



Management Of Skills Competency Tests (Ukk) In State Vocational High Schools

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Abstract: Vocational education aims to equip students with skills aligned with industry demands. Competency Certification (UKK) is a key assessment to evaluate students' readiness in Vocational High Schools (SMK). This study examines the management of UKK in SMK Negeri across Malinau Regency, focusing on planning, execution, and evaluation. Using a qualitative multi-site approach, the research involves school stakeholders, 12th-grade students, and examiners as key informants. The findings indicate that UKK implementation follows a structured process supported by industry collaboration. Supervision adheres to national guidelines, though a standardized fraud reporting system is lacking. Key challenges include student delays and limited equipment, while resource optimization and long-term projects serve as supporting factors. The study highlights the need for infrastructure improvements and enhanced supervision to ensure graduates meet industry standards, ultimately strengthening the quality of vocational education and workforce readiness.

Keywords: Competency Certification; UKK Management; Vocational High School; Workforce Readiness.

Introduction

Education plays a crucial role in shaping the quality of human resources, particularly in developing skills and competencies needed in the workforce (Sairmaly, 2023). According to Law No. 20 of 2003 on the National Education System, education is a conscious and structured effort to create an optimal learning environment and processes that enable students to actively develop their potential (Noor, 2018). This development aims to equip individuals with spiritual strength, self-discipline, strong character, intelligence, commendable ethics, and practical skills that contribute to personal growth, society, the nation, and the state. Within this framework, vocational education has a distinct purpose: to prepare students for specific occupational fields by providing them with specialized skills and competencies essential for employment.

Vocational education serves as a bridge between academic learning and practical industry demands. Its primary objectives include supplying skilled workers for various industries and business sectors, fostering entrepreneurial capabilities among students, and transforming students from being job seekers into productive individuals capable of creating employment opportunities (Mahande, 2023). In achieving these objectives, vocational education institutions emphasize both hard skills and soft skills, ensuring that graduates possess not only technical proficiency but also adaptability, problem-solving abilities, and teamwork, which are essential for workplace success (Yasdin, 2023).

Despite the structured approach of vocational education, a significant challenge remains: the misalignment between vocational graduates' competencies and industry expectations. According to data from the Central Bureau of Statistics Badan Pusat Statistik (2024), the unemployment rate among graduates by education level revealed that vocational

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high school (SMK) graduates had the highest unemployment rate at 9.31%, compared to general high school (SMA) graduates at 8.15%, university graduates at 5.18%, diploma holders (D1/D2/D3) at 4.79%, junior high school graduates at 4.78%, and elementary school graduates at 2.56%. This alarming unemployment rate highlights the struggle of SMK graduates in securing employment or establishing independent businesses. The primary reason for this issue is the inadequate practical competencies of graduates, which hinder their absorption into the labor market.

Further analysis suggests that Indonesian SMK graduates exhibit skill levels below the expected standards (Suharno et al., 2020). Data from the World Economic Forum (2016) in Sweden reported that the competitiveness of Indonesian vocational graduates is significantly concerning, ranking only 35% within ASEAN and 10% globally (Leaders, 2016). Despite government and industry collaboration to enhance vocational training programs, projections indicate that Indonesian SMK graduates will still miss approximately 65% of job opportunities within the ASEAN Economic Community era (Suharno et al., 2020). These statistics underscore the urgent need for improved vocational education strategies to ensure students gain the competencies necessary for career success.

Government Regulation No. 4 of 2022, amending Regulation No. 57 on National Education Standards, reinforces the importance of competency-based education in vocational schools. It emphasizes that vocational graduates must acquire skills that enable them to be self-reliant or pursue further education in their field (Nugroho & Miyono, 2024). A fundamental component of this competency-based system is the Competency Certification (UKK), which serves as an assessment mechanism to evaluate students' proficiency in their respective trades. The UKK measures competencies at levels 2 or 3 within the Indonesian National Qualifications Framework (KKNI) and is conducted at the final stage of vocational education by Professional Certification Institutions (LSP-P1/LSP-P2/LSP-P3), Technical Competency Test Committees (PTUK), or accredited institutions in collaboration with industry partners. The results of the UKK provide a standardized measure of a graduate's skill level, offering validation to potential employers regarding their readiness for the workforce.

Competency Certification (UKK) is a mandatory requirement for vocational school graduation. Ministerial Regulation No. 28 of 2009 on Competency Standards states that UKK results serve as a benchmark for graduates' competencies, providing crucial information for industry stakeholders about the qualifications of prospective employees (Prasetyo, 2017).

To ensure the credibility and effectiveness of the UKK, its implementation must adhere to rigorous standards regarding examination facilities, assessment tools, and qualified assessors (Julaeha, 2021). A critical aspect of UKK execution is the verification of testing locations (TUK) to maintain the integrity and reliability of the certification process.

However, empirical observations indicate that UKK implementation in various vocational schools still falls short of expected standards. Several key challenges include insufficient infrastructure, inadequate assessment facilities, and the suboptimal verification of test centers. In regions where Professional Certification Institutions (LSPs) are unavailable, the UKK often fails to reflect industry-required competency standards, limiting graduates' employability. The absence of an LSP leads to inconsistencies in assessment quality, raising concerns about the credibility of certifications issued. Given the pivotal role of the UKK in vocational education, it is imperative to conduct an in-depth analysis of its management and execution.

In Malinau Regency, three vocational schools serve as Testing Centers (TUK) conducting independent UKK assessments in collaboration with industry partners: SMK Negeri 1 Malinau, SMK Negeri 2 Malinau, and SMK Negeri SPP Malinau. Due to the lack of an SMK Professional Association or a regional LSP, these schools rely on government-issued UKK guidelines as the minimum competency standard. The UKK process in these institutions is extensive, involving several stages: preparation, assessor invitations from industry partners, test location verification, UKK execution, and issuance of competency certifications. The prolonged duration and complexity of these stages often create logistical challenges, affecting the overall efficiency and effectiveness of UKK implementation.

Based on the issues outlined above, this study aims to analyze the Management of Competency Certification (UKK) in Vocational High Schools in Malinau Regency. The research will explore the administrative framework, implementation strategies, and challenges faced in conducting the UKK, with the ultimate goal of identifying key areas for improvement. By addressing these concerns, this study seeks to provide strategic recommendations for optimizing UKK management, enhancing vocational education outcomes, and ensuring that SMK graduates possess the skills and qualifications necessary for workforce integration and career advancement.

Method

This study employs a qualitative approach with a multi-site case study design, focusing on the

management of the Competency Skills Test (Uji Kompetensi Keahlian, UKK) at State Vocational High Schools (SMK Negeri) in Malinau District. The purpose is to explore how UKK is implemented by examining the processes of planning, execution, and evaluation.

Site Selection

The research was conducted in several SMK Negeri in Malinau District, selected through purposive sampling based on the following criteria: schools with active UKK implementation in multiple vocational fields; schools that collaborate with industry partners for UKK assessment; and schools representing diverse geographic and resource conditions (urban vs. rural).

Malinau District was chosen due to its unique socio-economic and industrial landscape, where vocational education plays a critical role in preparing graduates for regional workforce demands.

Data Collection Techniques

Data were collected using three primary techniques: observation, interviews, and document study, ensuring triangulation.

Observation

Type: Non-participant observation, where the researcher documented UKK activities without direct involvement. Aspects Observed: UKK preparation, test execution, assessment process, examiner-student interactions, and logistical challenges. Recording Method: Field notes, observation checklists, and photographs (with consent).

Interviews

Type: Semi-structured interviews, allowing flexibility while maintaining focus on UKK management. School Principal - Oversight of UKK implementation. Vice Principal for Curriculum - Planning and coordination of UKK activities. Head of Vocational Program & Productive Subject Teachers - Student preparation and internal assessment. Twelfth-Grade Students - UKK experiences and challenges. and External Assessors - Industry experts evaluating student competencies.

Data Analysis

The study follows Miles & Huberman's (1984) interactive analysis model, which consists of three stages: Data Reduction - Filtering and summarizing key information by categorizing interview transcripts, observation notes, and document data into relevant themes (e.g., planning, execution, supervision); Data Display - Organizing data into matrices, tables, and narratives to visualize patterns in UKK management across different schools; and Conclusion Drawing &

Verification - Identifying key findings related to best practices, challenges, and areas for improvement in UKK management, followed by cross-checking with informants to ensure accuracy.

Data Validity & Reliability

To ensure research validity and reliability, several strategies were employed: Data Source Triangulation: Cross-checking findings from different informants (principals, teachers, students, external assessors); Method Triangulation: Comparing results from observations, interviews, and document studies.

Member Checking

Sharing preliminary findings with key informants for validation and feedback to ensure accurate representation of their perspectives.

Audit Trail

Systematic documentation of research steps, including interview transcripts, field notes, and coding procedures, allowing transparency and reproducibility

Result and Discussion

In this study, the data obtained include school The study on the management of the Competency Skills Test (Uji Kompetensi Keahlian, UKK) at Vocational High Schools (SMK) in Malinau District revealed several important findings in relation to planning, organization, implementation, and control of the UKK process. These findings are discussed in detail to provide a comprehensive understanding of how the UKK is managed in the three schools under study: SMK N SPP Malinau, SMK N 1 Malinau, and SMK N 2 Malinau.

Planning of UKK

The planning phase for the UKK at SMK N in Malinau District reflects consistency and alignment across the three schools. A structured approach to planning is evident, starting with the formation of committees composed of teachers and staff responsible for organizing the UKK, preparing budgets, and setting schedules in collaboration with the teaching staff. This process aligns with strategic educational planning theories, which emphasize the importance of stakeholder collaboration in designing educational programs (Wheelen et al., 2008). Moreover, the preparation stage involves analyzing students' competencies in accordance with the curriculum and selecting exam questions in collaboration with DITPSMK and DUDIKA, highlighting an alignment with the needs of the industry and relevant curriculum developments. As noted in the theory of education

systems, adapting the education system to labor market demands is crucial for preparing students adequately for the workforce (Moore et al., 2021). Overall, the planning process at these schools is not only administratively thorough but strategically designed to ensure that students are equipped with competencies that align with industry needs, thus enhancing their employability.

Organization of UKK

The organization of UKK at SMK Negeri in Malinau District demonstrates a well-structured and systematic approach involving various stakeholders. The formation of committees according to specific vocational fields, with clear roles such as chairperson, secretary, and treasurer, ensures a well-organized implementation of the UKK. This organizational structure aligns with management theories that stress the importance of clear structures to enhance team effectiveness in achieving goals (Appelbaum, 1997; Dssouza & Ujagare, 2024; Gagné, 2018). Additionally, the rotation system, where experienced members from previous years take on leadership roles, ensures continuity and leadership development within the UKK management team. The scheduling of UKK is done collaboratively through the Musyawarah Kerja Kepala Sekolah (MKKS) and is adjusted according to the availability of internal and external assessors.

This collaborative scheduling and transparent evaluation process, where results are uploaded to e-apor, reflects a commitment to transparency and accountability in assessment. Regular training for teachers ensures that they remain up-to-date with the latest assessment methods, which is critical for maintaining educational quality (Darling-Hammond et al., 2017). Furthermore, the collaboration with industries, including external assessors and the provision of tools, ensures that the competency tests are relevant to industry demands, enhancing the students' readiness for the job market.

Implementation of UKK

The implementation of the UKK in SMK Negeri Kabupaten Malinau follows a structured and collaborative process (Fauzi et al., 2020). The process begins with meetings among the school's teaching staff and committees, where they agree on the schedule, budget, and assignment of internal and external assessors. Coordination with vocational teachers, industry representatives, and the school's committee is crucial to ensure that all parties involved have a shared understanding of the UKK procedures. This collaborative approach in educational management enhances the quality of education by involving all relevant stakeholders (Bush, 2020). The preparation of

facilities and resources, such as practical tools and exam rooms, is a vital step before the implementation of UKK. A well-prepared environment contributes to the successful conduct of the exams, as supported by Bonem et al. (2020), who assert that a conducive learning environment enhances student performance.

On the day of the exam, internal and external assessors monitor the process to ensure its smooth execution, which strengthens the reliability of the assessment process. After the exam, evaluations of the UKK results and the implementation process are conducted to identify areas for improvement, reflecting a commitment to continuous improvement, which is essential in education. The submission of reports to relevant authorities further demonstrates transparency and accountability in the implementation of UKK, essential for recognizing students' competency certificates in the industry.

Control of UKK Implementation

The control mechanism for UKK implementation at SMK Negeri Kabupaten Malinau indicates significant efforts to maintain the integrity and quality of the evaluation process (Sintawati, 2010). Monitoring is conducted by the school and the regional education office, with a committee responsible for overseeing the entire process. However, there is no formal reporting system to address potential fraud, indicating a need for a stronger management and control system in education, as highlighted by Shewbridge et al. (2019). While the UKK follows national technical guidelines and involves experienced examiners, there has been a lack of effective periodic evaluations and feedback collection. Challenges such as student tardiness and equipment limitations point to the need for better operational management to address these issues. According to Wright (2007), a clear feedback system and continuous evaluation are crucial for improving learning outcomes. On the positive side, factors like the availability of large land areas and long-term projects indicate that there are untapped resources that could further support the UKK process. Therefore, developing a fraud reporting system and implementing regular evaluations would be crucial steps to improve the reliability and quality of the UKK in the future.

Overall, the management of UKK at SMK Negeri Kabupaten Malinau is marked by a systematic and collaborative approach in planning, organizing, implementing, and controlling the competency tests (Akhyar & Ilham, 2022; Ali et al., 2023; Rohaeni et al., 2021). The schools have successfully integrated industry needs into the curriculum and assessment procedures, which is crucial for preparing students for the labor market. The involvement of various stakeholders, including school staff, students, teachers, and industry

partners, contributes to the effectiveness and transparency of the UKK process. However, there is room for improvement in the areas of control and feedback mechanisms to further enhance the quality and reliability of the UKK implementation. With continued collaboration and the strengthening of management systems, the UKK process can serve as a model for vocational education that bridges the gap between education and industry needs.

Conclusion

The implementation of the Competency Skills Test (*Uji Kompetensi Keahlian, UKK*) at SMK Negeri Kabupaten Malinau involves a structured process, from planning to evaluation. The organizational structure of UKK, established on a rotational basis, along with support from industry stakeholders and socialization efforts with students and parents, indicates strong collaboration. The monitoring of the process is conducted by the school and the regional education office, adhering to the standard procedures set by national guidelines, although there is currently no formal reporting system to address potential fraud. The main challenges encountered include student tardiness and limited equipment, while factors such as the effective use of existing resources and long-term projects provide supporting elements for the implementation.

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Conflicts of Interest

The authors declare no conflict of interest.

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