Sustainable Partnership Strategy: Case Studies in Vocational High Schools and Partner Industries

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Abstract
A sustainable partnership strategy is essential in supporting the government's link and super match program in Indonesia. The partnership between vocational high schools and industry has a significant impact in producing competent graduates according to the needs of the world of work. However, the fact is that many schools and industries only form partnerships as a formality so that effective and efficient partnerships are not created, which has an impact on the program's discontinuity. Therefore, it is interesting to explore this issue more deeply about how the partnership strategy of vocational high schools and their partner industries can establish sustainable partnerships. The research method used is a single case study. Researchers collected data through in-depth interviews obtained through seven informants from schools and five informants from partner industries and conducted document studies to support sources of evidence. The results show that a sustainable partnership strategy requires (1) intrinsic motivation, (2) accommodation capability, (3) acculturation of industrial values, (4) mutual commitment, and (5) determination of program activities. These five points are the key to establishing a sustainable partnership between vocational high schools and their partner industries.

Keywords
partnership, strategy, sustainability, case study, vocational high school, industry

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Sustainable Partnership Strategy: 
Case Studies in Vocational High Schools and Partner Industries

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A sustainable partnership strategy is essential in supporting the government's link and super match program in Indonesia. The partnership between vocational high schools and industry has a significant impact in producing competent graduates according to the needs of the world of work. However, the fact is that many schools and industries only form partnerships as a formality so that effective and efficient partnerships are not created, which has an impact on the program's discontinuity. Therefore, it is interesting to explore this issue more deeply about how the partnership strategy of vocational high schools and their partner industries can establish sustainable partnerships. The research method used is a single case study. Researchers collected data through in-depth interviews obtained through seven informants from schools and five informants from partner industries and conducted document studies to support sources of evidence. The results show that a sustainable partnership strategy requires (1) intrinsic motivation, (2) accommodation capability, (3) acculturation of industrial values, (4) mutual commitment, and (5) determination of program activities. These five points are the key to establishing a sustainable partnership between vocational high schools and their partner industries.

Keywords: partnership, strategy, sustainability, case study, vocational high school, industry

Introduction

Indonesia will experience a demographic bonus in 2030-2040, wherein that year, the productive age of the population is predicted to reach 64% of the total population. The demographic dividend can be a threat if it is not prepared by providing quality vocational education to produce competent human resources and boost its economy. The current condition of vocational high school still needs changes both in quality and quantity. The data in the field shows that (1) based on statistical data as of August 2021, it can be seen that out of a total of seven million total open unemployed, 11.13% have vocational education (Central Bureau of Statistics, 2018), (2) only 22.3% of Vocational High School teachers teach according to their skill areas (Productive Teachers), and (3) vocational education has not yet linked and matched with the Business World/Industrial World (Ministry of Education and Culture, 2016). These data illustrate that the right strategy is needed with the number of productive ages that will occur in the future. The process is to provide quality vocational high schools through links and matches with industry. The suitability of the competence of vocational high school graduates with industry can reduce unemployment and increase the value of the country's economy.

Vocational education aims to prepare students to enter working life by providing equipment that matches their skills needs, providing practical training in laboratories equipped with new technologies and working closely with partners (Clarke & Winch, 2007; Durmus & Dagli, 2017). Vocational education is a form of talent development, primary education of skills
and habits that lead to the world of work seen as skill training (Hamalik, 1990). Vocational education emphasizes education that can adapt to (1) demand-driven, (2) link between users of education graduates and vocational education providers, and (3) compatibility between employees and employers (Hendarman et al., 2016). In the end, vocational education enables individuals to acquire the knowledge, abilities, and practices needed to work (Sumbodo et al., 2018). Mastery of graduate competencies (knowledge, skills, and attitudes) gives them confidence and readiness to work in the future. In addition, the expertise or ability of the workforce is needed to process natural resources and increase production output that can be sold to the public or exported abroad so that state income will increase.

The quality of vocational education can be assessed from two criteria, namely quality according to school standards and quality according to community standards or graduate users (Finch & Crunkilton, 1984). The competency gap in vocational education is caused by: (1) the lack of industry participation in determining the required training program, (2) the lack of quality vocational schools, which contributes to the existing skills gap, (3) the lack of industrial training leaves schools and students with no practical experience that helps improve their adaptability skills, and (4) less flexible curriculum, shortage of qualified teachers and trainers, and unavailability of appropriate and up-to-date infrastructure (BRICS Business Council, 2015).

Vocational high school quality can be improved by increasing collaboration and accessibility with the industry. The partnership is a strategy to use various technical, human, knowledge, facility, and financial resources (Pillay et al., 2014; Tennyson, 2011). Vocational high school collaboration with industry has a more significant opportunity to develop industry-based schools and a competent workforce. School and industry partnerships can increase the effectiveness and quality of education for teachers and students (Bines & Welton, 2005; Rowe et al., 2004). Some of the advantages of vocational schools that collaborate with industry include (1) having more support from the industry, (2) prioritizing for graduates to be absorbed by industry, (3) having active and sustainable cooperation, (4) having easy access to the industry, and (5) the ease of sharing resources in providing a skilled workforce, costs, and facilities.

Several studies have been conducted on link and match programs and collaboration between vocational high schools and industry. Collaboration between vocational high schools and industry has an impact on improving the quality of graduates (Hadromi et al., 2019; Ubaidah et al., 2021). Increasing the effectiveness of vocational school learning can be done through increasing and strengthening partnerships with industry or the world of work (Meirawan, 2015). The partnership between vocational education and industry is still weak because it is not supported by an explicit strategy (Sauli, 2021; Sumbodo et al., 2018). The system of vocational high schools partnering with industry requires a cooperation model, mechanism, and analysis of influencing factors (Murniati et al., 2016; Othman & Omar, 2012). Previous studies illustrate that collaboration between vocational high schools and partner industries requires strategies, mechanisms, and supporting factors to improve the quality of learning in vocational high schools. The right strategy in strengthening partnerships will impact reducing the gap between the world of education and the world of work. So, this research is very relevant to be explored more deeply why and how the partnership between vocational high schools and industry can survive and have a significant impact.

The sustainable partnership strategy is how vocational high schools and industrial schools can maintain core functions, reorganize their organizations, and build capacity, learn, and adapt (Flynn et al., 2016). Strategy is used to guide all activities and decisions to achieve common goals. Strategy is an approach to direct and determine the organization according to its objectives on an ongoing basis (Rothaermel, 2019; Sadler, 2003; Witcher, 2020). Strategies are needed for every organization, such as companies, government institutions, and schools,
later changing the organization. Both parties continuously implement the strategic partnership by improving at every stage (Al-Gharrawi, 2018).

The purpose of this study is to provide an overview of how sustainable partnership strategies are in vocational high schools and their partner industries. The results of this study may provide a foundation to build solutions for vocational high schools in (1) reducing the gap between vocational education and industry, (2) establishing better relations between vocational high schools and partner industries, and (3) being used as a reference by policy managers, teachers, schools, and industry to improve the quality of graduates.

**The Context of the Study**

The first author is a lecturer at a state university in Yogyakarta. He is also currently pursuing a doctoral program majoring in technology and vocational education at a state university in Yogyakarta, Indonesia. His research focuses on vocational education at the vocational high school and college levels. The second author is a professor of education at a state university in Yogyakarta, Indonesia. He has expertise in evaluation, especially in vocational education. The third author is a professor of education at a state university in Yogyakarta, Indonesia. He has areas of expertise in learning and partnerships in vocational education. The first author collaborates with two other authors with the same research interest in developing vocational education through qualitative and quantitative research methods.

We are interested in exploring how the partnership strategy is triggered by a policy that requires vocational high schools to have partners from industry to minimize skills gaps and industry barriers in obtaining a workforce that is suitable for the type of work. Although there have been many studies discussing partnerships, we find that research is still rarely done in the context of partnership strategies between vocational high schools and industry to survive and be sustainable. In addition, the importance of this research is to obtain an overview of vocational high schools implementing partnerships with industry.

**Method of Research**

**Research Design**

This study uses a single-case study approach to explore the case under investigation. This study aims to explore the process of sustainable partnership strategies in vocational high schools and partner industries. Qualitative research is a form of investigating a phenomenon in the natural environment by using multi-source data in understanding and understanding the phenomenon (Arsenault & Anderson, 1998). This research uses a combination of methods in data collection, including literature, surveys, in-depth interviews, and documents. The basic assumption of the qualitative research paradigm is that a deep understanding of the world can be obtained through observation and conversation without managing or conditioning them (Arsenault & Anderson, 1998). The choice of using a single case study aims to examine the unit of analysis to explain the object of research (Creswell, 2015). This type of case study is intended to obtain more detailed and focused data on describing research results more clearly and in more detail (Yin, 2019). This case study method is very suitable for researchers to understand how entities between vocational high schools and partner industries with different characteristics can collaborate.

The selected cases are typical cases or representative cases from similar cases. Partnerships between vocational high schools and industry have been widely researched, but researchers only chose one case that was deemed capable of representative of other partnership cases. (4) Researchers could study and analyze causes of phenomena that have never been done
Researchers have obtained permission from vocational high schools and industry partners to observe and analyze cases. These cases have never been done by researchers before, so this case is a unique opportunity for researchers. The selected cases are longitudinal; they can study the same case twice or more at different times. Researchers focus on issues or problems in one vocational high school and one partner industry as a unit of analysis and then conclude the case to illustrate the problem. Based on the understanding and characteristics of vocational high schools and their partner industries, researchers can obtain theories about strategic partnerships based on facts and evidence in the field.

The research case is based on phenomena in vocational high schools and partner industries in implementing effective and efficient strategic partnerships. Case studies can add value to our unique knowledge of the individual, organizational, or unit phenomena (Creswell, 2015; Gustafsson, 2017; Yin, 2009). Identification of cases in this study by conducting a preliminary study related to the objectives and needs of the research. The primary research was conducted by looking for objects and subjects related to sustainable partnerships in vocational high schools and partner industries. The selection of vocational schools and initiatives used as research objects is determined based on their characteristics, track record, experience, and partnerships.

The indicators determined by researchers from vocational schools and industries are based on: (1) schools that have active collaborations with more than 100 industries, (2) schools that have industry-specific classes, (3) the contribution of both parties in transferring human resources, transferring knowledge and skills, developing curriculum, apprenticeship programs, and developing facilities and infrastructure, (4) the absorption of graduates in partner industries, (5) quality in managing partnerships based on reputation and track record between schools and industry, and (6) industries with large capacities that have the infrastructure available to support large-scale production. The six indicators are unique characteristics or basic requirements for establishing an effective and efficient partnership that will impact the organization's sustainability, students, and society. These indicators are the goals and benefits of partnering with the industry. The mutual benefits and the creation of work-oriented learning will increase education quality. In addition, contributions from both parties will encourage more optimal learning. Researchers choose prominent and distinctive cases about a particular phenomenon by investigating the issue in-depth and describing it in detail to describe a phenomenon (Lune & Berg, 2017; Yin, 2019). The researcher focuses on cases in one vocational school and one partner industry as a unit of analysis and then concludes to illustrate the problem. Further case studies answer how and why (Yin, 2009). The researchers understand characteristics and theories about the strategic implementation of sustainable partnerships in vocational schools and partner industries.

Participants

The sampling approach was selected by purposive sampling. The process of choosing informants from vocational high schools and partner industries was not carried out on all staff but was selected based on identifying involvement, experience, and reputation in developing partnerships between vocational high schools and partner industries. The selection of informants must be relevant to the source of the data to be collected (Yin, 2009). Participants were selected based on the suitability of the case to provide an overview and expand the relationship and logic of the fixed issue (Eisenhardt & Graebner, 2007). The selected participants can provide a specific understanding of implementing sustainable partnerships between vocational high schools and industry. There were seven participants from vocational high schools and five from partner industries. Table 1 below is information from the selected participants.
Table 1
Sources of Informants from Vocational High Schools and Partner Industries

| Position categories                  | Gender | Years of experience at the institution | Qualification level |
|--------------------------------------|--------|----------------------------------------|---------------------|
| Headmaster                           | Male   | Ten years                               | Master's degree     |
| Deputy Head of Curriculum            | Female | Three years                             | Bachelor's degree   |
| Deputy head of infrastructure        | Male   | Four years                              | Bachelor's degree   |
| Deputy head of industrial relations  | Male   | Six years                               | Bachelor's degree   |
| Head of Skills Program               | Male   | Seven years                             | Bachelor's degree   |
| Internship Teacher                   | Male   | Four years                              | Bachelor's degree   |
| Apprentice Teacher                   | Male   | Three years                             | Bachelor's degree   |
| President Director (industry)        | Male   | Ten years                               | Master's degree     |
| Learning Manager (industry)          | Male   | Nine years                              | Master's degree     |
| Project Manager (industry)           | Male   | Five years                              | Bachelor's degree   |
| User (industry)                      | Male   | Three years                             | Bachelor's degree   |
| Instructor (industry)                | Male   | Five years                              | Bachelor's degree   |

Data Collection

We conducted a study for eight months starting from April 2021 by establishing intense relationships with schools and partners and determining potential participants to complete the final report. The research data sources only used two sources of evidence, namely the results of interview transcripts and document review. Data sources are based on the relationship between the questions, collected data, and conclusions drawn.

First, we compiled the questions for the interview protocol and listed the types of documents required. As Yin (2019) mentions, papers help verify, add specific details, and infer from interview processes and other sources of evidence. Protocols are used to increase the reliability of researchers and guide researchers in conducting data collection (Yin, 2009). After the interview protocol was developed, we validated the interview questions posed by two experts in the field of vocational partnerships. After being validated, we revise based on input and suggestions from experts.

Second, we collected the first data through in-depth interviews with twelve participants. Before the interview, the participants were given complete information regarding the purpose and procedure of the discussion. Participants have the right to refuse the interview or withdraw from the study by signing a consent document. As researchers, we are certainly thankful when participants agree to take part in our work. Out of thirteen participants agreed to participate in an audio-recorded interview.

The participants were asked questions based on their perspective on implementing a partnership strategy, the main drivers of partnerships, the programming process, how partnerships can be sustainable, how to implement partnerships, and how to build effective and efficient teamwork. Examples of interview questions can be seen in the following table.

Table 2
Sample Questions for the Interview

| Key Question                        | Sample Interview Questions                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------|
| Main drivers of partnerships        | How does your school/industry choose partners? How does your school/industry build mutual understanding? What basis is establishing partnerships in your school/industry for the program to survive? What is the program preparation process? |
We used Indonesian during data collection. Each participant was interviewed for an average of 45-60 minutes per participant, recorded using a smartphone. The interview process coincides with the collection of the required evidence documents. Document retrieval is done by asking for permission to obtain duplicate copies if permitted. Sources of documents to support data include minutes of internal meetings, school and industry profiles, drafts of joint curriculum preparation, organizational structure, Memorandum of Understanding (MoU), manuals, and activity reports.

**Data Analysis**

The data collection obtained in the field was carefully transcribed into the text and then entered the qualitative data analysis software ATLAS.ti 9 to help organize the data. The data analysis technique uses pattern matching. The pattern matching process using software consists of five stages: (1) selecting data, we made several quotations of each data that had been transcribed verbatim or documents by providing codes from the participants’ statements that were considered important or interesting. In this process, we read carefully and repeatedly to avoid unwanted errors, (2) coding, labelling in the form of words or sentences, (3) searching for data, analyzing relationships, sorting, and finding each data through the previously created code, (4) categorize data codes, (5) create a concept map, explore the results of the relationship from the findings based on categorization, quotation, and coding. The results of the data analysis found five components in the sustainable partnership strategy between vocational high schools and partner industries, namely: (1) intrinsic motivation, (2) accommodation capability, (3) acculturation of industrial values, (4) mutual commitment, and (5) determining the program of activities. Example of coding:

**Table 3**
*Coding Label: Acculturation of Industrial Values*

| Coding Label                  | Verbatim                                                                                                                                                                                                 |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acculturation of industrial   | At the time of learning to apply the movement called cultural values in the industry. (P5)                                                                                                                   |
| values                        | What is vital is the implementation of the company's work culture in schools, it will be applied according to the company culture, the hope is that if we enter the school, it means joining a company, starting from the security check entrance, then we have to look right and look left, how to walk safely, so there's a green area, a yellow area, a red area, that's all we apply like that. (P3) |
We focus on how the work culture in the industry is applied in the school, and the most important thing is that. (P8)

The important thing in implementing the partnership is applying the work culture in schools, K3 and basic safety, especially the placement of tools and discipline. (P4)

Trustworthiness

We used the trustworthiness of the data in this study to verify the data's accuracy, interpretation, and findings. We return the transcript of the interview results to the participants to verify whether the information we transcribed matches the participants (member checking). Potential researcher bias can be reduced by involving participants to examine and confirm the results (Birt et al., 2016). Member checking is used to validate and verify the level of trustworthiness of research results (Doyle, 2007). In addition, we maintained communication and established relationships with the participants during data collection and interviewed them many times to obtain in-depth data. We also carry out dependability by reviewing and auditing the entire research process together with the team.

Ethical Considerations

We convey that this manuscript did not go through the Institutional Review Board (IRB) process because generally, it is not widely done and is not mandatory in Indonesia. However, we assure that the participants in this study are voluntary. Participants were provided with complete information regarding the study and then given a consent form to participate, which they had to sign. Participants have the right to withdraw or refuse to answer questions during the interview process or document collection. This research also guarantees that applicable research ethics will keep all names, places, and locations confidential.

Findings

These findings are presented based on research questions about: "what is the strategy for sustainable partnerships between vocational high schools and partner industries?" Based on data analysis, it was found that there are five critical components in a sustainable partnership strategy between vocational high schools and partner industries, namely: (1) intrinsic motivation, (2) accommodation capability, (3) acculturation of industrial values, (4) mutual commitment, and (5) determining the program of activities. Figure 1 below is an illustration of how the partnership strategy works.

Figure 1
Sustainable Partnership Strategy
Intrinsic Motivation in Sustainable Partnership Strategy

The initial initiation of the formation of partnerships between vocational high schools and partner industries was the encouragement of each party. There are critical drivers from an industry point of view regarding collaboration. First, there is motivation in noble intentions that encourage them to do something big supported by the vision, mission, and industry strategy. For example, the industry responded:

What are the company's vision and mission? so if it is by the vision and mission, whatever business it is, let's run it." In line with another informant from the industry who argued that "for us, there is no meaning (partnership), for them (schools) there are records, so it means that encouragement is more important from within, and it must exist to be sustainable.

Second, the industry gets workforce by uptake students quickly by the existing competencies in the sector and following the conditions of the company's production.

The two main drivers from the school's point of view are: First, schools will have a branding or reputation when working with large companies. As the teacher gave his response, "To improve a school, it must have a branding when many of our graduates are accepted in big companies." In line with other teachers, "the more absorbed, the more recognized the school." Second, with a high level of absorption in large industries, it will provide opportunities and job opportunities for graduates by the relevance of competencies desired by the industry.

Intrinsic motivation will encourage vocational schools and industries to achieve their respective goals. Informants from the industry gave their experience that "Whether or not there is a policy from the government without internal encouragement will not work." Almost all participants shared their experiences that intrinsic motivation can provide the impetus for establishing sustainable partnerships so that each has an effort to sustain the program. The participants' perspectives were strengthened by document analysis regarding the same vision and mission and the track record of the partnership of both parties. A strong internal drive and the advantages of each party in establishing an alliance will make a sustainable relationship.

Accommodation Capability in Sustainable Partnership Strategy

The ability to accommodate partnership needs is the basis of program sustainability. The ability to adapt means the capacity of each party to meet requirements such as providing supporting facilities, providing competent teachers, establishing industry-specific classes, and providing learning tools. The school and industry both accommodate by providing the needs for the course of activities. For example, schools provide industry-specific courses, industry development modules, syllabus and lesson plans, complete facilities (pedestrian roads, learning media, teaching aids, etc.), and schedule schedules. Accommodation needs are flexible, in the sense that if there is a change in conditions, then each party can adjust. For example, there are new teaching aids that require changing modules and lesson plans, so the learning tools must be developed immediately.

Accommodation requires effort to meet the needs of each party. The teacher gave his experience: "Usually when there are demands from partners, for example, we allocate appropriate practice space, then we provide equipment that our partners do not provide." Other teachers also experienced another experience, "Later we usually form a team, then later it will be decided what partners want, what demands, also directions, and what is needed." The same experience from another teacher was also shared with us:
So we formed our team to divide into several teams, we will give them the tasks and authority to accommodate them according to the company's demands, because each company has its character, what is the hope from the company is that we can accommodate it so that the school will also benefit, the company will also benefit.

The experiences of the participants are supported by the results of document analysis, namely: there are regular dispatches of schoolteachers for internships, instructors from industry to schools, the number of tools provided, as well as an MoU which explains the agreement in providing costs and facilities to support the program of activities. Accommodation capabilities in partnerships between schools and industries must meet the resource needs of activities according to agreements such as allocating funds, facilities, and human resources.

**Acculturation of Industrial Values in a Sustainable Partnership Strategy**

The most important thing from the successful cooperation between vocational schools and industry is the acculturation of industrial values in schools. The school environment could replicate what is in the industry, both in tool technology and its environment. The teacher gave his experience to us:

What is vital is the application of the company's work culture in schools. It will be applied according to the company culture. The hope is that entering the school means entering a company, starting from the security check entrance. Then we have to look right and look left, how to walk safely, so there are green areas, yellow areas, red areas, that's all we apply like that.

Another teacher shared his experience with us that "When learning to apply the movement, the name is cultural values that exist in the industry."

The acculturation of industrial values must be applied in schools. So later, it will become a culture attached to students and has strong competence and character following the industry where students will work. The industry gave his experience to us: "Our focus must be on teachers how teachers are trained as role models so that the implementation of the industrial work culture there can run and in the end is the active involvement of the teacher, if the teacher is not proactive, sharing and doing it there is difficult." The acculturation of industrial values begins with teacher representatives from vocational schools who are given training in the industry which will later be transferred to other teachers and students because the teacher is a role model. The teacher must be an example to his students in applying industrial values because, after all the learning, if it is not used, it will not work.

The perspectives of the participants are evidenced by the existence of documents regarding monitoring of program implementation, assessments from industry, learning models, and facilities in the school environment. The quality of the partnership between vocational schools and industry can be measured by the extent to which schools can apply industrial values. Through acculturation of industrial cultural values in schools, students will get used to the industrial environment, which will shorten their adaptation to the world of work.

**Shared Commitment in Sustainable Partnership Strategy**

The implementation of the partnership will not last long if there is no commitment from each party. Partner schools and industries show promise by implementing the partnership program optimally according to mutual agreement. As the teacher shared with us, "We show
the quality of this school by implementing the program optimally here, so the work culture is shown so that the industry can know, it turns out that the work culture is implemented."

Another teacher also added related to the commitment: "Indeed, because the partner industry is very committed to the school, we feel this apart from a few others, but the partner industry is indeed extraordinary in terms of assistance to schools, especially to the character of children." This opinion emphasizes a firm commitment from the industry to provide maximum assistance to schools.

Most of the participants gave their experiences about commitment to carrying out each activity to the fullest. The participants' responses are evidenced by document analysis that there is a schedule for routine activities for getting joint commitments, meeting outcomes, and mentoring plans. All the documentary evidence points to mutual commitment in carrying out the program of activities. So, partner schools and industries have incentives that lead to the resilience and sustainability of the partnership.

**Determination of Activity Programs in the Sustainable Partnership Strategy**

Determination of the program is a set of activities in planning and formulating actions to run according to their goals. For example, how the program is planned, selecting the suitable alternative, and implementing the evaluation. For example, the teacher gives his experience about updating skills, "if later there are advanced skills, later the teacher will be called for training, for example like that". The teacher's experience emphasizes the existence of a human resource development program. We also shared the experiences of other teachers, namely "in determining activities, we usually do a needs analysis, so what is the purpose of the partnership? Well, we'll go into detail later and discuss it together."

The experience of the participants is evidenced by the analysis of documents regarding the determination of activities that have been agreed upon in the MoU, including (1) Alignment of competency-based curriculum according to industry needs, (2) development of practicum facilities, (3) provision of productive study teachers and instructors, (4) industrial work practices for students and industrial apprenticeships for teachers, (5) other related activities and agreed by the parties. This evidence emphasizes the existence of a straightforward program of activities agreed upon by both parties.

Determining the program of partnership activities between vocational schools and partner industries requires the role of each partner. For example, we summarize the actions that have been carried out in partnerships between partner schools and industry as follows:

**Table 4**  
*Strategy for Partnership Activities of Vocational High Schools and Partner Industries*

| Strategy from Vocational High School                                      | Strategy from Partner Industry                                      |
|-------------------------------------------------------------------------|---------------------------------------------------------------------|
| Vocational high school facilities: provide a place/workshop following  | Industry instructors: industry sends instructors to help train      |
| industry criteria to conduct theoretical and practical learning.       | students and teachers to acquire relevant skills.                   |
| Establish industry-specific classes: the school provides special      | Industrial visits: regular visits to industry for students         |
| courses for partner industries and selects students according to        | and schools to gain practical knowledge and industrial              |
| industry criteria.                                                     | developments.                                                      |
| Certified teachers: teachers who have been trained and certified      | Learning aids: the industry delivers the latest tools and           |
| based on the qualifications of industry partners responsible for       | modules as learning materials and practices for students in schools.|
| transferring what is obtained from the industry to their students and   |                                                                     |
| other teachers.                                                        |                                                                     |
| Strategy from Vocational High School | Strategy from Partner Industry |
|-------------------------------------|--------------------------------|
| Machines and tools: the school provides machines and other tools to support learning according to industry criteria. | Practical materials: industry provides and supplies materials for student practice according to industry standards. |
| Acculturation of industrial values: the school applies industrial values throughout the school environment. | Recruitment: industry offers and selects jobs for graduates who have been trained explicitly by the industry. |
| Workshop: conduct workshops at least once a year to increase knowledge of the development of the industrial world | Resource persons: industry sends experienced instructors to be resource persons |

Focus Group Discussion: Discuss and share knowledge regularly to gain potential and solve existing problems.

Determining partnership activities requires each role to follow the resources used effectively and efficiently. The part of schools and industry can impact the program's course to achieve the agreed goals. This contribution is expected to impact the collaboration between vocational schools and their partner industries.

Discussion

Vocational education currently has a significant contribution, especially in Indonesia. This study is essential for vocational high schools and partner industries in implementing current and future partnership strategies. Studies on partnerships in previous research suggest that four critical aspects of building successful alliances require the support of the environment, process, training, and people involved (Callan & Ashworth, 2004; Helmy, 2014; Lendrum, 2003.). The results of our research provide different perspectives on how vocational high schools and their partner industries carry out partnership strategies in a sustainable manner. This finding can be used as a support for existing theories to minimize the partnership gap between vocational high schools and the industry. We reveal that there are five key points regarding the sustainable partnership strategy between vocational high schools and their partner industries, namely: (1) intrinsic motivation, (2) accommodation capability, (3) acculturation of industrial values, (4) mutual commitment, and (5) determining the program of activities. These five key points are very relevant to previous research. For example, a supportive environment will not be effective if schools do not habituate industrial values. The process and training will not last if the two parties cannot accommodate each other's needs.

First, intrinsic motivation in a sustainable partnership strategy between vocational high schools and partner industries. Intrinsic motivation is the best indicator of organizational motivation (Ates & Buluc, 2017). Intrinsic motivation will reflect the ability to increase management productivity and efficiency (Beqiri, 2019). You will get a competent workforce through industrial partnerships, while schools will be more recognized and get branding. Motivation and organizational commitment go hand in hand because good motivation means high responsibility (Bytyqi, 2020). We find that the intrinsic motivation in the partnership strategy will encourage partners to do their best, so each partner will gain sustainable mutual benefits.

Second, accommodation capability in a sustainable partnership strategy between vocational high schools and partner industries. Partnerships require the role of vocational high schools and industry in providing competent teachers, facilities and infrastructure, and a solid internal commitment (Murniati et al., 2016). Partnerships with industry can contribute to implementing the work climate, facilities, motivation, student attitudes, and policies (Meirawan, 2015). One of the successful partnership strategies is the ability of each
organization to procure and manage resources and adaptive capabilities in a dynamic environment (Thomas et al., 2018). Availability and type of support from partners, including the type of support provided in the workplace planning process (Billett, 2011). Furthermore, adaptive capacity is essential for sustainable partnerships between schools and industry (Flynn et al., 2016). We find the ability to accommodate needs has a critical role in the sustainability of the collaboration between vocational high schools and partner industries.

Third, acculturation of industrial values in a sustainable partnership strategy between vocational high schools and partner industries. Cultural differences between partners were cited as a significant failure factor (Duisters et al., 2011). The work culture of every worker is a supporting factor for the industry to develop and have global quality (Sukardi et al., 2020). Acculturation of industrial values for schools provides quality learning and improves the quality of graduates. For industry, recruited graduates have the same competencies as partner industries, adapt more quickly, and the industry no longer trains its new workforce. For students, it provides real experience and increases competitiveness as a provision to enter the world of work. For other industries, they were obtaining new, qualified workers without incurring training costs so that the acculturation of industrial values has a broader impact, not only on vocational high schools and their partners but on students and the surrounding community.

Fourth, joint commitment to a sustainable partnership strategy between vocational high schools and partner industries. Lack of commitment is one of the factors why partnerships fail (Mtonga & Banja, 2020). Commitment is shown by running the program and attaching importance to both (Thomas et al., 2018). There is an active role and commitment from the industry, especially the top management level to participate in the development of partnerships (Hughes et al., 2002). Furthermore, the partnership strategy requires personnel who have a high commitment (David & David, 2017). Researchers found that joint commitment can have an impact on the sustainability of cooperation, where all parties carry out and participate actively in every activity.

Fifth, determining the program of activities in a sustainable partnership strategy between vocational high schools and partner industries. The main drivers of successful partnerships are institutions and culture, program support and training mechanisms, organizational functions, and existing policies (Nawaz & Koc, 2020). The existence of an effective program of activities with partner industries makes it easier to increase the competence of students and teachers in acquiring knowledge, skills, and industrial culture and can reduce the gap between vocational high schools and industry (Gunadi et al., 2020). The partnership activity program is prepared based on the needs and objectives stated in the cooperation agreement. We found that the determination of activities could impact the implementation of effective and efficient partnerships that lead to the sustainability of the relationship between vocational high schools and the industry.

Implications

The government is currently formulating a policy called the link and match 8+i program, where the program requires vocational high schools to involve industry in all its activities, such as compiling relevant curricula, assigned practices to students, appropriate teaching materials, internship programs, instructors’ industry, as well as the formation of the character of students who are ready to work. This study can be an additional knowledge for vocational schools, industry, and the government to choose the right partnership strategy in the implementation of vocational education. In addition, it emphasizes five aspects as described in this study, namely increasing intrinsic motivation, accommodation capability, acculturating
industrial values, joint commitment, and determining program activities so that the partnership relationship between vocational high schools and industry can survive and be sustainable.

**Limitations and Suggestions for Future Research**

This case study research focuses only on one vocational high school and its industrial partners. We realize that there are limitations because the results of this study are a small representation of the partnership strategy between vocational high schools and their partner industries. However, this research provides an overview and knowledge of how the partnership strategy of vocational high schools and partner industries can survive and be sustainable. The five key partnership strategies can be used as indicators of the partnership between vocational high schools and industry in establishing a sustainable relationship. Future research needs to be carried out in several vocational schools and industries by adding more participants or using qualitative and quantitative methods. Aspects that might be carried out in future research by adding the role of government in the partnership strategy between vocational high schools and industry.

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