



Management of Graduate Quality Improvement in Vocational High Schools

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Abstract: The quality of Vocational High Schools graduates often depends on several factors, such as the alignment of the curriculum with industry standards, the quality of teaching, the practical experience provided to students, and the involvement of industry partners. This study aims to analyze the management of improving graduate quality in Vocational High Schools and identify the factors that affect the improvement of Vocational High Schools graduate quality. Through this research, it is hoped that appropriate solutions will be found to improve the quality of SMK graduates, enabling them to be more prepared to face the workforce and contribute to economic development and the advancement of industry in the future. This research uses a qualitative approach with a case study method. Data analysis follows the Miles & Huberman model, which consists of data collection, data presentation, data reduction, and conclusion. This research identifies several challenges faced by Vocational High Schools in improving the quality of their graduates. The curriculum's mismatch with industry needs, lack of collaboration with the industrial sector, the need to enhance teacher competence, and ineffective management are some of the factors hindering the improvement of SMK graduate quality.

Keywords: Management; Quality; Graduates; Vocational Education

1. Introduction

Vocational High Schools play a strategic role in producing skilled workers who are ready for the industrial workforce. Along with the times, the demands for the quality of Vocational High Schools graduates have increased. Society, the government, and the industrial sector expect Vocational High Schools to produce graduates who not only master technical skills but also possess good character, social skills, and the ability to adapt to rapid technological changes.

However, despite various efforts that have been made, the quality of Vocational High Schools graduates still faces several challenges. Many Vocational High Schools graduates still struggle to find jobs that match their areas of expertise. One of the contributing factors is the mismatch between the curriculum applied in schools and the needs of the workforce. Additionally, suboptimal educational management, limited educational facilities and infrastructure, and the lack of industry involvement in curriculum development and practical training for students are also significant challenges.

The role of management in improving the quality of Vocational High Schools graduates is crucial, particularly in terms of planning, organizing, and supervising the ongoing educational process. Effective management will ensure that the quality of graduates produced can compete in the industrial world and adapt to the ever-evolving labor market demands.



Partnership management is a process that consists of actions including planning, organizing, implementation, and evaluation, aimed at managing a partnership relationship between schools and the business and industrial sectors [1]. The aforementioned issues are supported by several findings from relevant studies which suggest that the purpose of partnerships is to improve the quality of education and the competency of graduates. The implementation of partnerships requires improvements, starting from the organization to the partnership strategies. Furthermore, it can be explained that the standards and objectives of cooperation have not been fully understood by the leaders, causing communication between organizations to not run smoothly [2-3].

Based on these findings, it can be concluded that the progress of vocational high schools is greatly influenced by the effectiveness of school program organizers, including human resources, infrastructure, and cooperation with industry [4-6]. Most vocational school managers also lack understanding and effective implementation of educational accountability, often leading to mismanagement of budget allocation [7].

The quality of Vocational High Schools graduates often depends on several factors, such as the alignment of the curriculum with industry standards, the quality of teaching, the practical experience provided to students, and the involvement of industry partners. Key areas affecting graduate quality include: 1) Curriculum Relevance: graduates need to master both technical skills and soft skills. The curriculum must be aligned with current industry needs and technological advancements. Research shows that mismatches between the school curriculum and industry demands can reduce graduates' competitiveness in the job market; 2) Practical Training: Hands-on experience in workshops or through internships is crucial. Programs that integrate real-world industry experience tend to produce more qualified graduates. Studies emphasize the need for Vocational High Schools to collaborate with industry partners to provide better training opportunities; 3) Industry Collaboration: Industry involvement in curriculum design and internship programs helps ensure that the education provided is relevant and meets labor market needs. Some studies indicate that schools with strong industry connections have higher graduate employability rates; and 4) Teacher Competence: Highly qualified and continuously trained teachers play a significant role in enhancing the quality of graduates.

This study aims to analyze the management of improving graduate quality in Vocational High Schools and identify the factors that affect the improvement of Vocational High Schools graduate quality. Through this research, it is hoped that appropriate solutions will be found to improve the quality of SMK graduates, enabling them to be more prepared to face the workforce and contribute to economic development and the advancement of industry in the future.

2. Materials and Methods

This research is a qualitative descriptive study with a case study approach. This approach was chosen because the study uses all types of information from facts that are described in narrative form. Data sources in this study were determined using purposive sampling. Based on the criteria set, the data sources or informants in this research are the school principal, the vice principal of curriculum, the vice principal of public relations, the head of the mechanical engineering expertise program, productive teachers from Vocational High Schools 4 Lhokseumawe, and leaders from the business and industrial sectors in Lhokseumawe.

The instruments used in this research include interview guidelines and documentation guidelines. Data analysis begins with data validity. The criteria for qualitative data validity are credibility, transferability, dependability, and confirmability. The techniques used to validate the data include source triangulation and technique triangulation. After continuous data triangulation to reach data saturation, the next step is data analysis using the Miles & Huberman (1998) model, which follows four steps: data collection, data presentation, data reduction, and drawing conclusions & verification [10].

3. Results and Discussion

The research findings regarding the analysis of management for improving the quality of graduates from Vocational High Schools highlight several important findings that illustrate how SMK management influences the quality of graduates, both in terms of technical competencies and character. Below are some of the relevant findings from the research in this context:

1. **Curriculum Planning Not Aligned with Industry Needs** Numerous studies show that the curriculum implemented in Vocational High Schools is often not fully aligned with industry needs. This results in graduates lacking relevant skills for the workforce, even though they have basic technical knowledge. Therefore, there is an urgent need to enhance synergy between educational institutions and industries in curriculum development and the implementation of training programs.
2. **Lack of Collaboration with Industry** Most Vocational High Schools have not maximized their partnerships with industry. Research indicates that Vocational High Schools with strong partnerships with the industrial sector tend to produce graduates who are more job-ready, as they gain direct experience through internships, industrial training, and company visits. More intensive collaboration between Vocational High Schools and industries will ensure that the education provided is relevant to the evolving job market.
3. **Improving Teacher Competence** Research also finds that the competence of teachers in Vocational High Schools significantly affects the quality of graduates. Teachers who are well-trained and possess sufficient skills in their respective fields can provide high-quality instruction. Therefore, the professional development of teachers through training and certification is crucial in improving graduate quality.
4. **Use of Practical Learning Methods** The research reveals that Vocational High Schools integrating both practical and theoretical learning in a balanced way produce graduates with better skills. Therefore, practical-based learning (such as internships, workshops, and projects) is crucial to ensure that students acquire skills that can be directly applied in the workforce.
5. **Ineffective Management** Several studies indicate that management practices in Vocational High Schools, including planning, organizing, implementing, and evaluating educational programs, are still not optimal. Lack of thorough planning and effective coordination between schools and industries often becomes a barrier to improving graduate quality. Therefore, more structured education management, involving various stakeholders, is needed to achieve the goal of improving graduate quality.
6. **Lack of Evaluation and Feedback** Research also shows that the process of evaluating the quality of Vocational High Schools graduates is often not effective. Feedback from the industry regarding the readiness and quality of Vocational High Schools graduates is still limited, even though such feedback is essential for continuous improvement. Therefore, a more transparent evaluation system that involves industry stakeholders should be implemented.

Research underscores the importance of aligning curriculum with industry demands, fostering strong industry collaborations, improving teacher competence, integrating practical learning, optimizing management practices, and ensuring transparent evaluation and feedback systems. These factors are critical to improving the quality of graduates from Vocational High Schools.

Intensive collaboration with the industrial sector, through internships and direct work practice programs, is one of the most effective ways to ensure that Vocational High Schools produce graduates who are job-ready. With a strong partnership between Vocational High Schools and companies or industries, graduates become more competent because they gain practical experience that is directly relevant to the demands of the labor market.

A structured internship program provides students with the opportunity to engage in industry activities directly. This allows students to apply the skills they have learned in school in

real-world situations, while also gaining valuable experience that enhances their competitiveness in the job market. Additionally, a well-organized internship program also offers the chance to build important professional networks. With these connections, graduates have a greater chance of securing employment after completing their education.

Strong partnerships with industries can also assist Vocational High Schools in developing curricula that align more closely with the evolving needs of the industry. Students will be trained in the skills most needed by the workforce, and industry partners can provide direct feedback regarding the competencies that Vocational High Schools graduates should possess. As a result, Vocational High Schools graduates who participate in internships and work practice programs will be more easily absorbed into the labor market and have better career prospects.

This research identifies several challenges faced by Vocational High Schools in improving the quality of their graduates. The curriculum's mismatch with industry needs, lack of collaboration with the industrial sector, the need to enhance teacher competence, and ineffective management are some of the factors hindering the improvement of Vocational High Schools graduate quality. Therefore, efforts are needed to address each of these aspects, particularly in terms of strengthening collaboration with industries, developing teacher competence, and implementing more intensive practical learning. With well-directed and structured improvements, it is hoped that Vocational High Schools graduates will be better prepared to face the workforce and meet the growing demands of the labor market.

4. Conclusions

This management model for improving the quality of SMK graduates involves collaboration between schools, the industrial world, and the government to enhance and improve educational quality. With effective management, a relevant curriculum, skilled teachers, and a learning process based on practical skills, SMK graduates will be well-prepared to face an ever-evolving labor market.

References

- [1] Asiah, A. Manajemen Kemitraan SMK dengan Dunia Usaha dan Industri untuk Meningkatkan Kompetensi Lulusan SMK (Studi Kasus di SMK N 1 Cihampelas Kabupaten Bandung Barat). *Tsaqafatuna*, 2021, *volume 3*, pp. 1–12.
- [2] Lestari, B., & Pardimin. Manajemen Kemitraan Sekolah dengan Dunia Usaha dan Industri Untuk Meningkatkan Kompetensi Lulusan SMK. *Media Manajemen Pendidikan*, 2022, *volume 2(1)*, pp. 101–113.
- [3] Yunarsih, N. Manajemen Kemitraandalam Peningkatan Mutu Lulusan Diploma Tiga Kebidanan. *Faletehan Health Journal*, 2021, *volume 7*, pp. 142–148.
- [4] Auta, M. Work place performance of university technology and vocational education (TVET) student-teachers: A tracer study. *Journal Plus Education*, 2020, *volume 26 (1)*, pp. 229-238.
- [5] Ismayati, E., Muslim, S., Kusumawati, N., Rahmadyanti, E., Hilmi, M., & Wrahatnolo, T. Critical study of research results about TVET and TEFA's role in social, economic, and education development in the country. *Journal of Education, Teaching and Learning*, 2020., *volume 5 (1)*, pp. 106-113.
- [6] Okolie, U. C. A critical perspective on TVET teachers' pedagogical practices: insights into the guiding pedagogical principles in practice. *Journal of Vocational Education & Training*, 2021, *volume 9*, pp. 1-20.
- [7] Rianti, A. Model Pengawasan Keuangan Pada Badan Layanan Umum Daerah (BLUD). *Jurnal Dialog Islam dengan Realitas*, 2021, *volume 6 (2)*, pp. 239-256.
- [8] Miles, M. B. & Huberman, A. M., *Qualitative Data Analysis*, CA: Sage Publication, 1994.