



Vocational Education Needs to Support the Development of the Mandalika Special Economic Zone, Lombok, Indonesia

Rahma Fibriani Dili Putri; Untung Waluyo; Sudirman Wilian; Mohamad Mustari; Fahrudin

Master of Education Administration Study Program, Postgraduate, University of Mataram, Indonesia

<http://dx.doi.org/10.18415/ijmmu.v12i2.6869>

Abstract

This study aims to analyze the needs of vocational education relevant to the leading sectors in the Mandalika Special Economic Zone (SEZ), West Nusa Tenggara. With a descriptive qualitative approach, data were obtained through in-depth interviews, direct observation, and document analysis of stakeholders in the tourism industry and vocational education institutions. The results of the study revealed three main focuses: (1) the types of vocational education that are most needed include hospitality, culinary, and tour guides; (2) there is a gap between the curriculum applied in vocational schools and industry needs, especially in soft skills such as attitude, communication, and English language skills; and (3) the lack of readiness of vocational education institutions in teacher training, competency certification, and industry involvement in curriculum development. These findings emphasize the importance of a collaborative approach between the government, industry, and educational institutions in designing a vocational education system that is responsive to the dynamics of the local and regional labor market. This research provides a real contribution to the formulation of vocational education policies that are integrated with tourism-based regional development. The practical implications of this research are that vocational education institutions need to strengthen partnerships with industry, revise the curriculum periodically, and improve the capacity of teachers and students through ongoing training, certification, and internship programs.

Keywords: *Vocational Education; Special Economic Zone; Tourism Industry; Vocational Curriculum; Industrial Collaboration*

Introduction

The rapid development of the global economy, especially due to technological acceleration and changes in industrial structure, has forced the world of education to fundamentally change its approach. The industrial revolution 4.0 has encouraged the emergence of new professions that require special skills and high adaptability (Putri et al., 2024). In this context, vocational education is starting to receive more attention because it is considered capable of bridging the gap between educational institutions and the job market (Sudira, 2017; Niza, 2024). Vocational education is no longer considered as an alternative educational path, but as the main strategy in forming work-ready human resources. Leading sectors, such as tourism, manufacturing, and information technology, require a workforce that is not only skilled but

also adaptive to change (Yonanda & Usman, 2023).

In Indonesia, the Mandalika Special Economic Zone (a.k.a. SEZ) is a concrete example of a tourism-based economic growth center with great potential (Suryade et al., 2022). The Mandalika SEZ has attracted a lot of investment and created new job opportunities for local and national communities (Widyaningrum, 2023). The demand for workers with specific skills in the tourism sector has increased significantly in this area (Azizurrohman et al., 2023). Vocational education is expected to be able to meet these needs by providing directly relevant graduates (Farmasari., 2023). However, challenges arise because vocational education has not been fully able to adapt to the needs of dynamic and global industry (Bolli et al., 2018; Choy & Yeung, 2024). Serious efforts are needed to align educational content with the standards and rhythm of the ever-evolving tourism industry (Huddleston & Laczik, 2018). Thus, vocational education must be placed within the strategic framework of national and regional economic development (Lado et al., 2023).

The main objective of vocational education is to provide technical skills and practical expertise that can be directly applied in the real world of work (CEDEFOP in Sudira, 2017). The curriculum and learning process are focused on application skills, such as manual skills, time management, and problem-solving skills (Waluyo et al., 2023). However, a classic problem that continues to emerge is the mismatch between educational output and the actual needs of the industry (Yonanda & Usman, 2023). Many vocational education graduates are not job-ready due to the lack of intensive practical training during their studies (Purwadi et al., 2020). On the other hand, the world of work demands graduates who are not only technically competent, but also have good soft skills such as interpersonal communication, teamwork, leadership, and use of foreign languages (Mishra, 2024). This is very important in the context of the Mandalika Special Economic Zone which is oriented towards foreign tourists (Lado et al., 2023).

The concept of link and match between the world of education and the world of industry has become a major strategy in the development of vocational education in Indonesia (Asrin et al., 2022). This term refers to efforts to align the educational curriculum with the competency needs expected by the world of work. Grollmann (2008) emphasized that the success of vocational education is highly dependent on the ability of educational institutions to be flexible and adaptive to the dynamics of the labor market. However, the reality in the field shows that the implementation of link and match has not been optimal (Marcheline & Adiati, 2021). One of the main causes is the low participation of the industrial sector in the preparation of vocational education curricula (Sellar & Lingard 2017). This causes many vocational education graduates to lack the relevant skills needed in the workplace (Widiaty et al., 2013).

In the context of developing vocational education, collaboration between educational institutions, the business world, and local governments plays a very strategic role (Majumdar, 2011). This collaboration enables the creation of an educational ecosystem that is responsive to the real needs of the labor market (Rageth & Renold, 2020). The business world gets a ready-to-use workforce, while educational institutions gain access to industry information and resources. The local government also benefits because it can reduce unemployment rates and increase regional competitiveness (Mustari, 2020). In the Mandalika Special Economic Zone, partnerships like this can be focused on developing adaptive curricula and industry-based job training programs (Farmasari, 2023).

Theoretically, the human capital theory approach developed by Becker (2009) is an important basis for understanding the urgency of vocational education. This theory states that education is an investment in human resources that will result in increased productivity and economic growth. In addition, this social system approach also provides an in-depth perspective for understanding the role of vocational education. Parsons saw education as a mechanism for the selection and allocation of individuals into social and economic systems. The combination of human capital and social system theories provides a strong conceptual foundation for the development of vocational education strategies

(Shi & Bangpan, 2022). The social constructivism theory developed by Vygotsky (1978) also makes a major contribution to designing contextual and practice-based vocational education. According to Vygotsky, learning occurs optimally when students are directly involved in relevant and meaningful activities (Wilian, 2021). This means that the learning process must involve social interaction and real experiences in the work environment. In the context of vocational education, this is translated into project-based learning, simulations, and industrial internships (Elmanora et al., 2022).

One of the main challenges in developing vocational education in Indonesia is the quality of teaching staff and supporting facilities which are still limited. Many teachers in vocational schools do not yet have industrial competency certification relevant to the fields they teach. This causes the learning material delivered to be less appropriate to real needs in the field. This inequality has a direct impact on the quality of learning and the readiness of graduates to face the world of work (Purwadi et al., 2020). In the development of vocational education in the Mandalika Special Economic Zone, a locally based contextual approach is very important (Risfandini, 2019). This area has a unique leading sector, namely tourism, which requires practical skills and excellent service from the workforce (Bahri & Abdillah, 2022). Therefore, the vocational curriculum must be designed based on mapping these needs so that it is relevant and applicable. Effective vocational education must produce graduates who are able to interact professionally with international tourists (Amirullah et al., 2020).

The competency-based training (CBT) model is considered one of the most appropriate approaches to be applied in vocational education in strategic areas such as the Mandalika Special Economic Zone (BNSP, 2022). CBT focuses on mastery of competencies that are measurable and can be evaluated objectively. In SEZ Mandalika, CBT can be integrated with professional certification programs recognized by the industrial world as written in the ASEAN MRA-TP. With this approach, vocational education can be more adaptive to changes in work needs. Through the theoretical framework and various field findings, it is clear that strengthening vocational education in the Mandalika Special Economic Zone must be carried out in an integrated and collaboration-based manner (Lado et al., 2023). This research aims to provide practical and theoretical contributions in developing strategies to improve the quality of vocational education. With this approach, the research results are expected to be the basis for formulating evidence-based and contextual policies.

Method

This study uses a descriptive qualitative approach which was chosen to comprehensively and thoroughly describe the condition of vocational education in the Mandalika Special Economic Zone (SEZ). This approach is considered appropriate because it is able to explain social phenomena in depth based on the perspectives of the actors directly involved. In this context, vocational education is not understood only as a formal education system, but as part of local social and economic dynamics. Qualitative research allows researchers to capture the meanings, perceptions, and subjective experiences of informants. The purpose of this approach is not only to describe the apparent facts, but also to reveal the values, views, and obstacles that influence vocational development. The descriptive approach was chosen so that the findings produced are not only generalizations, but also rich in unique local contexts. Thus, the data collected is expected to be able to answer research questions in depth. This approach also provides space for researchers to reconstruct narratives from stakeholders. The perspectives of teachers, LPK managers, government officials, and industry players are very important to understand the relationship between education and the work sector. The interaction between the world of education and the world of business cannot only be explained through numbers, but also needs to be analyzed from the perspective of experience and interpretation. Therefore, this method provides flexibility in exploring data and understanding the process as a whole. This study does not aim to test hypotheses, but to understand the complex and dynamic social reality in the development of vocational education.

The location of this research was chosen purposively in the Mandalika Special Economic Zone (SEZ) area located in Central Lombok Regency, West Nusa Tenggara Province. This area is one of the five national super priority destinations being developed by the Indonesian government in order to strengthen the tourism sector. The Mandalika Special Economic Zone (SEZ) has great potential in absorbing workers from the vocational sector, especially in the hospitality and tourism sectors. The selection of this location was not only based on its strategic geographical position, but also because the challenges of vocational education in this region are very complex. This area presents a reality that brings together the needs of industry with the readiness of educational institutions on a local scale. In addition, Mandalika is also the location for national-scale development projects such as MotoGP which have a direct impact on the demand for skilled labor. Researchers chose this location so that the data obtained truly reflects the actual conditions of vocational education development in tourism areas. Various vocational education institutions around this area have close relationships with industry players. These relationships provide space for researchers to examine partnership patterns and the effectiveness of training and internship programs. By choosing this location, researchers also want to explore how vocational education is able to adapt to the dynamics of local labor market needs. The complexity of this location enriches the analysis in understanding the structural and cultural challenges in strengthening vocational education. The selective placement of research locations strengthens the contextual validity of the research findings.

Informants in this study were selected based on purposive considerations with the criteria of having direct involvement and experience in the field of vocational education and the tourism industry. Informants consist of various groups who are considered to be able to provide rich, in-depth, and diverse information related to the research topic. They include school principals, vocational high school teachers, LPK managers, education and labor office officials, and hotel and tourism industry players. A total of 18 informants were interviewed in order to explore a comprehensive perspective. The composition of informants includes 6 vocational teachers, 3 school principals, 2 LPK managers, 3 service officials, and 4 industry players. The selection of informants was carried out by considering representation from educational institutions, government institutions, and the industrial sector. This is done to ensure that the data obtained comes from various perspectives. The informants' direct experience of the training process, curriculum, and workforce recruitment is a very valuable source of information. Researchers strive to maintain a balance of representation between education providers and users of vocational graduates. The aim is for the analysis carried out to be able to reflect the reality of vocational education from the perspective of both providers and users. Through this composition of informants, it is hoped that a complete picture will emerge regarding the challenges and opportunities for developing vocational education in the Mandalika Special Economic Zone. The diversity of informant backgrounds strengthens the depth of the data and enriches the interpretation of the findings.

Data collection techniques in this study were carried out using triangulation methods to increase the validity and depth of the information obtained. The three main methods used are in-depth interviews, participant observation, and documentation studies. In-depth interviews were conducted in a semi-structured manner, allowing flexibility in exploring informants' answers according to the direction of the discussion. The questions asked covered various important aspects such as curriculum policy, synergy with industry, readiness of educational institutions, and experience in implementing vocational programs. Participatory observation was conducted directly in vocational schools and the tourism industry, with researchers actively involved in observing the learning and training process. Interactions between students and teachers, learning facilities, and work practice activities were also systematically observed. Documentation studies were conducted to access various documents such as curriculum, learning implementation plans, industry cooperation reports, and employment data from related agencies. This triangulation technique was chosen to ensure that data did not come from only one source or method. The aim is to capture a diversity of perspectives and strengthen the findings obtained from the field. By combining oral data, direct observations, and written documents, researchers can construct a more complete and holistic picture. This process also allows for cross-confirmation between data obtained from

various sources. This approach is very important in qualitative research so that the results obtained are not biased and have high interpretative power.

The implementation of interviews in this study was carried out flexibly, either through face-to-face meetings or online, depending on the conditions and willingness of the informant. All interviews were recorded with the informant's permission and then transcribed verbatim to maintain the accuracy of the information. Transcription was done immediately after the interview to ensure that no important details were missed. The researcher noted expressions, tone of voice, and situational context during the interview as part of the qualitative data. Observation activities were carried out for approximately three months, from May to July 2024, at several vocational schools and tourism business units in the Mandalika Special Economic Zone. Researchers participated in learning activities, practical training, and teacher-student interactions to directly understand the implementation of vocational education. In addition, visits to hotels and tourist attractions are also conducted to observe the needs and work standards applied in the field. Documentation studies were obtained through official requests to educational institutions and local government agencies. The documents analyzed included curriculum data, cooperation programs with industry, and local employment reports. All data obtained were categorized and arranged into analytical themes according to the formulation of the problem. This process was carried out systematically and in stages so that there was no overlap or chaos in the analysis. With in-depth and varied data collection, this study is expected to be able to provide a real picture of the condition of vocational education in the research area.

Data analysis in this study follows the stages developed by Miles, Huberman, and Saldaña (2014), namely data reduction, data presentation, and drawing conclusions. The data reduction process is carried out by sorting raw data into relevant and meaningful information according to the focus of the study. Data that is too general, irrelevant, or repetitive is eliminated to maintain the effectiveness of the analysis. Data presentation is done in the form of descriptive narratives and thematic tables that show patterns and relationships between variables. This presentation helps researchers in identifying key issues and sub-themes that emerge from the field data. Drawing conclusions is done iteratively by always returning to the raw data to check the validity of the findings. Data validation is carried out through triangulation of sources and methods to ensure that the findings are accountable. In addition, the researcher conducted member checking by confirming the interpretation results to the informant to avoid misunderstandings. The peer debriefing process was also involved by inviting several vocational education experts to provide input on the analysis results. The purpose of this process is to increase the credibility and reliability of the research results. All analysis steps were carried out while still referring to the previously established theoretical framework. With systematic and transparent procedures, the results of the analysis are expected to describe social reality accurately and objectively.

The ethical aspects of this research are strictly maintained from the initial stage to the end of implementation. The researcher ensured that each informant understood the purpose of the study and gave voluntary consent. The consent procedure was carried out through informed consent conveyed both verbally and in writing. The informant's identity was disguised to maintain their confidentiality and privacy in all reports, publications, and presentations. The researcher gave the informant the freedom to withdraw from the study at any time without any consequences. This study has also obtained official permission from the authorized agency, including from the educational institution where the study was conducted. During the data collection process, the principle of transparency was upheld, by providing complete information to participants regarding their rights and responsibilities. The researcher's neutrality was maintained by not taking sides with any party and refraining from unfounded interpretations. Interpretation of results is done by referring to valid theories and data to avoid personal bias. All data documentation processes are carried out carefully by avoiding manipulation and maintaining the authenticity of information. Researchers also note any obstacles or field situations that may affect the research process as part of methodological reflection. By maintaining research ethics as a whole, the integrity of the results obtained can be scientifically accounted for.

Overall, the methodological design in this study was designed to answer the three main focuses that have been established in the problem formulation. First, this study aims to identify the types of vocational skills needed by the tourism sector in the Mandalika Special Economic Zone. Second, this study analyzes the gap between vocational education curriculum and the real needs of the tourism industry. Third, this study evaluates the extent to which vocational education institutions are prepared to respond to the dynamics and challenges of local industry. The selection of a qualitative approach provides flexibility in exploring information from various perspectives and social contexts. The use of source and method triangulation strategies strengthens the validity of the findings and enriches data interpretation. With this design, it is hoped that the research results can provide theoretical and practical contributions to the development of vocational education. The findings obtained not only provide a situational overview, but also evidence-based policy recommendations. This research is expected to be a reference for stakeholders in formulating more adaptive vocational education policies. In addition, the analysis model and collaborative approach in this study can be replicated in other areas with similar characteristics. Thus, this research methodology is designed not only to answer academic questions, but also to support the agenda of sustainable human resource development. Integration between theory, field data, and research ethics is an important foundation in producing credible and useful scientific work.

Findings and Discussion

The results of this study are arranged thematically to describe the main issues that emerge from processing interview, observation, and documentation data. The use of a thematic approach allows researchers to present data systematically based on important focuses in the development of vocational education. The themes that emerge not only reflect facts on the ground, but also represent the experiences, perceptions, and aspirations of education and industry players. There are six main themes discussed, namely (1) the need for tourism-based vocations, (2) curriculum gaps, (3) industry involvement, (4) readiness of educational institutions, (5) strengthening soft skills, and (6) the need for certification. Each theme was analyzed by linking it to relevant theories and references to previous studies to strengthen the validity of the interpretation (Shi & Bangpan, 2022; Choy & Yeung, 2024). This approach provides depth of analysis while maintaining continuity between empirical data and conceptual foundations. In addition, thematic discussions allow exploration of the complex interrelationships between issues in the context of the Mandalika Special Economic Zone. Analysis is conducted not only to describe problems, but also to identify solutions and strategic opportunities. These findings provide a comprehensive overview of the challenges of vocational education in super priority tourism areas. Curriculum relevance, industry involvement, and institutional readiness are three main dimensions that are interrelated and determine the success of vocational programs. Therefore, this section is designed to present the dynamics of the field while remaining based on scientific principles. The discussion conducted is expected to be able to become a basis for formulating evidence-based policies and best practices in the field of vocational education (Lado et al., 2023).

The first theme that emerged in this study was the need for vocational education based on the leading tourism sector. Informants from the industrial world, such as hotels, restaurants, and travel agencies, stated that the need for vocational workers is very high (Azizurrohman et al., 2023). The main focus is on hospitality, catering, guest services and tour guiding. Along with the increasing number of tourists coming to the Mandalika Special Economic Zone, the demand for vocational workers has also increased (Widyaningrum, 2023). One hotel manager said that their needs were not only technical skills, but also communication skills and good service attitudes (Widiaty et al., 2013). He said, “*We need front office staff that can speak English well and have excellent service attitudes.*” However, vocational education and training institutions admit that current training programs have not fully adapted to industry demands. This is in line with the findings of Amirullah et al. (2020). Many programs have yet to reach new areas such as homestay management and adventure tourism services. The growing trend of experience-based travel also requires new skills that are not yet taught in schools. This shows the

importance of periodically updating the curriculum based on data on tourism sector needs as suggested by Risfandini (2019). Vocational education must be more adaptive in developing programs that are contextual to local tourism developments. The relevance between the type of training and industry needs is the main basis for designing HR development policies in this region.

The second theme identified was the gap between vocational education curricula and the real competencies needed in the world of work. The results of interviews with teachers and principals showed that the national curriculum is too general and not flexible enough to adapt to the dynamics of the tourism industry's needs. This finding is in line with the explanation of Bahri & Abdillah (2022). A vocational school teacher said, *"We teach according to the textbook, but when students do internships, they are confused because in industry there are many practices that are not included in the curriculum."* This statement shows that there is a lack of synchronicity between the contents of the curriculum and the actual work context. Industry also said that graduates often lack understanding of standard operating procedures (SOPs), work ethic, and service culture. This condition causes graduates to be unprepared to work professionally in the tourism sector. Industry needs continue to grow, while the curriculum moves slowly due to the bureaucratic and top-down revision process. Therefore, a more participatory curriculum evaluation system is needed by directly involving industry players as stated by Rageth & Renold (2020). Curriculum revisions should focus on best practices that have proven effective in the field. In this context, a collaborative model in curriculum development becomes an urgent need. This curriculum gap shows the importance of close connections between schools and the industrial world so that graduates are truly work-ready (Marcheline & Adiati, 2021). Reformulation of the vocational curriculum must pay attention to flexibility and accuracy in responding to the needs of priority sectors such as tourism.

The fourth theme shows that the readiness of vocational education institutions to support the tourism sector in the Mandalika Special Economic Zone is still relatively low. Many vocational schools still face obstacles in terms of practical facilities and infrastructure that meet industry standards. This finding supports the description of Purwadi et al. (2020). Some schools do not even have adequate practical laboratories and still rely on simulations using simple equipment. One of the principals said, *"We have a culinary department, but the stoves we use are very different from those used in hotels."* This inequality results in students not gaining authentic and applicable learning experiences. These infrastructure limitations are compounded by a lack of access to the latest learning technologies used in the industrial sector. Apart from facilities, the quality of teachers is also a serious problem because most of them do not have industry experience or recent professional training. This is in line with the explanation of Elmanora et al. (2022). The lack of industry-based training makes it difficult for teachers to adapt teaching materials to field practice. Schools also do not yet have a learning evaluation system based on industry standards. In conditions like this, the readiness of institutions to produce graduates who are ready to work is still very limited. Therefore, increasing institutional capacity, both in terms of facilities and human resources, is a priority in developing vocational education in this region.

The fifth theme that stands out is the importance of strengthening soft skills as core competencies needed in the world of work, especially in the tourism sector. According to Mishra (2024), Soft skills such as discipline, initiative, work ethic, teamwork, and communication skills are determining factors for graduate success in work. Almost all industry players interviewed emphasized that technical aspects can be trained, but work attitudes and behaviors are difficult to form in a short time. A trainer from the hotel said, *"We can train them on technical matters, but if their attitude is not good, it is difficult."* This shows that vocational education must be more serious in internalizing character values into the learning process. Currently, learning in many schools still focuses on cognitive and technical aspects, while affective and social dimensions are less touched (Sudira, 2017). The lack of integration of character strengthening in the curriculum causes the graduates unable to develop professional work attitudes needed in the field. Schools therefore need to develop project-based learning methods, customer service simulations, and leadership training as part of strengthening soft skills. In addition, teachers need to receive training to become facilitators in the formation of student character. The learning environment must also support the

development of positive work attitudes from the start. Industry involvement in providing soft skills training is highly recommended so that students gain first-hand experience in the world of work. Successful vocational education is that which is able to form individuals with complete skills—both technical and non-technical.

The sixth theme focuses on the need for certification and validation of graduate competencies as real evidence of work ability. The industrial world today does not only assess based on formal diplomas, but places more emphasis on proof of skills through professional certificates. Several informants from the industry stated that they prefer graduates who have certification from a nationally accredited Professional Certification Institution (LSP). This certification is considered to guarantee that graduates have gone through an assessment process based on industry standards. However, not all vocational schools have access to certification institutions due to limited facilities, costs, and human resources. The existing certification process is also often considered administrative and does not reflect the real abilities of graduates. Therefore, it is necessary to strengthen the internal certification system in schools with assistance from official LSPs. Schools must collaborate with certification institutions and industry in designing competency-based certification programs. Certification must also be carried out periodically and linked to students' real work practices. In addition, the government needs to provide regulatory and financial support to expand access to this certification. With relevant and credible certification, graduates will have a higher competitive advantage. This process will help accelerate the absorption of labor into the industry and improve the overall quality of vocational human resources as conveyed by Lado et al. (2023).

The final theme underlines the importance of collaborative strategies between government, industry and educational institutions in building responsive vocational education. Multi-stakeholder engagement is key to creating a sustainable and relevant vocational ecosystem. Local governments, especially the Education Office and the Manpower Office, have an important role in designing regulations that support cooperation between schools and industry. One of the office officials said, *"We are preparing a roadmap for tourism vocational partnerships, but we still need synergy from all parties."* This shows that collaborative efforts have begun to be built, but have not been well coordinated. A regular vocational coordination forum is needed that involves all relevant parties, including industry associations and professional organizations. The government should also provide incentives to industries that are willing to partner with schools and provide internships. On the other hand, schools need to actively build relationships and demonstrate readiness to collaborate. This collaboration can also be facilitated through the establishment of joint vocational centers as a place for training and certification. This collaborative approach reflects the principles of inclusive and locally-oriented vocational education partnerships. Synergy between sectors is an important foundation for building superior vocational education in the era of industry and digitalization. Collaborative strategies will strengthen the integration between education, the world of work, and regional development based on local potential.

The findings of this study strengthen a number of important theories in vocational education studies, especially the human capital theory put forward by Becker (2009). This theory states that education is a form of strategic investment to increase labor productivity and economic growth. In the context of the Mandalika Special Economic Zone, relevant vocational education will have a direct impact on improving the quality of human resources in the tourism sector (Shi & Bangpan, 2022). The gap between the curriculum and industry needs reflects the weak integration between the education system and social structure, as explained by Vygotsky (1978) in the theory of social constructivism. Vocational education should act as a mechanism for allocating human resources to appropriate social and economic positions. Meanwhile, the importance of contextual, collaborative, and real-world experience-based learning is in line with Vygotsky's social constructivism theory. This theory emphasizes that effective learning occurs through social interactions in real and meaningful contexts. Findings regarding the need for soft skills and practical training show that education not only transfers knowledge, but also forms complete work competencies (Wilian, 2021). Therefore, the reformulation of vocational education must

include both technical and non-technical dimensions simultaneously. Education strategies need to be directed at project-based learning models, industry partnerships, and field training. With a strong theoretical framework, this study contributes to the development of a relevant and adaptive vocational education model. Vocational education built on the principles of human capital, social systems, and constructivism will be the foundation for HR transformation in strategic areas such as the Mandalika Special Economic Zone.

Conclusion

1. Based on the research findings, it can be concluded that the type of vocational education that is most relevant to the leading sectors in the Mandalika Special Economic Zone is education that focuses on tourism such as hospitality, culinary arts, tour guiding, homestay management, and experience-based tourism services. The need for vocational workers in this sector is very high along with the increasing number of tourist visits, which requires graduates to have not only technical skills, but also soft skills such as communication and excellent service. Therefore, vocational education that is contextual, adaptive to tourism trends, and integrated with the development of leading sectors is very relevant in answering the needs in the Mandalika Special Economic Zone.
2. The suitability between the current vocational education curriculum and the needs of the industry in this area is still relatively low. The curriculum used by many educational institutions is still general and not responsive to the dynamics of the tourism industry sector which is changing very quickly. This is reflected in complaints from teachers and industry players who mention the gap between the material taught and practice in the field, such as understanding SOPs, work ethics, and service culture. This discrepancy indicates the need for participatory curriculum reformulation by directly involving industry players as partners in the preparation of curriculum content and structure to be more in sync with the reality of work needs.
3. The readiness of vocational education institutions in supporting the development of tourism human resources in the Mandalika Special Economic Zone also still faces many challenges. Most vocational schools do not yet have adequate and modern practice facilities, and there is minimal access to the latest technology used in the industry. In addition, the quality of teachers who have not been exposed to industry experience is a separate obstacle in delivering applicable learning. The lack of an industry-standard learning evaluation system and unequal access to competency certification also add to the list of challenges. Therefore, strengthening institutional capacity as a whole is an urgent need to improve the quality of graduates who are ready to work.

Recommendation

1. It is recommended that vocational education institutions in the Mandalika Special Economic Zone develop a curriculum based on the real needs of the tourism industry by directly involving industry players. The curriculum must be responsive to new trends such as experience-based tourism, homestay management, and digital tourism services. Curriculum adjustments must be carried out periodically and based on workforce needs data to remain relevant and dynamic.
2. Regional and central governments need to provide support in the form of improving practice facilities according to industry standards as well as training and certification for vocational teachers. Collaboration with industry players to provide internship programs for teachers and training programs based on the latest industrial technology will help improve the readiness of educational institutions in producing graduates who are ready to work.
3. Vocational institutions must strengthen cooperation with Professional Certification Institutions (LSP) and industry associations to facilitate access to certification for students. The government

needs to provide certification cost subsidies and incentives for industries that are partners in vocational education. In addition, the formation of a cross-sector vocational education coordination forum (government, industry, and schools) needs to be encouraged to ensure sustainable synergy and formulate joint strategies in developing superior local-based human resources in the Mandalika Special Economic Zone.

References

- Amirullah, A. & Rante, M. & Rusdi, M.. (2020). Relevance of Vocational Education Curriculum to Travel Service Business in Makassar, Jakarta and Bali (Relevansi Kurikulum Pendidikan Vokasi Dengan Usaha Jasa Perjalanan Wisata Di Makassar, Jakarta Dan Bali). *JEKPEND: Jurnal Ekonomi dan Pendidikan*. 3. 19. 10.26858/jekpend.v3i1.11431.
- Asrin, A. & Ramdhani, A. & Muhaimi, L. & Maulyda, M. (2022). Principals' leadership strategy to improve "link and match" quality for vocational education. *Jurnal Kependidikan Penelitian Inovasi Pembelajaran*. 6. 40-52. 10.21831/jk.v6i1.40628.
- Azizurrohman, M. & Martayadi, U. & Najmudin, M. & Fathurrahim, F. & Bratayasa, I. (2023). Tourism Industry and Community Readiness: A Case Study of the Mandalika Special Economic Zone (KEK). *Journal of Economics Research and Social Sciences*. 7. 60-68. 10.18196/jerss.v7i1.13652.
- Bahri, A. S. and Abdillah , F. (2022). Human Resource Potential in Tourism in the National Tourism Strategic Area of Labuan Bajo, East Nusa Tenggara. *Destinesia Hospitality Journal & Tourist*, Vol. 3, No. 2, March 2022, pp. 84-92. ISSN 2686-2042.
- Becker, G. (2009) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 3rd Edition, University of Chicago Press, Chicago.
- BNSP (2022). Guidelines for the Implementation of Asean Mra-Tp Accstp | Cate | Toolbox Pada Tourism Industry – Professional Certification Institutions for Vocational Training and Education.
- Bolli, T., Caves, K. M., Renold, U., & Buergi, J. (2018). *Beyond employer engagement: measuring education-employment linkage in vocational education and training programs*. *Journal of Vocational Education & Training*, 70(4), 524–563. <https://doi.org/10.1080/13636820.2018.1451911>.
- Choy, M. W., & Yeung, A. S. (2024). Tourism vocational education: Relations of input and output. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 34, 100479. <https://doi.org/10.1016/j.jhlste.2024.100479>.
- Elmanora, E., Anwar, R. I., & Nugraheni, P. L. (2022). Various Learning Media for Vocational High School Students Majoring in Hotel Accommodation. *Indonesian Research and Publication Institute (IRPI) SENTIMAS: National Seminar on Research and Community Service. Proceedings of the National Seminar/ ISSN(E): 2830-3083*. Available at <https://journal.irpi.or.id/index.php/sentimas> pages: 403-411.
- Farmasari, S. (2023). Mentoring Teachers in the Mandalika Special Economic Zone (SEZ) Lombok to Grow and Develop Self-Regulated Learning Agencies to Support the Development of the Creative Industry Sector. *Journal of Community Service for Master of Science Education*. DOI: <https://doi.org/10.29303/jpmppi.v7i3.9469>.
- Grollmann, P. (2008). The Quality of Vocational Teachers: Teacher Education, Institutional Roles and Professional Reality. *European Educational Research Journal*. DOI 10.2034/eerj.2009.7.4.535.

- Huddleston, P., & Laczik, A. (2018). "In the driving seat or reluctant passengers?" Employer Engagement in Qualifications Development: Some Evidence from Two Recent 14-19 Qualification Reforms in England. *Journal of Education and Work*, 262–276. 31(1). pp. 262–276. DOI.10.1080/13639080.2018.1463086.
- Lado, M.N. & Wismayanti, K & Winaya, I. (2023). Community participation in the development of the Mandalika Special Economic Zone (Case study: Kuta Village, Pujut District, Central Lombok Regency) [Partisipasi Masyarakat Dalam Pembangunan Kawasan Ekonomi Khusus Mandalika (Studi Kasus: Desa Kuta Kecamatan Pujut Kabupaten Lombok Tengah)]. *Business and Investment Review*. 1. 35-44. 10.61292/birev.v1i4.36.
- Marcheline, AR, & Adiati, RP (2021). The effect of job satisfaction on psychological well-being in employees experiencing job mismatch. *Bulletin of Psychology and Mental Health Research (Brpkm)*, 1319–1330. <https://doi.org/10.20473/brpkm.v1i2.28616>.
- Miles, MB, Huberman, AM and Saldana, J. (2014) *Qualitative Data Analysis: A Methods Sourcebook*. Sages, London.
- Mishra, A. (2024). New Education Policy 2020: Why India Needs to Mainstream. *Vocational Education*. DOI :10.1007 /978-981-97-4318- 6_66.
- Mustari, M, & Rahman, M. Taufiq (2012). *Introduction to Research Methods*. 1st printing. Yogyakarta: LaksBang Pressindo Publisher.
- Mustari, Mohamad (2020). The Management of Community Education in Rural Areas by Religious Educational Institutions. *Journal of Social Development*, Volume 3 Number 1 Year 2020.
- Niza, AK (2024). *Vocational Education in the 5.0 Era*. First printing November 2024. Sukuharja, Central Java: Thata Media Group.
- Purwadi, A., Agustina, A., Sulisty, F. D., Rahmadi, U. T., & Aisha, A. (2020). Pengelolaan Pendidikan Vokasi yang Bermutu Pada SMK Bidang Kepariwisata.
- Putri, N.S., Mashudi, Setiawan, D., (2024) Pendidikan Vokasi :Relevansi Capaian Pembelajaran Terhadap Kebutuhan Dunia Industri 4.0. Intelktiva Published By Kultura Digital Media (Research and Academic Publication Consulting) E-Journal E-ISSN 2686-5661.
- Rageth, L., & Renold, U. (2019). The linkage between the education and employment systems: ideal types of vocational education and training programs. *Journal of Education Policy*, 35(4), 503–528. <https://doi.org/10.1080/02680939.2019.1605541>.
- Risfandini, A. (2019). Study of Tourism Potential Development in Coastal Areas of East Aceh Regency. *Journal of Tourism Charm* Vol 4 no 1. DOI: <https://doi.org/10.26905/jpp.v4i1.2819>.
- Sellar, S., & Lingard, B. (2017). The OECD and global governance in education. *Testing regimes, accountabilities and education policy*, 182-198.
- Shi, Y., & Bangpan, M. (2022). Young people's participation experiences of technical and vocational education and training interventions in low- and middle-income countries: A systematic review of qualitative evidence. *Empirical Research in Vocational Education and Training*, 14(1), 1-42. <https://doi.org/10.1186/s40461-022-00136-4>.
- Sudira, P. (2017). *TVET XXI Century Philosophy, Theory, Concept, and Vocational Learning Strategy*. Ed.2, Cet.1 .- Yogyakarta: UNY.

- Suryade, L., Fauzi, A., Achsani, N., & Anggraini, E. (2022). Key variables in the development of sustainable tourism special economic zones (SEZs) in Mandalika, Central Lombok, Indonesia [Variabel-variabel kunci dalam pengembangan Kawasan Ekonomi Khusus Pariwisata (KEK) berkelanjutan di Mandalika, Lombok Tengah, Indonesia]. *Jurnal Kepariwisata: Destinasi, Hospitalitas dan Perjalanan*, 6(1), 16–30. <https://doi.org/10.34013/jk.v6i1.327>.
- Waluyo, U. Wilian, S. Sudirman, S (2023). Evaluating The Implementation Of Mover Teacher Education Program Of English Language Teachers In West Nusa Tenggara. *JOLLT Journal of Languages and Language Teaching*. October 2023. Vol.11, No.4 p-ISSN: 2338-0810 e-ISSN: 2621-1378 pp.709-721.DOI: <https://doi.org/10.33394/jollt.v%vi%i.9051>.
- Widiaty, I. Kuntadi, I. Widaningsih, L. & Ana, A. (2013). Developing Vocational Education Curriculum Relevant to the Needs of the Workplace through Lesson Study Activities. 2013 *National Seminar “Vocational High School Readiness in Implementing the 2013 Curriculum”* <https://journal.uny.ac.id/index.php/ptbb/article/view/33082>.
- Widyaningrum, M. (2023). Case Study of the Development of the Mandalika Special Economic Zone (SEZ). Available at <https://www.djkn.kemenkeu.go.id/kpknl-samarinda/baca-article/16280/Case-Study-of-Economic-Area-Development-Khusus-SEZ-Mandalika.html> accessed on November 20, 2024.
- Wilian, S. Fitriana, E. Amin, M. Isnaini, M. (2021). Improving Teacher Professionalism Through Interactive Teaching Using Typical English Expressions in the Classroom. (Peningkatan Profesionalisme Guru Melalui Pengajaran Interaktif Menggunakan Ungkapan-ungkapan Khas Bahasa Inggris Di Kelas). *Jurnal Pengabdian Ilmu Pendidikan, Sosial, dan Humaniora* <http://journal.unram.ac.id/index.php/darmadiksani> Vol. 1, No. 2, Desember 2021, Hal. 70-79 e-ISSN 2798-6799 | p-ISSN 2798- 6918.
- Yonanda, A. & Usman, H. (2023). Determinants of Horizontal Mismatch Status in Higher Education Graduate Workers in Indonesia. *Journal of Employment*. 18 (2). pp. 142-157. DOI: 10.47198/naker.v18i2.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).