


Analysis of PIONEER Co-curricular Program and Learning Habit Development in SMK Negeri 3 Salatiga

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ABSTRACT

The escalating demand for industry-ready graduates requires vocational institutions to integrate character development and professional work ethics into their pedagogical frameworks. While industry-based curricula are widely studied, research regarding the impact of co-curricular programs on vocational learning habits remains sparse. This qualitative study investigates the PIONEER program at SMK Negeri 3 Salatiga and its efficacy in aligning student behaviors with industrial standards. Data were synthesized from interviews, observations, and document analyses. By focusing on the "institutional experience," this study fills a critical gap in understanding the real-world **struggles of implementing such initiatives**. The findings demonstrate that while PIONEER cultivates discipline and collaboration, it faces systemic challenges including divergent teacher perceptions and marginal parental engagement. The study concludes that PIONEER functions as a strategic mechanism to bridge vocational training and labor market requirements, offering a realistic model for fostering sustainable character growth and professional readiness.

Keywords: Co-Curricular Program, Industry-Based Curriculum, Learning Habits, Vocational Education, PIONEER Program

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INTRODUCTION

Vocational education is a sector of education that emphasizes practical training and skill development aligned with the needs of industry and the labor market. In Indonesia, alongside rapid economic growth, vocational education has gained increasing recognition as a strategic component in supporting sustainable economic development. The effectiveness of vocational education is closely associated with improved learning outcomes and workforce readiness. The distinctive strength of vocational education in Indonesia is reflected in its two main pillars. The first pillar is education, which provides students with essential theoretical knowledge and conceptual understanding. The second pillar is training, which focuses on the development of practical skills and direct field experience. Within the vocational curriculum, practical training plays a dominant role, accounting for approximately 40 percent of instructional content, exceeding that of general academic education.

Learning habits play an essential role in shaping students' academic achievement and overall learning development. In Indonesia, the implementation of the Merdeka Curriculum encourages students to become autonomous learners who are capable of managing their own learning progress. The desire to learn manifests in behaviour changes, such as improved learning abilities in school, shifts in attitudes at home and school, and the enhancement of personal potential. (Febianti et al., 2024). Recent studies indicate that many vocational students exhibit deficient learning habits, characterized by low self-regulation and inconsistent academic engagement. This is further exacerbated by persistent discipline problems – such as poor time management and lack of professional ethics – which directly conflict with the high-pressure environment of modern industry. Consequently, while students may possess basic technical skills, their failure to meet the behavioural and character standards demanded by employers remains a primary barrier to successful workplace transition. The transition from vocational education to the professional workforce in Indonesia remains problematic due to a persistent discrepancy between student readiness and industrial requirements. Empirical

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evidence suggests that many vocational students exhibit inadequate learning habits and low self-regulation (Yoto et al., 2024) Furthermore, significant challenges in student discipline and professional ethics continue to hinder their integration into high-performance industrial environments (Ali et al., 2020) This misalignment creates a critical gap where graduates, despite possessing basic technical knowledge, fail to meet the behavioral standards and work consistency expected by modern industry partners (Subiyantoro et al., 2023)

Co-curricular activities are carried out outside the classrooms but they supplement academic curriculum and help in learning by doing. Co-curricular activities are play a significant role in the development of students' performance since participation in these activities enables students to gain the basic principles of teamwork and individuality. In vocational high school, co-curricular activities are usually used as a supporting curriculum learning. Co-curricular activities must meet a number of requirements, such as being directly educational, relevant to students' everyday lives, and aligned with learning objectives. Co-curricular activities can be implemented more successfully in fostering students' interests, abilities, and character competencies by taking these requirements into consideration. Consequently, there is an urgent need for structured co-curricular initiatives, such as the PIONEER program at SMK Negeri 3 Salatiga, to cultivate the industrial character necessary for professional sustainability.

Requirement of the Workplace

Industrial partners have supported a number of Indonesian vocational schools to generate graduates that are disciplined, prepared for the workforce, and in line with industry standards. An industrial-oriented curriculum that matches actual workplace demands is jointly designed and implemented by schools and industries through formal collaboration. Through initiatives like industry internships, teaching factory models, project-based learning, and professional skill certification, this curriculum emphasizes both theoretical knowledge and practical competencies. By using this strategy, vocational schools are supposed to boost students' technical proficiency, increase their employability, and eventually turn out graduates who are capable, flexible, and competitive in the job market.

Implementation of an Industry-Based Curriculum in Vocational Schools

The development of the industrial world demands that vocational education institutions produce graduates who are not only technically competent but also adaptable to job market needs. This challenge has prompted vocational high schools in Indonesia to reorient their curricula to align with industry standards and work processes. SMK Negeri 2 Yogyakarta is one such vocational education institution that has emerged as a pioneer in implementing an industry-based curriculum through strategic partnerships, adjusting learning outcomes, and strengthening a work culture that aligns with industry standards.

Seeing this success, SMK Negeri 3 Salatiga was inspired to implement an industry-based curriculum to improve the quality of vocational education in schools. By using SMK Negeri 2 Yogyakarta as a benchmark for good practice, SMK Negeri 3 Salatiga is committed to developing a curriculum that is more responsive to technological developments and industry needs, thus producing competent, professional graduates who are ready to compete in the workforce. Through comparative studies between schools, school administrators recognized the importance of taking concrete steps to meet the ever-growing needs of industry. This awareness led to the birth of the PIONEER (Program for Industrial-Oriented Education and Readiness) co-curricular program, designed to strengthen student competencies. Therefore, the PIONEER program provides a relevant context for examining how co-curricular activities contribute to students' learning habits, discipline, and industry readiness. This program is designed not simply as a supplementary activity but as a bridge connecting classroom learning with real-world practice.

METHOD

This research uses a qualitative research method with a descriptive approach, which attempts to describe and illustrate the data obtained from the field related to the discussion.



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Qualitative descriptive research is a method that aims to provide a comprehensive summary of events or phenomena from the participants' perspectives, focusing on "who, what, where, and how" without delving into deeper theoretical explanations. The descriptive design was chosen to discover and understand the phenomenon by getting information directly from the student teachers involved in the teacher practicum. The information sources used in this research combine two sources: essential and optional (Moleong, 2018). The data sources are obtained from the field, namely the vice principal for curriculum and teacher who will carry out data collection. The vice principal of curriculum and the teacher became informants.

The data in this research are in the form of interview results, observation results, and document study results in the form of interview texts containing data about all the information needed to describe the PIONEER Co-curricular Program and Learning Habit Development in SMK Negeri 3 Salatiga. Data analysis models Milles and Huberman are used to process data that has been arranged into a pattern and categorized: data reduction, data presentation, and drawing conclusions/verification (Miles, M.B. & Huberman, 1984). This study employed a qualitative descriptive design involving five participants, consisting of one vice principal for curriculum and four vocational teachers who had been directly involved in the implementation of the PIONEER program for approximately one year. The research was conducted from September to December, while the data collection process lasted for three weeks. Data were gathered through semi-structured interviews, classroom observations, and document analysis.

To ensure the trustworthiness of the findings, several strategies were applied. Source triangulation was achieved by collecting data from both the vice principal and teachers, while method triangulation was conducted through the use of interviews, observations, and documents. Member checking was implemented by returning interview summaries and preliminary interpretations to participants for verification. In addition, peer debriefing was conducted through regular discussions with the research supervisor to refine data interpretation and minimize researcher bias. An audit trail was maintained by systematically documenting data collection procedures, coding processes, analytical decisions, and revisions.

The data analysis followed the interactive model of Miles and Huberman, which involves data reduction, data display, and conclusion drawing/verification. Prior to this process, the data were transcribed, coded, categorized, and organized into emerging themes through thematic analysis.

FINDINGS AND DISCUSSION

As part of an effort to understand how vocational schools respond to the growing demands of industry, the researcher conducted a study focusing on the implementation of the PIONEER program, which aims to strengthen students' readiness through industry-oriented learning. To obtain comprehensive insights, the researcher gained the data based on interviews. The interview consisted of several questions that explored the teachers' views of the industry-based curriculum, the challenges they encountered, and the strategies used in implementing the business and industrial organization curriculum in vocational schools. The PIONEER program plays a vital role in strengthening student discipline, developing work ethic, fostering collaboration, and facilitating the adaptation of industrial culture within the school environment. However, its effectiveness depends on continuous support from teachers, parents, industry partners, and institutional leadership.

Reasons for Implementing an Industry-Based Curriculum

The term PIONEER was initiated by SMK Negeri 3 Salatiga as a response to the school's observation of industry expectations toward vocational graduates. The establishment of the PIONEER program was driven by the fundamental needs of the industrial sector, particularly regarding students' mindset, work ethic, and professional behavior. These aspects are considered essential competencies that industries consistently require from prospective workers. Recognizing that academic skills alone are not sufficient to meet these demands, the

school sought to develop a structured program that could cultivate industry-aligned character, habits, and attitudes among students. Therefore, PIONEER was created as a strategic initiative to bridge the gap between school learning and real-world professional standards, ensuring that students are not only technically capable but also mentally and behaviorally prepared to enter the workforce.

PIONEER prioritizes activities that focus on student discipline, resilience, and character building. This program is designed as a systematic effort to develop a mindset and work ethic that align with industrial culture, ensuring that students are not only technically prepared but also mentally ready and professionally behaved as required in the workplace. Through various activities such as time-discipline habituation, physical training to build endurance, and the cultivation of positive work attitudes, PIONEER aims to instill essential industrial values such as responsibility, perseverance, teamwork, and a commitment to quality.

In addition, the activities within PIONEER are directed toward helping students develop self-confidence, adaptability, and perseverance when facing learning challenges or the demands of the modern industrial sector. Thus, this program not only strengthens non-technical competencies (soft skills) but also prepares students to become more mature, independent individuals who are ready to compete when entering the workforce. PIONEER functions as a bridge connecting character formation in school with real industry needs, enabling graduates to possess competitive advantages in both technical abilities and work attitudes.

PIONEER is a newly established program that began in January 2025 and is conducted four times a year, consisting of two PIONEER activities for teachers and two for students. This division is designed to ensure that the process of strengthening an industry-based culture takes place comprehensively, not only for students but also for teachers as the primary role models. In the Teacher PIONEER program, the activities focus on improving educators' capacity to understand industrial work culture, reinforce professional discipline, and align teaching strategies with industry competency requirements. Through this approach, teachers are better equipped to model appropriate behavior and guide students more effectively.

Meanwhile, the Student PIONEER program emphasizes character building, discipline, physical and mental strength, and work readiness. Through a series of structured activities – such as discipline training, work ethic habituation, professional attitude development, and industry-based simulation activities – students are prepared to face real challenges in the workplace. Conducting PIONEER regularly each year enables the character-building and work-culture development process to take place consistently, gradually, and sustainably. Thus, PIONEER functions not only as a new co-curricular program but also as a developmental system that strengthens students' readiness while enhancing the school's overall quality in responding to the demands of modern industry.

The implementation of PIONEER is carried out through a series of activities designed to ensure that the cultivation of an industrial work culture is truly integrated into the school environment. One of these activities is comparative studies between vocational schools, which allow the school to learn best practices from other institutions, particularly those that have previously and successfully implemented industry-based curricula or industrial culture. Through these activities, the school can identify new strategies, address internal weaknesses, and strengthen the development direction of PIONEER so that it remains relevant to industrial needs.

In addition, PIONEER is also realized through synchronization between industry and the school, which involves aligning competencies, work standards, and the latest requirements from the business and industrial sectors. This synchronization includes discussions on curriculum development, graduate competency standards, evaluation methods, and technological updates that the school must adopt. Through this alignment, PIONEER activities become even more relevant because they are directly oriented toward real and current industry needs.

Furthermore, the implementation of PIONEER is strengthened by inviting guest teachers from industry to the school. These industry practitioners provide field insights, share work experiences, introduce professional work culture, and offer practical training aligned with industry standards. Their presence helps students understand how the theories they learn in school are applied in real work settings, while also giving them a clearer picture of the demands and expectations of the working world. Through these various activities, PIONEER functions not only as a theoretical program but as a true bridge connecting the school with the industrial sector. This comprehensive implementation ensures that both students and teachers receive experiences, knowledge, and character development that are aligned with the needs of modern industry.

Challenges in Implementing the Program

In implementing the PIONEER program, the school faces several challenges arising from various parties, both from within the school environment and from students and their families. One of the most significant challenges is the difference in perspectives or the presence of pros and cons among teachers. Some teachers fully support the program because they see PIONEER as a strategic step in cultivating an industrial work culture, while others remain hesitant, viewing the program as an additional workload, requiring adjustments in teaching methods, or not yet fully understanding its long-term benefits. These differing viewpoints then affect the consistency of program implementation in the field.

From the students' side, the main challenge comes from the lack of parental support. Many parents do not fully understand the purpose and benefits of the PIONEER program, leading them to assume that the activities only add to the students' responsibilities without recognizing their contribution to work readiness. In some cases, students are not granted full permission to participate in the entire series of activities because parents prioritize household matters or other tasks they consider more important.

In addition to limited moral support, the economic condition of students' families – most of whom belong to lower-middle economic backgrounds – also becomes a challenge. Several PIONEER activities require additional expenses, such as equipment, activity uniforms, or transportation for industrial visits or comparative studies. These financial limitations make it difficult for some students to meet these requirements, resulting in unequal participation in the program.

Furthermore, another challenge comes from the limitations of school facilities and infrastructure. The insufficient number of classrooms forces PIONEER activities to be conducted alternately, with restricted schedules, or by using temporary spaces that are not entirely suitable. This situation can disrupt the smooth execution of activities, especially when large practice areas or training rooms are needed. Beyond classrooms, supporting facilities such as industrial equipment, technology-based learning media, and sports facilities for physical training also require improvement to ensure that the program can run more effectively. Overall, these challenges illustrate that the implementation of PIONEER requires comprehensive support from all parties – teachers, parents, students, and the school itself. Strengthening communication, improving facilities, and increasing stakeholder understanding become essential steps to ensure that the program can run consistently and deliver optimal results.

Impacts and Future Expectations of the PIONEER Program

The implementation of the PIONEER program has brought a number of positive impacts that can be observed both within the school environment and among the industry partners involved. Within the school, one of the most noticeable impacts is the improvement in students' discipline. Through the routines and habituation activities carried out in the PIONEER program – such as punctuality, neatness, and compliance with activity regulations – students have become more organized and responsible for their tasks and obligations. These changes are not only evident during PIONEER activities but also carry over into their daily school routines.

In addition, the program has contributed to increased student compliance with school rules. With a strong emphasis on professional attitudes and a work ethic that mirrors industrial culture, students have begun to demonstrate more orderly behavior, respect processes, and follow teachers' instructions more consistently. This directly contributes to a more conducive learning environment, enabling teachers to manage their classes more effectively and deliver instruction more smoothly.

In terms of character development, students have experienced improvements in perseverance, responsibility, teamwork, and resilience when facing academic tasks and challenges. The various PIONEER activities—integrating physical training, mental development, and the instillation of positive work values—help shape stronger and more mature character traits. Students become more confident, more motivated to learn, and better able to regulate their behavior. This makes PIONEER a program that not only develops technical competence but also strengthens non-technical competencies (soft skills) required in the workplace.

Externally, the PIONEER program has also received positive responses from industry partners. Industries view this initiative as a strategic step in preparing graduates who are not only technically skilled but also possess appropriate workplace attitudes that meet professional standards. They recognize that early character formation—particularly in discipline, work ethic, and behavior—adds significant value and distinguishes the school's graduates from those of other institutions.

Furthermore, the relationship between the school and industry has become stronger because PIONEER serves as evidence of the school's commitment to aligning education with real-world workforce needs. This opens wider opportunities for collaboration, such as graduate placement, internship programs, guest teaching from industry professionals, and ongoing curriculum alignment. Industries have gained greater confidence in the school's graduates as they see consistent character development and work-readiness training through PIONEER.

The second impact of implementing the PIONEER program can be seen in the transformation of the school's learning culture, particularly through the habituation of beginning and ending each learning session with Core Industrial Values. This practice represents a concrete outcome of the industry-based curriculum adopted through the PIONEER program. These Core Industrial Values include fundamental principles upheld in the world of work, such as discipline, integrity, responsibility, workplace safety, teamwork, and commitment to quality.

Through this daily routine, students not only acquire academic knowledge but also internalize industrial values that form the foundation of professional work culture. At the beginning of each lesson, teachers guide students to engage in brief reflection, align learning goals, and reinforce discipline and focus on tasks. Meanwhile, at the end of the lesson, students are encouraged to evaluate the learning process, identify mistakes, and reaffirm their commitment to positive work values.

This habituation gradually shapes students' mindsets and attitudes to become more structured, purposeful, and prepared to meet workplace demands. Students become more aware of the importance of punctuality, neatness, safety, effective communication, and teamwork during learning activities. This change not only influences individual behavior but also fosters a more professional, orderly, and competency-oriented learning environment.

By integrating Core Industrial Values into every learning session, PIONEER serves not only as a co-curricular program but also as a driving force for school-wide cultural transformation. This strengthens the industrial character embedded in all educational activities at SMK Negeri 3 Salatiga, positioning the school to produce graduates who are not only technically skilled but also mentally mature and equipped with work ethics aligned with industry standards.

The third impact of the PIONEER program is not only experienced by students but also brings positive changes to teachers as educational practitioners. One of the most noticeable

impacts is the improvement in teacher discipline, particularly regarding attendance and punctuality. Through PIONEER, teachers are expected to serve as role models for students by demonstrating industrial values such as discipline, commitment, and integrity. This expectation motivates teachers to be more consistent in arriving on time, preparing lessons thoroughly, and maintaining professionalism in every school activity. Over time, this practice contributes to the creation of a new work culture that is more orderly and structured within the school environment.

In addition, the PIONEER program also enhances teachers' ability to work collaboratively. Because PIONEER involves many structured activities, teachers are required to coordinate with one another in planning, implementing, and evaluating the program. This collaboration encourages teachers to be more open, communicative, and supportive in carrying out their responsibilities—traits that are essential in an industrial work culture. Through the intensive teamwork developed during the program, teachers gain a better understanding of their respective roles, strengthen solidarity, and build a more harmonious work environment. The combination of increased discipline and strengthened collaboration positions teachers not only as instructors but also as key figures in cultivating an industrial culture within the school. Thus, PIONEER creates a comprehensive impact on the entire school ecosystem, as improvements among teachers directly influence the learning environment and serve as a crucial factor in the sustainable implementation of the industry-based curriculum.

In the future, the implementation of the PIONEER cocurricular program is expected to evolve into a more comprehensive and sustainable initiative, supported by all stakeholders, including the school, teachers, parents, and industry partners. One of the main expectations is the increased support from teachers and parents. Teachers are expected to develop a deeper understanding of the essential role of PIONEER as part of shaping an industrial culture within the school, enabling them to collaborate more effectively in planning and carrying out program activities. Meanwhile, parents are hoped to provide full support, both morally and motivationally, so that students can participate in the entire series of activities without obstacles and gain maximum benefits from the program.

In addition to support from teachers and parents, the school also hopes for further development in the form of establishing special classes or boarding classes integrated with the needs of specific industries or partner companies. These specialized classes would serve as focused and intensive learning environments where students can directly apply industrial work values, receive stronger character development, and gain broader access to facilities, technologies, and work standards implemented in particular companies. With the establishment of industry-based special classes, students can obtain deeper and more relevant learning experiences, thereby improving their readiness to enter the workforce.

Another expectation is the continuous improvement of students' positive habits and achievements over time. Through the discipline-building activities, character formation, and reinforcement of work ethics promoted in PIONEER, students are expected to show more consistent behavioral changes, such as greater adherence to school regulations, improved cooperation skills, increased persistence in learning, and more professional attitudes in various school activities. These improved habits are expected to directly enhance students' academic and non-academic achievements, enabling them to excel not only in technical skills but also in personal qualities.

Overall, the PIONEER program is expected to continue developing as a platform for character building and industrial competency enhancement that not only strengthens students' work readiness but also elevates the school's reputation as an institution capable of adapting to the evolving demands of the industrial world. With strong support from all parties, improved facilities, and the continuous cultivation of an industrial culture, PIONEER is anticipated to become a flagship program that significantly contributes to the advancement of vocational education in the future

CONCLUSIONS

The PIONEER program was initiated by SMK Negeri 3 Salatiga in response to industry expectations toward vocational graduates. The program was designed to cultivate industry-aligned character, habits, and attitudes among students. Implemented in January 2025, PIONEER involved not only students but also teachers, who served as facilitators and participants. During its implementation, the program faced several challenges, including differing perspectives among teachers, limited parental support, students' lower-middle economic backgrounds, and constraints in school facilities and infrastructure. Despite these challenges, the PIONEER program produced several positive impacts. These included improvements in students' discipline, the transformation of the school's learning culture through the habituation of beginning and ending learning activities with Core Industrial Values, and increased teacher discipline, particularly in terms of attendance and punctuality. These findings demonstrate that the PIONEER program contributes to the development of an industry-oriented culture within the school. Based on these findings, several recommendations are proposed. First, vocational schools should strengthen internal coordination and shared understanding among teachers to minimize differences in perspectives during program implementation. Second, schools need to actively involve parents through regular communication and socialization programs to increase parental support. Third, institutional and policy-level support is necessary to improve facilities and infrastructure that support industry-oriented programs. Finally, policymakers are encouraged to consider integrating similar co-curricular programs into vocational education policies to enhance students' work readiness and ensure alignment with evolving industrial demands.

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