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## Transformation and Revitalization of Human Resources at Citra Negara Vocational School

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**Abstract:** The COVID-19 pandemic has triggered a major transformation in education, especially in SMK Citra Negara which focuses on vocational education. This study aims to evaluate the resistance of generation Z teachers to the implementation of technology-based educational transformation and industry needs. Using a qualitative approach, data were collected through interviews, observations, and document analysis. The results of the study indicate that although technology-based curriculum is able to bridge the gap between education and the world of work, resistance among generation Z teachers remains a challenge. Causal factors include lack of training, administrative burden, and limited access to technology. Strategies such as needs-based training, mentoring, and collaboration with industry partners have proven effective in reducing resistance. This study concludes that strong institutional support and a collaborative approach are key to the success of vocational education transformation.

**Keywords:** Educational Transformation, Vocational Education, Generation Z Teachers, Resistance to Change, Educational Technology

### INTRODUCTION

The COVID-19 pandemic has brought major changes to various aspects of life, including education. One of the most striking transformations is the implementation of online learning as a solution when face-to-face learning methods cannot be implemented. This method is the best alternative when face-to-face learning is not possible, such as in vocational high schools (SMK) which are the center of student activities (Riskasari et al., 2022; Dhawan, 2020). This method allows students to continue learning activities from their respective homes, provides flexibility in time, and bridges the limitations of physical access to the classroom (Lokshyna, 2020).

Educational transformation is a process of profound and targeted change in the education system to create a learning model that is more relevant to the needs of society and the development of the times. In the literature, educational transformation is often associated with strategic steps involving innovation in the fields of curriculum, teaching methods, and governance of educational institutions (Adedoyin & Soykan, 2020). This transformation not

only aims to improve the existing education system, but also to build a new foundation that allows educational institutions to produce competent and adaptive graduates. Revitalization of vocational education, especially in Vocational High Schools (SMK), is a process that aims to refresh and improve the education system to be better able to meet the needs of students, industry, and society. This process involves various strategic initiatives, including the implementation of innovative teaching methods, technology integration, and the development of educational programs that are relevant to the demands of the modern world of work (Chung et al., 2020). These revitalization steps are important considering the role of SMK as a provider of skilled workers who are ready to compete in the global market (Martini, 2024; Widiatna et al., 2019).

However, the implementation of online learning in vocational schools during the pandemic also presents various challenges. The sudden transition without adequate preparation has forced many parties, especially teachers, to adapt quickly to online learning technology. The absence of formal training for teachers often causes gaps in the use of technology to achieve learning goals (Rashitovna, 2021). In addition, limited infrastructure such as uneven internet access and technological devices are major obstacles to achieving student competencies, especially in practice-based vocational education (Chu, 2017).

Vocational education has unique characteristics because it emphasizes practical skills that are relevant to the needs of the workplace. In online learning, limited direct interaction between students and teachers and minimal practice facilities create gaps in the educational process. As a result, competency-based learning objectives are often not achieved optimally (Zizikova et al., 2023). Therefore, an in-depth study is needed to understand how user acceptance of online learning during the pandemic can be improved.

SMK Citra Negara, known as one of the innovative vocational education institutions, seeks to answer these challenges through various transformation and revitalization steps. By integrating digital technology and an industry-based approach, this vocational school is committed to creating superior and relevant human resources. The approaches taken include updating the competency-based curriculum, increasing the capacity of teaching staff, and implementing project-based learning methods (Shenkoya & Kim, 2023; Mishra et al., 2020). Thus, it is important to explore the extent to which users accept online learning during the COVID-19 pandemic. This study aims to examine in more depth how the transformation and revitalization implemented at SMK Citra Negara are able to answer the challenges of online learning and create competitive graduates. Through a comprehensive analysis, this study is expected to provide strategic recommendations to improve the effectiveness of the online learning system and the relevance of vocational education to industry needs.

## METHOD

This study uses a qualitative approach to deeply understand the process of transformation and revitalization of education at SMK Citra Negara. The data collection technique was direct observation at SMK Citra Negara which was carried out in a non-participatory manner, focusing on key elements, such as technology implementation, project-based teaching practices, and student involvement in industry-based programs (Spradley, 1980). Second, through in-depth interviews with the principal, teachers, and students. These interviews were semi-structured to allow for in-depth exploration while ensuring focus on the research objectives (Kvale, 2007). Document studies and secondary data were conducted to analyze official documents, such as the school's strategic plan, annual reports, and statistical data related to vocational education at SMK Citra Negara.

Data Analysis Techniques using Thematic Analysis involving the stages of data transcription, coding, and identification of themes relevant to the focus of the study. The themes identified include aspects such as challenges in educational transformation, revitalization strategies, and the reconstruction process at SMK Citra Negara (Braun & Clarke, 2006). Data

Triangulation is carried out by comparing data from various sources, such as interview results, observations, and documents. This approach ensures that the findings produced are unbiased and supported by various perspectives (Flick, 2018). With triangulation, researchers can identify consistencies and differences between data sources, which are then used to strengthen the interpretation of the results.

## **RESULTS AND DISCUSSION**

### **Positive and Negative Impacts with a Focus on Generation Z Teacher Resistance**

The transformation and revitalization of education at SMK Citra Negara has had a significant impact on various aspects of learning and relationships with industry. Based on interviews with the principal, vice principal for curriculum, and teachers, various positive impacts were identified that drove progress, but challenges also emerged, especially related to Generation Z teachers' resistance to change. One of the main positive impacts is the increasingly strong relevance of the curriculum to the needs of the workforce. The principal explained, "With technology-based curriculum updates and collaboration with industry, our students are better prepared to face the demands of the workforce. For example, in the engineering department, we have introduced a green technology module that is in great demand today." (Principal). The existence of information technology in the world of education means the availability of channels or facilities that can be used to broadcast learning programs both unidirectionally and interactively (Mustari, 2023). This transformation bridges the gap between vocational education and the demands of the ever-growing labor market.

Integration of technology in learning also has a positive impact on student motivation. One teacher said, "Simulation applications such as CAD make students more enthusiastic about learning. They understand the material better because they can practice directly." (Teacher 1). However, the implementation of this technology does not always run smoothly, especially due to resistance from some Generation Z teachers. The principal said, "Some young teachers, although considered more adaptive to technology in terms of age, actually experience obstacles because they are used to conventional methods." (Principal). Relatively young Generation Z teachers are often considered more familiar with technology. However, interviews showed that their resistance stems from several factors, such as lack of intensive training, limited time to adapt to new methods, and administrative pressure. Another teacher added, "Although we are familiar with technology, it is sometimes difficult to integrate new applications effectively in the classroom without clear guidance." (Teacher 2). This is in line with Ihtiar's research (2024). One of the main challenges is the lack of experience in classroom management, as well as the pressure to quickly adapt to the ever-changing curriculum.

Another negative impact of this transformation is the challenge of technology accessibility. "Not all students have adequate devices, and this is a barrier to technology-based learning," said one teacher (Teacher 3). This issue shows that transformation efforts require an inclusive strategy to ensure that all students and teachers can access the necessary technology. Limited funding is also a major obstacle. The vice principal explained, "The budget for teacher training and procurement of technology tools is very limited, even though this is important to support the success of the transformation." (Vice Principal for Curriculum). Without adequate funding, the revitalization process cannot be implemented evenly. Based on interviews, although the transformation and revitalization provide many benefits, resistance to change among Generation Z teachers is a major challenge. More intensive efforts in training, mentoring, and moral support for teachers are needed. In addition, collaboration between schools, government, and industry partners is needed to overcome technical and financial obstacles to ensure the sustainability of this program.

## **Effectiveness of Educational Transformation Implementation Steps at Citra Negara Vocational School**

The steps of educational transformation at SMK Citra Negara aim to improve the quality of learning and the suitability of graduates to the needs of the workforce. Improvement in the quality of learning can be seen from the quality of teacher learning behavior, student learning behavior, learning climate, learning materials, learning media, and learning systems in schools (Romadin A, 2020). However, resistance from generation Z teachers is one of the challenges in its implementation. This study analyzes this resistance and its impact on the effectiveness of transformation steps, such as curriculum updates, innovative learning methods, technology integration, and collaboration with the industrial world. Data were obtained through interviews with principals, vice principals, and teachers. The results show that although generation Z is known to be adaptive to technology, resistance arises due to lack of involvement, training, and logistical constraints. Recommendations are provided to overcome this resistance and increase the success of educational transformation.

**Curriculum Update as a Strategic Step.** Technology-based curriculum and industry needs are the main focus. The principal said that this update aims to bridge the gap between the world of education and the world of work. However, based on one statement from a teacher from generation Z, they felt that the update process did not involve them enough. One teacher said, "We often feel like we are just implementers without much room to provide input." (Teacher 1) This resistance reduces enthusiasm in implementing the new curriculum.

**Project-based Innovative Learning Methods** are considered effective in improving students' skills. However, Generation Z teachers face challenges in terms of time and resources. Another teacher explained, "With the additional workload of preparing projects, we sometimes feel overwhelmed." (Teacher 2) Lack of adequate training is also a factor of resistance. Technology Integration in Learning Generation Z teachers are generally adaptive to technology, but barriers to access and technical support affect effectiveness. One teacher said, "We need more training to be able to utilize technology to its full potential." (Teacher 1) In addition, limited devices among students are another obstacle that adds to the burden on teachers.

**Collaboration with Industry Internship programs** and curriculum evaluations with industry partners have received positive responses from Generation Z teachers. However, they feel that the administrative burden of these collaborations reduces their focus on teaching. A teacher stated, "We need a more efficient system to support collaboration without reducing time for students." (Teacher 3) Evaluation and Continuous Improvement Periodic evaluations conducted by the school include student satisfaction surveys and feedback from industry partners. However, the involvement of Generation Z teachers in these evaluations is still limited. Teachers stated that their participation in the evaluations could provide more accurate insights into the obstacles in the field. Barriers to Implementation Resistance to change is a major challenge. Generation Z teachers expressed that the lack of training and clear communication increased their uncertainty. The vice principal explained, "We need to increase support, such as intensive training and discussion forums, to reduce resistance." (Teacher 2)

## **Strategies to Overcome Obstacles in Education Revitalization at Citra Negara Vocational School**

The revitalization and reconstruction of education at SMK Citra Negara faces various obstacles that require the right strategy for effective implementation. The main focus of this discussion is to overcome the resistance of generation Z teachers, which is one of the most significant challenges in revitalization efforts. Resistance to change, especially from generation Z teachers, is a major challenge in educational revitalization. The principal said, "There are some teachers who still have difficulty adapting to new methods, such as project-based learning or the use of technology. They need more time and training." (Principal). As a generation born



in the digital era, generation Z teachers have great potential to adapt to technology, but they often feel burdened by high expectations without adequate support. Factors such as lack of relevant training, limited time to learn new methods, and uncertainty about the results of change strengthen this resistance.

Strategies to overcome this resistance involve ongoing, needs-based training. This training is designed to include an introduction to the latest technologies, interactive learning methods, and case studies of applications in vocational education. A teacher said, “The training provided is quite helpful for us to understand new technologies. In addition, we are also often given time to discuss with fellow teachers about how best to implement these new methods.” (Teacher 2). The school also creates a collaborative atmosphere by forming teacher working groups that aim to share experiences and help each other in adopting new methods. The vice principal added, “We also give awards to teachers who successfully implement innovations in learning. This makes teachers more motivated to try new things.” (Vice Principal for Curriculum). This approach not only helps reduce resistance but also encourages teachers to be more open to change. In addition, a mentoring program between senior teachers and generation Z teachers has been introduced to support this adaptation process.

Limited access to technology is also one of the reasons for Generation Z teachers’ resistance to change. The principal highlighted that not all teachers have adequate devices to support technology-based learning. To address this, the school provides technology devices such as laptops and tablets for teachers to lend. In addition, collaboration with industry partners and local governments allows the school to provide internet access and additional devices. The school also develops a community-based technology center that provides facilities such as computers, printers, and learning software for teachers who need them. In addition, a “technology buddy” program is implemented, where more experienced teachers help their colleagues who are still having difficulty using technology.

Strong institutional support is a key element in overcoming resistance from generation Z teachers. SMK Citra Negara adopts a collaborative approach that involves the principal, vice principal, and teachers in the decision-making process. This approach includes providing a discussion forum to discuss challenges and solutions related to implementing new methods, Mentoring between senior teachers and generation Z teachers to support the transfer of knowledge and experience, and Providing incentives or awards for teachers who successfully implement innovations. To strengthen this support, the school also holds counseling sessions for teachers to help them cope with stress or pressure related to change. The principal emphasized the importance of a personalized approach, saying, “We try to listen to each teacher and understand what they need to feel comfortable in facing this change.” (Principal).

Collaboration with the industry is also an important step in reducing resistance among Generation Z teachers. Joint training programs with industry partners help teachers understand the latest job market trends and needs. A teacher explained, “Partner companies often provide direct training to students or teachers. This really helps us understand the latest developments in the industry.” (Teacher 1). By involving the industry, teachers feel more confident in implementing new methods that are relevant to the needs of the workplace. This collaboration also includes the development of an industry-based curriculum, where teachers are directly involved in the design process so that they better understand the relevance of these changes. In addition, internships for teachers at partner companies are held periodically to provide first-hand experience of the dynamics of the modern workplace.

A holistic approach that includes aspects of training, collaboration, and incentives has shown positive results in overcoming resistance from generation Z teachers. With the right strategy and support from various parties, resistance can be transformed into an opportunity to create innovation in vocational education at SMK Citra Negara. This approach also includes providing facilities that support teacher welfare, such as comfortable break rooms, access to the latest teaching resources, and active involvement in strategic decision-making. By creating

a supportive work environment, schools can encourage teachers to be more proactive in facing the challenges of change.

## Discussion

The results of the analysis of the transformation and revitalization of human resources at SMK Negara with a focus on the resistance of generation Z teachers show complex dynamics but have significant potential for development. This study uses a holistic approach involving the principal, vice principal for curriculum, and teachers as the main actors in the change process. The main focus is to understand the impact, effectiveness of implementation steps, and strategies to overcome emerging resistance.

The transformation and revitalization of human resources at SMK Negara have had a real impact, especially in increasing the relevance of education to the needs of the world of work. One of the main positive impacts is the increase in the adaptability of the curriculum to technological developments and the demands of the modern job market. As explained by the principal, the implementation of a green and digital technology-based curriculum reflects the increasingly complex needs of future skills (Lokshyna, 2020; Deputy Principal for Curriculum). Another positive impact is the strengthening of teachers' pedagogical competence through intensive training oriented towards mastery of technology and interactive learning methods.

However, resistance from Generation Z teachers to change is a major challenge in implementing this transformation. This resistance appears in various forms, such as lack of motivation to attend training, limited time to learn new methods, and uncertainty about the results of change (Nikanorov & Shvindt, 2018). As a generation born in the digital era, Generation Z teachers actually have great potential to adapt to technology, but they often feel burdened by high expectations without adequate support.

Based on the interview results, factors such as poor time management and lack of incentives also contributed to this resistance. Strategic steps implemented by SMK Negara include curriculum updates, teacher training, and collaboration with the industrial world. Curriculum updates that emphasize mastery of green technology and digitalization have proven effective in improving student skills that are relevant to the needs of the modern job market (Cai et al., 2018; Subiyantoro, 2023). Intensive training for teachers, including technology training and project-based learning methods, has had a significant impact on improving pedagogical competence (Mutohhari et al., 2021). However, internal evaluations show that not all teachers can absorb training with the same level of success, so a more personalized approach is needed.

To overcome the resistance of generation Z teachers, SMK Negara adopted a collaborative approach. The formation of teacher working groups, the provision of discussion forums, and the provision of incentives are the main strategies to encourage teacher involvement in the transformation process. This approach is supported by the theory of active participation which emphasizes the importance of the involvement of all stakeholders in creating sustainable change (Nikanorov & Shvindt, 2018). In addition, a mentoring approach between senior teachers and generation Z has also begun to be implemented to strengthen the transfer of knowledge and experience.

Collaboration with the industrial world is also an important pillar in this revitalization. Internship programs, joint training, and curriculum development based on industry needs provide dual benefits for both students and teachers. In addition to improving student skills, these programs also open up opportunities for teachers to gain direct insight into job market trends and needs (Mongkhonvanit, 2017). This not only increases the relevance of education but also builds professional networks that can support the sustainability of the transformation program.

Strategies to overcome obstacles such as limited technological facilities include borrowing devices for students, collaborating with industry partners to provide practical tools, and diversifying funding sources through sponsorship and optimizing internal budgets (Astuti & Setyonaluri, 2022; Fitrian & Sugiyono, 2020). This approach is in line with the recommendations of Zizikova et al. (2023) on the importance of inclusive digitalization of education. In the context of resistance from generation Z teachers, strong institutional support is a key element. Continuous training, personal guidance, and recognition of teachers' contributions to the transformation process can create a more supportive work environment and encourage positive change. With the right strategy, resistance can be transformed into an opportunity to create innovation in vocational education at SMK Negara.

## CONCLUSION

Educational transformation at SMK Citra Negara during the COVID-19 pandemic shows that adaptation to technology and industry needs can increase the relevance of vocational education to the world of work. However, resistance to change among Generation Z teachers is a significant obstacle. This study highlights that this resistance can be overcome through a holistic approach that includes needs-based training, collaboration with industry partners, and strong institutional support. This finding is important because it shows that the success of educational transformation depends not only on innovative policies but also on the active involvement of all stakeholders, including teachers as the main actors.

The importance of this research lies in its broad implications for the development of vocational education in the future. With the right strategy, resistance can be transformed into an opportunity to improve the quality of education and create innovation in learning. This research also provides an original contribution by revealing the dynamics of resistance of generation Z teachers in the context of vocational education, an aspect that is rarely discussed in depth. Therefore, these findings are not only relevant for policy makers in the field of vocational education, but also for educational institutions that want to strengthen their links to the needs of the modern labor market.

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