

## Analysis of the Indonesian Presidential Regulation on the Revitalization of Vocational Education and Training: Policy Implications for Strategic Decision Making in Vocational Education Institutions

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### ABSTRACT

Vocational education is one of the important pillars in preparing competent and work-ready human resources, especially in facing the challenges of the industrial revolution 4.0 and society 5.0. This policy not only emphasizes strengthening learning infrastructure, but also on synergy between vocational education institutions and the business world/industrial world (DUDI). This study aims to analyze the implementation of the vocational education revitalization policy at BLK SMK Negeri 1 Purwakarta and assess its implications for the strategic decision-making process at the institutional level. Using a descriptive qualitative approach, data were obtained through direct observation, interviews with schools and industry partners, and documentation studies of formal institutional documents. The results of the study show that BLK SMK Negeri 1 Purwakarta has implemented most of the elements of the revitalization policy consistently. The availability of SWOT analysis documents, RKAT, and the active involvement of industry partners are the main strengths in implementing the program. However, several challenges such as the limited availability of the latest practical tools and the need for continuous HR training are still important notes in efforts to improve the program in the future. This finding underlines the importance of continuous monitoring and evaluation in overseeing the implementation of vocational policies at the education unit level. A strong commitment from school leaders, support from regional policies, and broader DUDI involvement are needed so that the revitalization of vocational education does not stop at the administrative level, but truly contributes to improving the quality of graduates who are adaptive, productive, and highly competitive

## **INTRODUCTION**

Vocational education in Indonesia is currently at a crucial point of transformation. The increasingly complex needs of the world of work and the rapid development of technology have given rise to new challenges for vocational education units, especially in preparing adaptive, skilled, and competitive graduates. The government responded to this dynamic by issuing Presidential Regulation of the Republic of Indonesia Number 68 of 2022 concerning the Revitalization of Vocational Education and Training. This regulation emphasizes the importance of synergy between vocational education institutions, the business world and the industrial world (DUDI), and professional certification institutions to create a contextual learning ecosystem that is responsive to the needs of the labor market. This policy change did not come without reason. According to the Coordinating Minister for the Economy, Airlangga Hartarto, the revitalization of vocational education is a long-term strategy to prepare superior human resources to support the national development agenda and the transformation of the Indonesian economy (Kemko Perekonomian, 2022). This is in line with the view of Gerd Biesta (2010), who emphasized that education must serve the needs of society in a relevant manner, not just graduate students with technical skills alone. In the context of vocational education, this relevance concerns the suitability of the curriculum to the realities of the world of work and industrial developments.

However, implementation challenges in the field are still often encountered. Many vocational education institutions, including Vocational High Schools (SMK), face a gap between central policy planning and implementation practices at the school level. Research findings by Setyosari and Suryani (2021) show that there is still inequality in the distribution of resources and weak ongoing training for vocational teachers, thus hindering the achievement of maximum policy outputs. A similar thing was also expressed by Nurfadhilah and Saputra (2020), who highlighted the lack of real involvement of the industrial world in the learning process as the main obstacle to the revitalization of vocational education.

One approach used to bridge policy implementation is the application of strategic management principles in the governance of vocational education institutions. This includes four main stages, namely planning, organizing, implementing, and controlling. Edward III (1980) stated that the effectiveness of policy implementation is highly dependent on clear roles, adequate resources, and coordination and control mechanisms that function effectively. In the context of vocational schools, this process is not only administrative, but also highly dependent on the commitment of school leaders and the support of the external environment.

Herlina and Widodo's (2022) research conducted in several vocational schools in Central Java showed that schools with structured strategic management tend to be more successful in aligning the curriculum with industry needs and gaining the trust of DUDI partners. This proves that policy implementation is not enough with regulations, but also requires strong and adaptive internal governance. On the other hand, the monitoring and evaluation

aspects are determining factors for the sustainability of the program. According to Sutrisno (2019), the success of revitalizing vocational education can only be achieved if educational institutions have a reflective evaluation system that is open to feedback from all stakeholders.

Within this framework, this study seeks to examine in depth how the implementation of the revitalization policy of vocational education is carried out at the BLK SMK Negeri 1 Purwakarta. This school was chosen because it has become one of the models for developing teaching factories and vocational training recognized by the regional education office. Initial observations indicate that the school has a good organizational structure and planning documents, but the dynamics of implementation and effectiveness of quality control are still interesting questions to explore further. This study also aims to assess whether the macro revitalization policy is truly able to be translated into contextual strategic decision-making at the education unit level. As an institution that organizes the internal Job Training Center (BLK) program, SMK Negeri 1 Purwakarta also faces challenges in managing industrial partnerships, updating practical tools, and coaching instructors. In an interview conducted by the research team earlier, the principal stated that, "We want this revitalization to not just be a formality project, but to be able to produce graduates who are really needed by the industry." This statement reflects a strong will from the internal party to translate the policy into real practice. However, the success of this intention is largely determined by the extent to which the organizational mechanisms and strategic decision-making run well.

In practice, the success of vocational education revitalization is highly dependent on solid collaboration between principals, teachers, committees, and industry partners. This is reinforced by Wibowo's opinion (2021), which states that "vocational education transformation will not be effective without visionary leadership that is able to bridge regulations and operational realities in schools." Therefore, there needs to be a systematic effort to build a school culture that is pro-innovation and reflective, especially in terms of managing revitalization programs and developing students' practical skills.

Based on the various descriptions above, it is important to conduct research that explores how this vocational education revitalization policy is implemented at the school level in real terms. This research is expected to provide an empirical picture of the effectiveness of policy implementation, as well as contribute recommendations for improving more adaptive and participatory decision-making strategies in vocational education institutions.

## LITERATURE REVIEW

Vocational education is currently an important pillar in the development of human resources that are productive, adaptive, and ready to face global challenges. This education is designed not only to transmit knowledge, but also to develop practical skills, technical competence, and professional work character. According to UNESCO (2015), vocational education and training must be able to bridge the gap between the world of education and the world of work through contextual, industry-based, and work-oriented competency programs.

The need to revitalize vocational education arises from the reality that there is still a mismatch between graduate competencies and the needs of the business world and the industrial world (DUDI). In the context of Indonesia, Presidential Regulation No. 68 of 2022 concerning the Revitalization of Vocational Education and Training is a strategic policy response. This policy directs vocational education units to have closer connections with DUDI, through strengthening teaching factories, industrial internships, and professional certification. This is reinforced by Naim's opinion (2018) who stated that vocational education in Indonesia requires systemic reform from upstream to downstream in order to produce graduates who are ready to use.

Theoretically, the revitalization of vocational education can be analyzed through a public policy implementation approach. Edward III (1980) explained that the success of implementing a policy depends on four main variables: (1) communication, (2) resources, (3) attitudes or dispositions of implementers, and (4) bureaucratic structure. These four factors are benchmarks in assessing how central policies are translated into real programs in schools, as well as how the involvement of internal actors such as principals and teachers influences the success of implementation.

In addition, the link and match approach developed by Djojonegoro (1998) is an important foundation in vocational education. This concept emphasizes that vocational education cannot be separated from the needs of the world of work. The curriculum must be designed with reference to industry needs, the learning process must reflect real work practices, and assessments must be based on national or international work competency standards. In practice, this approach is very relevant in responding to changes in the job landscape due to digitalization and industrial automation.

From a managerial perspective, the implementation of revitalization policies at the school level requires a systemic and results-oriented strategic management approach. Wheelen and Hunger (2012) stated that strategic management includes the process of identifying the internal and external environment, formulating strategies, implementing programs, and evaluating and controlling. In vocational education, this process can be found in the cycle of preparing the Annual Work Plan and Budget (RKAT), SWOT analysis of institutions, management of teaching factories, and making curricular decisions based on labor market needs. The concept of the four management functions proposed by Henri Fayol—planning, organizing, implementing, and controlling—is still very relevant to be applied in the context of vocational education. In a study conducted by Mulyasa (2019), it was found that vocational schools that consistently apply this management cycle tend to be better able to adapt to external demands, both from government and industry. These four functions are also the basis for school principals in making strategic decisions that impact the direction and quality of vocational education programs.

In the context of decision-making, Robbins and Coulter (2016) explain that strategic decisions are long-term decisions, concerning the direction of the institution, and based on data considerations and risk analysis. In vocational schools, strategic decision-making includes selecting superior majors, procuring

practical tools, mapping industry partners, and designing vocational teacher training. This decision is not only technical, but also greatly determines the competitiveness of the institution and graduates in the future.

The implementation of vocational education revitalization policies cannot be separated from the principle of cross-sector collaboration. Bryson, Crosby, and Stone (2006) in their cross-sector collaboration theory explain that the success of collaboration depends on a shared vision, mutual trust, open communication, and a participatory governance system. In the context of vocational schools, ideal collaboration includes cooperation between schools, DUDI, local governments, and certification institutions. Without a strong collaboration mechanism, the revitalization program risks becoming a mere formality.

Siregar and Sutarno's (2021) research found that vocational schools that successfully implemented revitalization policies were those that were able to build strong synergies with industry partners and local governments, and had transformational leadership at the principal level. This strengthens the argument that the success of the policy is highly dependent on the capacity of the implementers and the empowerment of the educational institutions themselves.

Thus, the theoretical basis in this study covers three main domains: first, the theory of public policy implementation as a framework for understanding the extent to which central policies can be implemented at the school level; second, strategic management theory as a basis for managing responsive and measurable vocational education institutions; and third, collaboration theory as an approach to assessing partnerships between stakeholders in vocational education. The three are the main pillars in analyzing the effectiveness of the implementation of the vocational education revitalization policy and its implications for strategic decision-making in educational units.

## METHODOLOGY

This study uses a descriptive qualitative approach to explore in depth the dynamics of the implementation of the vocational education and training revitalization policy at SMK Negeri 1 Purwakarta, especially in the school's internal Job Training Center (BLK) unit. This approach was chosen because it is able to capture the nuances, complexities, and meanings of the policy process that takes place in a dynamic social and institutional context. As emphasized by Denzin and Lincoln (2018), a qualitative approach allows researchers to enter the world of meaning of policy actors and understand how policies are translated into everyday actions at the micro level. In the context of education policies that are constantly evolving and often normative at the central level, this study seeks to answer fundamental questions: how and why revitalization policies can (or cannot) be implemented effectively at the education unit level. This is in line with Creswell's view (2014), which emphasizes that qualitative studies are very suitable for exploring issues of policy implementation that are contextual and not always linear. Thus, this approach provides space to understand policy as a social process, not just a regulatory product.

The analytical framework in this study is built on two main foundations. First, the classical strategic management theory of Henri Fayol, which formulates four main functions in management: planning, organizing, implementing, and controlling. These four pillars are used as a framework to assess the managerial capacity of schools in responding to the policy of Presidential Regulation No. 68 of 2022 concerning the Revitalization of Vocational Education and Training. Second, the policy implementation theory of Edward III (1980) which includes four important variables: policy communication, resources, implementer disposition, and bureaucratic structure. The integration of these two theories allows for a comprehensive analysis of the technical and political dimensions of the policy implementation process in the field.

The location of the study was determined purposively at SMK Negeri 1 Purwakarta because this school was considered representative in describing the dynamics of vocational revitalization based on teaching factories. This school already has an internal BLK unit and is listed as one of the model schools in the industrial partnership strengthening program by the West Java Provincial Education Office. This consideration is based on a strong institutional track record, active involvement in industry-based training programs, and success in establishing strategic collaboration with partners in the world of work.

To obtain a complete and in-depth picture, this study uses three main techniques in data collection, namely: (1) participatory observation, which is carried out directly in the planning, training, and evaluation activities of the revitalization program; (2) semi-structured interviews, involving key informants such as the principal, vice principal of curriculum, BLK coordinator, productive teachers, and representatives from industry partners; and (3) documentation studies, on internal policy documents such as RKAT, teacher training reports, teaching factory activity agendas, monitoring and evaluation reports, and cooperation agreement documents with industry.

In order to maintain the accuracy and relevance of the research instrument, tools were prepared in the form of observation guidelines, interview guides, and document verification sheets. This instrument was developed based on success indicators from Edward III's theory and Fayol's strategic management principles. Instrument validation was carried out through an expert judgment process with supervising lecturers and vocational education experts, as well as a readability test by education practitioners at the school level. Thus, the instrument used is not only academically valid, but also applicable in the field context.

Data analysis was conducted interactively and cyclically, following the model developed by Miles, Huberman, and Saldaña (2014), which includes three main stages: (1) data reduction, through the process of filtering and coding relevant information; (2) data presentation in the form of matrices, thematic narratives, and categorization maps; and (3) drawing conclusions and verification, through in-depth reflection and cross-confirmation between sources. This approach allows for the exploration of layered meanings and the discovery of patterns of best practices and obstacles in policy implementation. To ensure the validity and credibility of the data (trustworthiness), the researcher

applied the triangulation technique of sources and methods, namely by comparing the results of observations, interviews, and documentation. In addition, a member check process was carried out by reconfirming temporary findings with key informants to avoid interpretation bias. The researcher also compiled field notes systematically as part of an audit trail, which functioned to document each stage of data collection and analysis process transparently.

Methodologically, this research design combines the strength of an inductive approach with systematic rigor in tracing field evidence. The combination of a strong theoretical framework, triangulation data collection techniques, and a reflective analysis process, makes this study not only describe the phenomenon, but also present a critical evaluation of the functioning of policies at the school level. The results are expected to be able to contribute to the development of vocational education policy management practices that are more responsive to the needs of the world of work and the challenges of the times.

With such a research design, this study aims not only to answer research questions academically, but also to provide practical contributions in formulating data-based policy recommendations. These recommendations are expected to support the preparation of vocational education policies that are more adaptive, sustainable, and integrated with the industrial ecosystem. In the long term, the results of this study are expected to strengthen the position of SMK as a strategic institution in supporting the agenda of developing superior and globally competitive human resources.

## RESULTS

The implementation of the vocational education revitalization policy at BLK SMK Negeri 1 Purwakarta shows a fairly strong integration between strategic planning and managerial practices. In terms of planning, the school has prepared a SWOT analysis document that reflects strengths such as HR qualifications, opportunities for industrial collaboration, and challenges in the form of limited facilities and mismatch of graduate competencies with industry needs. This document is the basis for compiling work programs and decision-making at the strategic level, as reflected in the school's annual agenda and RKAT.

The legal basis that is the main foundation is Presidential Regulation No. 68 of 2022, which has been used as a reference in various internal school policy documents. In the planning document, this policy is described in an applicative manner into the institution's vision and mission and teaching factory development strategy. The objectives of the revitalization policy are also explicitly stated, namely to increase the competitiveness of graduates through strengthening industry-based skills and competency certification.

The policy targets are clearly identified, namely to include final-year vocational high school students, productive teachers, and industry partners. The strategies implemented are quite comprehensive, starting from curriculum updates, teacher training, implementation of industrial work practices, to the development of teaching factories. This approach shows the institution's

commitment not only to following regulations, but to actually implementing them in the context of school operations.

From the organizational aspect, the school has a legal Organizational Structure and Work Procedures (SOTK) document that has been approved by the principal. This structure contains the revitalization implementation unit, including the teaching factory coordinator, industrial relations team, and teacher training division. The division of main tasks and functions of personnel is evenly distributed and has been supported by an internal decree explaining the description of the duties and responsibilities of each party.

Personnel criteria and qualifications have also been determined by referring to technical experience and pedagogical training. The placement of vocational teachers in industrial training and competency improvement workshops shows that the process of adjusting human resources to policies is going well. In addition, the school's RKAT also includes a detailed allocation of funds for the revitalization program, including the need for procurement of practical tools, teacher training, and operational implementation of student internships.

In terms of implementation, the revitalization program has been running according to the school's annual agenda. All stages start from planning, implementation, to evaluation which are systematically scheduled. Activities carried out include teacher training by industry partners, revision of the adaptive curriculum, implementation of industrial work practices (PKL) for students, and implementation of competency certification tests.

Stakeholder involvement in program implementation is quite active. The school committee, representatives of DUDI, and the Purwakarta Regency Education Office are involved in the planning phase to evaluation. This collaboration creates an effective two-way communication system, strengthening policy implementation in the field. Industry involvement is not only as a place for PKL, but also as a resource person for training and a partner for assessing student competency tests.

The effectiveness and efficiency of resources are also well monitored. The financial report shows the use of the BOS budget and support from industry partners that are quite optimal. The school's internal evaluation revealed that most activities were carried out according to the budget and schedule set, with fund efficiency reaching more than 90%. This shows a high level of accountability in program management.

In terms of control, the school has a routine monitoring and evaluation system. Monitoring reports are prepared periodically and used as reflection material in leadership meetings. Observation data shows that most program targets have been achieved above 85%, including the number of students who received competency certificates and the number of teachers who participated in industrial training. The evaluation of the results also resulted in various program revisions as a form of response to the dynamics of implementation.

The feedback and follow-up mechanisms run in a structured manner. Evaluation forms were distributed to students, teachers, and industry partners, then analyzed by the management team. Findings from monitoring, such as the

lack of certain practical tools, were immediately followed up with budget adjustments and the purchase of new tools. This practice shows that the school's control system is capable of being an adaptive navigation tool for changes and obstacles in the field.

## DISCUSSION

The research findings show that the implementation of the vocational education revitalization policy at the BLK SMK Negeri 1 Purwakarta is running quite effectively and systematically, especially in the planning aspect. The existence of SWOT, RKAT documents, and legal basis referring to Presidential Regulation No. 68 of 2022 shows that the school has understood the importance of a strategic foundation in managing policy changes. This is in accordance with the opinion of Wheelen and Hunger (2012) that good strategic planning is the foundation for success in implementing change programs in educational institutions.

The strength of implementation at the planning level is also reflected in the suitability between policy targets and the strategies used. Adjusting the curriculum to industry needs, strengthening the teaching factory, and teacher training are real practices of the link and match concept put forward by Djojonegoro (1998). This concept emphasizes that vocational education must always be aligned with the dynamics of the job market so that graduates have high competitiveness in the business and industrial world. However, the success of planning does not necessarily guarantee overall success without the support of a clear organizational structure and division of roles. The results of observations on the organizational aspect show that the organizational structure in schools has supported policy implementation, with the existence of a special unit that handles the revitalization program.

This is in line with Edward III's (1980) implementation theory, which emphasizes the importance of a functional bureaucratic structure and the involvement of competent implementers in implementing public policies.

Determining personnel qualifications based on competency is also a significant supporting factor. Productive teachers involved in industrial training programs reflect efforts to continuously increase human resource capacity. This confirms the findings of Herlina and Widodo's (2022) research, which states that teacher capacity development is one of the determinants of the success of vocational policy implementation. By increasing teacher competency, the strategic decision-making process becomes more based on data and field experience.

In terms of implementation, revitalization program activities in schools have covered various important aspects such as teacher training, curriculum development, industrial work practices, and certification. The presence of activity logbooks and monitoring reports shows that the implementation process is not just a formality, but is followed by a strong documentation and reflection system. This shows the internalization of accountability and transparency values in the management of vocational education.

Active participation of stakeholders, especially industry partners, is one indicator of success in program implementation. The collaboration carried out is not only symbolic, but is truly operational in training and evaluating students. As expressed by Bryson, Crosby, and Stone (2006), effective cross-sector collaboration is characterized by trust, open communication, and proportional distribution of roles. What happened at SMK Negeri 1 Purwakarta shows that these principles have been implemented well.

The effectiveness of resource use is also worthy of appreciation. The management of funds that are neatly and proportionally recorded in supporting revitalization activities reflects mature financial planning. In the context of educational management, Robbins and Coulter (2016) emphasize that efficiency in resource use is an important indicator of organizational effectiveness. This also shows that schools are able to manage BOS funds and industrial assistance optimally to support the institution's strategic goals.

Meanwhile, the control system in schools reflects a positive evaluative culture. Comparisons between targets and actual achievements are carried out periodically, and monitoring findings are used as a basis for taking corrective action. This mechanism supports the statement of Sutrisno (2019), who stated that the evaluation and follow-up cycle is the heart of the effective education policy implementation process.

Providing feedback from various parties, including students and industry partners, demonstrates a participatory approach to policy management. Responses to deviations are made through program adjustments and procurement of additional tools, demonstrating the school's managerial flexibility. This approach reinforces Biesta's (2010) view that good education must be responsive to the context and real needs of students and their social environment. Although implementation has gone well, there are a number of challenges that still need to be considered. The limited availability of state-of-the-art practical tools and dependence on a few industry partners are still obstacles to expanding the scope of the revitalization program. Therefore, a strategy for diversifying partnerships and alternative funding innovations is needed, including through collaboration with professional certification institutions and external training.

Overall, the implementation of the revitalization policy at BLK SMK Negeri 1 Purwakarta can be said to be successful in translating macro policies into strategic and measurable micro practices. However, the sustainability of this achievement is highly dependent on the consistency of management, evaluation-based program updates, and the collaborative involvement of all stakeholders. These findings can be a reference for other vocational education units that are currently pursuing internal revitalization in a sustainable manner.

## **CONCLUSIONS AND RECOMMENDATIONS**

The implementation of the revitalization policy for vocational education at BLK SMK Negeri 1 Purwakarta shows a positive tendency in building an education management system that is adaptive to change. This can be seen from the careful planning, preparation of strategic documents, and the existence of a framework that is in line with the direction of national policy.

The existence of SWOT analysis documents, RKAT, and mapping of policy targets and objectives shows that the planning carried out is not only administrative, but also strategic. The school has succeeded in utilizing the strategic management framework to shape the direction of institutional policies that are oriented towards increasing the competitiveness of graduates.

In terms of organization, the school has a functional organizational structure and clear division of tasks. The revitalization implementation unit works according to the mandate and is supported by personnel with relevant qualifications. This indicates that the implementation of the policy is not individual, but rather integrated institutionally.

Teacher training programs, the preparation of industry-based curriculum, and the active involvement of DUDI partners in program implementation are indicators of success in the policy implementation stage. These activities are not only carried out routinely, but are also documented and monitored closely, both by the school's internal team and external stakeholders.

Resource effectiveness (5M) is managed accountably. The school is able to distribute and utilize human resources, materials, machines, methods, and capital efficiently to support revitalization activities. This proves the existence of solid managerial capabilities in managing public policy-based programs.

Policy control through monitoring and evaluation has been carried out systematically. The school provides a periodic reporting system that not only records program achievements but is also used as a tool for reflection and improvement. Feedback from various parties is an important part of the ongoing evaluation cycle.

The success of the implementation of this policy is greatly influenced by the synergy between the school and the industrial world. The collaboration is not just a formality, but is truly translated into training, industrial work practices, and competency tests with partners. This reflects the real application of the link and match principle. Although the program's achievements are quite good, there are still technical challenges such as limited state-of-the-art practice facilities and dependence on certain partners. These challenges show that the revitalization of vocational education is a dynamic process that requires continuous evaluation and innovation in its management.

In general, the implementation of the revitalization policy at the BLK SMK Negeri 1 Purwakarta can be a model of good practice in strategic decision-making at the vocational education unit level. This process shows that the transformation of vocational education requires a combination of visionary leadership, strategic governance, and strong partnerships.

### ***Recommendations***

To maintain the sustainability of the effectiveness of the implementation of the vocational education revitalization policy, educational units such as SMK Negeri 1 Purwakarta are advised to continue to improve their strategic planning process. This includes updating the SWOT analysis document and the Annual Work and Budget Plan (RKAT) periodically, so that they are always in line with the dynamics of industry needs and changes in national education policy.

Evaluation and updating of this planning are important as part of an adaptive and evidence-based internal quality management cycle.

The central and regional governments need to strengthen policy support for vocational education units by strengthening school institutions and management. Granting broader autonomy with a performance-based governance approach will encourage schools to be more independent and innovative in managing revitalization programs. This can be accommodated through affirmative policies, implementing regulations, and incentive schemes based on measurable performance achievements.

Increasing the capacity of vocational teachers is a strategic agenda that must be accelerated systematically. The government needs to provide wider access to industry-based training (industrial certified training), vocational pedagogical workshops, and benchmarking programs to leading vocational education institutions both domestically and abroad. This approach aims to align teachers' pedagogical and technical competencies with industry standards and the latest technological developments.

In the context of external collaboration, schools need to expand their partnership networks not only with large corporations, but also embrace the Micro, Small and Medium Enterprises (MSMEs) sector, and technology startups that are relevant to the expertise program. Diversification of these industrial partners will strengthen the sustainability of industrial work practices and expand opportunities for innovation in the development of adaptive curricula. This multi-stakeholder synergy needs to be facilitated by the government through cross-sector collaborative platforms.

Strengthening teaching factories as centers of production and project-based learning must be a priority in the vocational revitalization scheme. The function of the teaching factory is not only as a means of technical practice, but also as a medium for developing soft skills, managerial abilities, and entrepreneurship of students. This model can be used as a key performance indicator (KPI) for industry-based vocational schools.

Vocational education units also need to develop a digital-based monitoring and evaluation (monev) system to ensure accountability and effectiveness of policy implementation. The use of technology such as evaluation dashboards, teacher and student e-logbooks, and online feedback systems from industry partners will support the real-time data-based decision-making process. This can be included in the vocational school management information system as part of the digital transformation of education.

Finally, a long-term impact study on vocational school graduates needs to be conducted comprehensively. The evaluation includes job absorption, entrepreneurial success, and satisfaction of industry partners, all of which are indicators of the success of the revitalization program. In addition, further research needs to be conducted that focuses on the strategic leadership patterns of school principals and vocational managers in implementing this policy, so that an effective, replicable, and good practice-based vocational managerial model can be developed.

## FURTHER STUDY

The paradigm shift in vocational education driven by the national revitalization policy needs to be studied in more depth through longitudinal and cross-regional follow-up studies. This is important to measure the effectiveness of the program not only in terms of administrative output, but also in terms of substantive impacts on graduates, the industrial world, and the wider community. Along with changes in the characteristics of the world of work that are increasingly digital and flexible, the policy evaluation approach must adjust to a long-term and adaptive perspective.

One significant direction of follow-up studies is measuring the impact of revitalization on the absorption of vocational high school graduates. Previous research by Suryadi and Sudira (2021) revealed that only 35–40% of vocational high school graduates work in their fields of expertise. Therefore, a structured tracer study needs to be conducted to identify the gap between the vocational curriculum and the reality of the world of work, as well as to evaluate the effectiveness of the link and match policy factually.

Further studies can also be directed at developing a strategic leadership model for vocational school principals. In the context of change management, Fullan (2001) stated that effective educational leaders are those who are able to become agents of transformation through data-based decision making, collaboration, and courage in innovation. In Indonesia, research by Wibowo (2020) shows that the transformational leadership style of school principals has a positive impact on the readiness of policy implementation in vocational schools.

Another aspect that is worth studying is the institutional capacity in running the teaching factory program sustainably. In the research of Lestari & Mulyana (2022), it was stated that many schools have teaching factories only as an administrative complement, without a real production process and entrepreneurial orientation. An in-depth study of best practices such as at SMK Negeri 1 Purwakarta can be the basis for developing a production-based learning model and school business management.

The context of collaboration with the industrial world also deserves further exploration, especially in terms of the quality and sustainability of the partnership. Research by Grollmann & Rauner (2007) in Germany emphasized the importance of formal agreements, joint commitments, and measurement of the results of cooperation between educational institutions and industry. In Indonesia, this collaboration is still often informal and incidental. Therefore, further research needs to focus on a vocational partnership governance model that is mutual, professional, and long-term oriented.

Further studies can also be directed at the use of technology in vocational school management, especially in terms of monitoring and evaluation aspects. The development of a digital-based management information system will greatly assist data-based decision making. In line with the opinion of Marzano & Waters (2009), digitalization in school management has been shown to increase transparency, efficiency, and accountability in the education process. In addition to internal aspects, future research can also explore the social and cultural dimensions that influence the implementation of revitalization policies, such as

public perceptions of vocational schools, local values, and resistance to change. Hofstede (2001) in his theory of organizational culture explains that collective values greatly influence the way policies are accepted and operationalized in an institution. Cross-cultural and cross-regional studies will provide a broader picture of the local context in Indonesian vocational education.

Another strategic direction of study is to examine the development of key performance indicators (KPIs) in vocational revitalization. Many vocational schools do not yet have a measurable and standardized performance indicator system. By developing outcome-based KPIs, the evaluation of policy implementation will be more objective and can be compared between educational institutions nationally.

In closing, further studies designed with an interdisciplinary and collaborative approach are needed to strengthen the direction of future vocational education policies. This kind of research not only enriches the scientific realm, but also serves as a reference for evidence-based policy making for the central and regional governments, as well as other education stakeholders. In this way, vocational education revitalization will not only become an administrative agenda, but will truly become a driving force for improving the quality of national human resources.

## REFERENCES

- Biesta, G. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Routledge.
- Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review*, 66(s1), 44-55. <https://doi.org/10.1111/j.1540-6210.2006.00665.x>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE handbook of qualitative research* (5th ed.). SAGE Publications.
- Djojonegoro, W. (1998). *Pengembangan sumber daya manusia melalui SMK*. Jakarta: Depdikbud.
- Edward III, G. C. (1980). *Implementing public policy*. Congressional Quarterly Press.
- Fullan, M. (2001). *Leading in a culture of change*. Jossey-Bass.
- Grollmann, P., & Rauner, F. (Eds.). (2007). *International perspectives on teachers and lecturers in technical and vocational education*. Springer.

- Herlina, E., & Widodo, T. (2022). Strategi manajemen SMK dalam menyelaraskan pendidikan dengan kebutuhan industri. *Jurnal Pendidikan Vokasi*, 12(1), 15–27.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). SAGE Publications.
- Kemko Perekonomian. (2022). Revitalisasi pendidikan vokasi dorong pembangunan SDM unggul. Diakses dari <https://ekon.go.id/>
- Lestari, D., & Mulyana, D. (2022). Evaluasi implementasi teaching factory pada SMK negeri di Jawa Barat. *Jurnal Manajemen Pendidikan*, 8(2), 87–98.
- Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance*. Solution Tree Press.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Mulyasa, E. (2019). *Manajemen pendidikan kejuruan*. Remaja Rosdakarya.
- Naim, M. (2018). Reformasi pendidikan vokasi dalam era revolusi industri. *Jurnal Pendidikan Teknologi dan Kejuruan*, 21(2), 105–112.
- Nurfadhilah, I., & Saputra, A. (2020). Hambatan implementasi revitalisasi SMK di Indonesia. *Jurnal Pendidikan dan Kebudayaan*, 25(3), 223–234.
- Peraturan Presiden Republik Indonesia Nomor 68 Tahun 2022 tentang Revitalisasi Pendidikan dan Pelatihan Vokasi.
- Robbins, S. P., & Coulter, M. (2016). *Management* (13th ed.). Pearson Education.
- Setyosari, P., & Suryani, D. (2021). Ketimpangan implementasi pendidikan vokasi dan tantangannya. *Jurnal Ilmu Pendidikan*, 27(1), 45–60.
- Siregar, R., & Sutarno, H. (2021). Kolaborasi SMK dan industri dalam program revitalisasi pendidikan vokasi. *Jurnal Pendidikan Vokasi Indonesia*, 2(2), 90–101.
- Sutrisno, E. (2019). Evaluasi program revitalisasi SMK berbasis model CIPP. *Jurnal Evaluasi Pendidikan*, 10(2), 112–124.
- Suryadi, D., & Sudira, P. (2021). Tracer study lulusan SMK dan relevansinya terhadap kebijakan pendidikan vokasi. *Jurnal Penelitian Pendidikan*, 22(1), 77–88.

- UNESCO. (2015). *Unleashing the potential: Transforming technical and vocational education and training*. UNESCO Publishing.
- Wheelen, T. L., & Hunger, J. D. (2012). *Strategic management and business policy* (13th ed.). Pearson Education.
- Wibowo, A. (2020). Kepemimpinan transformasional kepala SMK dalam revitalisasi pendidikan vokasi. *Jurnal Kepemimpinan Pendidikan*, 8(1), 33-44.
- Wibowo, A. (2021). Visi kepemimpinan pendidikan vokasi dalam era industri 4.0. *Jurnal Manajemen Pendidikan Vokasi*, 3(1), 15-24.