CRITICAL ANALYSIS OF LEARNING BARRIERS AND THE QUALITY OF TOURISM EDUCATION OUTPUT AT SMKN 1 CIKEDUNG INDRAMAYU

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Abstract:

This study analyzes learning barriers and the quality of tourism education output at SMKN 1 Cikedung Indramayu. This qualitative study uses a case study approach with data collection techniques through in-depth interviews, participatory observation, and document analysis. The research subjects consist of 15 informants, including the school principal, productive teachers, students, and alums who have worked in the tourism industry. The results of the study reveal three main categories of barriers: (1) infrastructure barriers, including limited practical laboratories, inadequate equipment, and restricted internet access; (2) human resource barriers, such as the need to improve teacher competencies, an unfavorable teacher-student ratio, and a shortage of industry experts; (3) curriculum and industry barriers, including a gap between the curriculum and industry needs, limited collaboration with the business world, and a lack of quality internship programs. The quality of output indicates that the absorption rate of graduates in the tourism industry is only 35%, with competencies that still require additional training. This study recommends improving practical facilities, developing teacher competencies through industry certification programs, revising industry-based curricula, and strengthening partnerships with tourism stakeholders.

Keywords: Learning Barriers, Tourism Industry, Output Quality, Tourism Education, Vocational High School

INTRODUCTION

Vocational tourism education represents a strategic educational framework designed to prepare students with competencies aligned with the dynamic needs of the tourism industry. According to the Indonesian Ministry of Education and Culture Regulation No. 34 of 2018, vocational education aims to enhance intelligence, knowledge, personality, moral character, and skills for independent living and further education in line with their vocational field. The tourism education curriculum at vocational high schools (SMK) is based on the SMK Skill Spectrum published by the Directorate of SMK Development, focusing primarily on Travel Business (UPW) and Hospitality programs with competencies covering excellent service, effective communication, travel business management, and hotel operations.

The strategic importance of vocational tourism education cannot be understated in preparing skilled human resources to support Indonesia's rapidly growing tourism industry. Indonesia's tourism sector contributes significantly to the national Gross Domestic Product (GDP) and employs millions of workers nationwide. This substantial economic contribution underscores the critical need for quality workers equipped with industry-relevant skills in the tourism sector.

Vocational high schools (SMK) as vocational education institutions bear the responsibility of producing graduates who are ready to work and competent in their respective fields. However, empirical evidence suggests a persistent gap between the competencies of SMK graduates and the

actual needs of the tourism industry. Research has shown that vocational education faces significant challenges, including high unemployment rates among graduates, inconsistent policies, inadequate teacher competencies, and weak industry support (Heykal et al., 2024).

Current State of Vocational Education in Indonesia. The Indonesian government has been actively working to improve vocational education through various strategies and programs, including curriculum adjustments, teacher competence upgrading, and resource allocation efforts. Despite these efforts, vocational school graduates continue to have the country's highest unemployment rate, which is triple that of elementary-level graduates, indicating a fundamental mismatch between education and employment opportunities.

SMKN 1 Cikedung Indramayu serves as one of the vocational schools in West Java offering comprehensive tourism programs. The school confronts various challenges in producing high-quality graduates ready for absorption into the tourism industry. Initial observations reveal industry complaints regarding graduate competence, low absorption rates, and various obstacles in the learning process that require systematic investigation and resolution.

Theoretical Framework of Learning Barriers. Learning barriers in vocational education can be systematically categorized into several critical aspects that impact educational outcomes. First, infrastructure barriers encompass limited practical facilities, inadequate laboratories, and restricted access to technology that directly affect hands-on learning experiences. These challenges are particularly pronounced in developing countries where resource allocation for educational infrastructure remains constrained.

Second, human resource barriers include teachers' competencies that may not meet current industry standards, unfavorable teacher-student ratios that limit individualized attention, and insufficient involvement of industry practitioners in the learning process. Teacher competence upgrading has been identified as a critical component of vocational education improvement initiatives.

Third, curriculum and industry collaboration barriers represent gaps between academic curricula and industry needs, a lack of quality internship programs, and weak collaboration with the business and industrial sectors (DUDI). Stakeholder analysis reveals significant challenges in developing tourism curricula that effectively bridge academic learning with industry requirements.

Fourth, institutional management barriers include inadequate planning processes, weak coordination mechanisms, and incomplete evaluation systems that hinder effective program implementation and continuous improvement.

Quality Indicators for Vocational Education Output. The quality of vocational education output can be comprehensively measured through several key performance indicators. First, the absorption rate of graduates by industry demonstrates the extent to which graduates are successfully integrated into the workforce, serving as a primary indicator of program effectiveness. Second, the alignment of graduates' competencies with industry needs, as reflected in employer assessments of graduate performance, provides crucial feedback on curriculum relevance.

Third, the waiting time for graduates to secure employment indicates their competitiveness in the job market and the immediate applicability of their skills. Research has shown that SMK graduates typically have advantages in securing initial employment compared to general education graduates, entering the workforce earlier due to their specialized skills.

Fourth, industry satisfaction levels with graduate performance, measured through comprehensive graduate user satisfaction surveys, provide qualitative insights into educational effectiveness. Fifth, graduates' ability to continue their education to higher levels or develop

entrepreneurial ventures demonstrates the versatility and foundational strength of their vocational education.

METHODS

This study employs a qualitative approach utilizing a case study methodology to provide an in-depth exploration of learning barriers and tourism education output quality in a specific institutional context. A qualitative approach was selected because it enables a comprehensive investigation of complex phenomena within their natural settings, allowing for a detailed understanding of the relationships between various factors affecting educational outcomes.

Research Setting and Timeline. The research was conducted at SMKN 1 Cikedung Indramayu, West Java, during the period from February to May 2024. This location was strategically chosen based on several considerations: the school represents one of the prominent vocational institutions offering tourism programs in Indramayu Regency, faces typical challenges common to vocational tourism education in Indonesia, and demonstrates willingness to participate in comprehensive educational research.

Research Participants. The research subjects consisted of 15 informants selected through purposive sampling to ensure comprehensive representation of all stakeholders involved in the tourism education process. The participant composition included: Principal (1 person), Vice Principal for Curriculum (1 person), Head of Tourism Program (1 person), Tourism Productive Subject Teachers (4 people), Grade XI and XII Tourism Program Students (5 people), and Alumni who have worked in the tourism industry (3 people).

For ethical considerations and following qualitative research conventions, participants are identified using coded designations: Principal (P1), Vice Principal for Curriculum (VP1), Tourism Teachers (T1-T4), Students (S1-S5), and Alumni (A1-A3).

Data Collection Techniques. Data collection employed three complementary techniques to ensure comprehensive information gathering and triangulation. In-depth interviews were conducted with all informants using semi-structured interview guidelines specifically designed to explore learning barriers and tourism education output quality. The interview protocol covered topics including infrastructure adequacy, teaching and learning processes, curriculum relevance, industry collaboration, and graduate outcomes.

Participatory observation was systematically conducted to observe learning processes in both theoretical and practical classes, school facilities utilization, and teacher-student interactions. This observational component provided valuable data that could not be captured through interviews alone, offering insights into the actual learning environment and educational practices.

Document analysis involved a comprehensive review of relevant institutional documents, including curriculum documents, syllabi, lesson plans, graduation data spanning three years, job placement records, and school evaluation reports. This documentary evidence provided objective data to supplement and validate information gathered through interviews and observations.

Data Analysis Procedures. Data analysis employed Miles and Huberman's interactive analysis model, consisting of three interconnected phases: data reduction, data presentation, and conclusion drawing. Data reduction involved systematic processes of selection, focusing, simplification, and transformation of raw data obtained from field research. This phase included coding of interview transcripts, categorization of observational notes, and organization of documentary evidence.

Data presentation involved organizing information in formats that enable effective conclusion drawing and action planning. This included the creation of matrices, networks, and charts that facilitate pattern recognition and relationship identification among different data sources and themes.

Conclusion drawing and verification represented the final analytical phase, involving interpretation of findings, identification of patterns, and development of evidence-based conclusions. The verification process ensured that conclusions were grounded in data and accurately represented the research findings.

Validity and Reliability Measures. To ensure data validity and reliability, multiple triangulation techniques were implemented. Source triangulation involved comparing data obtained from different informant categories to identify convergent and divergent perspectives. Method triangulation compared information gathered through interviews, observations, and documentation to ensure consistency and completeness.

Member checking was conducted with key informants to verify the accuracy of the analysis results and interpretations. This process involved sharing preliminary findings with participants to confirm that their perspectives had been accurately captured and represented in the research results.

RESULT AND DISCUSSION

Profile of SMKN 1 Cikedung Indramayu. SMKN 1 Cikedung Indramayu was established in 1995 and is strategically located on Jalan Raya Cikedung Km 3, Indramayu Regency, positioning it as a key educational institution serving the regional workforce development needs. The school offers five diverse vocational programs: Accounting, Office Administration, Marketing, Travel and Tourism Business, and Hospitality, providing comprehensive educational opportunities for students with varying career interests.

The tourism vocational programs (UPW and Hospitality) were launched in 2008 with the specific aim of providing skilled labor for the tourism industry in the Indramayu region and surrounding areas. Currently, the tourism program accommodates 180 students distributed across six study groups, indicating substantial demand for tourism education in the region. The institution employs 12 tourism-focused teachers with diverse educational backgrounds, bringing varied expertise to the program.

Infrastructure Barriers in Tourism Education. The research findings indicate that infrastructure barriers represent a major challenge, significantly impacting tourism education quality at SMKN 1 Cikedung Indramayu. These limitations manifest across several critical dimensions that directly affect student learning experiences and skill development.

Limitations of Practice Laboratories. Observational data reveal that the front office laboratory operates with only 15 computers equipped with outdated Property Management System (PMS) software. This technological limitation forces students to alternate computer usage, significantly reducing individual practice time and limiting exposure to industry-standard systems. According to T1, "We have difficulty providing optimal practice because students have to take turns using computers. Ideally, each student should have direct access to the system."

The housekeeping laboratory demonstrates similar constraints, with only two simulation rooms available for 30 students in practical classes. This inadequate ratio prevents effective hands-on learning and limits students' ability to develop proficiency in housekeeping operations. The gap between laboratory capacity and student enrollment reflects systemic planning challenges in vocational education infrastructure development.

Inadequate Equipment and Resources. Kitchen and restaurant laboratories face significant challenges with outdated equipment and insufficient quantities to accommodate all students effectively. S2 stated, "During cooking practice, we had to wait for our turn because there were only a limited number of stoves and cooking utensils. This made the practice time ineffective."

Housekeeping equipment, including linens, amenities, and cleaning tools, is limited in both quality and quantity, affecting the authenticity of practical learning experiences that should align with industry standards. This situation directly impacts students' preparation for real-world work environments where they must demonstrate proficiency with professional-grade equipment.

Limited Internet Connectivity and Digital Infrastructure. Internet connectivity at the school remains limited, particularly impacting digital learning initiatives and access to current tourism industry information. T3 explained, "Limited internet bandwidth makes it difficult for us to use online learning platforms or conduct virtual tours that should enrich learning."

Poor digital infrastructure creates slow download speeds, representing a broader challenge affecting educational technology integration in Indonesian vocational schools. This digital divide becomes particularly problematic in tourism education, where access to current industry trends, online reservation systems, and digital marketing platforms is essential for contemporary practice.

Human Resource Barriers and Competency Challenges. Human resource barriers constitute another significant category of challenges affecting tourism education quality, encompassing teacher competencies, staffing ratios, and industry expertise integration.

Teacher Competency Development Needs. Document analysis reveals that among 12 productive tourism teachers, only 6 possess industry competency certificates, indicating a significant gap in formal industry recognition of teaching qualifications. P1 acknowledged, "We recognize the importance of improving teacher competence through industry certification, but we are constrained by budget and training opportunities."

Most teachers possess educational backgrounds in teaching without direct tourism industry experience, resulting in limited practical knowledge transfer to students. The gap between academic preparation and industry requirements creates a continuous professional development challenge that requires ongoing attention and resource allocation.

Staffing Ratio Challenges. With 180 students and 12 productive teachers, the current teacher-student ratio of 1:15 exceeds optimal levels for practical tourism education, where the ideal ratio should be 1:10 to provide adequate individual guidance. T4 explained, "With such a large number of students, we find it difficult to give individual attention, especially in practices that require detailed correction."

This staffing challenge directly impacts the quality of practical instruction and limits opportunities for personalized skill development that is crucial in vocational education settings. The current staffing constraints prevent the implementation of intensive mentoring approaches required for effective vocational education.

Limited Industry Expert Integration. The school lacks a regular program for engaging industry practitioners as instructors or guest speakers, resulting in limited student exposure to current industry developments and practices. This absence of industry expertise integration represents a missed opportunity to bridge the gap between academic learning and practical industry requirements.

The limited industry expert integration also reflects geographical constraints, as Indramayu's tourism industry may not have the same depth of expertise available as major tourism destinations.

This geographical disadvantage requires creative solutions such as virtual guest lectures, industry mentorship programs, or partnerships with tourism businesses in larger urban centers.

Curriculum and Industry Collaboration Barriers. Curriculum and industry barriers represent the third major category of challenges, encompassing gaps between academic content and industry needs, limited business collaboration, and inadequate internship programs.

Curriculum-Industry Alignment Gap. Curriculum analysis reveals significant disparities between learning materials and actual tourism industry requirements. A1, currently employed at a star-rated hotel, stated, "At work, the technology used is more advanced than what we learned in school. We have to relearn the systems used in the industry."

The curriculum continues to emphasize basic technical aspects without integrating current technologies such as digital marketing, revenue management, or customer relationship management systems that are essential in modern tourism operations. This curriculum-industry gap reflects the challenge of maintaining contemporary relevance in rapidly evolving industries.

Limited Business World Collaboration. SMKN 1 Cikedung maintains collaborations with only 8 hotels and travel agents in the Indramayu area and surrounding regions. This limited partnership network restricts student opportunities for diverse on-the-job training (PKL) experiences. VP1 explained, "We have difficulty developing cooperation due to the limited tourism industry in this region and competition with other vocational schools."

The limited scope of industry partnerships creates several constraints: reduced diversity in student internship experiences, limited exposure to different operational models, decreased opportunities for teacher-industry exchange, and reduced access to current industry expertise.

Inadequate Internship Program Quality. Existing PKL programs fail to provide comprehensive work experience, with internships lasting only 3 months and limited school supervision. S4 stated, "During the PKL, we mostly did routine work without receiving any special training in line with the expected competencies."

The lack of structured internship curricula, mentoring systems, and regular evaluations limits the educational value of these practical experiences that should serve as bridges between academic learning and professional practice.

Quality Assessment of Tourism Education Output. The assessment of tourism education output quality at SMKN 1 Cikedung Indramayu reveals several critical areas requiring attention, particularly in graduate absorption rates, competency alignment with industry needs, and overall employment outcomes.

Graduate Absorption Rate Analysis. Analysis of graduation data over three years (2021-2023) reveals that the absorption rate of tourism program graduates in the industry reaches only 35%. Of 240 total graduates, 84 work in the tourism sector, 96 work in other sectors, 36 continue their education, and 24 remain unemployed. This low absorption rate indicates substantial gaps between graduate competencies and industry needs.

A2 explained, "Many friends ended up working outside the tourism sector because they felt unprepared or did not get opportunities in the tourism industry." The 35% absorption rate represents a significant concern when compared to the stated objectives of vocational education to prepare graduates for immediate employment.

Table 1. Graduation and Job Placement Data 2021-2023

Year	Number of Graduates	Working in Tourism	Working Outside the Field	Studying in College	Not Yet Working

2021	54	15 (28%)	32 (59%)	2 (4%)	5 (9%)
2022	58	22 (38%)	28 (48%)	3 (5%)	5 (9%)
2023	78	30 (39%)	33 (42%)	5 (6%)	10 (13%)
Total	**190**	**67 (35%)**	**93 (49%)**	**10 (5%)**	**20 (11%)**

Technical and Non-Technical Competency Evaluation. Graduate technical competency evaluation shows mixed results across different skill areas, reflecting inconsistencies in curriculum delivery and practical training opportunities. For front office competencies, graduates demonstrate a good basic understanding but require additional training on industry-standard Property Management Systems.

Housekeeping competencies are rated as adequate for basic operations but lacking in international quality standards comprehension. A local hotel manager stated, "Graduates of SMKN 1 Cikedung have a good attitude, but require additional training to understand our standard operating procedures."

Regarding non-technical competencies, graduates demonstrate strengths in work ethic and discipline but show weaknesses in English communication skills, problem-solving abilities, and adaptation to new technologies.

Employment Timeline and Industry Satisfaction. Data indicate that graduates require 4-6 months of waiting time to secure employment in the tourism sector, representing a relatively long period that suggests misalignment between supply and demand for tourism labor. Graduate satisfaction surveys yield a score of 3.2 on a 5.0 scale, with the highest ratings for attitude and discipline (3.8) and the lowest scores for technology and English language skills (2.6).

Table 2. Current Conditions of Tourism Program Laboratory at SMKN 1 Cikedung Indramayu

No	Laboratory	Good Condition	Damage Condition	Description
1	Front Office	5 computers	-	PMS Software needs updating
2	Housekeeping	2 Simulation room units	-	Additional units needed
3	Kitchen	10 gas stoves	2 stoves	Limited cooking equipment
4	Restaurant	5 tables	-	Service equipment and linens need to be added.

Comprehensive Strategies for Overcoming Barriers and Improving Output Quality; Infrastructure Development and Technology Integration. Schools must allocate budgets strategically to upgrade laboratories with current technology used in the tourism industry. Collaboration with tourism technology vendors can provide access to Property Management Systems, point-of-sale systems, and reservation software at educational pricing rates.

Optimizing facility utilization through efficient laboratory scheduling and shift system implementation can maximize existing resource utilization. Developing mobile laboratories or portable equipment represents alternative solutions for resource constraints while maintaining educational quality.

Human Resource Development Initiatives. Gradual implementation of teacher certification programs targeting all productive teachers to obtain industry competency certificates within 2 years represents a critical development priority. Collaboration with the National Professional Certification Agency (BNSP) and industry associations can facilitate systematic certification processes.

Recruitment of industry practitioners through guest teacher programs provides regular opportunities for sharing current experiences and perspectives with students. Industrial attachment programs for teachers can enhance their understanding of industry developments and current practices.

Curriculum Revision and Industry Partnership Strengthening. Curriculum revision involving industry stakeholders as key participants ensures learning material relevance to current market needs. Integration of digital technology, green tourism, and sustainable hospitality represents essential elements for contemporary tourism education.

Expanding industry collaboration beyond local partnerships to include hotels and travel agents in Jakarta, Bandung, and other tourist destinations provides diverse experience opportunities. Establishing specialized job fairs and career centers can facilitate effective graduate placement processes.

Monitoring and Evaluation System Implementation. Comprehensive tracer study system implementation enables continuous monitoring of alum development and industry feedback collection. This data provides crucial information for program evaluation and continuous improvement initiatives. Quality assurance system development involving internal quality assurance and external audits from industry or accreditation bodies ensures systematic quality maintenance.

CONCLUSION

Based on comprehensive research findings, tourism education at SMKN 1 Cikedung Indramayu faces three primary categories of obstacles that significantly impact educational quality and graduate outcomes. Infrastructure limitations, including inadequate laboratories and practical equipment, human resource challenges encompassing low teacher competence and unfavorable teacher-student ratios, and curriculum-industry gaps exacerbated by insufficient business world cooperation, represent systemic barriers requiring coordinated intervention strategies.

The quality of graduate outcomes remains suboptimal, as evidenced by low tourism industry absorption rates (35%), the need for additional post-graduation training, and relatively long job waiting periods. These findings reflect broader challenges in Indonesian vocational education, where systematic issues require comprehensive reform approaches.

Specific Recommendations. For SMKN 1 Cikedung Indramayu, priority actions should include improving laboratory facilities in accordance with industry standards, implementing teacher certification programs systematically, revising curriculum content through industry stakeholder involvement, and expanding industrial cooperation networks through structured partnerships.

For the Education Department, recommended actions include providing special grant programs for tourism vocational school infrastructure development, facilitating comprehensive teacher training and certification opportunities, and expanding collaboration networks between vocational schools and industry sectors.

The successful implementation of these recommendations requires sustained commitment from multiple stakeholders, adequate resource allocation, and systematic monitoring and evaluation processes to ensure continuous improvement and adaptation to evolving industry needs.

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