



School Effectiveness: Institutional Benchmarking for Vocational High School Management

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ABSTRAK

Era disrupsi menghadirkan tantangan bagi sekolah berupa standar lulusan pendidikan dibandingkan dengan industri dan dunia kerja. Pemerintah menyikapinya dengan mengeluarkan kebijakan sekolah kejuruan untuk menghasilkan sumber daya manusia yang unggul. Strategi adaptif yang diterapkan merupakan salah satu peningkatan kualitas jangka panjang melalui pengukuran kinerja organisasi dengan menggunakan model benchmarking. Penelitian bertujuan untuk menganalisis efektivitas teknik benchmarking dalam meningkatkan pelayanan pendidikan di SMK Negeri. Penelitian ini bersifat kualitatif dengan menggunakan teknik studi kasus. Kebenaran data diperiksa melalui sumber kepala sekolah, humas sekolah, dan guru senior. Teknik triangulasi data dan diskusi sejawat digunakan untuk menguji data. Temuan penelitian ini menunjukkan penerapan benchmarking teknis melalui perencanaan, analisis, integrasi, implementasi, dan kematangan yang dikenal dengan istilah institusionalist benchmarking. Strategi benchmarking organisasi berkelanjutan dilaksanakan secara bersamaan melalui adaptasi visi, misi dan tujuan terhadap lingkungan strategis; benchmarking penentuan fokus sasaran, dan penentuan tujuan melalui jalinan kemitraan sekolah unggulan. Adaptasi program outcome benchmarking menghasilkan aktualisasi pengelolaan sistem informasi pendidikan, teknik tutor sejawat, optimalisasi kegiatan penelitian, dan penguatan pengawasan internal. Selain itu, wawancara merupakan satu-satunya metode yang digunakan untuk mengumpulkan data untuk penelitian ini. Oleh karena itu, penelitian selanjutnya akan menyelidiki institusi sekolah lain di Indonesia, khususnya pengembangan sekolah kejuruan yang telah mengintegrasikan kompetensi sains dan keterampilan.

ABSTRACT

The disruption era presents a challenge for schools in the form of educational graduate standards in comparison to industry and the workforce. The government responded by instituting a policy of vocational schools to produce superior human resources. The adaptive strategy implemented is one of long-term quality improvement through the measurement of organizational performance using benchmarking models. The study aims to analyze the effectiveness of benchmarking techniques in improving educational services in Public Vocational High School. The research is qualitative in nature, employing case study techniques. The veracity of the data is checked using sources of principals, school public relation, and senior teacher. Data triangulation techniques and peer discussion were used to examining the data. The study's findings demonstrate technical benchmarking implementation through planning, analysis, integration, implementation, and maturity is known as institutionalist benchmarking. Benchmarking strategies for sustainable organizations are implemented concurrently through vision adaptation, mission and objectives toward strategic environments; benchmarking targeting focus determination, and goal determination through the fabric of school superior partnerships. Adaptation of the benchmarking outcomes program results in actualizing educational information system management, peer tutoring techniques, optimization of research activities, and strengthening internal supervision. In addition, interviews are the only method used to collect data for this study. Therefore, future research will investigate the school institution of others in Indonesia, particularly the development of vocational schools that have already integrated science and skill competencies.

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1. INTRODUCTION

Entering the disruption era presents challenges for managers of educational institutions to always carry out organizational development and innovation in managerial terms (Kimberly & Bouchikhi, 2016; Portuguese Castro et al., 2019). This is inseparable from the strategy of educational institutions to achieve the best quality. On the other hand, educational institutions that are mediocre and conservative (close themselves) to changes have the potential to be affected by natural selection, fail to compete, or even be threatened with closure (Liu, 2021; Mutohhari et al., 2021; Prasetyo et al., 2022; Reese, 2018). Based on data from the Ministry of Education and Culture as reported, as many as 646,200 educational institutions ranging from elementary to higher education levels were closed due to unpredictable changes -disruption- (Kartikasari & Nuryasana, 2022; Kimberly & Bouchikhi, 2016).

Strategic issues in the disruption era are related to the business, industry, and work world (IDUKA). The government anticipates the need for the work world in the industrial sector through vocational school policies to create opportunities for quality output of education graduates (Faturahman & Suherman, 2022; Yanto et al., 2022). A program launched by vocational schools to produce competitive graduates who are ready to work according to the needs of today's world of work. Therefore, 70 percent of learning programs in vocational schools practices in the industrial world. An effective technique for measuring program achievement or organizational performance is benchmarking (Carayannis, 2020; Fang et al., 2022; Juharyanto et al., 2023).

In July 2020, through the Directorate General of Vocational Education, the Government established 467 schools implementing the Center of Excellence (COE) program, a program oriented towards improving the quality of sustainable vocational education. The significance of the change affects the quality of educational organizations so that it demands the adaptive role of educational institutions that are preventive. In the TQM study, one of the effective policy models developed in improving organizational quality is the benchmarking strategy (Acevedo-De-los-Ríos et al., 2021; Glewwe et al., 2020; Singhanian et al., 2022). The implementation of the benchmarking strategy encourages institutional managers to anticipate challenges in the long term, looking deep into the map of the competitive process. Benchmarking efforts also associate institutional managers with the capacity of similar institutions. Evaluation to other superior institutions is to adopt the system to be implemented to provide better results or output quality (Caleb et al., 2017; Lubis, 2016; Lumban Gaol, 2021).

The orientation of educational institutions is to provide quality educational services for students. Schools should provide contextual responses following the orientation of regional development and community needs (Kushnir et al., 2022; Suryawati & Osman, 2018). In other words, various efforts are made to bring together various parties who have interests or stakeholders so that they have access to policy formulation and decision-making regarding equity and service expansion, quality, relevance, and efficiency of quality education management (Komatsu et al., 2022; Nimehchisalem et al., 2023). Adjustment to the demands of the business and work world is carried out by increasing the competence of graduates through vocational school policies (Gunasekaran, 2021; Misbah et al., 2020).

Institutional managers focus on long-term programs by improving the quality of customer service through the implementation of Total Quality Management (TQM). Operationally, the effectiveness of TQM requires the participatory cooperation of all components of the organization, both internal and external (Arifin et al., 2018; Rizal, 2019; Sartika et al., 2022). There are two kinds of quality improvement targets: to achieve the specified quality standards and to improve the quality standard, which is conducted because the quality standards have been achieved. The quality standards improvement process is conducted through benchmarking. If the results of self-evaluation and audit indicate the quality standards that have been set have not been achieved, then improvements must be made to achieve these standards. On the other hand, if the results of the self-evaluation and audit state they have been achieved, then the next is a planning process to improve quality standards through benchmarking (Pino-Mejías et al., 2021; Siregar & Prasetyo, 2023; Syapsan, 2019).

The study is qualitative and conducted as a case study at SMKN 3 Lhokseumawe. The selection of the locus is based on several objective considerations. SMKN 3 is recognized as a leading vocational school in Lhokseumawe. Among the 7 vocational schools in Lhokseumawe, SMKN 3 offers the highest number of competency-based programs compared to other vocational schools. The urgency of conducting research in vocational schools is due to the distinctive characteristics of their management and curriculum compared to other general schools. Observations of the socio-cultural aspects of Aceh reveal similarities with religious educational institutions such as madrasah and pesantren. Despite being marginalized in some ways, vocational schools still attract public interest.

Various studies on the factors that influence TQM, benchmarking, reward systems, and performance measurement systems on managerial performance have been carried out by previous researchers. The research position focuses on benchmarking discussions and improving the quality of

vocational education. The objective conditions for relevant research are similar to Suartini's study, which also examines the need for innovation in vocational education concerning teaching and governance. Unlike Acharya and Smit's study, which explains the relationship between vocational education and skill development in fostering entrepreneurship (Shrivastava & Acharya, 2021; Stadler & Smith, 2017). Research conducted by previous study found that the benchmarking technique had a significant positive effect on managerial governance and organizational performance (Bogetoft, 2013; Gunasekaran, 2021). The application of TQM is able to increase consumers and improve quality continuously. Then, research conducted by Rahmah and shows TQM has a positive and significant effect on performance (Marquez et al., 2022; Rahmah & Prasetyo, 2022; Singhania et al., 2022). The aims of this study is to analyze the effectiveness of benchmarking techniques in improving educational services in Public Vocational High School.

2. METHOD

This research uses a qualitative approach with a case study technique. The implementation of benchmarking studies on organizational goals uses interviews, discussion groups, observations, and documentation to collect data. Meanwhile, the informants were the principal, vice-principal, teachers, and extracurricular coordinator at SMKN 3 Lhokseumawe. To explore the implementation of benchmarking based on total quality management at SMKN 3 Lhokseumawe, the research employed the interview method. Key stakeholders including principals, teachers, community leaders, and relevant entities were interviewed to gather pertinent data. The analysis technique employed an interactive model, encompassing stages such as data collection, data reduction, data presentation, and concluding-verifying the findings. Data collection and analysis is carried out by researchers as part of the research process as participants with informants who provide data (Miles, M. B., Huberman, A. M., & Saldaña, 2018).

The stages of the collection technique consist of (1) observation, the researchers conduct systematic observation and record of symptoms that occurred on the research object, SMKN 3 Lhokseumawe; this is used to see the social situation. Thus, by observing, an overview of the principal's strategy and management in implementing TQM to improve school quality will be obtained. (2) Interview, this method was used to explore data related to the implementation of benchmarking based on total quality management at SMKN 3 Lhokseumawe. The interviewed research objects are principals, teachers, community leaders, and stakeholders. (3) Documentation, it was used to complement existing data to make it more accurate and reliable.

The data analysis technique is an interactive model with the stages of data collection, data reduction, data display/presentation, and conclusion/verification (Emzir, 2013). Now, data techniques and systems have been added to the scope of benchmarking research. In the research analysis context, research outcomes are transformed into strategic analysis and the enhancement of expert program systems. Human resources, infrastructure tools, materials, processes, finances, and marketing focus on data collecting in the context of benchmarking. In addition, technical guidelines, rules, and regulations for vocational schools are included in digital documentation as photographs of the formalization of competence program activities, workshops, and aspects.

3. RESULT AND DISCUSSION

Result

An educational institution such as SMKN 3 Lhokseumawe, students, parents, IDUKA, and the community are target customers who must be satisfied. The satisfaction obtained by customers or service users can be measured by the quality of services the school provides. SMKN 3 Lhokseumawe, a vocational high school in Aceh, initially offered only three areas of expertise: Accounting, Marketing, and Office Administration. However, it has since expanded to offer seven areas of expertise, including Accounting and Institutional Finance, Sharia Banking Automation and Office Management, Online Business and Marketing, Tour and Travel Enterprises, Graphic Design, and Graphic Production. This transformation is part of the institution's innovation efforts to adapt to the demands of the industry.

As part of its efforts to strengthen the profile of its students in Pancasila (the state ideology of Indonesia), SMKN 3 Lhokseumawe implemented benchmarking activities for its Accounting and Digital Business students at several business units in Aceh Tengah. The benchmarking activities aimed to observe the effectiveness of the Work Culture (P5BK) and the production system of Gayo coffee that could be marketed for export to Europe, America, Australia, and the Middle East.

Benchmarking and Leadership Managerial Competency

Measurement on the managerial aspect of leadership refers to the type of performance benchmarking, comparing the performance of leaders in program implementation, learning, or services. The research results at SMKN 3 Lhokseumawe show that improving managerial competence as a principal has been given to schedule several activities related to the implementation of good school programs. The principal already has the ability and certificate and is in accordance with the certificate regulations in teaching staff. Then, the teacher at the school, who is an important and main factor for educators, has been very influential in producing the quality of the learning process.

The objective indicator of managerial competence is the number of teachers who have educator certificates. The certificate proves that teachers have the ability to lead the class and teach. Unfortunately, not all teachers are competent and have certificates as educators. Professional teachers are formed from the competence of teachers and have good certificates from the government as educators. This has resulted in some teachers who do not have good skills in managing classes with a fun learning process. Thus, the quality of teachers who are of good quality, have a pattern of thinking ranging from creative, innovative, and have good skills in running and managing program activities are not optimal.

Leadership managerial competencies for improving the quality of teachers at SMKN 3 Lhokseumawe include supporting factors. It means having support or encouragement through a foundation in a school that has developed to date and support from several other staff who have developed in their respective fields. So, the more other administrators in the school, the program can be well structured. As a leader, the principal already has duties and responsibilities related to the support of the vice-principal, who has helped based on the existing program of activities to show that several other teachers can carry out the program of activities since the communication that has been delivered.

Institutional Capacity to Implementing Benchmarking

The effectiveness of the implementation of benchmarking helps schools improve their organizational performance or the process of educational services. This study refers to three aspects: leadership managerial competence, institutional capacity, and the effectiveness of SBM-based policies. To achieve size conformity, several stages of implementation are required, including: (1) detailed understanding of the learning process carried out by the teacher; (2) analysis of learning processes and services that perform well; (3) Comparison of the education service process -learning- with school processes that perform well; (4) implementation of corrective measures to approach the education service process of schools that perform well.

Specifically, benchmarking implemented at SMKN 3 is a strategic benchmarking and benchmarking process. The observation process is carried out by non-participants or observing how other schools outperform the competition. In the process aspect, how other leading institutions carry out the work processes. Benchmarking aspect overview is show in [Table 1](#).

Table 1. Benchmarking Aspect Overview

Operational Goal	Aspect Overview
Subject Selection	Schools that can serve as examples in the regional scope are SMKN 3
Process	The process of determining schools is based on the following criteria: school management, human resources, and completeness of infrastructure. This reason is objective because of the achievement and role of teachers in the development of vocational education.
Identify Potential Partners to Compare	Potential partners are chosen because they have the distinction and scope of institutional excellence.
Identify Data Sources	Sources of data are identified through recommendations from the regional education office and potential future collaborations.
Data Collection and Partner Selection	Data is collected empirically through established procedures or a series of research processes.
Gap Determination	Gaps are determined through gap analysis which compares internal and external advantages.
Define Process Differences	The process is distinguished by the source of input or the capacity of incoming students and the availability of education personnel according to the required field of vocational expertise.
Expected Performance Targets	Performance has a target of continuous quality improvement.

Operational Goal	Aspect Overview
Communication	Communication is carried out in institutional synergy with internal communication techniques. In this case, the role of the Public Relations section is sensitive and crucial.
Goal Adjustment	The objectives are adjusted to the vocational institute targets referring to the Directorate General of Vocational Education vision. This aspect is also situational, meaning that it sees the dynamics of the existing school.
Implementation	The benchmarking results are implemented through the supervision of the committee and the school that is used as a reference.
Review and Readjustment	The review was carried out on three aspects that were deemed insufficient by the school: 1) increasing the competence of digital-based vocational teachers, 2) both student and teacher exchange activities, and 3) expanding institutional networks that lead to cooperation in MSMEs, industry, and other business units.

In the corridor of development, vocational schools need affiliation to channel talent. In addition, school capacity development can also be carried out by participating in various school competition events so as to produce achievements as qualitative evidence of the quality of the learning process that has been held by the school. The Office Management department also implemented benchmarking activities at the Regional Office of the Directorate General of Taxation in Aceh Province, focusing on administrative aspects, innovation, time management, correspondence, and tax systems. The benchmarking study results are presented in [Table 2](#).

Table 2. Benchmarking Program Adaptability

Benchmarking Program Adaptability	Aspect	Characteristic
Processing of a Service-based information System	Data collection for Computer-Based School documents requires manual data entry and management information system knowledge. Output: web-based management of SIM data.	Supervisions
Method of Tutoring by Colleagues	The study of simulation-based information and digital communication. Curriculum modifications and innovative instructional techniques meet aspects.	Action plan
Research Activities.	Implications of the anticipated collaborative and existing research efforts (ongoing).	Collaboration within the school's teams.
Test of Skill Competency	The skills competency test program is administered annually as part of routine evaluations.	Internal evaluation

[Table 2](#) describes numerous benchmarking programs adaptability, including service-based SIM management. In this context, Vocational Schools and institutions in the Lhokseumawe region collaborate on community service initiatives. Then, there is the peer tutor program and classroom action research. In this instance, the emphasis is on the participation of students as tutors or learning resources for other students.

The outcomes of benchmarking studies are frequently employed to strengthen the supervisory function. The issue at SMK Negeri 3 Lhokseumawe was a modification in the SMK curriculum's format. This issue necessitates that teacher enhances their initial techniques, methods, resources, approaches, and tactics for learning. The benchmarking findings also assess the hurdles in implementing activities from offices, schools, and subjects. Optimizing the implementation of benchmarking strengthens the collaborative role of teachers by fostering greater cooperation in benchmarking initiatives. This study analyzed the industrial sector in Lhokseumawe City, focusing on its potential to absorb vocational school graduates. The industrial sector was categorized into three types: management, industrial services, and industrial companies or businesses. The management sector was further classified into four categories based on its capacity: Large-Scale Industry (employing more than 100 workers), Medium-Scale Industry (employing 20-99 workers), Small-Scale Industry (employing 5-19 workers), and Household Industry (employing 1-4 workers).

Based on the analysis, the opportunities for the management sector covered a wide range of industries, including food and beverages, wood products, printing and reproduction media, refining products, pharmaceuticals, non-metallic mineral products, furniture, transportation equipment, repair

services, and other related industries. The findings of this study indicate that the industrial sector in Lhokseumawe City has shown significant development and has the potential to absorb vocational school graduates. However, the study also highlights the need for vocational schools to adapt their curricula to the changing demands of the industrial sector. This can be achieved through the development of partnerships between vocational schools and industries to ensure that the skills and knowledge taught in the curriculum align with the needs of the job market.

The implementation of vocational education in SMKN 3 Lhokseumawe relies heavily on the expertise of competent teachers, encompassing a wide array of dispositions, knowledge, and skills. The crux of lesson planning and instructional objectives serves as a fundamental instrument to effectively showcase the application, elucidation, and ramifications of technology for students. Demonstrative approaches stand as the paramount method employed by technology educators. Hence, the provision of both practical and theoretical instruction should furnish expert competencies that not only assist students in their endeavors but also are readily comprehensible to them.

Benchmarking Effectiveness

In this aspect, the benchmarking flow refers to functional benchmarking, where the comparison process is carried out on the functional work produced through policies. Functionalization refers to how certain policies are useful in improving the functional operations of the organization's work. Program implementation is carried out in three stages: leadership competence, institutional capacity, and SBM-based policies. The internalization of the school service system also refers to the concept of integrated quality management or total quality management (TQM) as an alternative solution to solving these problems. Benchmarking implementation at SMKN 3 Lhokseumawe in realizing a quality order and culture is show in Figure 1.

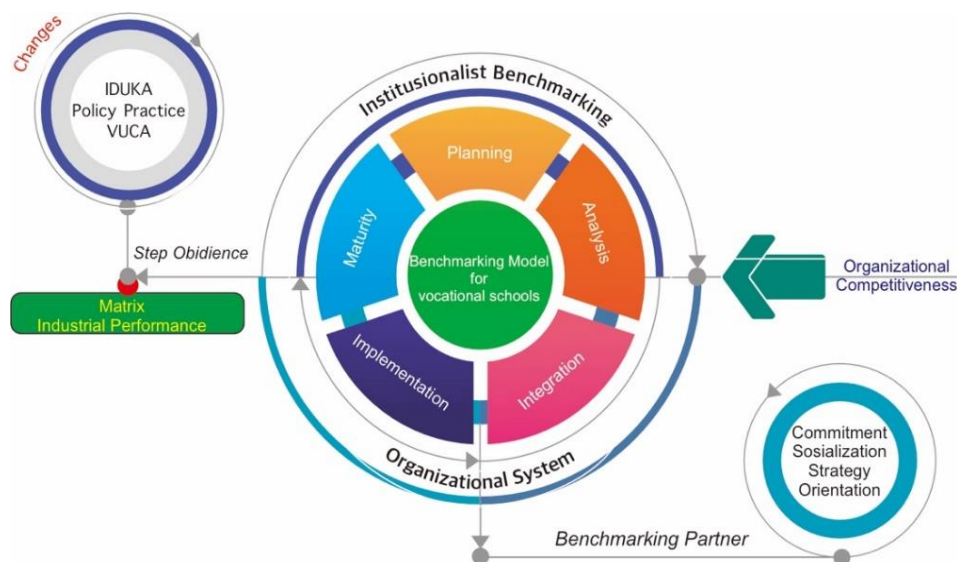


Figure 1. Benchmarking Implementation

Figure 1 showed that the stages of benchmarking implementation at SMKN 3 Lhokseumawe in realizing a quality order and culture could be seen from (1) socialization in realizing an active commitment in the implementation of benchmarking. Best practice implementation strategy through a clear and comprehensive understanding of the work-related as a basis for comparison (practice-actualization of concepts); (2) the desire to change and adapt is supported by policies based on benchmarking findings, (3) competitive orientation as a manifestation that competence is constantly changing and is necessary to precede it, (4) a desire to share information with benchmarking partners, (5) a focus on benchmarking implementation on industry best practices, and second on performance metrics, (6) the adaptation process is carried out against VUCA with a concentration on building a network of companies within the industry, or operations other best functional, recognized by the industry, work world, or IDUKA; (7) adherence to the benchmarking process steps, (8) a continuous benchmarking effort, institutionalist (ingrained) benchmarking.

Discussion

From the author's observation, benchmarking activities are carried out through several stages: starting from planning, analysis, integration, implementation, and maturity. The first stage is planning. The first step in planning benchmarking is identifying what processes or operations need improvement for benchmarking. The second step is to look for other companies/institutions or competitors that successfully carry out the same operation. The third step is to determine what types of data are needed and determine what methods of observation and measurement should be carried out. The fourth step is to conduct negotiations with benchmarking partners to reach an agreement on benchmarking research. Novelty research shows a correlation between quality improvement and culture according to Engkington, Gunasekaran and Antasari (Antasari, 2021; Elkington et al., 2017; Gunasekaran, 2021).

The benchmarking findings are also utilized as an evaluation tool to enhance the education service system. First, the categorizing of enhancements leads to the development of a planning concept based on a study of studies on changes in government legislation governing the Link and Match program's execution. Second, in terms of the organizational structure. In this instance, the organization is carried out through the leadership of a professional workgroup. Thirdly, benchmarking results in a strengthening of cooperation with the industrialized world. Initially, Aceh's industrial network was mapped, followed by the optimization of the special employment market (BKK) and the provision of industrial classes. Fourthly, the control principle. This component is strengthened by internal and external supervisors working jointly on the supervisory procedure. Externally represented by a network of partners and practitioners and internally by the principal.

Vocational education plays a crucial role in human resource development and the advancement of energy technology for the environment. In this era of sustainability, social awareness regarding relevant technology within the context of vocational high schools becomes even more important (Astuti et al., 2021; Pambayun et al., 2020). The supporting criteria for implementing benchmarking results include the availability of a teacher apprenticeship program, the distribution of competency test certificates to all students, and the standardization of work practices per industry norms (Johnston, 2020; Lubis, 2016).

The expected implications of the benchmarking strategy are to help schools achieve targets and goals by modifying the system, imitating many things from outstanding schools to shorten the learning process towards achieving sustainable quality (Gunasekaran, 2021; Syapsan, 2019). The results of this study suggest that the industrial sector in Lhokseumawe City offers a range of opportunities for vocational school graduates. This highlights the importance of vocational schools adapting their curricula to meet the demands of the job market, and developing partnerships with industries to ensure graduates are equipped with the necessary skills to succeed in the workforce (Faturohman & Suherman, 2022; Ismara & Prianto, 2020).

Still lacking is the awareness and concern of society, students, and parents regarding vocational education. In the meantime, future vocational education will require the implementation of holistic instruction. Humans who can adapt to different environments are evaluated not only on the basis of their academic performance, but also on their concern for energy resources (Baker, 2004; Popoola et al., 2020). Teaching, learning, and training in vocational education are characterized by an emphasis on practical instruction to acquire technical skills and theoretical knowledge in the field of energy extraction technology and engineering. Therefore, both practical and theoretical instruction should be able to provide students with employment-relevant expertise and be easily understood by students. Future research should investigate other school institutions in Indonesia, particularly those that have already integrated science and skill competencies in vocational schools' development.

4. CONCLUSION

There are three key steps to this process. The first step is to ensure that the school leaders possess the necessary managerial competence to secure government assistance. The second step is to develop institutional and managerial capacity to establish relationships with the industry, business, and the work world, known as *Iduka*, during the learning process. The third step involves decision-making by the school leadership, which is guided by the implementation of school-based management (SBM) using a structured frame of reference as a theory for the service process. The benchmarking program includes the adaptability of service-based SIM management. The vocational schools and institutions in the Lhokseumawe region collaborate on community service initiatives, such as the peer tutor program and classroom action research. The benchmarking implementation at SMKN 3 Lhokseumawe involves several stages, such as socialization, policy support, competitive orientation, sharing information with benchmarking partners, focus on industry, adaptation process, adherence to benchmarking process steps, and continuous benchmarking effort, which leads to institutionalized benchmarking

5. REFERENCES

- Acevedo-De-los-Ríos, A., Rondinel-Oviedo, D. R., & .. (2021). Impact, Added Value and Relevance of an Accreditation Process on Quality Assurance in Architectural Higher Education. *Quality in Higher Education*, 1–19. <https://doi.org/10.1080/13538322.2021.1977482>.
- Antasari, R. R. (2021). *Analisis Penggunaan Benchmarking untuk Meningkatkan Mutu Keunggulan Bersaing antara Rumah Jurnal di Lingkungan Perguruan Tinggi Keagamaan Islam Negri (PTKIN)*. Rajagrafindo Persada (Rajawali Pers).
- Arifin, I., Juharyanto, Mustiningsih, & Taufiq, A. (2018). Islamic Crash Course as a Leadership Strategy of School Principals in Strengthening School Organizational Culture. *SAGE Open*, 8(3), 215824401879984. <https://doi.org/10.1177/2158244018799849>.
- Astuti, M., Arifin, Z., Mutohhari, F., & Nurtanto, M. (2021). Competency of Digital Technology: The Maturity Levels of Teachers and Students in Vocational Education in Indonesia. *Journal of Education Technology*, 5(2), 254–262. <https://doi.org/10.23887/jet.v5i3.35108>.
- Baker, K. H. (2004). A Comparison of Students' Achievement and Attitudes between Constructivist and Traditional Classroom Environments in Thailand Vocational Electronics. *Programs King Mongkut's Institute of Technology*, 29(2), 133–153. <https://doi.org/10.5328/JVER29.2.133>.
- Bogetoft, P. (2013). *Performance Benchmarking: Measuring and Managing Performance*. Springer Science & Business Media.
- Caleb, E. E., Usoro, A. D., Onweh, V. E., & Akpan, G. A. (2017). Benchmarking Technical Vocational Education and Training in Nigeria for adaptation to Industry Skills Demand: a Needs Assessment Study. *International Journal of Educational Benchmark*, 6(2), 44–64. <https://www.researchgate.net/profile/Emmanuel-Caleb-2/publication/369197403>.
- Carayannis, E. G. (2020). Benchmarking. In *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* (pp. 201–201). Springer International Publishing. https://doi.org/10.1007/978-3-319-15347-6_300091.
- Elkington, R., Van der Steege, M., Glick-Smith, J., & Breen, J. M. (2017). *Visionary Leadership in a Turbulent World: Thriving in the New VUCA Context*. Emerald Group Publishing.
- Emzir, M. (2013). Metodologi Penelitian Pendidikan: Kuantitatif dan Kualitatif. *Jakarta: Rajawali Pers*.
- Fang, Z., Chang, B., & Dang, J. (2022). Growth Mindset Matters: Influences of Socioeconomic status on Chinese Secondary Vocational Students' Learning Engagement. *Journal of Pacific Rim Psychology*, 16, 183449092211419. <https://doi.org/10.1177/18344909221141984>.
- Faturohman, N., & Suherman, S. (2022). The Pattern of Vocational School Partnership with Industry and the World of Work (IDUKA) In Order to Increase the Absorption Of Graduates of Setiabudhi Vocational School Rangkasbitung. *Journal of Positive School Psychology*, 6(5), 5191–5197. <https://journalppw.com/index.php/jpsp/article/view/7498>.
- Glewwe, P., Shen, R., Sun, B., & Wisniewski, S. (2020). Teachers in Developing Countries. In *The Economics of Education* (pp. 371–389). Elsevier. <https://doi.org/10.1016/B978-0-12-815391-8.00027-6>.
- Gunasekaran, A. (2021). Benchmarking Tools and Practices for Twenty-First Century Competitiveness. *Benchmarking: An International Journal*, 8(2). <https://doi.org/10.1108/bij.2001.13108baa.001>.
- Ismara, K. I., & Prianto, E. (2020). Safety education management in welding robotic laboratory. *Journal of Physics: Conference Series*, 1446(1). <https://doi.org/10.1088/1742-6596/1446/1/012061>.
- Johnston, N. (2020). The Shift towards Digital Literacy in Australian University Libraries: Developing a Digital Literacy Framework. *Journal of the Australian Library and Information Association*, 69(1), 93–101. <https://doi.org/10.1080/24750158.2020.1712638>.
- Juharyanto, J., Arifin, I., Sultoni, S., Adha, M. A., & Qureshi, M. I. (2023). Antecedents of Primary School Quality: The Case of Remote Areas Schools in Indonesia. *SAGE Open*, 13(1), 215824402211449. <https://doi.org/10.1177/21582440221144971>.
- Kartikasari, E., & Nuryasana, E. (2022). School literacy movement program in elementary school, Indonesia: Literature review. *Journal of Education and Learning (EduLearn)*, 16(3), 336–341. <https://doi.org/10.11591/edulearn.v16i3.20383>.
- Kimberly, J. R., & Bouchikhi, H. (2016). Disruption on Steroids: Sea Change in the Worlds of Higher Education in General and Business Education in Particular. *Journal of Leadership & Organizational Studies*, 23(1), 5–12. <https://doi.org/10.1177/1548051815606434>.
- Komatsu, H., Fu, S.-P., Lin, M.-H., Hsieh, Y.-H., Rappleye, J., & Silova, I. (2022). Measuring the Transformation of University Students' Self-Construal for Greater Environmental Sustainability. *SAGE Open*, 12(1), 215824402210798. <https://doi.org/10.1177/21582440221079836>.
- Kushnir, I., Nunes, A., & ... (2022). Education and the UN Development Goals Projects (MDGs and SDGs): Definitions, Links, Operationalisations. *Journal of Research in International Education*, 21(1), 3–21. <https://doi.org/10.1177/14752409221088942>.

- Liu, R. (2021). Disparities in Disruptions to Postsecondary Education Plans During the COVID-19 Pandemic. *AERA Open*, 7, 233285842110454. <https://doi.org/10.1177/23328584211045400>.
- Lubis, A. (2016). Peningkatan Kinerja Melalui Strategi Benchmarking. *At-Tijarah: Jurnal Ilmu Manajemen Dan Bisnis Islam*, 2(1), 14–26. <https://doi.org/10.56403/nejesh.v2i3.126>.
- Lumban Gaol, N. T. (2021). School Leadership in Indonesia: A Systematic Literature Review. *Educational Management Administration & Leadership*, 174114322110108. <https://doi.org/10.1177/17411432211010811>.
- Marquez, J., Lambert, L., Ridge, N. Y., & Walker, S. (2022). The PISA Performance Gap Between National and Expatriate Students in the United Arab Emirates. *Journal of Research in International Education*, 21(1), 22–45. <https://doi.org/10.1177/14752409221090440>.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook*. Sage Publications.
- Misbah, Z., Gulikers, J., Dharmas, S., & Mulder, M. (2020). Evaluating competence-based vocational education in Indonesia. *Journal of Vocational Education and Training*, 72(4), 488–515. <https://doi.org/10.1080/13636820.2019.1635634>.
- Mutohhari, F., Sutiman, S., Nurtanto, M., Kholifah, N., & Samsudin, A. (2021). Difficulties in implementing 21st century skills competence in vocational education learning. *International Journal of Evaluation and Research in Education*, 10(4), 1229–1236. <https://doi.org/10.11591/ijere.v10i4.22028>.
- Nimehchisalem, V., Hosseini, M., Cortazzi, M., & Jin, L. (2023). Multiple Perspectives of Stakeholders towards Young Learners' Language Assessment in an International School in Malaysia. *Language Teaching Research*, 136216882311544. <https://doi.org/10.1177/13621688231154440>.
- Pambayun, N. A. Y., Sofyan, H., & Haryana, K. (2020). Vocational high school infrastructure conditions and the challenges in facing the era of literation and industrial revolution 4.0. *Journal of Physics: Conference Series*, 1700(1), 0–8. <https://doi.org/10.1088/1742-6596/1700/1/012068>.
- Pino-Mejías, J.-L., Luque-Calvo, P.-L., & ... (2021). Survey of Methods for Ranking and Benchmarking Higher Education Institutions. In *Handbook of Operations Research and Management Science in Higher Education* (pp. 159–211). https://doi.org/10.1007/978-3-030-74051-1_6.
- Popoola, G. A., Amoo, O. K., Umar, O. G., Popoola, A. A., & Olatunji, O. M. (2020). Influence of reading habit on student academic performance in a senior second school in Ibadan. *Multifaceted Strategies for Social-Emotional Learning and Whole Learner Education*, 141–162. <https://doi.org/10.4018/978-1-7998-4906-3.ch007>.
- Portuguez Castro, M., Ross Scheede, C., & Gómez Zermeño, M. G. (2019). The Impact of Higher Education on Entrepreneurship and the Innovation Ecosystem: A Case Study in Mexico. *Sustainability*, 11(20), 5597. <https://doi.org/10.3390/su11205597>.
- Prasetyo, M. A. M., Anwar, K., Asvio, N., & M, Z. (2022). Dimensional Analysis of School Based Pesantren Design Development. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 7(1), 1–13. <https://doi.org/10.25217/ji.v7i1.1636>.
- Rahmah, S., & Prasetyo, M. A. M. (2022). Quality Islamic Boarding School Model: Linking the Principles of Teacher Professionalism and Organizational Management. *AL-HAYAT: Journal Of Islamic Education*, 6(2), 161–173. <https://doi.org/https://doi.org/10.35723/ajie.v6i2.249>.
- Reese, S. (2018). Unlearning and the Learning Organization: Revisited and Expanded. *The Learning Organization*, 25(3), 210–212. <https://doi.org/10.1108/TLO-01-2018-0013>.
- Rizal, S. (2019). Humas dalam Perspektif Manajemen Pendidikan Islam. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 3(1), 16–36. <https://doi.org/10.47766/idadrah.v3i1.610>.
- Sartika, D., Nengsi, A. R., & ... (2022). Work Readiness of Graduates Responding to User Needs for a “Ready to Work” Workforce from University Perspective. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 6(1), 37–50. <https://doi.org/10.47766/idadrah.v6i1.490>.
- Shrivastava, U., & Acharya, S. R. (2021). Entrepreneurship Education Intention and Entrepreneurial Intention amongst Disadvantaged Students: an Empirical Study. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(3), 313–333. <https://doi.org/10.1108/JEC-04-2020-0072>.
- Singhania, M., Saini, N., & ... (2022). Quantification of ESG Regulations: A Cross-Country Benchmarking Analysis. *Vision: The Journal of Business Perspective*, 26(2), 163–171. <https://doi.org/10.1177/09722629211054173>.
- Siregar, F. A., & Prasetyo, M. A. M. (2023). The Innovation of Pesantren Development in Aceh Province through the Effectiveness of Organizational Culture. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 9(1), 174. <https://doi.org/10.33394/jk.v9i1.5735>.
- Stadler, A., & Smith, A. M. J. (2017). Entrepreneurship in Vocational Education. *Industry and Higher*

- Education*, 31(2), 81–89. <https://doi.org/10.1177/0950422217693963>.
- Suryawati, E., & Osman, K. (2018). Contextual learning: Innovative approach towards the development of students' scientific attitude and natural science performance. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(1), 61–76. <https://doi.org/10.12973/ejmste/79329>.
- Syapsan. (2019). The Effect of Service Quality, Innovation Towards Competitive Advantages and Sustainable Economic Growth. *Benchmarking: An International Journal*, 26(4), 1336–1356. <https://doi.org/10.1108/BIJ-10-2017-0280>.
- Yanto, D. T. P., Kabatiah, M., Zaswita, H., Giatman, G., & Effendi, H. (2022). Development of Virtual Learning using Problem-Based Learning Models for Vocational Education Students. *Elinvo (Electronics, Informatics, and Vocational Education)*, 7(2), 163–172. <https://doi.org/10.21831/elinvo.v7i2.52473>.