraduates in Yunnan Province, China was 82.07/81.67, which was higher than the criteria set. 2) The post-test scores of the students who studied through the intelligent education management platform on encouraging the creative thinking habits were 81.67, SD 3.73, which indicated higher scores than those in the pretest of 40.80, SD 5.38, and the t-test between the pre-test and post-test was 35.01 at a significant level of .05. 3) The students' satisfaction with the intelligent education management platform in encouraging creative thinking habits for Grade 4 undergraduates in Yunnan Province, China, received a high satisfaction level as a whole at an average of 4.49.
Keywords: intelligent education management, encouraging creative habits

INTRODUCTION

In 21st-century China's higher education system, educational institutions in Yunnan Province need to cultivate graduates who possess both academic knowledge and innovative thinking skills, adaptive thinking, and the ability to integrate creative ideas. This requires the development of teaching processes and methods to cultivate competencies that drive problem-solving in a knowledge-based society. China's educational reforms have emphasized innovative learning and entrepreneurship. China has restructured its education system as a key national strategy, defining the function of innovation and entrepreneurship education (IEE). This entails integrating vocational education with inventiveness and entrepreneurship to meet manufacturing needs and designing curricula and personnel training models that correspond with regional industrial development (Lv, M., Zhang, H., Georgescu, P., Li, T., & Zhang, B., 2022).

Critical thinking activities based on the Self-Regulated Learning (SRL) framework are an effective achievement testing process intended for enhancing 21st-century teaching capabilities. It stresses the incorporation of technology and creativity to improve student learning outcomes, as evidenced by higher post-test scores compared to pre-test scores (Sangsawang, T., 2020).The educational goals of SRL theory are developed through student-centered online instructional design. The learning process applies digital technology to aid decision-making and systematic management strategies to improve instructional efficiency and student outcomes. Educational data analysis can greatly improve the learning environment and improve teaching and management efficiency (Yang, W., & Sangsawang, T., 2026).

However, this emphasis on developing a creative identity among undergraduate students is still lacking. The limited focus on innovation-oriented teaching and management within classic educational systems restricts students' ability to cultivate creativity, which is important for modern education. Many universities lack successful

management strategies that integrate creativity development into institutional policies, curriculum design, and teaching methods. Cultivating creativity at Yunnan universities is a key challenge (Li, M., & Mu, A., 2025).

A survey of student creativity at universities in Yunnan province, China reveals that it is shaped by several factors, including leadership, systematic management or integration within the educational structure, student-teacher relationships, student self-confidence, the cultivation of innovative behaviors, and the lack of intelligent educational management systems applying advanced technologies such as artificial intelligence, data analytics, and digital resources to assist personalized and personalized adaptive learning. While such systems have the capacity for enhancing creativity through flexible learning environments and live feedback, their implementation in many universities is limited. As a result, the opportunities to foster creative behavior through technologically advanced management have not been fully realized. Fourth-year undergraduate students face increasing pressure regarding employment and graduation requirements, focusing more on scholastic achievement and job preparation than on developing creativity and innovative management skills. Students may graduate devoid of the necessary creative abilities for the modern workplace. Therefore, a key issue identified in this research is the lack of effective intelligent educational management approaches that promote and support the development of creative customs among fourth-year undergraduate students in Yunnan Province, China.

Therefore, universities should design learning experiences that support the progressive development of students' competencies and promote innovative learning behaviors. Teaching should move away from traditional and rigid management structures to unconventional approaches to reduce limitations on the creative potential of students. There is an increasing need to integrate smart education approaches to foster creative behavior among undergraduate students.

LITERATURE REVIEW

Intelligent Education Management (IEM) and the cultivation of creative habits within fourth-year undergraduate students in Yunnan Province, China. As final-year students face the transition from university life to the working world, AI-driven management systems serve an important function in moving past rote learning to higher levels of creative thinking. The IEM provides traditional Chinese higher education institutions with the main benefit of improving the knowledge discovery process through more effective use of resources, data, technical infrastructure, digital competence, and joint skills, and by encouraging an attitude of intrinsic motivation. Undergraduate teaching reforms thus shift from "examination" to "potential enhancement," focusing on attendance and behavioural analysis and giving personalized feedback as a foundation for creative expression. Adopting artificial intelligence (AI) has advantages, helping to stimulate creativity and engagement, but also tackling limitations in creativity, a lack of affective engagement, and anxiety about academic performance. Managing the effective use of AI in the education system is important. An integrated learning environment using artificial intelligence improves the efficiency of systematic learning and creativity between students and teachers. A group of 120 students faced strict frameworks that limited creativity and innovation. Repetitive, impersonalized interactions with AI increased anxiety about academic performance based on AI assessments, and technical frustrations hindered the learning process. In contrast, AI ignited creativity, new ideas, problem-solving methods, and greater engagement through interactive features. Quantitative data also shows that teachers and students have positive attitudes about the benefits and challenges of AI applications. Adding AI to educational apps has a double effect on college students' creativity and academic and psychological well-being, boosting both. Some of the main challenges are creative limitations, limited affective involvement, anxiety about academic performance, balancing these factors, rigorous implementation, and continuous assessment, all of which are necessary for the best results(Lin, H., & Chen, Q., 2024)

Activities Promoting Creative Behavior for 4th-Year Undergraduate Students. Creative behavior is a key outcome, covering thesis, internship, and graduation project. "Intelligent Education Management" encourages creative behavior as follows: (a) Project-Based Learning with AI (PBL): Activities are designed to encourage creative use of AI tools, such as ChatGPT or LLM in China, which serve as assistants for managing repetitive data tasks. When routine tasks are automated, students can then focus on developing their analytical, critical, and analytical problem-solving skills, (b) Building on this, Collaborative Learning with Artificial Intelligence uses G4-style collaborative learning, assigning leadership roles alongside AI-powered consensus-building. Intelligent management systems monitor interactions in real-time and provide immediate positive feedback, (c) Blended Learning with AI: By providing regional datasets and business trends, technological empowerment enables students to apply innovative problem-solving to local challenges, such as sustainable tourism or the preservation of ethnic culture, (d) Integrating a competitive mechanism is another driver of creativity in the Yunnan University context, providing structured opportunities for students to create while being supported by intelligent management systems that help manage and monitor competition. Applying artificial intelligence (AI) into learning activities helps develop students' diverse thinking skills. Learning activities can more effectively focus on creative design

processes, becoming student-centered and fostering engaged participation and skills in out-of-the-box thinking, design thinking, self-confidence, creativity, and reflective thinking(Saritepeci, M., & Durak, H., 2024).

Smart education refers to the application of artificial intelligence-powered systems, data analytics, and technology to improve the planning, delivery, and evaluation of education. Personalization, automation, and analytics-based decision-making enable institutions to customize learning experiences for each individual student. Smart technologies such as learning platforms, chatbots, and virtual digital simulations allow teachers to track student progress, predict learning outcomes, and deliver focused support. These supporting tools for both academic management and instructional design create a streamlined learning setting, boost resource management and stakeholder interaction, and form a holistic ecosystem that supports the entire teaching and learning process (Koshiry, A., & Tony, M., 2025).

Smart technologies in higher education integrate AI and change traditional teaching. Asa result, these advances create intelligent, interactive, student-centered environments. Main benefits include increased pupil engagement, more effective personal learning, and improved analytical thinking and problem-solving skills. AI-driven learning systems are redefining learning environments to respond to diverse learning needs and encourage pupil engagement, causing improved student motivation, interaction, and academic performance, and promoting closer connections between students and learning content (Z., Yu, C., & Yao, G., 2024).

Creative habits refer to consistent behaviors, such as flexibility and reflective thinking. These habits are integral to modern education systems, which emphasize problem-solving, project-based, and collaborative learning to actively develop and nurture students' creativity. The project-based learning curriculum was integrated with a thinking-pairing strategy to assess the effectiveness of developing creative thinking skills in education students. The curriculum featured five interconnected components: First, project preparation introduced students, formed pairs, and established a shared understanding of the project. Next, during pair work, students discussed, developed a shared knowledge framework, analyzed practice, brainstormed, and provided feedback within pairs. Project production followed, encompassing development, testing, revision, and presentation. Subsequently, students participated in project evaluation, offering feedback to other pairs. Finally, the project concluded with a reflection on overall experiences and the key elements of fluency, flexibility, originality, and elaboration. As a result, a post-course assessment showed students perceived improvement across all aspects of creative thinking (Li, M., & Tu, C., 2024).

The role of smart education in promoting creative behavior is achieved through several mechanisms,including: (a) Personalized learning: AI systems personalize learning content and strategies to suit individual needs based on individual differences and interests. This personalization fosters intrinsic motivation and curiosity, key drivers of creativity, (b)Adaptive reflection: Intelligent systems provide real-time feedback and analysis, enabling students to reflect on their learning processes, supporting the development of metacognitive skills for creative thinking, (c) Interactive and immersive learning environments: Technologies such as virtual reality, simulations, and game platforms create learning experiences that encourage experimentation and innovation, (d) Supporting collaborative learning: AI tools facilitate collaboration through smart grouping, peer feedback systems, and communication platforms, enhancing creativity and team idea generation, (c) Data-driven instructional design: Educators can use data analytics to design creative-focused activities such as open-ended projects and interdisciplinary integrated assignments. (Guettala, M., Bourekkache, S., Kazar, O., & Harous, S., 2024).

Applications of IEM to develop creativity include Over-reliance on technology reduces human interaction, hindering creativity and emotional development. Ethical and privacy concerns associated with AI data collection and decision-making. Lack of teacher training to effectively integrate AI into teaching. Fostering creative habits among final-year undergraduate students. Creativity is one of the most sought-after skills in the digital age. Designing and producing multimedia materials, including creativity assessment tools, self-assessment creativity tools, infographic assessment tools, and questionnaires on attitudes towards infographic design, resulted in significantly higher student creativity scores across all components, such as originality, fluency, flexibility, and elaboration. Developing appropriate and effective methods to boost student confidence and encourage out-of-the-box thinking was crucial (Amnouychokanant, V., 2023).

Intelligent Management and Creative Habits. Intelligent education management systems can foster the development of creative habits by enabling personalized, encouraging exploration, critical thinking, and reflective practice. Additionally, AI integration in classroom settings may facilitate a shift from traditional instruction toward learner-driven, innovation-oriented learning activities (Huang, J., & Chano, J., 2025).

Psychosocial and Institutional Factors. Beyond technology, research also underscores the importance of psychological and institutional factors in the development of creativity. Studies show that teachers', and students' self-esteem positively influence creative outcomes, suggesting that intelligent educational management should be coupled with social and motivational support structures to maximize the cultivation of creative habits. Emerging evidence suggests that integrating these elements can create dynamic learning ecosystems that encourage sustained creativity and innovation (Transforming higher education for the knowledge economy: Enhancing creative thinking and problem-solving skills through collaborative learning, 2025) (Wang et al., 2020).

METHODOLOGY

Population of the sample: the research used a population of 350 Grade 4 undergraduate students in Yunnan, China, to test the use of the Intelligent Education Management on Encouraging Creative Habits system. The sample comprised 30 Grade 4 undergraduate students in Yunnan, China, obtained using a purposive sampling technique. The sampling method is detailed in Table 1.

Table 1: Basic information on study subjects (N=350)

Demographic variables	Category	Frequency	Effective percentage (%)
Gender	Male	110	31.43%
	Female	240	68.57%
Age	18-20 years old	206	58.86%
	21-25 years old	144	41.14%

From the data table, the number of female survey participants significantly exceeded male participants, at approximately 37.14 percent. The age groups with the highest proportions were 18-20 years and 21-25 years, at 58.86 percent and 41.14 percent, respectively.

Research Instrument; investigate the efficiency of an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China,The instruments used for collecting the data were an intelligent education management platform on encouraging the creative thinking habits for Grade 4 undergraduates in Yunnan Province, China for enhancing learning achievement, a student's pretest and a post-test, and a teacher satisfaction form: 1) An intelligent educational management platform to promote creative thinking behavior of Grade 4 undergraduates students in Yunnan Province, China. (a) Develop a curriculum to interview teachers and other stakeholders. Identify problems in traditional teaching methods, including difficult content, outdated media, and limited teaching materials and activities. (b) Design a framework that integrates intelligent teaching, creative thinking, and self-directed learning. Use online learning for content delivery. Facilitate in-class discussions to foster engagement. Promote teamwork for collaborative understanding. (c) Design a system to identify platform components, including course websites, AI tools for content recommendations, and learning-tracking dashboards. Leverage intelligent technologies like AI, big datasets, and cloud storage. Make the website and app user-friendly for Chinese students. (d) Plan activities that promote creativity, such as problem-solving, brainstorming, and project work. Create educational videos, charts, and games. Organize activities according to the P-OIITT steps. (e) Create a platform with web and mobile applications that link to a student database. Add features such as intelligent content recommendations, learning tracking, and instant feedback. (f) Test the platform's performance in encouraging creative thinking habits across 3 phases., (g) Evaluate pretest and posttest results. Check creativity, review learning data, and view results with simple statistics. (h) Continuously develop by using feedback and data. Make the AI smarter and update activities and content regularly, 2) Test the platform's performance in encouraging creative thinking habits across three phases; *Phase 1,* Individual with 3 students; *Phase 2*, small-group trial with 9 students, with improvements based on feedback; *Phase 3*, field test in a real classroom. (i) Evaluate pretest and posttest results. Check creativity, review learning data, and view results with simple statistics. (j) Continuously develop by using feedback and data. Make the AI smarter and update activities and content regularly, 3) Create a questionnaire on "Students' Satisfaction of Using Intelligent Education Management Platform to Encourage Creative Thinking Habits," follow these steps: (1) Defining the Research Objective: Clearly state the goal, such as measuring student satisfaction with how the platform promotes creative thinking, (2) Identifying Key Constructs: Base the questionnaire on frameworks: (a) System Quality: usability, stability; (b) Information Quality: content clarity, timeliness; (c) Service Quality: support, responsiveness; (d) Learning Experience: participation, interest;(e)Creative Thinking Support: idea stimulation, problem-solving; (e)Overall satisfaction, (3) Item Generation: Create questions that cover all variables. System Quality: The platform is easy to use. The system runs smoothly without errors. Creative Thinking Support, the platform, encourages me to think creatively. I can generate new ideas through this platform.(4)Scaling Methode (a 5-level Likert scale, e.g., 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree), (5) Content Validity; Have 3–5 experts evaluate, using the Index of Item-Objective Congruence, Acceptable value: IOC ≥ 0.50, (6)Pilot Testing: Test the questionnaire with a small sample group of

30 people to check the understanding of the questions and revise the questions before actual use,(7)Reliability Testing: Use Cronbach's Alpha. Acceptable value ≥ 0.70,(8) Construct Validity: Analyze with Factor Analysis. (EFA/CFA), Check factor loading > 0.50, (9) Final Questionnaire Structure: The questionnaire should be divided into 3 parts: Part 1: Demographic information, gender, age, field of study, and platform usage experience. Part 2: Satisfaction Constructs, with 23 questions based on key constructs;Part3: Open-Ended Feedback, for additional suggestions, and (10) Data Collection and Ethics: Obtain informed consent from respondents, maintain data confidentiality, and use data for research purposes.

The statistical devices used for analyzing the data were percentage, mean, standard deviation, and the t-test for the dependent sample. This research uses SPSS 22.0 to describe and statistically analyze the current state of the potential of Intelligent Education Management to encourage creative habits among Grade 4 Undergraduates in Yunnan, China, and the influential factors affecting Grade 4 undergraduates in Yunnan Province, China. AMOS 17.0 was then used to analyze the preliminary relationship between teachers' ability to teach using Intelligent Education Management to encourage creative habits and the influential factors. This is followed by a structural model analysis of the transformation of effective classrooms towards teaching using Intelligent Education Management to encourage creative habits. The research also examines the relationship between Intelligent Education Management and Encouraging Creative Habits, adaptability to educational tasks, a conducive environment for teaching, and the social impact of teaching using Intelligent Education Management on Encouraging Creative Habits. Finally, the mechanisms influencing the transformation towards effective teaching using Intelligent Education Management on Encouraging Creative Habits in classrooms are analyzed.

Procedure; Operational Procedure 1) Study the effectiveness of applying conflict resolution strategies for intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China, to improve academic achievement of intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China, 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China, improves the academic achievement of Grade 4 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 Grade 4 undergraduates 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.

Table 2: 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 IOC index and found it to be It means excellent validity every expert looked at the items and thought, "Yes, this aligns beautifully with the objectives." In practical terms, anything above 0.80 is considered strong, so 0.95 is borderline overachieving. 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 IOC index and found it to be 0.93. Later, media experts conducted an evaluation to facilitate further evaluation. Therefore, a cumulative average score of the IOC index exceeding 0.5 is considered acceptable. Objective-relevant conformity was evaluated using the following criteria, as shown in Table 3.

Table 3: Value of Item Objective Congruence index and verbal interpretation

IOC ≥ 0.50	Item is considered congruent with the objectives. Acceptable (bare minimum survival)
IOC ≥ 0.80	Item is considered congruent with the objectives. Good (respectable academic citizen)
IOC ≥ 0.90	Item is considered congruent with the objectives. Excellent (publishable without embarrassment)

The total mean score of the 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China; to enhance learning achievement of intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China for content experts and the assessment of media quality aspects of intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates in Yunnan Province, China and then take the posttest after learning via intelligent education management on Encouraging Creative Habits 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 IOC index. The evaluation criteria were used for checking the congruence between objectives and items of the test as follows the value of the IOC index and verbal interpretation of achievement assessment. The total mean score of the 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 intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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 knowledge before and after learning via intelligent education management on Encouraging Creative Habits for Grade 4 undergraduates 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; 3meaning Undecided; 2 meaning Disagree; 1 meaning Strongly disagree).

Data collection

Step 1: Introduce students to an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Provence, China.

Step 2: Administer the teacher's Pretest to receive the score.

Step3:Conduct learning activities with students by utilizing lessons through an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Provence, China subject teaching.

Step4:Administer a post-test to students after they have studied an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Provence, China and analyze the scores using statistical methods.

Data and Statistical Analysis:

The researcher conducted the data analysis using the following procedures: Find the efficiency of an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Provence, China, as indicated by E_1/E_2 = 80/80 (Chaiyong Brahmawong, 2009). (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. Compare the achievement test results before and after using information technology, as per the ADDIE model, in Chinese subject teaching to enhance the learning achievement of Shunde Polytechnic students in China, using a dependent t-test. Study the satisfaction of students in an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Provence, China, using mean and standard deviation. The basic statistics in data analysis are the formula for calculating the arithmetic mean ($\bar{x}$), The formula for calculating the Standard Derivation (SD), The formula used to determine the quality of the instruments was: In finding content validity of the achievement test, we conducted the IOC index formula, The formula used in finding the difficulty index of the achievement test were Range of difficulty index and verbal interpretation. The formula for calculating the item discrimination of the achievement test is Range of discrimination index and verbal interpretation. The formula for calculating the reliability of the achievement test K-R20 by Kuder-Richardson is the formula for calculating the variability of the achievement test is the formula used to verify the hypothesis: the formula used in analyzing the differences in achievement scores using the dependent t-test.

RESEARCH RESULT

Intelligent Education Management on Encouraging Creative Habits for Grade 4 undergraduates;

Blended online teaching, as informed by an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Province, China, often abbreviated as IT, refers to the use of computer systems and communication equipment to process, store, transmit, and manage digital information. It encompasses various software, hardware, and network infrastructures for effectively collecting, storing, analyzing, and sharing information. In addition to introducing the basic concepts of information technology, this field also involves addressing common problems and providing solutions, such as seeking expert technical support. To access assistance, one can contact the technical support team of their school or educational institution, consult online technical support communities and documentation, or refer to the help documents and video tutorials available on the associated teaching platform. In the Basic Computer Application subject, teaching on an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Province, China. The instruction involves using the design process. In the current study, the researcher developed blended online instruction in line with intelligent education management to encourage creative habits among Grade 4 undergraduates. Information technology. The details are provided below: *1) Analysis:* Using blended teaching online according to an Intelligent Education Management on Encouraging Creative Habits for Grade 4 Undergraduates in Yunnan Province, China, is necessary to analyze it first. Research needs to explore students' backgrounds, ability levels, learning needs, and expected goals for blended teaching, according to the ADDIE model, and to combine this with online education, intelligent education management, and the encouragement of creative habits among Grade 4 undergraduates. In intelligent education management to encourage creative habits,

learners need specific, integrated online instruction, aligned with intelligent educational management, to encourage creative habits among Grade 4 undergraduates. Information technology, as well as comprehension ability in learning and teaching via intelligent education management to encourage creative habits, *2) Design:* After analyzing the students' background and needs, we can begin designing the curriculum. In blended online teaching, guided by intelligent education management to encourage creative habits, it is necessary to analyze this first. Research must explore students' backgrounds, ability levels, learning needs, and expected goals, align instruction with intelligent educational management, and encourage creative habits. According to the ADDIE model of combined education and intelligent education management, encouraging creative habits, as well as learning comprehension ability. Therefore, we need to design a combined instruction based on intelligent education management to encourage creative habits applications, the ADDIE model for blended online teaching, and intelligent education management to encourage creative habits. Researchers need to set clear course objectives and teaching strategies. Course objectives should be measurable and closely related to students' career and learning needs. Teaching strategies can include using multimedia resources, introducing examples and visual data, and other methods to improve students' vocabulary and reading comprehension. *3) Development:*According to the ADDIE paradigm, it is essential to conduct an initial analysis of intelligent education management to encourage creative habits applications. To conduct a comprehensive examination, researchers must assess several aspects of students' profiles, including their educational background, proficiency level, specific learning needs, and anticipated educational objectives. A preliminary analysis is essential for implementing blended online teaching, specifically through intelligent educational management to encourage creative habits. A preliminary examination is necessary to implement blended online instruction, specifically through intelligent educational management to encourage creative habits. To conduct a thorough analysis, researchers must consider students' educational backgrounds, proficiency levels, learning needs, and goals. In intelligent education management, encouraging creative habits is implemented using the ADDIE model. To effectively engage with the Basic computer application curriculum, learners must possess specific skills in blended online instruction, as prescribed by intelligent education management to encourage creative habits, and a proficient level of reading comprehension. Hence, researchers must develop a blended online teaching approach based on intelligent education management to encourage creative habits. This approach should be designed following the ADDIE model for blended online teaching, while also considering learners' proficiency in combined online teaching, as per intelligent education management, to encourage creative habits among Grade 4 undergraduates. Hence, researchers must develop a blended online teaching approach grounded in intelligent educational management to foster creative habits. This approach should adhere to the ADDIE model for combined online teaching while considering the learners' proficiency in intelligent education management to encourage creative habits skills. Hence, researchers must devise an integrated online teaching approach grounded in intelligent educational management to encourage creative habits among Grade 4 undergraduates, following the ADDIE model for blended online teaching. Consequently, the next step is to develop the curriculum. Developing a curriculum involves implementing teaching practices derived from the analysis and design phases and utilizing instructional materials. When implementing intelligent education management to encourage creative habits among Grade 4 undergraduates through blended online education, it is essential to conduct a thorough analysis beforehand. To conduct a comprehensive study, researchers must investigate several aspects of students, including their educational history, proficiency level, individual learning needs, and expected outcomes. According to intelligent education management to encourage creative habits among Grade 4 undergraduates is implemented through blended online teaching using the ADDIE model. To effectively engage with the primary computer application curriculum, learners must possess specific skills in combined education online, as prescribed by intelligent education management to encourage creative habits for Grade 4 undergraduates, and a proficient level of reading comprehension. Therefore, developing a blended online teaching approach grounded in intelligent educational management to encourage creative habits among Grade 4 undergraduates when teaching basic computer applications is crucial. This instructional design should adhere to the ADDIE model for blended online teaching and align with intelligent educational management to encourage creative habits among Grade 4 undergraduates in basic computer application instruction. In this context, educators can incorporate a range of teaching resources, such as news articles, magazines, and industry reports, to enhance the learning experience. Simultaneously, integrating the Internet, video, animation, and other multimedia resources can enhance the efficacy of student learning. *4) Implementation:*The next step is to implement the lesson plan after developing the blended teaching according to the ADDIE model of combined online education. Based on the intelligent education management on encouraging creative habits for Grade 4 undergraduates in Yunnan province, China. During this phase, it is essential to make necessary adjustments to the curriculum to meet students' specific needs and goals. It is also crucial to ensure that teaching methods and resources are adaptable to variations and continuously improved. *5) Evaluation:*Following the implementation phase, it is imperative to thoroughly evaluate blended online teaching in line with intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan province, China. This assessment should encompass both student learning outcomes and the quality of the instructional process. Various methods can be used to assess student learning outcomes, including exams,

questionnaires, and student feedback. Additionally, the teaching process can be evaluated through reflective meetings and other measures to gain insights into future course improvements. Using intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China, can enhance students' learning outcomes, leading to more effective course design and improved teaching quality. By following the five steps of analysis, design, development, implementation, and Evaluation, we can achieve our curriculum objectives and provide better teaching services to our students. *6) Procedure:In the initial phase*, the researcher examined existing ideas on online blended teaching, focusing on intelligent educational management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. This examination formulated questions for the pretest, posttest, and questionnaire to assess knowledge and understanding of basic computer measuring. In *the second step* of the study process, the researcher, adviser, and other specialists in the field conducted a thorough assessment of the pretest, posttest, and questionnaire. In *Step 3* of the study, the pretest, posttest, and questionnaire were administered to a sample of 30 students enrolled in a blended online course on intelligent education management that encouraged creative habits among Grade 4 undergraduates. It is important to note that these students were not part of the study's participant group. In *Step 4*, a cohort of 30 students from Yunnan province, China, who were enrolled in a blended online course using intelligent education management to encourage creative habits among Grade 4 undergraduates, were tasked with completing a pretest. The test lasted around one hour. In Step 5, the researcher developed a teaching plan using the ADDIE model, with an explicit focus on intelligent educational management and on encouraging creative habits among Grade 4 undergraduates in Yunnan Province, China. The teaching plan was created for blended online instruction in line with intelligent education management, encouraging creative habits among Grade 4 undergraduates. The researcher's advisor and specialists in the field of intelligent education management on encouraging creative habits among Grade 4 undergraduates in Yunnan province, China, using the ADDIE methodology, with an explicit focus on basic computer applications. Subsequently, participants were tasked with completing both the posttest and questionnaire. The test lasted around one hour. This study aims to assess the effectiveness of blended online teaching, using intelligent education management, in encouraging creative habits among Grade 4 undergraduates in Yunnan Province, China. (1) This study aims to ascertain the utilization of intelligent education management on encouraging creative habits for Grade 4 undergraduates within the framework of the ADDIE model to enhance the academic achievement of students enrolled in intelligent education management on encouraging creative habits for Grade 4 undergraduates, with a specific focus on Basic computer application instruction. The study will be guided by a balanced E_1/E_2 ratio of 80/80. According to (E_1), the percentage is derived from the average (mean) of all students' scores across various activities and assignments, including drills, exercises, project work, and other formative evaluations. The variable denoted as E_2 represents the proportion, expressed as a percentage, of the average (mean) of all scores achieved by students on their posttests, final examinations, and other summative assessments. The present study evaluates the implementation of blended online education, specifically using intelligent educational management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. The Evaluation was conducted by a panel of three subject matter experts and three media experts. The present study aims to evaluate the quality of content features in blended online education, with a specific focus on the Basic Computer Application course at the Technical Vocational College in Yunnan Province, China. The assessment will be conducted using intelligent education management to encourage creative habits for Grade 4 undergraduates, with a particular emphasis on the perspectives of content specialists. The content specialists at Technical Vocational College in Yunnan province, China, who specialize in Basic computer applications, were asked to assess the suitability of the content used in the online, blended teaching approach, specifically regarding intelligent education management and the encouragement of creative habits for Grade 4 undergraduates. The present study examines the assessment of online combined teaching, guided by intelligent education management, to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. The Evaluation targets media experts. A request was made for media professionals specializing in information technology, computer technology, educational technology, or related fields to evaluate the suitability of media used in online blended Learning, specifically regarding intelligent educational management to encourage creative habits among Grade 4 undergraduates in Basic computer skills. The researcher conducted the activities enumerated below. *Step 1:* The assessment in this study has been developed to fit the study hypothesis. Consequently, it was developed based on both theories utilized in this study. The study shows that using blended online teaching, guided by intelligent education management, to encourage creative habits among Grade 4 undergraduates in Yunnan province, China, enhances the learning achievement of Technical Vocational College students in Yunnan province, China. The questionnaire has two main sections. *Part 1:* The primary objective of this section is to survey industry professionals about their experiences with blended online teaching, aligned with intelligent education management, to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. This section consisted of a closed-ended questionnaire structured along a Likert-type scale and included five (5) point questions. Participants were asked to indicate, on a scale from 1 to 5, how much they agreed with each statement. The meanings of each number are as follows: 5 = excellent, 4 = good, 3 = average, 2 = poor, and 1 = very poor. *Part 2:* This section consisted of an open-ended questionnaire. The participants requested to use blended online

teaching, following the intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. *Step 2:* Before administering the assessment, three experts in educational measurement and evaluation were asked to assess the appropriateness of the language used in the questionnaire. The data obtained were used to calculate the Item Objective Congruence Index (IOC). The results of the evaluation assessment of content quality of the item objective congruence index (IOC) by measurement and evaluation experts found that the value of the item objective congruence index (IOC) was 0.93. The assessment was then sent to content experts for further evaluation, and the results of the evaluation assessment with media quality of item objective congruence index (IOC) by measurement and evaluation experts found that the value of item objective congruence index (IOC) was 0.93, and then the assessment was sent to media experts for further evaluation. Thus, the total mean score of the Item Objective Congruence (IOC) Index is supposed to be higher than 0.5 for acceptable data. The evaluation criteria used to check the congruence between objectives and items of the test were as follows: a value of the item objective congruence index (IOC) and verbal interpretation (+1item is considered congruent with the objectives, 0 item is considered neutral in terms of whether it is congruent with the objectives, 1 item is considered not congruent with the objectives. The total mean score of the Item-Objective Congruence (IOC) Index is supposed to be higher than .5 for acceptable data. ***Step 3:*** Experts will use the assessment. Evaluation of content quality aspects of information technology according to the ADDIE model, Basic computer application teaching for enhancing learning achievement of Technical Vocational College students in Yunnan province, China, for content experts, and the assessment of media quality aspects of blended instruction online according to the intelligent education management to encourage creative habits among Grade 4 undergraduates students for media experts. The pretest-posttest assessments evaluated students' comprehension of blended online instruction using the intelligent education management system to encourage creative habits among Grade 4 undergraduates in Yunnan province, China. The following questions focused on reading comprehension in basic computer applications and used a more traditional educational style. According to the ADDIE model on Basic computer application topic instruction, students must take a pretest before starting their studies. After Basic Computer Application, students took a posttest before moving on. Next, the researcher describes how to complete each phase. Early on, the researchers chose experiments. They chose multiple-choice questions for their investigation. The second part involves creating a questionnaire to assess students' academic performance in Basic computer applications using the ADDIE paradigm for instructional design. In step three, measurement and assessment, educational professionals must check the test's objectives and items. Data used to calculate the IOC. The evaluation criteria for assessing the test's goals and questions are explained in this section. In particular, the Index of Consistency (IOC) and achievement test verbal interpretation were examined. Consistency occurs when exam items match objectives. When assessing test item-learning objective alignment, an item 0% is usually considered neutral. An exam item with a score of -1 does not meet the goals. The aggregate mean IOC Index score must surpass 0.5 for data to be acceptable. Detailed data analysis is the fourth phase. 30 undergraduates in a Basic Computer Applications class took the pre-and post-tests. Although not part of the study's sample, the kids enthusiastically participated in testing. Achievement test indices are calculated from the results after administration and Evaluation. It includes the difficulty, discrimination, and dependability indexes. According to Kuder-Richardson's K-R=20 formula, the difficulty index should be between 0.2 and 0.8. The discriminant index should be .2 or higher, and the reliability should be .8 or higher. The study examined student satisfaction with the integration of technology in basic computer applications training at the Technical Vocational College in Yunnan Province, China. An ADDIE instructional design paradigm study measured students' satisfaction with online learning platforms and their attitudes toward the use of IT in education. Based on the study's hypothesis, three measurement and Evaluation specialists created and administered the questionnaire to evaluate the teaching of basic computer applications. Researchers assessed data alignment with aims using the IOC. Using questionnaire data, ADDIE will determine student satisfaction with IT-based Learning.

RESEARCH RESULT

This study offers a comprehensive examination of intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China, using the ADDIE paradigm and a descriptive analysis approach. The objective of the analysis was to enhance students' learning outcomes at the Technical Vocational College in Yunnan province, China, by imparting fundamental computer application skills. The findings are presented briefly in the table below. This report consists of two sections: Analysis Results and Descriptive Data Statistics. (1) This study examines the effectiveness of utilizing intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan province, China, through the ADDIE model in teaching intelligent education management to encourage creative habits applications to students at the Technical Vocational College in Yunnan province, China. The study will be conducted by individuals E_1 and E_2 to enhance students' learning outcomes. In this study, we aim to compare students' learning achievement by analyzing pretest and posttest scores using intelligent educational management to encourage creative habits among Grade 4 undergraduates. The instructional approach employed in this study is based on the ADDIE paradigm and focuses on teaching intelligent education management to encourage creative habits applications. To assess the statistical

significance of the observed differences, we will utilize the t-test. This study aims to examine the level of satisfaction among students who use intelligent education management to encourage creative habits among Grade 4 undergraduates in the context of fundamental computer application training, using the ADDIE paradigm. Mean and standard deviation calculations will be used to measure satisfaction levels. The present discourse aims to conduct a comprehensive analysis of the subject matter at hand. The findings of the study indicate that. This study aims to examine the effectiveness of intelligent education management in encouraging creative habits among Grade 4 undergraduates and enhancing students' learning outcomes at the Technical Vocational College in Yunnan province, China, using the ADDIE model as a framework for basic computer application instruction. The present study investigates the impact of incorporating intelligent education management to encourage creative habits application training, using the ADDIE model, on students' learning success at the Technical Vocational College in Yunnan Province, China. Specifically, the study focuses on the use of intelligent education management to encourage creative habits among Grade 4 undergraduates and improve their learning outcomes.

Table 4: The report on the efficiency of blended teaching online according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates in Yunnan province, China.

n=30

Items	Score	Score	Standard	Percentage	E_1/E_2
Ongoing	100	82.07	80	82.07	82.07/81.67
Posttest	20	14.22	80	81.67	82.07/81.67

From Table 4, the study found that the average mean score of ongoing assessments was 82.07, while the mean score of posttests was 81.67. These results suggest a significant improvement in learning outcomes through the implementation of blended online teaching, explicitly using intelligent educational management to encourage creative habits among Grade 4 undergraduates. The study focused on applying the ADDIE model to intelligent education management to encourage creative habits among Grade 4 undergraduates and enhance students' academic achievement at the Technical Vocational College in Yunnan Province, China. The findings indicate that the efficiency ratio of E_1 to E_2 ranged from 82.07 to 81.67. In summary, this study focuses on developing an online learning program based on the ADDIE model, specifically designed to improve students' academic achievement at a Technical Vocational College in Yunnan Province, China. The program adheres to the established 80/80 standard.

Table 5: The evaluation report of an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China from three content experts.

Evaluation Items	**M**	**SD**	**Result Interpretation**
1. Content-learning objective consistency.	5	.00	Excellent
2. Content is intriguing.	4.5	.00	Excellent
3. Content and activities are learner-friendly.	4.67	.58	Excellent
4. Content is appropriate for each activity.	4.55	.58	Excellent
5. Content sorting is appropriate.	4.38	.58	Excellent
6. Content accuracy.	5.00	.00	Excellent
7. Content reading is appropriate for learners.	5.00	.00	Excellent
8. Activities are consistent with the content.	5.00	.00	Excellent
9. A presenting approach engages students.	4.38	.58	Excellent
10. The overview of the content is complete.	5.00	.00	Excellent
Total	**4.49**	**.23**	**Excellent**

Table 5, blended teaching online according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates from three content experts. The Evaluation comprises 10 items developed and approved by 3 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 intelligent education management in encouraging creative habits for an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China. Quality was consistently high (M = 4.49, SD = .23). Findings indicate excellent content consistency, interest, accuracy, appropriate English-subject teaching, consistent activities, and a complete overview (M = 5.00, SD = .00). The posttest scores of the students who studied through the intelligent education management platform on encouraging the creative thinking habits were 81.67, SD 3.73, which indicated higher scores than those in the pretest of 40.80, SD 5.38, and the t-test between the pre-test and post-test was 35.01 at a significant level of .05. The students' satisfaction with an intelligent education management platform on encouraging the creative thinking

habits of Grade 4 undergraduates in Yunnan Province, China a, received a high satisfaction level as a whole at an average of 4.49.

Table 6: Results of Evaluation of blended teaching online according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates in Yunnan province, China, by three media experts.

Evaluation Items	M	SD.	Result Interpretation
1. Learning through blended teaching online according to the intelligent education management on encouraging creative habits.	4.85	.58	Excellent
2. The sequence of activities and content is appropriate.	4.53	.58	Good
3. Easy to use, uncomplicated.	4.67	.58	Excellent
4. The images are consistent with the content.	4.33	.58	Good
5. The images convey the meaning.	4.42	.58	Good
6. The activities are appropriate for the learners.	4.00	.00	Good
7. Interesting content.	4.64	.58	Good
8. Interest in Learning.	4.33	.58	Good
9. Makes it possible to understand the content more.	4.33	.58	Good
10. The details are clear and easy to understand.	4.85	.58	Excellent
Total	4.50	.58	Good

Table 6: An intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China. In China, three media specialists help Technical Vocational College students master the fundamentals of an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates 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 information technology according to the ADDIE model, an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China application instruction to improve the learning accomplishment of Technical Vocational College students in Yunnan province, China. Overall, quality was outstanding(M = 4.50, SD = .58). According to the ADDIE model, learning by the intelligent education management encouraging creative habits for Grade 4 undergraduates application is exceptional when the computer application is straightforward to comprehend, utilize, and has precise details (M =4.85, SD. =.58).

Table 7: Compare students' achievements before and after learning through blended teaching online according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates application.

Items	**n**	M	**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 7 presents the learning achievement of intelligent education management in encouraging creative habits among Grade 4 undergraduates, according to the ADDIE model. Basic computer application teaching for enhanced learning achievement of Technical Vocational College students in Yunnan province, China. The mean pretest score was 8.80, and the standard deviation (SD) was 2.33. The result after using an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China application teaching constituted a substantial improvement in students, 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 8: Examine students' satisfaction with an intelligent education management platform on encouraging the creative thinking habits of Grade 4 undergraduates in Yunnan Province, China.

Evaluation Items	**M**	**SD**	**Result Interpretation**
1. An intelligent education management platform on encouraging the creative thinking habits online blended Learning.	4.40	.51	Strongly Agree

2. Rich learning resources are available for an intelligent education management platform encouraging the creative thinking habits.	4.60	.50	Strongly Agree
3. Computer use benefits from an intelligent education management platform on encouraging the creative thinking habits application knowledge.	4.50	.51	Strongly Agree
4. The intelligent education management on an intelligent education management platform on encouraging the creative thinking habits application can collaborate and communicate.	4.37	.51	Agree
5. An intelligent education management platform on encouraging the creative thinking habits application allows for immediate feedback and Evaluation.	4.53	.51	Strongly Agree
6. Blended teaching online according to an intelligent education management platform on encouraging the creative thinking habits application can get multimedia teaching tools.	4.50	.51	Strongly Agree
7. Teaching blended teaching online according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates application can have to learn management and tracking.	4.53	.51	Strongly Agree
8. According to the intelligent education management on encouraging creative habits for Grade 4 undergraduates application, blended teaching online can be an innovative teaching method.	4.67	.48	Strongly Agree
9. According to the intelligent education management on encouraging creative habits for Grade 4 undergraduates application, blended online teaching can be intercultural teaching.	4.41	.50	Agree
10. Blended teaching online, according to the intelligent education management on encouraging creative habits for Grade 4 undergraduates application, can be rethought and improved.	4.57	.50	Strongly Agree
Total	4.49	.50	**Strongly Agree**

Table 8: Shows the results of the Evaluation of students' satisfaction with blended online teaching, according to intelligent education management, for encouraging creative habits among 30 Grade 4 undergraduates. The overall student satisfaction was a strongly agreeing level (M =4.51, SD. = .50). When considering each item, it was found that blended teaching online according to an intelligent education management platform on encouraging the creative thinking habits application methods was strongly agreeing level (M = 4.67, SD= .48), and combined teaching online according to an intelligent education management platform on encouraging the creative thinking habits application was strongly agree level (M = 4.60, SD= .50), respectively. The students' satisfaction with the intelligent education management platform in encouraging creative thinking habits for Grade 4 undergraduates in Yunnan Province, China, received a high satisfaction level as a whole at an average of 4.49.

CONCLUSION

The analysis of the above information addresses the research objectives as follows: to study the efficiency of using blended online teaching, guided by intelligent education management, in encouraging creative habits among Grade 4 undergraduates. 1) Results of the evaluation of the efficiency of blended teaching online according to intelligent education management on encouraging creative habits for Grade 4 undergraduates. The mean score for the ongoing assessment was 81.40, and the mean score for the posttests was 81.23, indicating a substantial improvement in blended online teaching according to the intelligent education management to encourage creative habits among Grade 4 undergraduates in Yunnan Province, China. The result revealed that the value of efficiency of E_1/E_2 was 81.40/81.23. To summarize, this online Learning, based on blended teaching and intelligent educational management, is designed to encourage creative habits among Grade 4 undergraduates and is developed in accordance with the defined 80/80 standard criteria, 2) Results of Evaluation of the students' satisfaction with the intelligent education management platform in encouraging creative thinking habits for Grade 4 undergraduates in Yunnan Province, China, received a high satisfaction level as a whole at an average of 4.49.

DISCUSSION

The findings of this study directly address the research objective of examining the efficiency of blended online teaching guided by intelligent education management in encouraging creative habits among Grade 4 undergraduates in Yunnan Province, China. The results revealed that the instructional model achieved an efficiency value (E_1/E_2) of 81.40/81.23, which exceeded the established criterion of 80/80. This indicates that students demonstrated effective learning performance both during the instructional process and after completing the learning activities. The findings suggest that the integration of intelligent education management with blended online learning can effectively enhance students' learning achievement and support the development of creative habits.The success of the developed model may be explained by the characteristics of intelligent education management systems, which provide personalized learning pathways, real-time monitoring, and adaptive feedback mechanisms. These features align with the concept of intelligent learning environments proposed by Spector (2014), who argued that intelligent educational technologies can facilitate learner engagement, self-regulation, and higher-order thinking skills. Furthermore, the use of learning analytics within intelligent education management enables instructors to make data-driven decisions that improve instructional effectiveness and learner outcomes (Siemens & Long, 2011).The findings are also consistent with previous studies on blended learning. According to Graham (2013), blended learning combines the advantages of face-to-face instruction and online learning environments, resulting in greater flexibility, interaction, and learner autonomy. Similarly, Garrison and Vaughan (2008) emphasized that blended learning promotes meaningful learning experiences through the integration of collaborative activities, reflective practices, and technology-enhanced instruction. These elements contribute significantly to the development of creativity because students are encouraged to explore ideas, solve problems, and engage in collaborative knowledge construction. The results further demonstrated that students were highly satisfied with the intelligent education management platform, with an overall mean score of 4.49. This high level of satisfaction suggests that students perceived the platform as useful, accessible, and supportive of their learning needs. The finding supports the Technology Acceptance Model (TAM) developed by Davis (1989), which states that perceived usefulness and perceived ease of use are critical factors influencing users' acceptance of technology. When learners perceive educational technologies as beneficial and easy to use, they are more likely to engage actively in learning activities and achieve positive learning outcomes. Moreover, the high satisfaction scores may be attributed to the platform's ability to provide flexible learning opportunities, immediate feedback, and interactive learning experiences. These findings are consistent with research by Al-Fraihat et al. (2020), who found that system quality, information quality, and service quality significantly influence students' satisfaction and success in online learning environments. The intelligent education management platform used in this study appears to have successfully incorporated these qualities, thereby promoting positive learning experiences and encouraging creative thinking habits.In terms of creativity development, the findings support the view that technology-enhanced learning environments can foster creative habits by encouraging exploration, experimentation, and collaborative problem-solving. According to Beghetto and Kaufman (2014), creativity can be cultivated through learning environments that provide opportunities for inquiry, innovation, and reflective thinking. The blended learning activities implemented through the intelligent education management platform offered students opportunities to engage in such processes, thereby contributing to the enhancement of creative habits. Overall, the findings indicate that blended online teaching guided by intelligent education management is an effective approach for promoting creative habits among undergraduate students. The efficiency results exceeding the 80/80 criterion and the high level of student satisfaction demonstrate that the instructional model successfully supported both academic achievement and creativity development. These findings reinforce current educational trends emphasizing the integration of intelligent technologies, learning analytics, and student-centered pedagogies to enhance learning effectiveness and prepare students for the demands of the digital era.

REFERENCES

Al-Fraihat, D., Joy, M., Masa'deh, R. E., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. *Computers in human behavior*, *102*, 67-86.

Amnouychokanant, V. (2023). Knowledge management using storytelling with infographics to develop creativity of undergraduate students. *International Journal of Learning, Teaching and Educational Research*, *22*(10), 18-36.

Beghetto, R. A., & Kaufman, J. C. (2014). Classroom contexts for creativity. *High ability studies*, *25*(1), 53-69.

Bo, Z., Chen, W., Chen, X., Chen, Y., Cheng, Z., Cui, X., ... & (PandaX Collaboration). (2024). First indication of solar B 8 neutrinos through coherent elastic neutrino-nucleus scattering in PandaX-4T. *Physical Review Letters*, *133*(19), 191001.

Chen, Z. (2025). *The research on educational management for entrepreneurship based on the creativity value chain.* International Journal of Development Administration Research, 8(1), 37–48.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, *13*(3), 319-340.

El Koshiry, A., & Tony, M. A. A. (2025). Modern Learning Strategies in the Age of Digital Transformation: Future Insights and Practical Challenges. *Educational Process: International Journal*, *17*, e2025313.
Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley & Sons.
Graham, C. R. (2013). Emerging practice and research in blended learning. In *Handbook of distance education* (pp. 333-350). Routledge.
Guettala, M., Bourekkache, S., Kazar, O., & Harous, S. (2024). Generative artificial intelligence in education: Advancing adaptive and personalized learning. *Acta Informatica Pragensia*, *13*(3), 460-489.
Huang, J., Chano, J., & Chookhampang, C. (2025, December). Optimization Strategies for Enhancing Innovative Behavior and Entrepreneurial Intentions in Entrepreneurship Education: The Role of Flow. In *11th International Conference on Educational Reform (ICER 2025* (pp. 83-91). Atlantis Press.
Huang, J., Chookhampang, C., & Chano, J. (2025, September). Teaching model development to enhance the creativity for college students in China. In *Frontiers in Education* (Vol. 10, p. 1598909). Frontiers Media SA.
Huang, Y., Zhang, Z., Xu, B., Zhou, X., Zhai, J., & Gao, D. (2025). Digital Learning Empowering Sustainable Education: Evidence from the Determinants of Chinese College Students' Knowledge Innovation Capability. *Sustainability*, *17*(20), 9060.
He, S., & Sangsawang, T. (2023). Blended Teaching Online According to the Super Star Learning Pass Model on Basic Computer Application for Shunde Technical Vocational College. *Turkish Online Journal of Educational Technology-TOJET*, *22*(4), 36-51.
Hu, R., & Li, C. (2025). Exploring the roles of entrepreneurial education, proactive personality and creative self-efficacy in the formation of undergraduates' new venture ideas in China. *Behavioral Sciences*, *15*(2), 185.
Li, M. M., & Tu, C. C. (2024). Developing a project-based learning course model combined with the think–pair–share strategy to enhance creative thinking skills in education students. *Education Sciences*, *14*(3), 233.
Liang, Y., Chen, R., Hong, H., Li, S., & Han, L. (2025). Shaping digital entrepreneurial intention in higher education: the role of entrepreneurship education, creativity, and digital literacy among Chinese university students. *Journal of Innovation & Knowledge*, *10*(5), 100788.
Lin, H., & Chen, Q. (2024). Artificial intelligence (AI)-integrated educational applications and college students' creativity and academic emotions: students and teachers' perceptions and attitudes. *BMC psychology*, *12*(1), 487.
Li, Y., Ding, X., Li, J., Pan, H., Chen, X., & Fan, Y. (2024). Innovation in Education Management and Talent Cultivation Models for New Quality Productivity: Based on Data Driven and Intelligent Teaching Management [J]. Academic Journal of Management and Social Sciences, 8(2), 199-204.
Li, Y., Sangsawang, T., & Vipahasna, K. (2023). Utilizing the Delphi Technique to Develop a Self-Regulated Learning Model. Journal of applied data sciences, 4(3), 254-263.
Long, P., & Siemens, G. (2014). Penetrating the fog: analytics in learning and education. *Italian Journal of Educational Technology*, *22*(3), 132-137.
Wang, D., Hu, B., Hu, C., Zhu, F., Liu, X., Zhang, J., & Peng, Z. (2020). Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus–infected pneumonia in Wuhan, China. *jama*, *323*(11), 1061-1069.
Wang, S., & Huang, Y. (2025). Facilitation or Inhibition: The Impact of Generative Artificial Intelligence on College Students' Creativity. *Frontiers of Education in China*, *20*(1), 38.
Spector, J. M. (2014). Conceptualizing the emerging field of smart learning environments. *Smart learning environments*, *1*(1), 2.
Saritepeci, M., & Yildiz Durak, H. (2024). Effectiveness of artificial intelligence integration in design-based learning on design thinking mindset, creative and reflective thinking skills: An experimental study. *Education and Information Technologies*, *29*(18), 25175-25209.
Sangsawang, T. (2020). An instructional design for online learning in vocational education according to a self-regulated learning framework for problem solving during the covid-19 crisis. *Indonesian Journal of Science and Technology*, *5*(2), 283-298.
Zhang, Y., Sangsawang, T., & Vipahasna, P. P. (2023). Assessing factors and simulating innovation: A study of innovative capacities among data science professionals in China. *Journal of Applied Data Sciences*, *4*(3), 213-228.