



Teaching Strategies at an Aerospace University for Airline Management Students: A Case Study

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Abstract

This case study explores the effectiveness of teaching strategies in an educational context, focusing on their impact on student learning outcomes and engagement. The study examines various teaching methods, including hands-on activities, online platforms, and interactive simulations, to understand how each strategy contributes to the enhancement of students' understanding and retention. Through interviews and thematic analysis of participant feedback, the research investigates the alignment of these methods with the evolving demands of future professions, particularly within the aerospace sector. The study follows seven phases: case selection, securing permissions, ensuring participant confidentiality, initiating data collection, documenting interviews, obtaining participant feedback on field notes, and systematically coding and storing data. The participants, students pursuing degrees in Airline Management, express a preference for hands-on activities and practical training, highlighting their role in preparing students for real-world challenges in the aviation industry. Additionally, the study explores how personal motivators, such as passion and family influence, shape students' views on the effectiveness of teaching methods. The research also examines the role of blended learning, combining online forums and live sessions, and evaluates its effectiveness in managing students' time and personal commitments. The findings provide valuable insights into the relationship between teaching strategies and student engagement, offering guidance for educators, curriculum designers, and institutions aiming to improve teaching methods and better prepare students for future challenges in the aerospace industry.

Keywords: *teaching strategies, airline management, aviation industry*

Introduction

The dynamic nature of globalization has reshaped contemporary educational discussions, focusing on lifelong learning and the evolving role of education as a profession. The transfer of expertise to education, along with the development of learner competencies, has become central to contemporary education systems. Jobs now easily cross borders, and multinational corporations are increasingly willing to relocate jobs for strategic advantages, influenced by factors like cost, market access, and regulatory considerations (CHED, 2013). To respond to these changes, the Commission on Higher Education (CHED) introduced Outcome-Based Education (OBE), a model that organizes educational systems around core competencies that all learners must acquire in order to meet professional standards by graduation. This approach emphasizes assessments that reflect the competencies needed for future success.

One such program that adheres to these principles is the Bachelor of Science in Airline Management, which aims to equip students with a well-rounded education combining theory and practical skills. The program's outcome is to prepare graduates with the necessary competencies for a successful career in the aviation industry, fostering both professional expertise and character development.

Teaching is a reflective practice, where each lesson offers an opportunity for improvement based on what worked, what didn't, and why. Teachers are encouraged to evaluate their approaches, consider alternative strategies, and continually refine their methods to enhance student learning (Bregazzi, 2015). This ongoing process of reflection and adaptation is vital in responding to the diverse learning needs of students.

The issue under investigation stems from observed variations in teaching strategies within the Bachelor of Science in Airline Management program. The goal of this study is to understand these strategies in-depth and propose a Development Plan to enhance teaching effectiveness.

Research Question/ Objectives

This study aimed to answer the following questions:

1. What are the primary teaching strategies used in the instruction of airline management students at an aerospace university?
2. How do these strategies align with the demands and standards of the aviation industry?
3. What impact do the various teaching methods have on student academic performance, skill development, and career readiness, as reflected in their learning outcomes and post-graduation employment?
4. What are the perceptions and experiences of faculty members and students regarding the effectiveness and relevance of the employed teaching strategies?
5. How can these insights inform improvements in the teaching approach for airline management students?

Methodology

This study employed a qualitative research approach, which is particularly suitable for capturing participants' perspectives and gaining an in-depth understanding of the issue being studied (Creswell, 2013). The following sections outline the research design, setting, sampling, participants, data collection, analysis, and trustworthiness procedures.

Research Design

This research used a single case study design. According to Yin (2003), a case study approach is appropriate when: (a) the research seeks to answer "how" and "why" questions, (b) the actions of participants cannot be manipulated, (c) contextual factors are believed to influence the phenomenon being studied, or (d) the boundary between the phenomenon and its context is unclear.

Participants/Respondents

Purposive Sampling was used to select participants. The target group consisted of eight (8) students enrolled in the Bachelor of Science in Airline Management program. The researchers coordinated with the Program Head to identify students who met the following criteria: (a) enrolled in the BS AM program for the 2023-2024 academic year, (b) in their third year of study, and (c) preferably fluent in English.

Instruments

A semi-structured interview guide, which allows for focused yet flexible data collection, was used in this study (Bhandari, 2023). The researchers developed the interview protocol, which was followed during face-to-face interviews with the participants. A structured sequence was followed during interviews to ensure consistency and to gather reliable data. After collecting the qualitative data, the researchers performed thematic analysis and presented the findings as a narrative. This approach follows the typical research process of identifying a problem, formulating research questions, collecting and analyzing data, and interpreting the results (Creswell, 2019).

Procedure

Creswell (2012) outlined seven phases for data collection: selecting cases based on predetermined criteria, obtaining necessary permissions, assuring participants of confidentiality, initiating data collection promptly, documenting interview records, discussing field notes with participants, and coding and storing data systematically. These steps were adhered to in this study. Data were collected through interviews, using paper questionnaires as the medium. The participants were third-year students from the Airline Management program, and their identities were kept anonymous to maintain confidentiality.

Data Analysis

Data analysis in qualitative research involves identifying patterns and themes from the data (Daniels, 2012). The analysis process begins with organizing the data, followed by reading and reflecting on the responses to identify common themes (Creswell, 2013). The coding process involved organizing responses by question, noting key concepts, and categorizing them. In the final steps, the themes were connected to narrative sequences, and the data's meaning was interpreted.

Results

Upon reviewing the transcript from the detailed interview regarding the teaching strategies at an Aerospace University for Airline Management students, the researchers identified the following themes: Basic Role Perceptions and Experience, Career Influence and Personal Goals, Active Learning Strategies, Importance of Professional Development, and Students' Training and First-Hand Experience.

Theme 1: Basic Role Perceptions and Experience

The basic role of a student is centered around being an engaged participant in their educational journey. These perceptions are crucial for creating a positive and effective learning experience. Educators and institutions are essential in reinforcing these perceptions, guiding students with a sense of purpose and responsibility. Students often see their educational roles as preparation for future careers or academic advancement, understanding the connection between their studies and future opportunities. They view themselves as learners focused on acquiring knowledge, skills, and understanding across various fields.

Participant A described,

"My role at Indiana Aerospace is just like any other basic student role. The experience has its challenges, but nothing out of the ordinary for a student."

Additionally, Participant B added,

"I'm a third-year student working toward my Bachelor's in Airline Management."

Participant C shared:

"I'm studying Airline Management, and my experience so far has included Cabin Crew Training as part of the course."

Participant D mentioned:

"Hi, I'm Aya, a third-year student in Airline Management. My experience here has been positive."

Participant E remarked:

"I'm Dian, a third-year student in Airline Management. Since face-to-face classes resumed, I've had the chance to experience practical training."

Participant F said:

"I'm Nicole, and my journey at the Aerospace University began with a passion for aviation. Being an Airline Management student connects me to an industry that excites me."

Participant G noted:

"I'm a third-year student in Airline Management. My experiences have been more than I expected, especially when face-to-face classes resumed."

Participant H stated:

"I'm a third-year student at Indiana Aerospace University, studying Airline Management. My experience has been good."

Theme 2: Career Influence and Personal Goals

The connection between career influences and personal goals is dynamic and complex. Career influences, including societal expectations, family backgrounds, and external pressures, can significantly impact career choices. Personal goals, on the other hand, are shaped by individual values, interests, and motivations. Some students align their goals with external influences, while others follow a path driven by their personal passions.

Participant A revealed:

"Becoming an airline staff was my parents' dream, and over time, it became mine as well. What keeps me motivated is knowing how hard my parents work to pay for my education."

Participant B shared:

"My motivation comes from my love for being part of an industry that connects people and explores new places. It's an adventurous field where I face new challenges every day."

Participant C said:

"My motivation comes from my passion for aviation, which was influenced by role models I look up to."

Participant D expressed:

"Initially, this wasn't my goal, but my sister, who studied Aviation here, influenced me. This career is also something my mother dreams for me, which is why I'm pursuing it."

Participant E stated:

"I chose this course because the aviation industry offers many job opportunities."

Participant F mentioned:

"I've wanted to pursue aviation since I was a child. Watching planes in the sky sparked a fascination that's only grown over time."

Participant G explained:

"My aunt inspired me to pursue this field. At first, I wasn't sure, but I now enjoy what I'm doing as a student."

Participant H shared:

"My mother was an airline manager, and she has always been my role model. I aspire to follow in her footsteps."

Theme 3: Active Learning Strategies

The methods and strategies used by the university in teaching students are important in shaping how knowledge and skills are developed. A balance between theoretical and practical learning is essential for evaluating the effectiveness of the educational program and ensuring students are prepared for industry demands.

Participant A discussed:

"As I mentioned earlier, hands-on training is very effective. It helps us apply what we learn in real-life situations, both inside and outside the classroom."

Participant B shared:

"Interactive and practical hands-on experiences enhance our understanding and keep students engaged with industry practices."

Participant C explained:

"It's been very beneficial for me because each student learns differently. The blended learning approach lets us learn at our own pace, making it easier to adapt to what works best for us."

Participant D commented:

"Interactive and hands-on experiences help us understand the material better and ensure we stay aligned with industry standards."

Participant E said:

"Not just me, but most of the AM students prefer hands-on activities instead of online classes. We're more engaged and eager to learn through practical activities."

Participant F remarked:

"The school should improve facilities to support A.M students who prefer hands-on activities, especially for our major subjects, rather than learning online."

Participant G expressed:

"The school needs more facilities to accommodate A.M students. We prefer in-person learning, particularly for major topics."

Participant H added:

"Most students prefer hands-on activities because they are more engaging than online learning."

Theme 4: Importance of Professional Development

Professional development is crucial for career growth, as continuous learning and skill improvement are vital for adaptability and long-term success. It demonstrates initiative and ambition, which are valued by employers and provide opportunities for career advancement.

Participant A responded:

"I don't think we've discussed anything like that yet."

Participant B explained:

"Students understand the teaching methods, but there's always room for improvement to make things more efficient."

Participant C said:

"The flexible schedule allows us to work while studying, but the downside is that many instructors aren't present during face-to-face classes, which affects our learning."

Participant D commented:

"Although the teaching methods help us improve, we need more instructors who can help us better."

Participant E mentioned:

"Instructors should be more efficient in teaching to ensure we're fully prepared for our careers. More practical training aligned with our field would be beneficial."

Participant F expressed:

"Some A.M. students feel they didn't learn much during online classes. They get bored easily and prefer more hands-on training."

Participant G noted:

"More hands-on activities would have helped us learn more effectively."

Participant H concluded:

"Improving teaching strategies would make a significant difference in helping us prepare for our careers."

Theme 5: Students' Training and First-Hand Experience

Experiential learning is important for students, as it allows them to gain real-world insights and hands-on experience. Integrating first-hand experiences into training enriches the learning environment and prepares students to apply their academic knowledge in practical situations.

Participant A suggested:

"As I recommended earlier, hands-on training is important. It would be a good addition to the school's offerings."

Participant B stated:

"We should receive more training directly related to our course and future careers, helping us develop the skills necessary for the pressure we'll face in the aviation industry."

Participant C shared:

"My advice would be to take up Airline Management and actively engage in activities related to the course. This helps you gain more practical knowledge and prepares you beyond what the school offers."

Participant D commented:

"I'd recommend more training, both within and outside the school, to provide students with first-hand experience. Instructors should be more open to giving us opportunities to engage."

Participant E mentioned:

"Instructors need to be more effective in their teaching. We need more practical training that aligns with our field to gain the experience we need."

Participant F emphasized:

"More internships and cooperative education opportunities would help bridge the gap between school learning and real-world experiences, preparing us for the challenges in the airline industry."

Participant G expressed:

"To be better prepared for our future jobs, instructors must be more efficient and provide more hands-on instruction to help us build the necessary experience."

Participant H concluded:

"Instructors should maximize teaching strategies to keep students motivated and provide more practical training."

According to Barbara Šteh & Jana Kalin (2012), practical training is essential for acquiring real-world experience, which helps students connect theory to practice and gain valuable work experience.

Conclusions

Based on the study's findings and the responses from the eight participants, the following conclusions were drawn:

The research examines the teaching methods used by an aerospace university for its Airline Management students, providing valuable insights into key themes. These themes, as reflected in the participants' responses, capture the complex relationship between educational strategies and the preparation of students for careers in the airline industry.

The study also enhances the understanding of teaching practices in aerospace education, setting the stage for continuous improvements in curriculum design and teaching methods. By addressing the specific needs and expectations of Airline Management students, the research contributes to the broader goal of preparing future aviation professionals for successful careers in the ever-evolving aerospace sector. The participants' call for more practical training aligns with their desire for an education that balances theoretical knowledge with hands-on experience, which is vital for success in the dynamic aviation industry.

To address this, the university should consider integrating more hands-on activities into the curriculum to offer students greater opportunities for experiential learning. Responding to these expressed needs would enhance the educational experience for Airline Management students, ensuring they are well-equipped to tackle the challenges of their future careers.

Finally, conducting multi-center studies across various aerospace universities would provide a broader perspective on teaching strategies in different institutional settings. Including the viewpoints of instructors alongside students could offer a deeper understanding of how teaching strategies function within aerospace education. Exploring the long-term effects of different teaching strategies on graduates' careers in the aerospace industry would provide valuable insights into their effectiveness. Additionally, incorporating emerging technologies and fostering collaborations between students and instructors could further enhance the educational experience in aerospace programs. Future research on these issues could use this study as a foundation to expand the available data on teaching strategies at Indiana Aerospace University.

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