



Bridging The Gap Between Tourism Science And Vocational Education: Strategies To Increase Industry Relevance In Indonesia

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ABSTRACT

Indonesia's tourism industry is growing rapidly, but the gap between tourism science and vocational education continues to hinder the development of quality human resources. This journal examines strategies to bridge this gap and increase industry relevance, focusing on the Indonesian context. A comprehensive literature review identified several key strategies, including: Computational Social Science Integration, Industry-University Collaboration, Executive-in-Residence Models, and Industry Engagement in Curriculum Development. The effective implementation of these strategies can increase the relevance of tourism vocational education to the industry, producing a skilled and work-ready workforce that contributes to the growth and sustainability of Indonesia's tourism industry.

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INTRODUCTION

Indonesia's tourism industry has experienced rapid growth in recent years, becoming one of the main contributors to the national economy. In 2023, the tourism sector contributes 6.1% to Indonesia's GDP and is expected to continue to increase in the coming years (Ministry of Tourism and Creative Economy of the Republic of Indonesia, 2023). This growth, however, brings new challenges. One of the main challenges is ensuring the availability of skilled and qualified human resources to meet the growing needs of the industry.

Vocational education plays an important role in providing skilled labor for the tourism industry. However, there is often a gap between the vocational education curriculum and industry needs. This gap can lead to vocational education graduates not having the skills and knowledge needed to get a job in the tourism industry.

This study aims to examine strategies to bridge the gap between tourism science and vocational education in Indonesia. This literature review will analyze ten recent studies addressing this topic and identify key strategies that can be applied to enhance the industry relevance of tourism vocational education programs.

Tourism is one of the most important economic sectors in Indonesia. In 2023, the tourism industry contributes 6.1% to Indonesia's GDP and employs more than 15 million people (Ministry of Tourism and Creative Economy of the Republic of Indonesia, 2023). The industry is expected to continue to grow in the coming years, with a target of 30 million tourists by 2030 (Ministry of Tourism and Creative Economy of the Republic of Indonesia, 2023).

The growth of the tourism industry brings new challenges, one of which is ensuring the availability of skilled and qualified human resources. Vocational education plays an important role in providing skilled labor for the tourism industry. However, there is often a gap between the vocational education curriculum and industry needs.

Previous research has identified several factors contributing to the gap between tourism science and vocational education. These factors include:

First, Lack of industry involvement in the development of vocational education curricula (Lampoltshammer & Scholz, 2023; Babalola, 2019). Second, the skills and knowledge taught in vocational education programs are not always in accordance with industry needs (Maruanaya, 2021; Dixon, 2017). Third, Lack of opportunities for vocational education students to gain work experience in the industry (Zhang et al., 2022; Al-Dabagh et al., 2017). Fourth, The gap between tourism science and vocational education can have a negative impact on vocational education graduates. Graduates who do not have the skills and knowledge needed to get a job in the tourism industry may struggle to get a job or may have to work for a low salary. This can have a negative impact on their career development and on the Indonesian economy as a whole.

The purpose of this study is to examine strategies to bridge the gap between tourism science and vocational education in Indonesia. This literature review will analyze ten recent studies addressing this topic and identify key strategies that can be applied to enhance the industry relevance of tourism vocational education programs.

This study uses the literature review method to analyze ten recent studies that address the topic of the gap between tourism science and vocational education in Indonesia. The analyzed research was published in leading academic journals in the fields of tourism, education, and human resource development.

The literature review identified several key strategies that can be applied to bridge the gap between tourism science and vocational education in Indonesia. These strategies can be categorized into four main groups:

- a) Social Science Integration of Computation

- b) Industry-University Collaboration
- c) Executive-in-Residence Model
- d) Industry Involvement in Curriculum Development

RESEARCH METHOD

Types of Research

This study uses **literature review** method to examine strategies to bridge the gap between tourism science and vocational education in Indonesia. Literature review is a systematic and thorough research method to analyze and evaluate existing literature on a particular topic. This method allows researchers to collect and synthesize information from a variety of sources, including journal articles, books, reports, and websites.

Data Sources

The main data sources for this study are **scientific journal articles** published in leading academic journals in the fields of tourism, education, and human resource development. The journals selected for this study have gone through a rigorous selection process to ensure the quality and relevance of their content.

In addition to journal articles, the study also utilized other **secondary data sources**, such as **books**, **reports**, and **websites** from related organizations, such as the Ministry of Tourism and Creative Economy of the Republic of Indonesia, the Central Bureau of Statistics, and vocational education institutions. These secondary data sources are used to enrich information and provide broader context about the research topic.

Data Analysis Methods

This study used **qualitative analysis** methods to analyze the data collected. Qualitative analysis is a research method that focuses on understanding the meaning and interpretation of data that is non-numeric. In this study, qualitative analysis was carried out by:

- a) **Read and understand carefully journal** articles, books, reports, and other secondary data sources.
- b) **Identify key themes** that emerge from the data collected.
- c) **Categorize these themes** based on their similarities and relatedness.
- d) **Analyze the relationship** between these themes and develop a theoretical framework for understanding the gap between tourism science and vocational education.
- e) **Draw conclusions** and recommendations based on data analysis.

Inclusion and Exclusion Criteria

To ensure the quality and relevance of the data, the study applied the following inclusion and exclusion criteria:

Kriteria Inklusi:

- a) Journal articles are published in leading academic journals in the fields of tourism, education, and human resource development.
- b) Journal articles discuss the topic of the gap between tourism science and vocational education.
- c) Journal articles have been published within the last 10 years (2013-2023).
- d) Journal articles are written in English or Indonesian.

Exclusion Criteria:

- a) Journal articles are not relevant to the research topic.
- b) Journal articles do not have adequate methodological quality.
- c) Journal articles are not available online or in libraries.

Validation and Reliability

To ensure the validity and reliability of the study, the following steps are carried out:

- a) **Triangulation of data sources:** Data is collected from a variety of different sources to ensure diversity of perspectives and increase the validity of findings.
- b) **Recheck data:** Data is corrected by rereading and double-checking its validity to ensure accuracy.
- c) **Seeking feedback:** Research findings are shared with experts in tourism and education to get feedback and suggestions to improve validity and reliability.

Research Ethics

This research was conducted by upholding the principles of research ethics, including:

- a) **Honesty and integrity:** Researchers ensure that all information presented in the study is accurate and impartial.
- b) **Clarity and transparency:** Researchers clearly explain the research methodology and data sources used.
- c) **Respect for privacy:** Researchers do not disclose personal information of individuals or organizations involved in research.
- d) **Copyright:** Researchers respect the copyright of all data sources used.

Research Limitations

This study has several limitations, namely:

- a) **Number of data sources:** This study used only 10 journal articles as the main data source. Further research with more and more diverse data sources can provide a more comprehensive understanding of the gap between tourism science and vocational education.
- b) **Focus on the Indonesian context:** This study only focuses on the Indonesian context. Further research in other countries can provide insight into how these gaps are addressed in other countries and how best practices can be adapted for the Indonesian context.
- c) **Research method:** This study used literature review method

RESULTS AND DISCUSSIONS (10 PT)

Result

The literature review identified several key strategies that can be applied to bridge the gap between tourism science and vocational education in Indonesia. These strategies can be categorized into four main groups:

1. Computational Social Science Integration

Computational social science is an interdisciplinary field that combines computer science, social sciences, and humanities to study human behavior in a digital world. The integration of computational social sciences into the tourism vocational education curriculum can help students develop skills needed in industries that are increasingly dependent on technology, such as:

- a) **Data analysis:** Analyze traveller and market data to develop effective marketing strategies.
- b) **Social media:** Manage social media to promote travel destinations and engage with travellers.
- c) **Web development:** Building websites and mobile apps to enhance the traveller experience.

2. Industry-University Collaboration

Collaboration between the tourism industry and vocational education institutions can help ensure that the vocational education curriculum is relevant to industry needs. This collaboration can be done in various ways, such as:

- a) **Internship:** Provide opportunities for students to intern in tourism companies and gain real work experience.
- b) **Seminars and workshops:** Invite industry experts to give seminars and workshops to students on the latest trends in the tourism industry.
- c) **Industry advisory board:** Establishes an industry advisory board made up of tourism industry representatives to provide input on the vocational education curriculum.

3. Executive-in-Residence Model

The Executive-in-Residence model is a professional development program that brings industry executives to vocational education institutions to teach and mentor students. This model can help students develop the skills and knowledge needed to succeed in the tourism industry.

4. Industry Involvement in Curriculum Development

The tourism industry should be actively involved in the development of vocational education curricula. This involvement can be done through various means, such as:

- a) **Curriculum review:** Invite industry representatives to review the vocational education curriculum and provide feedback.
- b) **Development of learning materials:** Working closely with the tourism industry to develop learning materials relevant to industry needs.
- c) **Competency assessment:** Work closely with the tourism industry to develop a competency assessment that measures students' ability to work in the tourism industry.

Table 1. Literature Review

No	Journal	Key Findings	Implication
1	Bridging Disciplinary Divides through Computational Social Sciences and Transdisciplinarity in Tourism Education in Higher Educational Institutions: An Austrian Case Study	The integration of computational social science into tourism education can bridge the gap by combining modules such as network science, knowledge management, and data science to enhance the relevance of industry and vocational education.	It is necessary to incorporate computational and transdisciplinary social science modules into the tourism education curriculum in Indonesia.
2	Tourism & Hospitality Education in Nigeria: Strategies for Bridging the Issues of Curriculum Gap	Communication, multi-lingual, operational, and computational skills are required in industry.	It needs to develop a tourism education curriculum that focuses on the skills the industry

	for Industry Fit and Development	Graduates lack confidence in employability, especially in professional management skills.	needs and increases graduates' confidence in their employability.
3	Bridging competency gap between vocational school and industry by adopting the German BLok platform	Online platforms such as BloK can facilitate communication and coordination between vocational schools and industry, enabling the exchange of information and the development of industry-relevant skills.	It is necessary to adopt online platforms such as BloK to facilitate collaboration between vocational schools and the tourism industry in Indonesia.
4	Bridging the Gap: An Exploratory Study on Classroom-Workplace Collaborations	Collaboration between vocational schools and industry can help students develop the skills and knowledge needed to succeed in the tourism industry.	Need to increase collaboration between vocational schools and the tourism industry in Indonesia.
5	Curriculum Construction and Practice of Tourism Marketing Based on Industry-University Cooperation	Industry involvement in the development of the tourism education curriculum can help ensure that the curriculum is relevant to industry needs.	Need to increase industry involvement in the development of tourism education curriculum in Indonesia.
6	Bridging the Gap between Hospitality Higher Education Graduates and the Market Requirements	Hospitality education graduates need to have the skills and knowledge that the industry requires, such as management, communication, and foreign language skills.	It is necessary to strengthen the hospitality education curriculum in Indonesia to ensure that graduates have the skills and knowledge that the industry needs.
7	Using Real Life Case Studies	The use of real case studies in tourism education can help students develop the skills and knowledge needed to succeed in the tourism industry.	Need to develop and use real case studies in tourism education in Indonesia.
8	The influence of tourism and hospitality students' perceived effectiveness of outcome-based education on their VUCA skills	Outcome-based education can help students develop the VUCA skills needed to succeed in the uncertain,	Need to implement outcome-based education in tourism education in Indonesia

		complex, ambiguous, and volatile tourism industry.	to help students develop VUCA skills.
9	Issues and challenges in tourism and hospitality education: case of indonesia	Tourism education in Indonesia faces several challenges, such as lack of relevance of the curriculum to industry needs, lack of resources, and lack of cooperation between vocational schools and industry.	It is necessary to overcome these challenges to improve the quality of tourism education in Indonesia.
10	The Disparity between the Tourism Education/Training and the Needs of the Tourism and Hospitality Industry Manpower Needs	The gap between tourism education and industry needs needs to be bridged to ensure that tourism education graduates have the skills and knowledge needed to succeed in the tourism industry.	It is necessary to implement the strategies identified in this study to bridge the gap between tourism education and industry needs in Indonesia.

Table 1.2 Results and Discussion with Literature Review

Strategy	Result	Library Survey
Social Science Integration of Computation	Students can develop skills needed in an industry that is increasingly dependent on technology.	Lampoltshammer & Scholz (2023)
Industry-University Collaboration	The vocational education curriculum is relevant to industry needs.	Maruanaya (2021); Dixon (2017)
Executive-in-Residence Model	Students develop the skills and knowledge needed to succeed in the tourism industry.	Zhang et al. (2022); Al-Dabagh et al. (2017)
Industry Involvement in Curriculum Development	The vocational education curriculum is aligned with industry needs.	Zhang et al. (2022); Al-Dabagh et al. (2017)

Discussion

The implementation of the strategies identified above can help increase the industry relevance of tourism vocational education programs in Indonesia. This can result in a skilled and work-ready workforce that contributes to the growth and sustainability of Indonesia's tourism industry.

However, it is important to note that implementing these strategies will not be easy. There are several challenges that need to be overcome, such as:

- a) **Lack of resources:** Many vocational education institutions do not have sufficient resources to implement these strategies, such as qualified teaching staff and advanced technology.
- b) **Lack of industry support:** Some tourism companies may be reluctant to collaborate with vocational education institutions for fear of competition from graduates.
- c) **Cultural change:** A cultural change is needed in vocational education institutions to focus more on industry needs.

Despite the challenges, the potential benefits of implementing these strategies are enormous. Governments, the tourism industry, and vocational education institutions must work together to address these challenges and ensure that tourism vocational education programs are relevant

CONCLUSION

Indonesia's tourism industry is growing rapidly, but the gap between tourism science and vocational education continues to hinder the development of quality human resources. This journal examines strategies to bridge this gap and increase industry relevance, focusing on the Indonesian context. A comprehensive literature review identified several key strategies, including: Computational Social Science Integration, Industry-University Collaboration, Executive-in-Residence Models, and Industry Engagement in Curriculum Development. The effective implementation of these strategies can increase the relevance of tourism vocational education to the industry, producing a skilled and work-ready workforce that contributes to the growth and sustainability of Indonesia's tourism industry.

Key Conclusions:

- a) The gap between tourism science and vocational education is a major challenge for Indonesia's tourism industry.
- b) The implementation of the strategies identified in this study can help bridge this gap and increase the industry relevance of tourism vocational education programs.
- c) The government, tourism industry, and vocational education institutions must work together to address these challenges and ensure that tourism vocational education programs in Indonesia produce graduates who have the skills and knowledge needed to succeed in the tourism industry.

Recommendations:

- a) The government needs to allocate more resources to support tourism vocational education programs, including teaching staff training, infrastructure development, and the provision of advanced technology.
- b) The tourism industry needs to be more actively involved in developing the tourism vocational education curriculum and providing internship opportunities to students.
- c) Vocational education institutions need to focus more on developing the skills and knowledge that the tourism industry needs and providing opportunities for students to learn in a real environment.

Bridging the gap between tourism science and vocational education is an important task to ensure a sustainable future for Indonesia's tourism industry. By implementing the strategies identified in this study, the government, tourism industry, and vocational education institutions can work together to create tourism vocational education programs that are relevant to the industry and produce graduates who are ready for work and able to contribute to the growth and sustainability of the Indonesian tourism industry.

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