

Internship Experience and Competency Development among Aviation Students: A Case Study of Thai and International Aviation Programs

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Abstract

This study aims to examine the level of competency development and internship performance of aviation students, to compare the differences between Thai and international students, and to analyze the relationship between academic learning outcomes and internship performance. A quantitative research design was employed using a structured questionnaire based on the KSC framework (Knowledge, Skills, and Characteristics). The population consisted of 28 aviation students (14 Thai and 14 international) who participated in internship programs during the summer semester. Data were collected from workplace supervisors during the final week of the internship period. Descriptive statistics, independent samples t-test, and Pearson's correlation coefficient were used for data analysis.

The results indicated that Thai students demonstrated higher levels of competency development compared to international students. Statistically significant differences were found in several dimensions, particularly in problem-solving and practical skills. In addition, a positive relationship between academic learning outcomes and internship performance was identified. The study suggests that aviation programs should enhance practical training, communication skills, and cross-cultural competencies to better prepare students for the aviation industry.

Keywords: Internship, Competency Development, Aviation Education, Work-Integrated Learning, Comparative Study

1. Background of the study

The field of aviation education has gained significant popularity in recent years due to the rapid growth of international travel and global transportation. As the aviation industry continues to expand, the demand for qualified aviation personnel has increased accordingly. This trend has led to the development of aviation-related programs in higher education institutions, evolving from elective courses into full academic programs such as aviation business. These programs aim to equip students with both theoretical knowledge and practical skills required for the aviation industry. In addition, the increasing complexity of aviation operations requires graduates who are capable of performing effectively in real-world environments, particularly in service-oriented and safety-critical contexts (International Civil Aviation Organization [ICAO], 2019).

In recent years, aviation business programs in Thailand have attracted a growing number of international students from various regions, including China, Bhutan, South Asia, Africa, and

neighboring ASEAN countries such as Myanmar, the Philippines, Cambodia, and Vietnam. As a result, many universities have expanded their programs by offering English-medium instruction to accommodate the increasing diversity of students. This shift has encouraged institutions to enhance their curriculum design, teaching methods, and learning environments to better align with international standards and student needs. Furthermore, aviation education must emphasize both academic knowledge and practical competencies to ensure that graduates are well-prepared for the demands of the industry under the ASEAN University Network Quality Assurance (AUN-QA) framework.

Internship programs play a crucial role in bridging the gap between classroom learning and real-world practice. Through internships, students are exposed to actual working environments, allowing them to develop essential competencies such as communication skills, adaptability, problem-solving abilities, and teamwork (Kolb, 1984; Jackson, 2015). However, differences in cultural background, language proficiency, and learning experiences may influence the outcomes of internship programs, particularly between Thai and international students. Therefore, it is important to examine competency development and satisfaction levels among these groups to better understand their learning needs and to improve aviation education programs accordingly.

At present, the Aviation Personnel Development Institute offers two main programs: Aviation Business (Thai program) and Aviation Management (international program). While both programs aim to prepare students for careers in the aviation industry, they differ in academic orientation, with the former focusing on liberal arts and service-related competencies, and the latter emphasizing business and management perspectives. However, under the ASEAN University Network Quality Assurance (AUN-QA) framework, higher education institutions are required to ensure that students demonstrate not only theoretical knowledge but also practical competencies applicable to real-world situations (ASEAN University Network [AUN], 2020). As a result, both programs incorporate internship and cooperative education courses that require performance-based assessment by external organizations, such as airlines and airports. Previous studies have indicated that employer evaluations play a crucial role in assessing student competency development and identifying skill gaps, particularly in areas such as communication, problem-solving, and professional behavior (Jackson, 2015; International Civil Aviation Organization [ICAO], 2019). Therefore, as the researcher is directly involved in internship and cooperative education courses, this study aims to examine and compare the performance outcomes of students from both programs, in order to provide insights for curriculum improvement and better alignment with industry expectations.

2. Objective(s)

1. To examine the level of competency development and internship performance of Thai and international students in aviation programs.
2. To compare the differences in competency development and internship performance between Thai and international students.
3. To analyze the relationship between academic learning outcomes and internship performance as evaluated by airline supervisors.

3. Methodology

3.1 Research Design

This study employed a quantitative research design using a structured questionnaire as the primary research instrument. The questionnaire was distributed to employers or supervisors after students had completed 4 months of their internship period. This timing was considered appropriate as it allowed employers to observe and evaluate students' performance in real working environments.

The questionnaire was designed to assess key dimensions of student performance, including knowledge, skills, and personal characteristics, which are essential components of competency development in the aviation industry. These dimensions were evaluated based on employers' perspectives to ensure that the assessment reflects actual workplace expectations.

The implementation of this research was also aligned with institutional quality assurance requirements, particularly in preparation for the ASEAN University Network Quality Assurance (AUN-QA) assessment. Collecting systematic feedback from industry partners is essential for evaluating learning outcomes and improving curriculum design. Therefore, this study aims not only to assess student performance but also to support continuous quality improvement in aviation education programs.

3.2 Population and Sample

The population of this study consisted of aviation students enrolled in internship programs during the summer semester. The study focused on two academic programs: the Aviation Business program (Thai program) and the Aviation Management program (international program). The total number of students participating in the internship was 28, with 14 students from each program. Due to the relatively small number of students during the summer period, the researcher employed a census approach by including all available participants in the study, rather than selecting a sample. This approach ensured complete coverage of the target population and enhanced the accuracy of the findings.

Data were collected from employers or supervisors who directly oversaw the students during their internship. Each supervisor was requested to evaluate the performance of the assigned students using a structured questionnaire. Therefore, the data used in this study represent the full population of internship students and their corresponding workplace evaluations.

3.3 Research Instrument

The questionnaire was developed based on the KSC framework (Knowledge, Skills, and Characteristics), which is widely adopted in outcome-based education and aligned with the ASEAN University Network Quality Assurance (AUN-QA) guidelines (ASEAN University Network, 2020). In this study, the "Characteristics" dimension also incorporates ethical attributes, which are considered essential for professional performance in the aviation industry.

The questionnaire items were designed to assess students' performance in terms of knowledge application, practical skills, communication ability, and personal characteristics as evaluated by workplace supervisors. In addition, academic learning outcomes were measured using supervisor evaluations and student self-assessment records related to knowledge application, practical skills, communication ability, and professional behavior during the internship period.

Content validity was evaluated by a panel of experts in aviation education and related fields. The reliability of the instrument was tested using Cronbach's alpha, which yielded a value greater than 0.70, indicating acceptable internal consistency.

3.4 Data Collection

Data were collected from 15 workplaces and 28 supervisors who directly supervised the students during the internship period. Paper-based questionnaires were distributed and collected during the final week of the internship.

3.5 Data Analysis

Descriptive statistics, including mean and standard deviation, were used to examine the level of competency development and internship performance of aviation students.

To compare differences between groups, independent samples t-test was employed to determine whether there were statistically significant differences in competency development and internship performance between Thai and international students.

Furthermore, Pearson's correlation coefficient was used to analyze the relationship between students' academic learning outcomes and their internship performance as evaluated by airline supervisors. This analysis aimed to identify the strength and direction of the relationships between theoretical knowledge acquired from the programs and practical performance in real-world internship settings.

All statistical analyses were conducted using a statistical software package, and the level of significance was set at 0.05.

4. Result(s)

The results of this study are presented in accordance with the three research objectives. The findings include the level of competency development and internship performance, the comparison between Thai and international students, and the relationships between academic learning outcomes and internship performance.

Table 1: The Level of Competency Development and Internship Performance of Thai and International Students

Dimension	Thai (Mt)	Inter (Mi)	Interpretation
Job Performance	4.69	4.33	High
Problem Solving	5.00	2.70	High / Moderate
Adaptability & Creativity	4.30	4.16	High
Language Skills	4.06	4.44	High
Technology Skills	4.69	3.05	High / Moderate
Service Mind & Interpersonal Skills	5.00	4.44	Highest
Responsibility & Discipline	4.37	3.88	High
Overall Satisfaction	4.37	3.33	High / Moderate
Overall	4.56	3.79	High / Moderate

Table 1. The level of competency development and internship performance of Thai and international students as evaluated by workplace supervisors. The results indicate that Thai students achieved a higher overall mean score ($M_t = 4.56$) compared to international students ($M_i = 3.79$). Thai students were rated at a high level across all dimensions, while international students showed moderate to high levels of performance. The largest differences were observed in problem-solving skills and technology-related competencies, suggesting potential gaps in practical application and adaptation among international students.

Table 2: Comparison of competency development and internship performance between Thai and international students

Dimension	Thai (Mt)	Inter (Mi)	t	Sig.
Job Performance	4.69	4.33	2.10	0.040
Problem Solving	5.00	2.70	6.50	0.000
Adaptability & Creativity	4.30	4.16	0.85	0.400
Language Skills	4.06	4.44	-1.75	0.090
Technology Skills	4.69	3.05	4.80	0.000
Service Mind & Interpersonal	5.00	4.44	2.95	0.006
Responsibility & Discipline	4.37	3.88	2.60	0.015
Overall Satisfaction	4.37	3.33	3.90	0.001
Overall	4.56	3.79	4.85	0.000

The results indicate that Thai students demonstrated higher levels of competency development and internship performance than international students across most dimensions. The overall mean score of Thai students ($M_t = 4.56$) was significantly higher than that of international students ($M_i = 3.79$). The t-test results revealed statistically significant differences in several dimensions ($p < 0.05$), including problem-solving skills, technology skills, service mind, responsibility, and overall satisfaction. However, no significant differences were found in adaptability and language skills ($p > 0.05$). These findings suggest that although both groups performed at generally high levels, Thai students showed stronger performance in practical and operational competencies.

Table 3: The Relationship between Academic Learning Outcomes and Internship Performance as Evaluated by Airline Supervisors

Variables	r	Sig. (2-tailed)	Interpretation
Thai Program: Academic Learning → Internship Performance	0.78	0.000	Strong positive correlation

International Program: Academic Learning → Internship Performance	0.65	0.001	Moderate to strong positive correlation
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Table 3 presents the relationship between academic learning outcomes and internship performance as evaluated by airline supervisors. The results indicate that there is a positive and statistically significant relationship in both programs. For Thai students, a strong positive correlation was found ($r = 0.78$, $p < 0.05$), indicating that academic learning outcomes are highly associated with internship performance. Similarly, international students also showed a moderate to strong positive relationship ($r = 0.65$, $p < 0.05$). These findings suggest that knowledge and skills acquired from the academic programs contribute positively to students' performance in real-world internship settings.

5. Qualitative Findings

Content analysis of open-ended responses from 28 supervisors revealed themes related to communication skills, workplace adaptability, service mind, and cultural adjustment among students. These qualitative findings provide deeper insights into students' workplace behavior, communication challenges, adaptability, and cross-cultural interaction within aviation internship environments.

The qualitative findings from Part 3 of the questionnaire revealed that Thai students demonstrated strong service mind, interpersonal skills, and professional behavior, while international students showed strengths in responsibility and adaptability but faced challenges in problem-solving, workplace communication, and cultural adjustment.

6. Discussion and Conclusion

The findings indicate that Thai students demonstrated higher levels of practical competency and internship performance, particularly in hands-on skills and workplace responsibility, while international students showed strengths in language proficiency and adaptability but faced challenges in problem-solving and communication. These results align with prior studies suggesting that local students adapt more effectively to workplace environments due to their familiarity with organizational culture and communication norms.

The study supports the concept of experiential learning, emphasizing the importance of practical experience in developing professional competencies. Cultural background and communication styles were found to influence internship outcomes, particularly among international students, who may require additional support in language use and cultural adaptation within the Thai higher education context.

Under the AUN-QA framework, students are expected to demonstrate both knowledge and practical competencies in real-world settings. Therefore, aviation programs should strengthen practical training, workplace readiness, and cross-cultural competencies through targeted support mechanisms such as language training, cross-cultural communication workshops, and simulation-based learning. At the same time, Thai students should be encouraged to further develop foreign language proficiency and global competencies to enhance their readiness for international aviation careers.

This study is limited by its small sample size and specific internship context, which may affect generalizability. This study should be interpreted cautiously because the findings were

obtained from a small and context-specific sample within a single institutional setting. In addition, differences between Thai and international students may be influenced by contextual factors such as language proficiency, cultural background, communication styles, and workplace environment rather than nationality alone.

Future research should involve larger samples across multiple institutions and explore additional factors such as cross-cultural adaptation and learning behaviors. Overall, the findings confirm a positive relationship between academic learning outcomes and internship performance and highlight the importance of integrating practical training, industry collaboration, and intercultural competency development to meet the evolving demands of the aviation industry.

7. References

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