Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

# Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province

**Li Xuefei[1], Lerlak Othakanon[2] and Danucha Saleewong[3]**

[1]Mater of Education in Curriculum and Instruction, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani Province, Thailand

[2,3]Lecturer, Curriculum and Instruction Program, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani Province, Thailand

[1]E-mail: 1129918189@qq.com, ORCID ID: https://orcid.org/0009-0005-4900-5050

[2]E-mail: lerlak@vru.ac.th, ORCID ID: https://orcid.org/0009-0002-2397-6906

[3]E-mail: danucha@vru.ac.th, ORCID ID: https://orcid.org/0000-0001-8145-6170

Received 05/02/2026 Revised 18/02/2026 Accepted 20/03/2026

## Abstract

**Background and Aims:** This experimental research aimed to 1) compare students' civil aviation etiquette ability before and after learning through the Interactive Teaching Method, 2) compare students' civil aviation etiquette ability after learning through the Interactive Teaching Method with the determined criterion set at 70%, and 3) assess students' satisfaction after learning through the Interactive Teaching Method.

**Methodology:** Based on the Constructivist learning theory, this study applied Social Learning Theory and Experiential Learning Theory. The research instruments were lesson plans, a civil aviation etiquette ability test, and a satisfaction questionnaire. The overall appropriateness of the lesson plans was very high (*M*=4.62, *SD*=0.49). The civil aviation etiquette ability test had an IOC between 0.67 and 1.00, item difficulty (p=0.43-0.60), item discrimination (r=0.25-0.50), a KR20 value of 0.73, and inter-rater reliability of 0.82. The satisfaction questionnaire had an IOC between 0.67 and 1.00 and a reliability index of 0.82. The statistics used to analyze data were mean, standard deviation, t-test for dependent samples, and t-test for one sample.

**Results:** 1) Students' civil aviation etiquette ability after learning through the Interactive Teaching Method was higher than before at a statistically significant level of .01 ($t_{49}$=45.62, $p$<.01), 2) students' civil aviation etiquette ability was higher than the determined criterion of 70% at a significance level of .01 ($t_{49}$=37.95, $p$<.01), and 3) students' satisfaction after learning through the Interactive Teaching Method overall was at a high level (*M*=4.14, *SD*=0.85).

**Conclusion:** The knowledge gained from the research is that the six-step Interactive Teaching Method: 1) Topic Presentation, 2) Brainstorming, 3) Small group activity, 4) Group presentation, 5) Discussion, 6) Conclusion & Evaluation effectively enhances students' civil aviation etiquette ability. The most significant steps for improvement are small group activities involving scenario simulation and role-playing, and real-time integration of AI technology, peer evaluation, and



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

teacher guidance. Furthermore, this method has been shown to boost students' interest in learning and enhance their proficiency in core civil aviation etiquette competencies, including safety and security etiquette, professional image and standardization, interpersonal and communication skills, emotional management and resilience, and service innovation and cooperation.

**Keywords:** Interactive Teaching Method; Civil Aviation Etiquette Ability; Student Satisfaction; Second-Year Civil Aviation Majors

## Introduction

Against the backdrop of globalization, China's civil aviation market has remained the world's second largest for years. To enhance its competitive edge, the 14th Five-Year Plan for Civil Aviation, released in 2022, explicitly called for higher service quality and a recognizable Chinese aviation brand, listing well-qualified service personnel as a prerequisite for high-quality development (Civil Aviation Administration of China [CAAC], 2022). Almost simultaneously, the Ministry of Education's New Liberal Arts Initiative urged universities to bring real professional scenarios into the classroom and to anchor ability-building in hands-on training, offering a policy lever for regional universities to deepen the reform of cabin-crew programs.

As one of Jilin Province's flagship institutions for applied talent, Changchun Normal University relies on its Second-Year Civil Aviation Service Etiquette course to supply job-ready graduates to airlines; the quality of this single module, therefore, determines how easily students clear the professional entry bar and how strongly the university can contribute to the service brand of Northeast China. However, the university has long adopted the traditional teaching model of "teacher demonstration - student imitation - paper-and-pencil test," which accounts for the majority of class time and results in classroom interaction below 30% (Changchun Normal University, 2025). This outdated model not only contradicts student-centered learning principles but also creates three salient problems that directly impact students' competencies in the civil aviation industry:

**1. Weak situational transfer ability**: When dealing with emergency scenarios such as flight delays, overbooking handling, and cabin conflicts, students often have rigid language expressions and slow responses, lacking flexible service capabilities (Zhang & Li, 2021).

**2. Insufficient depth of reflection**: Students' after-class reflection logs mostly stay at a superficial level, such as "Mastered the 30-degree bow etiquette today," without in-depth thinking about core issues such as passengers' psychological needs or cultural differences (Wang, 2022).



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

**3. Scarce awareness of service innovation**: Faced with new scenarios such as self-service check-in equipment, students mostly passively wait for guidance on standard procedures, lacking the ability to proactively optimize service links (Chen & Wang, 2024).

These circumstances indicate that the traditional lecture model can no longer meet the industry's demand for high-quality service personnel and has failed to effectively foster necessary civil aviation etiquette competencies (Changchun Normal University, 2025). Before university, most students' exposure to etiquette training is limited to basic norm memorization in middle and high schools; they rarely receive training on flexibly applying etiquette in complex service scenarios or managing emotional labor. Classroom observations at Changchun Normal University reveal that first-year civil aviation majors often struggle to formulate appropriate service language, judge the appropriateness of etiquette behaviors in specific scenarios, and transform learned norms into authentic service actions for real passengers (Han et al., 2023). If these gaps are not addressed in the early academic years, they will have a ripple effect on subsequent professional courses and ultimately compromise the quality of talent training.

The second year of civil aviation undergraduate education is a critical period for consolidating professional foundations; this period also represents the last opportunity to embed unified civil aviation etiquette standards. The National Standards of Teaching Quality for Undergraduate Civil Aviation Majors (Ministry of Education, 2020) list "civil aviation service etiquette application" as a core competency that must be "attained early." Intervening in the second year offers two advantages: (a) the compulsory course Civil Aviation Service Etiquette provides full access to students without selection bias, and (b) students' academic load is manageable before specialized professional training, allowing sufficient time for a complete interactive teaching cycle. Longitudinal research indicates that etiquette ability reinforcement in the second year produces lasting gains in internship performance and employment competitiveness throughout the remaining study period (Xiong, 2024); consequently, the present intervention targets second-year students.

To address low civil aviation etiquette ability, three remedial pathways have been proposed: 1) Scenario-based teaching, integrating etiquette training into simulated service scenarios (Li, 2020); 2) Problem-based learning (PBL), using authentic industry problems to foster application skills (Wang, 2018); 3) Interactive teaching, employing two-way communication and real-time feedback to enhance participation (Muir et al., 2022).

Among these, the Interactive Teaching Method has proved most effective for developing practical skills and knowledge transfer in service-oriented courses (White, 2018). It is an instructional strategy in which students actively participate in knowledge construction through two-way communication, collaborative activities, and real-time feedback, operating at the



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

application and analysis levels of Bloom's taxonomy (Barkley et al., 2014). Its educational value lies in: 1) Situating learning in real-world contexts to enhance motivation and transfer; 2) Cycling through "topic presentation–brainstorming–practice–discussion–evaluation" to cultivate practical ability and critical thinking; 3) Using multi-source feedback (teacher, peer, AI) to foster self-regulation and continuous improvement (Vygotsky, 1978).

Civil Aviation Etiquette Ability refers to the comprehensive literacy of learners to apply professional knowledge, emotional regulation skills, cross-cultural communication methods, and service innovation thinking to complete service tasks in a standardized, efficient, and appropriate manner (Xiong, 2024). It includes five core dimensions: safety and security etiquette, professional image and standardization, interpersonal and communication skills, emotional management and resilience, and service innovation and cooperation.

Empirical studies have shown that the Interactive Teaching Method can significantly improve students' practical ability and service awareness in etiquette courses (Liu et al., 2021). However, empirical evidence within Chinese civil aviation universities remains scarce, especially regarding the effectiveness of a six-step interactive teaching model in enhancing the five-dimensional civil aviation etiquette ability.

Therefore, this study aims to investigate the Effect of the Interactive Teaching Method on the Civil Aviation Etiquette Ability of Second-Year Students at Changchun Normal University. This study recruited Second-Year cabin-crew majors to complete a six-week mini-course that comprised twelve academic hours of interactive teaching. Through pre- and post-measurements, reflective journals, and classroom observation, it evaluates the effect of this short, high-density intervention on students' civil-aviation etiquette competence. The findings are expected to provide evidence-based guidance for reconstructing civil aviation etiquette curricula, setting learning-outcome standards, and scaling up interactive instructional models in the industry.

## Objectives

1. To compare students' civil aviation etiquette ability before and after learning through the Interactive Teaching Method.

2. To compare students' civil aviation etiquette ability after learning through the Interactive Teaching Method with the determined criterion set at 70%.

3. To assess students' satisfaction after learning through the Interactive Teaching Method.



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

## Literature Review

### 1. Theoretical Foundations

This study is based on two core theories supporting the Interactive Teaching Method: Social Learning Theory (Vygotsky, 1978) and Experiential Learning Theory (Kolb, 1984). 1) Social Learning Theory: Vygotsky (1978) argues that learning occurs through social interaction within the Zone of Proximal Development (ZPD), emphasizing collaboration and peer feedback as key to the interactive teaching model. It aligns with civil aviation etiquette education's demand for flexible application in diverse scenarios. 2) Experiential Learning Theory: Kolb's (1984) cyclical learning model (concrete experience-reflective observation-abstract conceptualization-active experimentation) supports the six-step interactive teaching, bridging classroom instruction and workplace application in civil aviation education.

### 2. Interactive Teaching Method

The interactive teaching method is a student-centered paradigm characterized by two-way communication and active participation of learners in knowledge construction (Vygotsky, 1978). It reframes the instructor's role from a primary lecturer to a facilitator who designs and fosters the learning environment. Its core components include participant roles (teacher as facilitator, learners as active participants), interactive activities (collaborative learning, problem-based learning, role-playing), and a supportive learning environment (physical arrangement promoting interaction, psychological safety encouraging participation) (Chickering & Gamson, 1987). The six-step teaching process (1) Topic Presentation (2) Brainstorming (3) Small group activity (4) Group presentation (5) Discussion (6) Conclusion & Evaluation has been verified as effective in service-oriented courses (Ishtiaq et al., 2019).

### 3. Civil Aviation Etiquette Ability

Civil Aviation Etiquette Ability is a multidimensional construct integrating theoretical knowledge and practical operation (Chen & Liu, 2012; Liang, 2018). Theoretical knowledge includes an understanding of international safety regulations, service standards, and cross-cultural norms. Practical operation covers five core dimensions: 1) Safety & Security Etiquette, applying etiquette principles to ensure cabin safety and order; 2) Professional Image & Standardization, adhering to civil aviation norms and protocols; 3) Interpersonal & Communication Skills, communicating effectively with diverse passengers; 4) Emotional Management & Resilience, performing emotional labor and maintaining service quality under pressure; 5) Service Innovation & Cooperation, collaborating with teams and proactively meeting passenger needs (Liu et al., 2021; Hon et al., 2009; Han et al., 2025).



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

### 3. Student Satisfaction

Student satisfaction in interactive etiquette courses is defined as students' overall evaluative judgment of how well the instructional design, interaction quality, learning resources, and outcomes meet their academic needs and professional aspirations (Biner et al., 1997). It includes four key dimensions: teaching content satisfaction, teaching strategy satisfaction, media and resource satisfaction, and evaluation method satisfaction (Akyol & Garrison, 2011). Student Satisfaction is learners' subjective evaluation of teaching (Liu et al., 2021), measured by Likert-scale questionnaires, and acts as a mediating factor linking engagement to better learning outcomes (White, 2018).

## Conceptual Framework

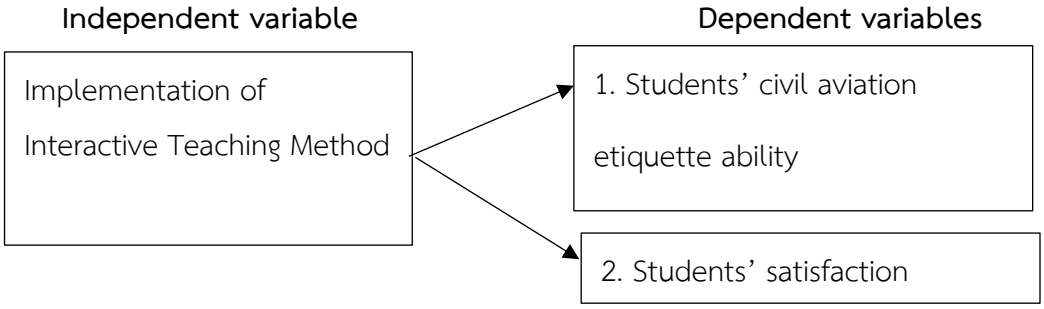



**Figure 1** Conceptual Framework

### Interactive Teaching Method in Civil Aviation Etiquette Education

Existing research shows that the Interactive Teaching Method can improve students' etiquette standardization and scenario adaptability (Sun, 2017). However, most studies lack a standardized teaching process design and a comprehensive evaluation of the five-dimensional etiquette ability, and there is insufficient verification of the effect of a 12-class-hour intervention cycle (Zhang, 2019). This study fills this gap by exploring the effectiveness of a structured six-step Interactive Teaching Method in enhancing civil aviation etiquette ability.

## Methodology

### Population and Sample

1. The population of this study was 200 second-year students majoring in civil aviation at Changchun Normal University, Jilin Province. These students were divided into 4 classrooms, with 50 students per class, and all were enrolled in the compulsory Civil Aviation Service Etiquette course.



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

2. The sample of this study was 50 second-year civil aviation majors (one entire classroom) at Changchun Normal University, Jilin Province, derived by the cluster random sampling method. This sampling method ensured representativeness and avoided selection bias, as the selected class shared the same curriculum, teaching schedule, and baseline etiquette knowledge as the other three classes in the population, which laid a foundation for the subsequent six-week Interactive Teaching Method intervention and pre-post measurement.

**Experimental Design**

This study adopts the one-group pretest-posttest design (Campbell and Stanley, 1963) to investigate the effectiveness of the Interactive Teaching Method:

| Group | Pretest | Treatment | Posttest |
|---|---|---|---|
| Experimental | $O_1$ | X | $O_2$ |

$O_1$: Measurement of students' civil aviation etiquette ability before the experiment.

X: Implementation of the Interactive Teaching Method.

$O_2$: Measurement of students' civil aviation etiquette ability and satisfaction after the experiment.

**Research Instruments**

1. Lesson Plans. Six lesson plans covering the core content of civil aviation service etiquette (overview & core values, grooming, appearance and posture standards, communication etiquette, special passenger service etiquette, emergency & complaint handling etiquette). The overall appropriateness was at a very high level (M=4.62, SD=0.49).

2. Civil Aviation Etiquette Ability Test. Divided into theoretical knowledge (30 multiple-choice questions) and practical performance (scoring rubric). It had an IOC between 0.67–1.00, item difficulty (p=0.43-0.60), item discrimination (r=0.25-0.50), KR20 value of 0.73, and inter-rater reliability of 0.82.

3. Satisfaction Questionnaire. 15 items based on a five-point Likert scale, covering four dimensions (content, teaching strategies, media and resources, evaluation). It had an IOC between 0.67 and 1.00 and a reliability index of 0.82.

**Data Collection**

1. Administer the pretest to measure students' civil aviation etiquette ability.
2. Implement the Interactive Teaching Method with 6 lesson plans (12 total hours).
3. Administer the posttest using the same instrument as the pretest.
4. Distribute the satisfaction questionnaire to students.

**Data Analysis**

1. Compare pretest and posttest scores of civil aviation etiquette ability using a t-test for dependent samples.



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

2. Compare posttest scores with the 70% criterion using a t-test for one sample.

3. Assess student satisfaction using the arithmetic mean and standard deviation.

## Results

1. The results of the comparison of Civil Aviation Etiquette Ability before and after learning.

**Table 1** Comparison of Civil Aviation Etiquette Ability before and after Learning

| Group1 | Full scores | n | Pretest scores | | Post-test scores | | *t* | *p* | Effect size |
|---|---|---|---|---|---|---|---|---|---|
| | | | *M* | *SD* | *M* | *SD* | | | |
| Experimental group | 80 | 50 | 57.32 | 2.78 | 70.38 | 2.68 | 45.62** | .001 | 6.45 |

**p<0.01

As presented in Table 1, the mean pretest score of students' civil aviation etiquette ability was 57.32 (*SD*=2.78), and the posttest score was 70.38 (*SD*=2.68). Posttest scores were significantly higher than pretest scores at the .01 level of statistical significance ($t_{49}$=45.62, *p*<.01).

2. The result of the comparison of Civil Aviation Etiquette Ability with the 70% criterion.

**Table 2** Comparison of Civil Aviation Etiquette Ability with the 70% criterion

| Group | n | criterion score | *M* | *SD* | *t* | *p* | Effect size |
|---|---|---|---|---|---|---|---|
| Experimental group | 50 | 56 | 70.38 | 2.68 | 37.95** | .001 | 5.37 |

**p<0.01

As presented in Table 2, the mean posttest score of students' civil aviation etiquette ability was 70.38 (*SD*=2.68), which was significantly higher than the criterion of 56 points (70% of 80) at the .01 level of statistical significance ($t_{49}$=37.95, *p*=<.01).

3. The result of students' satisfaction with the Interactive Teaching Method

**Table 3** Students' satisfaction with the Interactive Teaching Method in the overall dimension

| Dimension | *M* | *SD* | Satisfaction Level |
|---|---|---|---|
| 1. Content | 4.15 | 0.84 | High level |
| 2. Teaching strategies | 4.12 | 0.86 | High level |



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

| Dimension | *M* | *SD* | Satisfaction Level |
|---|---|---|---|
| 3. Media and resources | 4.14 | 0.85 | High level |
| 4. Evaluation | 4.15 | 0.85 | High level |
| **Overall** | **4.14** | **0.85** | **High level** |

As shown in Table 3, students' overall satisfaction with the civil aviation etiquette course content was at a high level (*M*=4.14, *SD*=0.85). Specifically, all individual satisfaction items also achieved high levels: satisfaction with the novelty of the civil aviation etiquette course learning content was at high level (M=4.15, *SD*=0.84), satisfaction with the course's teaching strategies reached at high level (*M*=4.12, *SD*=0.86), satisfaction with the course's media and resources was at high level (*M*=4.14, *SD*=0.85), and satisfaction with the course' evaluation was also at high level (*M*=4.15, *SD*=0.85).

## Conclusion

This study assessed the civil aviation etiquette course by examining pre- and post-learning outcomes, benchmarking against a 70% proficiency standard, and evaluating student satisfaction. The key findings indicated that students' performance in civil aviation etiquette improved significantly after learning ($p < .01$), their post-learning proficiency exceeded the 70% benchmark at a significant level ($p < .01$), and their overall satisfaction with the course was at a high level (*M*=4.14, *SD*=0.85). These results confirm the feasibility of the course's teaching approach, which effectively enhances students' competencies and fulfills the research objectives.

## Discussion

1. The significant improvement in students' civil aviation etiquette ability after the intervention is attributed to the synergy of three mechanisms: 1) Immersive scenario simulation bridges theory and practice. The Interactive Teaching Method restores real civil aviation scenarios (e.g., special passenger service, emergency handling) through role-playing, allowing students to apply etiquette norms in authentic contexts and deepen their grasp of practical skills (Li, 2020). This transforms passive knowledge reception into active practice, addressing the weak situational transfer ability of traditional teaching. 2) Diverse interactive forms stimulate learning motivation. Group cooperation, peer evaluation, and AI-assisted feedback break the one-way knowledge transmission model. Students actively reflect on etiquette application in discussions and mutual correction, while real-time feedback from multiple sources accelerates error correction and ability improvement (Nicol & Macfarlane-Dick, 2006). 3) Job-oriented design strengthens professional



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

adaptability. Teaching activities are closely aligned with civil aviation post needs, helping students recognize the connection between etiquette ability and career development. This enhances learning pertinence and promotes the transfer of learned skills to professional scenarios (Afsar et al., 2017).

2. The 70% criterion (56 points) was set based on civil aviation industry standards and undergraduate teaching quality requirements, representing the proficient level for professional entry (Wang & Li, 2020). The Interactive Teaching Method addresses the core gaps of traditional teaching: insufficient real-world connection, lack of interactive practice, and limited feedback mechanisms. The six-step teaching process comprehensively covers the five dimensions of civil aviation etiquette ability, while diverse teaching resources (VR cabin simulation equipment, real case videos) provide strong support for skill mastery. This ensures that students not only memorize etiquette norms but also develop practical application capabilities, enabling them to exceed the preset standard.

This result is consistent with existing research conclusions. Previous studies have pointed out that the interactive teaching method can effectively improve students' practical ability and adaptability in practical courses, especially suitable for courses that emphasize scenario-based application, such as etiquette and services (Muir et al., 2022; White, 2018). As a core course for civil aviation service majors, civil aviation etiquette's teaching goal is not only to let students master norms but also to flexibly apply them in complex professional scenarios. The interactive teaching method exactly meets this core demand, achieving comprehensive ability improvement through diverse interactive forms (Wang, 2018; Zhang, 2019).

3. The high overall satisfaction ($M$=4.14) reflects the comprehensive effectiveness of the Interactive Teaching Method. From the perspective of satisfaction in each dimension, learning content, teaching strategies, teaching effects, and teaching evaluation are all highly recognized, but there is still room for slight optimization. Satisfaction in the teaching materials dimension is slightly lower than other dimensions, which may be related to the timeliness of teaching case updates and the depth of application of auxiliary resources such as VR; some students' feedback indicates that the time allocation of a few interactive activities is not reasonable, affecting the participation experience (Akyol & Garrison, 2011; Kuo et al., 2013). This characteristic provides a clear direction for subsequent teaching optimization:

Teaching content needs to be more in line with the latest industry trends, adding new content such as smart civil aviation services and emergency etiquette in special scenarios, supplementing excellent service cases and negative cases of civil aviation enterprises at home and abroad to enhance the timeliness and pertinence of teaching content (Chen & Chang, 2010; Kim et al., 2022). Teaching materials should be optimized by creating illustrated and focused



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

Interdisciplinary Academic and Research Journal, 6 (6), November-December 2026
Old ISSN 2774-0374: New ISSN 2985-2749
Website: https://so03.tci-thaijo.org/index.php/IARJ/index
Article ID: e298060

courseware and case manuals, combined with VR simulation resources to improve the practicality of teaching materials (Liu et al., 2021; Zain & Bowt, 2019). Form should enrich the diversity of interactive scenarios, add complex scenarios such as cross-post collaboration simulation and emergency etiquette disposal to improve students' comprehensive application capabilities (Mubeen & Reid, 2014; Sun, 2017). Time allocation should be reasonably adjusted for each interactive link, set up a flexible adjustment mechanism, and dynamically optimize teaching rhythm according to students' participation progress and feedback (König et al., 2020; Wang & Chen, 2021).

## Conclusion

This study aimed to compare students' civil aviation etiquette ability before and after the Interactive Teaching Method, compare posttest scores with the 70% criterion, and assess student satisfaction. Therefore, the implementation of the Interactive Teaching Method is feasible for civil aviation etiquette courses, as it effectively improves students' civil aviation etiquette ability and achieves high student satisfaction. The six-step teaching process, especially small group activities and real-time feedback, plays a key role in enhancing core competencies.

## Recommendation

1. Systematically integrate the Interactive Teaching Method into civil aviation etiquette curricula, optimizing lesson plans based on industry updates and student feedback.

2. Strengthen teachers' training on interactive teaching skills and industry knowledge, encouraging cooperation between universities and airlines to enrich teaching resources.

3. Improve the multi-dimensional evaluation system, increasing the weight of process evaluation, such as participation in group activities, scenario simulation performance, and expanding the application of AI-assisted evaluation.

4. Expand the sample size and adopt a controlled experimental design with a traditional teaching control group to improve the generalizability of results.

5. Conduct longitudinal tracking of learning outcomes to verify the long-term impact of the Interactive Teaching Method on students' internship and employment performance.

6. Explore the integration of emerging technologies such as AI and VR with the Interactive Teaching Method to further enhance teaching effectiveness.



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060;
DOI: https://doi.org/10.60027/iarj.2026.e298060

## References

Afsar, B., Safdar, U., Dost, M., & Ali, Z. (2017). Flight attendants' knowledge sharing, innovative work behaviour, and new service development. *International Journal of Work Innovation, 2*(2), 123–140. https://doi.org/10.1504/IJWI.2017.085055

Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry. *The Internet and Higher Education, 14*(3), 185–190. https://doi.org/10.1016/j.iheduc.2011.01.002

Barkley, E. F., Cross, K. P., & Major, C. H. (2014). *Collaborative learning techniques: A handbook for college faculty*. John Wiley & Sons.

Biner, P. M., Bink, M. L., Huffman, M. L., & Dean, R. S. (1997). Personality characteristics differentiating and predicting the achievement of televised-course students and traditional-course students. *American Journal of Distance Education, 11*(2), 46–60. https://doi.org/10.1080/08923649709526959

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Rand McNally.

Changchun Normal University. (2025). *Civil aviation service etiquette course teaching status report*. Changchun Normal University.

Chen, F. Y., & Chang, Y. H. (2010). Competencies for flight attendants: A study from the perspective of airline passengers and experts. *Journal of Air Transport Management, 16*(6), 337–339. https://doi.org/10.1016/j.jairtraman.2010.07.001

Chen, F., & Liu, L. (2012). Research on the safety services capability model for ATC service in the ATM division. *Energy Procedia, 17*, 1369–1375. https://doi.org/10.1016/j.egypro.2012.02.254

Chen, L., & Wang, H. (2024). Research on service innovation awareness of civil aviation major students in the background of smart aviation. *Journal of Transportation Engineering and Information, 22*(2), 189–196.

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 39*(7), 3–7.

Civil Aviation Administration of China. (2022). *14th five-year plan for civil aviation*. Civil Aviation Press.

Han, S., Liu, Y., & Zhang, J. (2023). Research on the professional basic ability of first-year civil aviation major students. *Enterprise Economy, 42*(7), 156–163.

Han, S., Liu, Y., & Zhang, J. (2025). Etiquette competence, emotional labor, and cabin crew well-being: A three-wave longitudinal study. *Journal of Air Transport Management, 98*, 101112. https://doi.org/10.1016/j.jairtraman.2024.101112



Citation: Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060; DOI: https://doi.org/10.60027/iarj.2026.e298060

Hon, S. L., Liu, Y., & Zhang, J. (2009). Etiquette competence, emotional labour, and cabin crew well-being. *Journal of Air Transport Management, 15*, 98–112. https://doi.org/10.1016/j.jairtraman.2008.09.002

Ishtiaq, M., Ali, Z., & Hussain, M. S. (2019). Student teams–achievement divisions (STAD) as a teaching strategy in EFL classrooms: A critical review. *International Review of Social Sciences, 8*(10), 139–149.

Kim, H., & Lee, N. (2022). The effects of the in-flight safety information characteristics on the safety behavioral intention of airline passengers. *Sustainability, 14*(5), 2819. https://doi.org/10.3390/su14052819

Kim, J., Park, S., & Lee, H. (2022). Cultural-sensitive etiquette and passenger willingness to pay: Experimental and financial evidence from international airlines. *Transportation Research Part E: Logistics and Transportation Review, 159*, 102626. https://doi.org/10.1016/j.tre.2022.102626

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education, 43*(4), 608–622.

Kuo, Y.-C., Walker, A. E., Belland, B. R., & Schroder, K. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distance Learning, 14*(1), 16–39. https://doi.org/10.19173/irrodl.v14i1.1338

Li, J. (2020). Practical research on civil aviation etiquette teaching based on scenario simulation. *Journal of Civil Aviation Education, 32*(2), 50–55.

Liang, J. (2018). Research on the teaching reform of civil aviation service etiquette. *Journal of Engineering Education Research, 34*(3), 89–92.

Liu, C., Zhang, T., & Wu, S. (2021). Emergency evacuation efficiency: The impact of portable command languages on passenger evacuation. *Safety Science, 139*, 105267. https://doi.org/10.1016/j.ssci.2021.105267

Ministry of Education. (2020). *National standards of teaching quality for undergraduate civil aviation majors*. Higher Education Press.

Mubeen, S., & Reid, N. (2014). The measurement of motivation in science students. *European Journal of Educational Research, 3*(3), 129–144. https://doi.org/10.12973/eu-jer.3.3.129

Muir, T., Wang, I., & Trimble, A. (2022). Promoting student engagement: Using interactive online teaching methods. *Education Sciences, 12*(2), 1–15. https://doi.org/10.3390/educsci12020105



Citation: Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060; DOI: https://doi.org/10.60027/iarj.2026.e298060

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199–218. https://doi.org/10.1080/03075070600568631

Sun, Y. (2017). Construction and practice of an interactive teaching method model in civil aviation etiquette teaching. *Vocational Education Research, 12*(4), 67–72.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wang, L. (2018). Research on the teaching reform of civil aviation service etiquette. *Journal of Jilin Engineering Normal University, 34*(5), 89–92.

Wang, L., & Chen, Y. (2021). Effects of flexible scheduling in interactive classrooms: A randomized experiment. *Journal of Educational Psychology, 113*(4), 651–665. https://doi.org/10.1037/edu0000534

Wang, X., & Li, M. (2020). Standardization of in-flight service etiquette and its effect on conflict reduction. *Journal of Aviation Management, 12*(4), 33–48.

Wang, Y. (2022). Research on the after-class reflection status of civil aviation etiquette course students. *Journal of Jiangsu Vocational College of Education, 42*(6), 89–92.

White, M. (2018). Interactive teaching method in vocational education: A review of practices. *Vocational Education Review, 7*(2), 101–115.

Xiong, Y. (2024). The significance of service etiquette training on Chinese aviation students. *Archives des Sciences, 74*(S1), 1–10.

Zain, N. M., & Bowt, H. (2019). An interactive teaching and learning approach for programming courses. In *2019, IEEE 10th International Conference on Mechanical and Intelligent Manufacturing Technologies (ICMIMT)* (pp. 95–99). IEEE. https://doi.org/10.1109/ICMIMT.2019.8843819

Zhang, L., & Li, N. (2021). Research on situational transfer ability of civil aviation major students in etiquette application. *Enterprise Economy, 40*(8), 167–174.

Zhang, Q. (2019). Research on the application of the case teaching method in the civil aviation service etiquette course. *Journal of Civil Aviation Education, 3*(2), 45–50.



Citation:
Li, X., Othakanon, L., & Saleewong, D. (2026). Effect of Interactive Teaching Method on Civil Aviation Etiquette Ability of Second-Year Students in Jilin Province. Interdisciplinary Academic and Research Journal, 6(6), e298060; DOI: https://doi.org/10.60027/iarj.2026.e298060