Implementation of the Competency Certification Program as Effort to Improve the Quality of Vocational School Graduates

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Article Info	ABSTRACT
	Purpose of the study: This study aims to describe the implementation of the competency certification program in vocational high schools as a strategy to improve the quality of vocational education and strengthen alignment with industry demands.
	Methodology: The study uses a qualitative descriptive method supported by grandtour interviews with the Vice Principal for Curriculum as the key informant, along with documentation of LSP-P1 activities and institutional records analyzed through data reduction, data display, and conclusion drawing. **Main Findings:** The findings show that competency certification implementation includes program planning aligned with policies and industry needs, assessments conducted through LSP-P1, collaboration with business and industry partners, and strategies to address challenges related to assessor availability, facility limitations, and student readiness. The results indicate that certification enhances students' employability, professionalism, and competitiveness. **Novelty/Originality of this study:** The novelty of this study lies in positioning LSP-P1 certification not merely as an administrative procedure but as a transformative instrument for strengthening the quality culture in vocational education and improving the responsiveness of schools to industry needs.

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1.   INTRODUCTION

Vocational education in Indonesia plays a strategic role in producing skilled, professional, and workforce-ready human resources. In the era of globalization and the Fourth Industrial Revolution, the demand from business and industry sectors (*Dudi)* for competent workers continues to increase[1]. Vocational High Schools (SMK), as key institutions of vocational education, serve as the frontline in producing graduates who are able to meet labor market demands at both national and international levels. However, despite these expectations, the quality of SMK graduates in Indonesia remains a serious national concern. According to data from the Central Bureau of Statistics, the open unemployment rate among SMK graduates reached 8.6 percent, making it the highest among all educational levels [2]. This condition indicates that not all SMK graduates possess competencies aligned with labor market needs, resulting in a persistent gap between education and industry.

To address these challenges, the Indonesian government has introduced various strategic policies aimed at strengthening the relevance and quality of vocational education. One such initiative is presidential regulation number 68 of 2022 on the revitalization of vocational education and training and vocational skills development

[3]. This policy emphasizes the importance of competency certification as a formal recognition of students' skills and knowledge in accordance with the Indonesian national work competency standards (SKKNI). Competency certification significantly improves workforce skills, productivity, and work conditions, thereby enhancing both individual performance and overall labor market quality [4]. This is consistent with the view of Kamaludin, who argue that professional certification institutions are key in ensuring that graduates have competency standards recognized by the industry [5]. The cooperation between vocational training institutions (TVET) with Professional Certification Institutions (LSP) and industry is important to align the curriculum with industry needs.

Competence is defined as the ability to do a job due to the possession of certain skills, cognition, and attitudes [6]. Competency can be interpreted as a person's ability to complete a certain job or task, which is based on a combination of skills, knowledge, and work attitude that is in accordance with the demands of the joby [7]. Competency certification in SMKs is administered through first-party professional certification Bodies (LSP-P1), which are licensed by the National Professional Certification Agency (Badan Nasional Sertifikasi Profesi/BNSP). Meanwhile, a profession is defined as a field of work that has functions and duties that require a person to fulfill certain competencies related to that field [8].

Based on government regulation no. 23/2004, the national professional certification agency (BNSP) has the task of carrying out competency certification as an integral part of the system that functions downstream and ensures labor competency, which in its implementation is carried out through licensing to the professional certification institute (LSP) [9]. In general, LSP has a number of main tasks, namely developing competency standards, carrying out competency tests in accordance with the standards that have been set, issuing competency certificates for participants who are declared competent, and verifying the competency test sites (TUK) to ensure the feasibility of test facilities and procedures [10]. Through this program, SMK students are assessed by certified assessors to ensure that they possess competencies that meet industry and labor market standards. Consequently, competency certification functions not only as an instrument for evaluating learning outcomes but also as a quality assurance mechanism in vocational education. Which is in line with Mulyadi's opinion, that competency certification is part of the workforce quality assurance system which aims to ensure that a person is able to do a job according to applicable standards [11]. Competency certification is an official recognition given after individuals take and pass competency tests based on national standards [12].

In essence, competency certification in SMKs represents a crucial step toward producing competent, certified, and job-ready graduates. The program serves as a bridge between education and industry by providing evidence of students' actual competencies in specific areas of expertise. Through competency certification, schools are able not only to measure the effectiveness of learning processes but also to strengthen internal accountability and a culture of quality. This aligns with the principles of total quality management (TQM) in education, which emphasize continuous evaluation, the development of human resources, and collaboration with external stakeholders such as industry partners and certification institutions.

In addition to TQM, the continuous knowledge improvement (CKI) approach is also highly relevant in the context of vocational education. CKI emphasizes the importance of ongoing learning processes through continuous updating of knowledge, skills, and work practices to remain aligned with industrial and technological developments. Nonaka and Takeuchi explain that organizational quality improvement occurs when knowledge is dynamically developed through continuous learning processes based on experience, data, and real-world needs. In vocational education, CKI encourages schools not only to meet established quality standards but also to innovate through reflective analysis of assessment results, curriculum updates, teacher competency development, and strategic collaboration with industry [13]. Thus, CKI serves as a foundation for sustainable quality development that ensures the continued relevance of graduates' skills in a rapidly changing labor market.

The implementation of competency certification through LSP-P1 in SMKs reflects the integration of TQM and CKI principles within the vocational education quality assurance system. From a TQM perspective, competency certification functions as a quality control mechanism based on standardized benchmarks, objective assessment, and quality improvement through the involvement of all stakeholders, including schools, assessors, industry partners, and students [14]. At the same time, competency certification supports the implementation of CKI, as assessment results provide a basis for continuous improvement through curriculum revision, enhancement of training quality, and capacity building for assessors and vocational teachers. This is consistent with the view of Goetsch and Davis, who argue that effective quality improvement in competency-based education and training must be grounded in measurable, data-driven continuous improvement aligned with industry needs [15]. The findings of the study [16] indicate that the implementation of competency-based human resource management, knowledge management, organizational culture, and organizational performance has been successfully carried out. Therefore, competency certification not only ensures that graduates meet national competency standards but also strengthens a sustainable quality culture that is adaptive to labor market dynamics.

Several previous studies have examined the implementation of competency certification programs in SMKs. Irwanti and Sudira emphasize that competency testing serves as a critical benchmark for assessing

students' achievement of competency standards[17], while Rizkiyah demonstrates that the implementation of LSP-P1 enhances students' work readiness and strengthens partnerships between schools and industry[18]. Furthermore, E. Astutik finds that the success of competency certification implementation in SMKs is strongly influenced by policy support, assessor readiness, and the availability of certified assessment venues (TUK) [20]. Nevertheless, most existing studies tend to focus on outcomes and program evaluation rather than on how schools manage and implement competency certification programs in real operational contexts.

This situation indicates the existence of a research gap in studies on competency certification implementation in SMKs. There remains a limited number of studies that comprehensively describe the implementation process, managerial strategies, and dynamics of stakeholder involvement at the school level. In fact, the context of implementation within educational institutions plays a critical role in determining the effectiveness of competency certification policies. Each school operates under different conditions in terms of human resources, assessment facilities, industry support, and leadership commitment in implementing LSP-P1 policies. Therefore, there is a need for research that focuses on how competency certification programs are concretely implemented at the school level, particularly from a school management perspective.

In this context, the present study offers novelty by employing a descriptive qualitative approach to provide a factual and contextual depiction of the implementation of competency certification programs in SMKs that operate LSP-P1. The study focuses on examining how schools plan, implement, and evaluate competency certification programs as part of their efforts to improve graduate quality. This approach is selected because it enables the exploration of social realities and school policy practices in a natural and authentic manner, without manipulation of field conditions.

Based on preliminary grand tour interviews with the Vice Principal for Curriculum Affairs, the implementation of the competency certification program at the school has been carried out in a structured manner involving various stakeholders, including school management, vocational teachers, and LSP-P1 assessors. The school endeavors to design certification programs that align with industry needs and the prevailing curriculum, while also coordinating across departments to ensure effective implementation. nevertheless, several challenges persist, such as the limited number of assessors, suboptimal availability of certified assessment facilities (TUK), and students' readiness to undergo competency assessments. Despite these challenges, the school continues to undertake improvement efforts through training, cross-subject collaboration, and continuous student development to embed competency certification as part of the school's quality culture.

This study aims to describe the implementation of competency certification programs through LSP-P1 in vocational high schools as an effort to enhance graduate quality, encompassing planning, assessment implementation, and school quality strengthening strategies. Theoretically, the study is expected to enrich the literature on vocational education management, particularly in relation to the implementation of competency certification policies and the role of LSP-P1 as an internal quality assurance instrument. Practically, the findings may serve as a reference for SMK administrators in improving the effectiveness of certification implementation, strengthening partnerships with industry, and developing sustainable student development strategies.

The scope of this study is limited to the implementation of competency certification programs in one public vocational high school in Jakarta that holds LSP-P1 status and is designated as a Center of Excellence (SMK Pusat Keunggulan/PK). The study focuses solely on managerial and implementation aspects from the school's perspective and does not directly assess students' certification outcomes. This delimitation is intended to allow for an in-depth examination of the dynamics of competency certification implementation at the school level and to provide a strong foundation for future research with broader scope. Accordingly, this study is expected to make a meaningful contribution to efforts to improve the quality of SMK graduates through nationally standardized and industry-relevant competency certification programs.

Previous research has highlighted the importance of competency certification in strengthening vocational graduates' readiness for employment, as shown in studies such as [1], [2], and [3]. However, most prior studies have focused on certification outcomes, student competency achievements, or model effectiveness, while very few have examined the internal managerial processes within schools that influence successful implementation, particularly in LSP-P1–accredited environments. Limited attention has also been given to how factors such as planning mechanisms, cross-departmental coordination, assessor availability, and facility readiness shape the effectiveness and sustainability of certification programs. This gap indicates a need for deeper exploration of the school-level managerial dynamics that underpin high-quality competency certification implementation.

The novelty of this research lies in its focus on analyzing the internal management strategies through which an SMK with LSP-P1 status organizes, implements, and sustains its competency certification program as part of a broader quality culture. Unlike previous studies that emphasize student outcomes, this study provides institutional-level insights into how schools operationalize national certification standards to meet industry needs. The urgency of this research stems from the increasing demand for industry-responsive vocational education and the government's push for competency-based certification through revitalization policies and the expansion of LSP-P1 institutions. Understanding these managerial processes is crucial for strengthening school

quality, addressing persistent challenges such as assessor shortages and limited facilities, and supporting evidence-based improvements in Indonesia's vocational education ecosystem.

2.   RESEARCH METHOD

2.1 Types of research

In order to improve the quality of education at a higher level, every effort to improve the quality needs to be researched. In order for research to produce accurate information, it is necessary to use the right research methods[21]. The research method is a process of searching for truth governed by logical considerations, aiming to obtain a systematic relationship between facts as an effort to find explanations, find, and confirm the truth of a problem[22]. This study employed a descriptive qualitative approach aimed at providing a factual, systematic, and in-depth portrayal of the implementation of competency certification programs in Vocational High Schools (Sekolah Menengah Kejuruan/SMK) as an effort to improve graduate quality[23]. This is in line with Harahap's statement, that qualitative research is general and basically used in the world of social sciences and humanities, in the rules of microstudies. Especially related to human patterns and behaviors (behavior) and what is behind these behaviors which are usually difficult to measure with numbers. Because what appears to be symptomatic is not always the same as what is in the actual mind and desire. Qualitative research is research that originates from an inductive mindset, which is based on objective participatory observations of a social phenomenon[24]. This approach was selected because it is appropriate for understanding phenomena contextually and naturally based on the perspectives of informants who are directly involved in program implementation. Through this method, the researcher sought to describe field realities as they occur, without manipulating research conditions or participants' behaviors.

As part of the preliminary data collection process, a grand tour interview was conducted to obtain an initial overview of the context in which the competency certification program through LSP-P1 was implemented at the school. The interview was carried out on October 23, 2025, in the lobby area of SMK Negeri 6 Jakarta through face-to-face interaction using a semi-structured interview format. The interview lasted approximately 60 minutes and was audio-recorded, complemented by manual note-taking to ensure data accuracy. Prior to the interview, the informant received an explanation of the research objectives through preliminary communication, including scheduling and formal permission. During the interview process, the informant demonstrated a highly cooperative attitude, enabling the researcher to obtain rich and relevant preliminary data that served as a strong foundation for the subsequent stages of the study. Following this initial stage, the research design was further developed by determining the research site, research subjects, instruments, and data collection techniques.

2.2 Research site and participants

The study was conducted at a public Vocational High School in Jakarta that operates a First-Party Professional Certification Body (LSP-P1) and holds the status of a Center of Excellence School (Sekolah Pusat Keunggulan/PK), namely SMK Negeri 6 Jakarta. The school was selected purposively, as it represents a vocational education institution that independently implements student competency certification through LSP-P1. In addition, the school has demonstrated experience in developing collaboration among areas of expertise, certified assessors, and industry partners.

The primary research participant was the Vice Principal for Curriculum Affairs, Ms. Indri Hayatunufus, who served as the key informant. The selection of this informant was based on the consideration that this position holds direct responsibility for the planning, coordination, and implementation of competency certification programs at the school. In subsequent stages of the study, additional informants such as assessors, vocational teachers, or assessment venue (TUK) managers may be involved to broaden the perspectives and depth of the data.

2.3 Data Collection Techniques

Data is a set of facts obtained through measurement. Good decisions result from drawing conclusions that are based on accurate data or facts. To obtain the right data, a quality measuring instrument or instrument is needed. A good instrument is one that has high validity and reliability[25]. Data collection techniques are tools used to collect real information or materials that can be used as a basis for research[26]. Research data were collected through three main techniques: in-depth interviews (grand tour interviews), preliminary observation, and online document analysis.

1.   Grand Tour Interview

Observation is a direct observation activity of the research object to closely understand the activities carried out [27]. The interview was conducted with the Vice Principal for Curriculum Affairs as the main informant. The interview adopted a semi-structured format using a flexible interview guide that allowed the researcher to explore information comprehensively regarding the implementation of

competency certification programs. The interview covered aspects of program planning, assessment implementation through LSP-P1, and school strategies for improving graduate quality through certification.

2. Observation

An interview is an interaction process between two people to exchange information and ideas through a question and answer session, thus allowing the formation of an understanding of a certain topic[28]. Observation was conducted during the early stage of the study to obtain a contextual understanding of the LSP-P1 environment, assessment-related activities, and the involvement of relevant stakeholders in the certification process. This observation was limited in scope, as the study was still in its preliminary phase, and therefore focused on general managerial and coordination processes rather than direct observation of student competency assessments.

3. Document Analysis

Documentation studies are data collection methods that are carried out by collecting various types of documents that have been available or documented before[29]. Document analysis was carried out by reviewing relevant documents and online information sources, including LSP-P1 activity reports published on the school's official website, policies issued by the National Professional Certification Agency (BNSP), and publications related to the implementation of competency certification in SMKs. This step was undertaken to enrich data obtained from interviews and observations and to provide a stronger conceptual and policy-based foundation for the analysis.

2.4 Data analysis

Data analysis was conducted interactively using the model proposed by Miles, Huberman, and Saldaña[30], which consists of three main stages:

1. Data reduction, involving the process of selecting, simplifying, and focusing interview, observation, and documentation data that are relevant to the research focus.
2. Data display, involving the organization of information into thematic narratives and tables to facilitate understanding of relationships among research components.
3. Conclusion drawing and verification, involving the interpretation of analyzed data to identify patterns, themes, and comprehensive insights into the implementation of competency certification programs at the school.

2.5 Trustworthiness of data

To ensure the validity and reliability of the research findings, source triangulation and technique triangulation were employed. Source triangulation was conducted by comparing data obtained from interviews, preliminary observations, and online documentation to ensure consistency of information. Technique triangulation was applied by using multiple data collection methods to enhance objectivity and credibility. In addition, member checking was conducted by confirming research findings with the informant to ensure that the data accurately reflected the informant's meanings and lived experiences in the field.

3.   RESULTS AND DISCUSSION

In Based on the findings obtained from the grand tour interview with the Vice Principal for Curriculum Affairs, preliminary observations of the school environment, and online document analysis of LSP-P1 policies and school activity reports, several key findings were identified regarding the implementation of the competency certification program in the vocational high school. These findings are organized into four main thematic aspects: (1) planning of the competency certification program, (2) implementation of assessment by LSP-P1, (3) implementation support and constraints, and (4) school strategies for improving graduate quality.

Table 1. Summary of Grandtour's Interview Findings

No.	Aspect of Findings	Description of Field Results	Impact on Graduate Quality
1	Planning of the Competency Certification Program	The school annually designs the competency certification program based on the academic calendar and guidelines issued by the National Professional Certification Agency (BNSP). The planning process is conducted	Alignment between the instructional curriculum and industry requirements is strengthened, enhancing students' readiness to undergo competency assessments.

No.	Aspect of Findings	Description of Field Results	Impact on Graduate Quality
		collaboratively by the Vice Principal for Curriculum Affairs, the Head of LSP-P1, vocational teachers, and certified assessors.	
2	Implementation of Assessment by LSP-P1	Competency assessments are conducted at the school's certified Assessment Venue (Tempat Uji Kompetensi/TUK) and involve internally appointed assessors who hold BNSP certification. The assessment process follows specific certification schemes aligned with each vocational specialization.	Provides formal recognition of students' competencies and increases the credibility of graduates in the labor market.
3	Implementation Support and Constraints	Strong support is provided by school management and alumni networks. However, key constraints include a limited number of certified assessors, challenges in maintaining TUK facilities, and students' psychological readiness to face the assessment process.	Serves as an evaluative basis for strengthening student coaching and enhancing assessor capacity development.
4	School Strategies for Quality Improvement	The school implements assessor training programs, student mentoring activities, and cross-disciplinary collaboration among vocational subjects to strengthen certification preparedness. Additionally, competency certification is increasingly integrated into productive learning activities.	Contributes to the development of a quality-oriented school culture and promotes continuous improvement in both teacher and student competencies.

3.1 Planning of the competency certification program

The planning of the competency certification program is conducted annually through coordination meetings involving the LSP-P1, productive subject teachers, heads of expertise programs, and school management. The planning activities include the determination of certification schemes, the selection of assessors based on their qualifications, the preparation of implementation schedules, and the readiness of Competency Test Venue (Tempat Uji Kompetensi/TUK) facilities in accordance with BNSP guidelines. The school also updates assessment instruments and administrative documents based on identified needs and the evaluation results from the previous year's implementation.

3.2 Implementation of assessment by LSP-P1

The assessment is carried out by certified assessors at the school's TUK through several stages, including pre-assessment, practical assessment, and the determination of results. Participants undergo document verification, technical simulations, and assessments based on observation and competency evaluation in accordance with the established certification scheme. Assessment results are determined through assessor meetings. The findings indicate that most TUK facilities meet the required standards; however, several practical equipment items require upgrading to support optimal assessment implementation.

3.3 Support and challenges in program implementation

Support for the implementation of the program is provided by the school principal, productive teachers, alumni, and industry partners. Nevertheless, several challenges were identified, including a limited number of assessors, certain practical facilities that do not yet fully meet current standards, and uneven levels of participants' mental readiness in facing formal assessment processes.

3.4 School strategies for improving graduate quality

The strategies implemented by the school include mentoring and coaching activities for students, the organization of mock tests, capacity building for assessors through training programs, and the integration of certification activities into productive learning starting from Grade X. These strategies are applied to enhance participants' readiness and to ensure the sustainability of the certification program within the school. Overall, the implementation of the competency certification program at the school is structured and conducted in accordance with established procedures, supported by strong internal and external stakeholders. Although limitations in facilities and assessor resources remain, the school demonstrates a strong commitment to program development and to improving graduate quality through competency certification.

The implementation of the competency certification program in Vocational High Schools (SMKs) plays a crucial role in supporting the quality of vocational education. Based on the research findings, the implementation of certification through the First-Party Professional Certification Body (LSP-P1) demonstrates the presence of a structured management system aimed at ensuring that graduates possess competencies aligned with the Indonesian National Work Competency Standards (SKKNI) and industry demands. This discussion elaborates on four main aspects identified in the study.

The planning process is conducted systematically and serves as an integral part of the school's quality assurance system. At the beginning of each academic year, the school formulates a certification implementation agenda based on the academic calendar and guidelines issued by the National Professional Certification Board (BNSP). This process involves coordination among school management, the head of LSP-P1, productive subject teachers, and certified assessors. Such a collaborative approach reflects the principles of Total Quality Management (TQM), which emphasize the involvement of all organizational elements in achieving quality objectives [31]. This is in line with Rachmad's opinion that the importance of competency-based approaches, suggesting that certification can serve as a formal mechanism to recognize individuals' competencies beyond academic degrees [32].

Furthermore, the involvement of alumni and industry partners indicates the application of the link and match concept in vocational education, ensuring alignment between educational outcomes and labor market needs [33]. Structured planning that actively engages both internal and external stakeholders thus becomes a fundamental foundation for maintaining the relevance and credibility of competency certification in preparing graduates for the world of work.

The implementation of competency certification is carried out at the school's Competency Test Venue (TUK) by certified assessors. The assessment model not only measures students' technical skills but also evaluates work attitudes, communication skills, and professional behavior. This approach suggests that certification is understood not merely as a summative test, but as an integral part of the learning process, consistent with the concept of assessment as learning. These findings are in line with previous studies indicating that LSP-P1 implementation can enhance students' self-confidence and strengthen school industry relationships [18], [20]. Consequently, LSP-P1 functions not only as a certification body but also as an instrument for legitimizing school quality and bridging the gap between vocational education and industry requirements.

The implementation of the certification program receives strong support from the school principal, productive teachers, and assessors. However, several challenges persist, particularly the limited number of certified assessors and the maintenance of TUK facilities. Competency certification positively impacts student employability and professionalism; however, obstacles such as limited assessors, inadequate testing facilities, and weak industrial collaboration hinder its full effectiveness. These constraints affect task distribution and the readiness of assessment implementation. Additionally, students' mental readiness poses another challenge, especially for those who are not accustomed to formal assessment formats.

These findings are consistent with the study by Irwanti and Sudira, which emphasizes that assessor availability and student readiness are critical factors in the success of competency certification programs[17]. Therefore, strengthening assessor capacity and providing systematic student preparation emerge as essential strategies that schools need to continuously reinforce.

Completing schooling is not just about fulfilling compulsory education, but also about meeting the qualification of graduate abilities, including attitudes, knowledge, and skills, in line with national education standards[34]. To address these challenges, the school has implemented several strategic measures, including assessor training, student mentoring and coaching, and the organization of mock tests prior to certification. The school also promotes cross-subject collaboration to ensure coherence between theoretical knowledge and practical skills, in line with the teaching factory approach commonly applied in vocational education. Principal leadership is closely related to teacher performance development, which plays an essential role in enhancing overall school quality [35]. Support systems are emphasized as an important dimension of students' graduate school experiences, suggesting that institutions should strengthen academic and non-academic support to enhance graduate quality [36].

In addition, regular evaluations of assessment outcomes are conducted to identify areas requiring improvement. This practice aligns with the principles of continuous quality improvement (CQI), which

emphasize ongoing refinement and enhancement across each cycle of program implementation [15]. Dufault et al. emphasize that educational programs, as complex systems, require a systematic continuous quality improvement (CQI) approach to drive effective improvemen t[37]. Then, Continuous improvement within TQM frameworks relies on systematic evaluation, performance measurement, and data-driven decision-making[38]. Through these strategies, certification activities are positioned not as isolated events, but as part of an integrated system for improving learning outcomes and graduate employability.

The findings indicate that competency certification functions not only as a final evaluation mechanism but also as a core component of the school's internal quality assurance system. The existence of LSP-P1 strengthens the school's position as a credible and nationally standardized competency assessment center [39]. This supports the perspective that successful certification implementation depends heavily on leadership support, assessor competence, and strong industry partnerships.

More broadly, these findings are highly relevant to the national policy on SMK revitalization and the strengthening of vocational education as outlined in Presidential Regulation No. 68 of 2022 and the Ministry of Education, Culture, Research, and Technology guidelines [40]. The competency certification implementation showed alignment with industry needs, though improvements are necessary in support mechanisms and process execution [41]. Nevertheless, program success requires continuous strengthening of monitoring mechanisms, assessor capacity building, facility maintenance, and sustainable student development strategies.

Overall, the competency certification program implemented through LSP-P1 makes a strategic contribution to improving graduate quality. The effectiveness of its implementation is strongly influenced by the quality of planning, assessment execution, resource support, and the school's commitment to continuous evaluation. When managed through a collaborative, reflective, and labor market–oriented approach, competency certification becomes a powerful instrument in reinforcing the role of SMKs as providers of competent, professional, and job-ready graduates.

This study has several limitations. First, the number of informants involved was relatively limited, as the data collection relied on a single key informant from the school management. Consequently, the findings may not fully represent the perspectives of all stakeholders involved in the implementation of competency certification, such as certified assessors, productive subject teachers, and students. Second, the study was conducted only at the grand tour stage of qualitative inquiry; therefore, the data obtained are exploratory in nature and provide an initial understanding of the phenomenon rather than an in-depth analysis. As a result, the findings should be interpreted with caution. Future research is recommended to involve a broader range of participants and multiple vocational schools to capture more diverse perspectives. Expanding the scope of informants and research sites would enable more comprehensive analysis and enhance the generalizability of findings across different vocational education contexts.

4. CONCLUSION

The implementation of the competency certification program in Vocational High Schools (SMKs) demonstrates a substantial contribution to improving the quality of graduates while strengthening the alignment between vocational education and the demands of the labor market. The findings reveal that the competency certification program conducted through the First-Party Professional Certification Body (LSP-P1) has been implemented systematically through integrated stages of planning, implementation, and evaluation that involve multiple institutional stakeholders. The planning process reflects collaborative efforts among curriculum managers, productive subject teachers, and certified assessors to ensure that learning outcomes are aligned with the Indonesian National Work Competency Standards (SKKNI) and the certification standards established by the National Professional Certification Board (BNSP). In the implementation stage, competency assessments conducted at the Competency Test Venue (TUK) indicate the school's commitment to maintaining objectivity, professionalism, and standardization in evaluating students' competencies. The program also serves as an internal quality assurance mechanism that not only measures students' competencies but also encourages schools to continuously adjust their learning processes to industry expectations. Although the program has been implemented effectively, several structural challenges remain, including the limited number of certified assessors, the varying readiness of TUK facilities, and differences in students' preparedness when facing competency assessments. Nevertheless, the school has addressed these challenges through a number of adaptive strategies, such as increasing assessor capacity through training programs, providing intensive coaching and simulation-based preparation for students, and encouraging cross-subject instructional collaboration to strengthen competency-based learning. These efforts illustrate that competency certification is not merely a final evaluation instrument but also a strategic mechanism for cultivating a culture of quality, professionalism, and continuous improvement within vocational education institutions. Ultimately, the competency certification program functions as both formal recognition of graduates' competencies and a strategic framework that enhances the competitiveness, credibility, and employability of vocational school graduates in the national workforce. Therefore, it is recommended that schools, policymakers, and industry partners strengthen

institutional support for competency certification by expanding assessor development programs, improving the quality and readiness of TUK facilities, and integrating competency-based preparation systematically into the learning process to ensure the sustainability and effectiveness of certification programs in vocational education.

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