

# Improving the Quality of Socio-Cultural Learning in Pontianak: Strategy for Developing Student Professionalism Training Programs Through Continuous Training

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## Abstract

Challenges in the education system and workforce development in Indonesia are very minimal, especially in the context of increasingly tight global competition. The urgency of this study lies in the urgent need to improve the quality of education in order to produce human resources who are ready to work and able to contribute to economic growth. The purpose of this study is to explore the relationship between training programs for students and graduate skills in the labor market. The research method used is a mixed approach, with a population consisting of vocational high school students in Pontianak City. The sample was taken randomly, namely 3800 students. Data collection techniques were carried out through surveys using validated questionnaires, observations, and in-depth interviews. Data analysis techniques used descriptive statistics and path analysis with the help of SPSS software version 29.0. The results of the study showed that there was a significant relationship between the quality of training and graduate performance, as well as a positive influence of strategic partnerships between training institutions and industry on the relevance of the curriculum. These findings indicate that increasing entrepreneurship training can increase the number of entrepreneurs among vocational high school graduates. Conclusion, emphasizing the need for a collaborative approach that integrates practical skills and creates entrepreneurs from vocational high school students to prepare the workforce to face challenges in the global market, which has important implications for national and global education policies.

**Keywords:** education, workforce, training, entrepreneurship, partnership, strategic, performance

## 1. Introduction

### 1.1 Introduce the Problem

With the increasing development of education in the 21st century, all countries are competing to achieve achievements through education (Navarro-Ibarra et al., 2025; Sorooshian, 2024). Indonesia also plays a role by utilizing its vast geographical area consisting of 19.498 islands and a population estimated to reach around 296.8 million people in 2024, Indonesia plays a role on the global stage (Pham & Nugroho, 2022; Misra et al., 2024). However, there are significant challenges, especially in exploiting its natural resources and how to develop its human resources who are ready to work in an increasingly tight global environment (Singh et al., 2024; Suda et al., 2024; Michel et al., 2024). With a large number of human resources as one of the foundations for economic development and innovation, but minimal desire to become entrepreneurs (Kostakis & Tsagarakis, 2022; Kwilinski et al., 2024). Through education and culture, this needs

to be improved individually and in community groups with the aim of creating job opportunities and reducing unemployment and improving the community's economy through educational training (Fute et al., 2024; Dushkova & Ivlieva, 2024). Many educational and training institutions face difficulties in keeping up with the rapid changes in the 21st century, resulting in a lack of skills with job market requirements, so that graduates are not ready to face the facts of the job market (Aljohani et al., 2022; Alhloul & Kiss, 2022). This situation is exacerbated by the need for continuous learning and skills development in the era of globalization and technological advances (Jianing et al., 2024; Tavares et al., 2023). Uneven job preparation can lead to high unemployment rates and low incomes for the community, thus exacerbating social inequality in a country (Revankar & Mishra, 2024; Kerschbaumer et al., 2024). Ensuring that educational curricula are in line with current economic needs is a pressing challenge (Samala et al., 2024a; Blanco-García et al., 2025). Educational frameworks, especially regulations such as laws and culture, aim to foster interest and not only intellectual but also moral character and civic responsibility among students (Younas & Imran, 2025). However, practical implementation of these frameworks is often lacking, especially in education training and professional development programs (Dahalan et al., 2024). Community Employment Training Centers that bridge this gap must evolve to enhance real-world skills through partnerships with industry and focus on practical training experiences (Tereshchenko et al., 2024). As Indonesia is culturally diverse and realizes its vision to become a developed country by 2045, referred to as "Golden Indonesia", the importance of developing a skilled, adaptable, and innovative workforce (Turcato et al., 2024). Not only increasing training capacity but also strategically updating the methods and content of educational programs to ensure their relevance and effectiveness (Akimov et al., 2023). Involving various stakeholders, including private companies, government agencies, and educational institutions, is essential to building a comprehensive system that encourages entrepreneurship and skills development (Khan et al., 2022). To address these challenges, education and training in Indonesia must be a collaborative and inclusive approach from the community (Asmayawati et al., 2024). Innovative solutions that align training programs with the needs of a dynamic labor market.

### *1.2 Explore Importance of the Problem*

Workforce development and education in Indonesia are critical, not only for the country's social and economic progress, but also for improving the quality of life of its citizens (Zainudin et al., 2024; Hasanah et al., 2024). As Indonesia moves closer to achieving its ambitious goal of becoming a developed nation by 2045, a skilled and work-ready workforce is essential (Pandya et al., 2023; Wynne et al., 2024). The current situation shows a worrying gap between the skills of job seekers and the needs of the modern industrial world, which could lead to high unemployment rates. A problem that threatens the stability and economic growth of the country (Kuzior, 2022; Tsutsunashvili et al., 2024). Rapid technological change and globalization require that continuous skills and adaptation are essential (Babashahi et al., 2024). Employers seek individuals who not only have academic knowledge, but also practical competencies that can be easily applied in real-world scenarios (Scandurra et al., 2024). This educational gap risks perpetuating a cycle of poverty and inequality, as young people struggle to find decent work that allows them to contribute to their communities and the wider economy (Chigbu & Nekhwevha, 2023).

### *1.3 Describe Relevant Scholarship*

The debate on workforce development and education in Indonesia has attracted significant academic interest, highlighting multiple dimensions of challenges and opportunities (Sudrajat et al., 2024; Arifin et al., 2024). Recent research highlights the importance of aligning education curricula with labor market requirements, emphasizing the urgent need for education training programs that meet the needs of evolving industries (Zhou et al., 2024; Akhtar et al., 2024). Studies by (Gunawan et al., 2024), describe Indonesia's demographics, highlighting rapid population growth and the resulting pressures on job creation and educational effectiveness. In addition, researchers such as (Li et al., 2025), have studied the interplay between education quality and social welfare, calling for systemic reforms that prioritize competence over mere academic achievement (Nadeem, 2024). Researchers such as (Samala et al., 2024b), provide further intellectual discussion, highlighting government frameworks as critical in shaping Indonesia's national education system (Yaqin et al., 2025). Their analysis reveals how legislation aims to enhance knowledge, as well as foster character and civic responsibility in students, ready to engage (Ayane & Mihiretie, 2024). Researchers such as discuss the importance of entrepreneurship education, asserting that developing an entrepreneurial mindset is critical to economic resilience in the global marketplace (Shore et al., 2024). Community education training centers discussed are important in bridging the gap between education and employment (Crawford et al., 2024). These institutions are an integrated effort to improve skills acquisition and employability among young people (Scandurra et al., 2024). The study shows an urgent call for a collaborative approach to education that integrates practical skills, creates entrepreneurs, and involves multiple stakeholders to prepare the Indonesian workforce for a competitive future (Elmatsani et al., 2024).

#### 1.4 State Hypotheses and Their Correspondence to Research Design

This study proposes the following hypothesis.

Hypothesis one: There is a strong relationship between the quality of educational training programs and the employability of vocational school graduates.

Hypothesis two: There is a strategic partnership between Community Work Training (CWT) and industry stakeholders, which has a positive impact and effectiveness of the training curriculum.

Hypothesis three: There is enhanced entrepreneurship training at CWT In producing entrepreneurship levels among vocational school graduates.

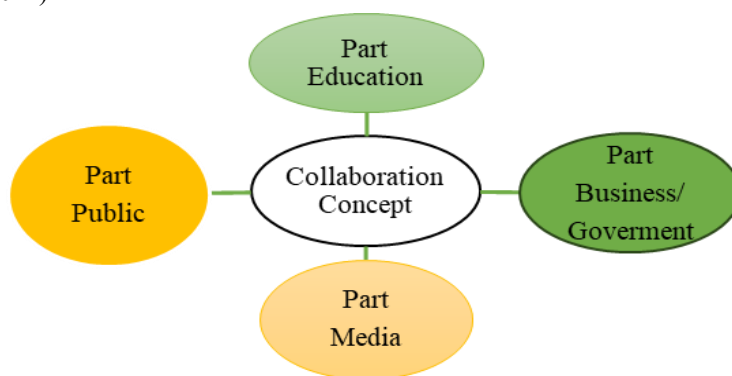
Hypothesis four: There is a significant integration of modern technology in training methods to increase the involvement of vocational schools in acquiring skills.

#### 1.5 Urgency and Purpose of Research

The urgency of this research lies in the main challenges faced by vocational schools in Indonesia in the rapid economic, educational, and social transformation, especially in the context of human resource development from vocational schools. In the era of globalization, Indonesia as the fourth most populous country in the world, requires an effective strategy to improve human resources from vocational school education and the skills of its workforce which are the key to stimulating economic growth and reducing unemployment of vocational school graduates. With a high level of workforce participation, but a low number of entrepreneurs. So, the purpose of this study is to identify factors that influence the success of the Community Work training program, especially vocational schools. This study aims to explore the relationship between the quality of training programs, strategic collaboration with industry, and entrepreneurship training on job preparation and entrepreneurship levels of vocational school graduates.

## 2. Method

The method used in this study is mixed research (Geremew et al., 2024). Mixed research methods with quantitative are used with surveys and qualitative with interviews, observations and documentation. By combining these two methods it is more objective, comprehensive, valid and reliable (Strijker et al., 2020). The first problem formulation uses a qualitative approach, and the second problem formulation uses a quantitative approach, namely assessing whether the influence and hypothesis can be accepted or not. This is done to increase understanding of how to solve research problems. Mixed methods focus on combining, analyzing, and collecting qualitative and quantitative data in a study or series of studies (Zhao et al., 2024). One of the main reasons is that combining qualitative and quantitative methods provides a deeper understanding than using only one or the other (Khoo-Lattimore et al., 2019). Based on the method above, researchers combine quantitative and qualitative data obtained from interviews, documentation studies, observations, and questionnaires. All of this is done simultaneously during field research. This study uses a concurrent triangulation design, namely quantitative and qualitative data collection is carried out simultaneously in one stage (Camilli Trujillo et al., 2022).



• Figure 2.1. Collaboration Concept (As'ari et al., 2025)

In Figure 2.1 above, the collaboration cycle of 5 (five elements of subjects or strategic partners known as the penta helix model) is one of the most complete partnership models today and it is hoped that through the principles of strategic partnership cooperation built by various stakeholders with different backgrounds will create a strong strategic partnership synergy so that it can provide a productive impact on the sustainability or independence of an organization in educational institutions and how to implement it (Glass et al., 2023). By collaborating in this strategic partnership, we can effectively and efficiently achieve our goals and sustainably by bringing shared values based on the orientation of the benefits of training in education for society, the country, and the global (Pereira et al., 2023).

### 2.1 Participant (Subject Characteristics)

The population in this study were education high school students in Pontianak city. While the sample in the surveyed study was 15% of the total students in Pontianak, namely 3800 education high school students. The sample collection technique was random sampling. The students found who were prepared by the school to take part in field work training, they were all used as samples to be asked to assess the instruments that had been prepared by the researcher. While the sample in the observation and interview amounted to 67 people in this study. This number was selected from several schools spread across Pontianak city which were considered to be able to represent in providing valid answers. The character of these respondents is students who have taken part in performance training at least 7-10 times at school or outside school.

### 2.2 The Data Collection

The data collection technique in this study was a survey. This survey was equipped with indicators and instruments that had been developed and validated by experts. The instrument was poured into Google Form and a link was created to facilitate the distribution of the instrument to vocational high school students. The instrument was given a rating scale with a Likert scale, namely from point one to point five. Then the data was also collected from the time of observation. The study observed performance, training, management in Pontianak City. Then the study conducted unstructured interviews to ensure that the data received was in accordance with what was experienced and felt by the respondents with Management. The final stage of this study collected documentary evidence related to the observation and interview data conducted by the researcher.

### 2.3 Data Analysis

The data analysis technique in this study with descriptive statistics with the help of SPSS version 29.0 (Alalalmeh et al., 2024). This study also uses SPSS for path analysis which is the development of multiple linear regression analysis on. In cases where exogenous variables directly or indirectly affect endogenous variables, path analysis is used to see the causal relationship in multiple linear regression (Tran et al., 2022; Gu et al., 2024). In the analysis of the results of observations, interviews and documentation by collecting data, reducing unrelated data, coding, aligning survey data with the three data that have been coded and drawing conclusions and making interpretations.

## 3. Results

The flagship program contained in the curriculum and has been implemented is the Community Work Training Center in education high schools. Education in education schools hopes that through this program it will be able to play a role as a strategy in producing human resources who are ready to work and are able to create jobs independently. The Community Work Training Center is a space that originates from the participation of religious, cultural and trade union educational institutions to participate in planning, developing and managing various types of work skills training programs for the entire community with the principles of easy access, quality and sustainability. Based on the results of the interview, almost all managers of the Community Work Training Center in Pontianak city prioritize the management of strategic partnerships in an effort to realize Vocational School and empowerment, starting from planning, organizing, implementing to evaluating strategic partnerships in an effort to become empowered and sustainable so that they do not only depend on government funding. The results of the interview also provide information about who the strategic partnerships are implemented by the Community Work Training Center in Pontianak. The partnerships carried out include education/school education in Pontianak city, both state and private, involving the global world. The Influence of Strategic Partnerships in the Independence of Education High School Training has a strategic influence on education, business, community, government and media is one form of penta helix partnership in the independence of Community Work training that needs special attention. The following is the result of the roadmap of the relationship between schools and independent institutions.

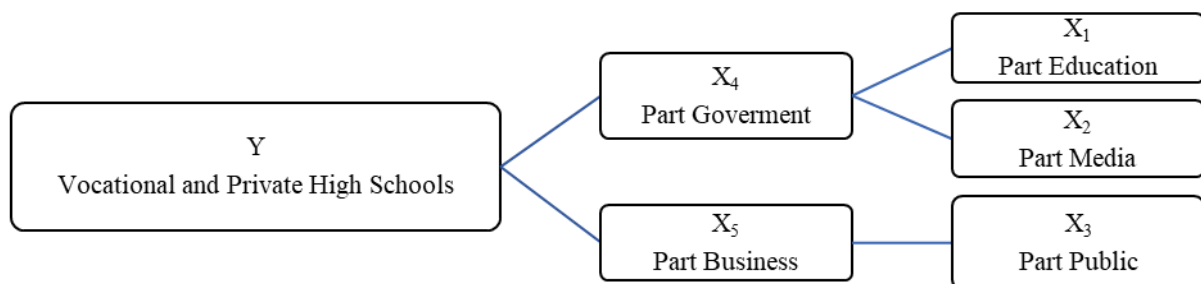


Figure 3.1. Overview of Research on the Impact of Vocational and Private High Schools

The path diagram in Figure 3.1 consists of two structural equations, where  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$  and  $X_5$  are endogenous variables and the analysis technique used in analyzing this data with the help of SPSS Version 29.0.

### 3.1 Statistics and Regression Analysis

Analysis of the overall influence of academic, media, community, government, business variables on Vocational School R square below.

Table 3.1. Model Summary R Square

| Model Summary  |       |          |                     |                            |
|--|-------|----------|---------------------|----------------------------|
| Model  | R     | R Square | Adjusted R Square e | Std. Error of the Estimate |
|  | 0.897 | 0.85     | 0.887               | 0.91                       |
| Predictors: Constant, Education, Public, Government, Business, Media |       |          |                     |                            |

The combined influence of education, media, society, government and global business variables on Vocational School is equal to  $KD = 0.85 \times 100\%$ , which is 85%. The remaining 15% is influenced by other factors outside this path model. The partial influence of education, media, society, government and business variables on Vocational School uses the T test, while to see the magnitude of the influence, the Beta or Standardized Coefficients numbers are used below.

Table 3.2. Regression Coefficients

| Coefficients <sup>a</sup> |                             |            |                           |       |       |
|---------------------------|-----------------------------|------------|---------------------------|-------|-------|
| Model                     | Unstandardized Coefficients |            | Standardized Coefficients |       | Sig.  |
|                           | B                           | Std. Error | Beta                      | t     |       |
| 1 Constant                | 0.531                       | 0.912      |                           | 0.479 | 0.003 |
| Education                 | 15.4                        | 0.212      | 0.263                     | 8.342 | 0.001 |
| Media                     | 1.16                        | 0.207      | 0.154                     | 4.215 | 0.000 |
| Public                    | 0.78                        | 0.113      | 1.16                      | 4.126 | 0.002 |
| Government                | 1.34                        | 0.083      | 0.78                      | 10.37 | 0.001 |
| Business                  | 1.34                        | 0.153      | 1.34                      | 6.29  | 0.001 |

a. Dependent Variable: Independence

Table 3.3. Regression Analysis Calculation Results

| Variables   | Value/Score                        | Decision  |
|---|------------------------------------|---|
| Anova   | Sig value. F is 0.001              | Ho: Rejected and Ha: Accepted. There is a relationship between education, media, society, government, business and Vocational School. |
| The Influence of Education on Vocational School         | t count 8.209 > t table of 3.015   | There is a significant influence between education and institutional independence of 11.4%,   |
| The Influence of Media on Independence and Institutions | t count 7.570 > t table of 3.015   | There is a significant influence between media and Vocational School of 17.3%.  |
| The Influence of Society on Institutions independence   | t count 4.51 > t table of 3.51     | There is a significant influence between society and Vocational School of 7.8%,   |
| The influence of government on the Vocational School    | t count 3.14 > t table of 3.005    | There is a significant influence between government independence and Vocational School of 8.4%.                                       |
| The influence of business on Vocational School          | t count 5.63800 > t table of 3.005 | There is a significant influence between business independence and Vocational School of 17.6% business and management influence.      |

### 3.2 Correlation Analysis Results

Correlation between education, media, society, government and business variables in institutions.

Table 3.4. Correlation of the Impact of Vocational and Private High Schools

|                   |                      | Correlations |       |        |            |          |            |
|-------------------|----------------------|--------------|-------|--------|------------|----------|------------|
|                   |                      | Education    | Media | Public | Government | Business | Vocational |
| Education         | Pearson Correlation. | 2            | 0.564 | 0.476  | 0.861      | 0.679    | 0.769      |
|                   | Sig. 2-tailed        | 0.001        | 0.001 | 0.001  | 0.001      | 0.001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |
| Media             | Pearson Correlation. | 0.492        | 2     | 0.812  | 0.7 21     | 0.607    | 0. 798     |
|                   | Sig. 2-tailed        | 0.001        | 0.001 | 0.001  | 0.001      | 0.001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |
| Public            | Pearson Correlation. | 0.734        | 0.973 | 2      | 0.7 52     | 0.737    | 0.931      |
|                   | Sig. 2-tailed        | 0,001        | 0,001 | 0.001  | 0.001      | 0,001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |
| Government        | Pearson Correlation. | 0.755        | 0.733 | 0.771  | 2          | 0.761    | 0.845      |
|                   | Sig. 2-tailed        | 0.001        | 0.001 | 0.001  | 0.001      | 0.001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |
| Business          | Pearson Correlation. | 0.705        | 0.607 | 0.737  | 0.761      | 2        | 0.795      |
|                   | Sig. 2-tailed        | 0.001        | 0.001 | 0.001  | 0.001      | 0.001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |
| Vocational School | Pearson Correlation. | 0.769        | 0.971 | 0.690  | 0.819      | 0.3800   | 2          |
|                   | Sig. 2-tailed        | 0.001        | 0.001 | 0.001  | 0.001      | 0.001    | 0.001      |
|                   | N                    | 3800         | 3800  | 3800   | 3800       | 3800     | 3800       |

Correlation is significant at the 0.01 level 2-tailed.

Table 3.5. Correlation Results

| Components/variables                  | Value/Score                                      | Decision                |
|---------------------------------------|--|-------------------------|
| Vocational School and education       | Correlation is 0.731. Significance is 0.001<0.05 | Very strong correlation |
| Vocational School from the media      | Correlation is 0.751. Significance is 0.001<0.05 |                         |
| Vocational School from society        | Correlation is 0.831. Significance is 0.001<0.05 |                         |
| Vocational School from the government | Correlation is 0.807. Significance is 0.001<0.05 |                         |
| Government and education              | Correlation is 0.755. Significance is 0.001<0.05 |                         |

### 4. Discussion

Found in this study, Community Work Training (CWT) specifically for Vocational School is one of the leading programs implemented in the Vocational School curriculum. This program aims to develop Human Resources (HR) who are not only ready to work but also able to create jobs independently (Budiarto et al., 2024). In the context of an ever-growing economy and society, the existence of this type of program is very important. Amidst the challenges of Vocational School graduates in finding jobs, CWT provides them with appropriate work skills training by focusing on the needs of industry and society. In its implementation process, CWT focuses on involving various stakeholders in the community, including educational institutions, religious organizations, culture, and trade unions. By prioritizing the principles of accessibility, quality, and sustainability, this program aims to empower the entire community. The goal of this approach is to create a comprehensive education ecosystem and support individuals in developing their skills. Through close collaboration between various institutions, CWT is able to provide training programs that are not only relevant but also sustainable. One of the keys to CWT success is the importance of building strategic partnerships (Liu et al., 2024). A CWT resource person from Pontianak City said that managing strategic partnerships is a high priority in efforts to achieve independence and institutional empowerment. This partnership will not be limited to educational institutions but will also involve the business sector, government, media and the wider community. This concept is known as Penta Helix and represents a collaboration between five main elements: education, industry, government, society and media (Siti Alia et al., 2024). The results of the analysis show that the total impact of the variables of education, media, society, government and business on Vocational School is 85%, while the remaining 15% is influenced by other factors outside the model. Regression analysis shows that the education variable has the highest influence on Vocational School with a contribution of 15.4%, followed by the media 11.6%, society 7.8%, government 6.9%, and the business world 13.4%. This significant impact shows that the close relationship between educational institutions and educational organizations contributes to the effectiveness of the training programs implemented.

To ensure the success of the program, CWT also conducts regular evaluations of the partnerships that have been built. Through the process of evaluating and improving partnerships, CWT management can identify strengths and weaknesses and optimize existing resources. For example, collaboration with the business sector can provide

employment opportunities for graduates, while partnerships with the media can help promote training programs and raise public awareness of the importance of education and skills training. Integrating feedback from the community and industry is also important in program development (Suklun & Bengü, 2024). Actively involving the community in the planning and management of training creates ownership of the program, increasing participation and long-term success. However, the challenge they face is the uncertainty of government funding. To overcome this, CWT is exploring alternative funding sources, such as sponsorship and crowdfunding from the private sector, which can increase its operational capital without having to rely entirely on government funding. CWT also plays a role in improving the quality of human resources at the local level in Pontianak. CWT contributes to reducing unemployment among education high school graduates by providing training tailored to industry needs and relevant skills. Providing ongoing training will strengthen participants' practical skills and better prepare them to enter the workforce. This has positive impacts not only for individuals but also for the local economy, which is further boosted by increased employment rates. In this regard, the use of technology in training should also be considered. Innovations in teaching methods, such as the use of online platforms for distance learning, can reach more learners, especially in today's digital age. Communities who previously did not have access to training are brought through the program, creating new opportunities for them to develop skills and become economically engaged. Measuring the impact of CWT on communities also requires a systematic approach. Collecting data on post-training employment rates, income generation, and community engagement in the program is an important step in evaluating the effectiveness of the training. This data can be used to assess the impact of the program on the local economy and to guide ongoing improvements in training delivery.

The implication of this study is that building partnerships with various stakeholders, such as educational institutions, media, society, government, and the business sector, has a significant impact on the independence of an organization. This strengthens the view that effective collaboration between various stakeholders is needed to achieve sustainability and resilience in vocational education institutions. Therefore, it is hoped that the management that is built will be more proactive in establishing partnerships with various sectors to support the training programs that are held, so as to produce graduates who are not only ready to work but also able to create jobs for themselves and others. On the other hand, the weaknesses are the limited sample size and limited geographic context, which only covers the city of Pontianak. This can reduce the generalizability of the findings of this study to other areas and different educational contexts. The regression and correlation analysis techniques used with other variables need to be considered. The motivation and management skills of managers play an important role but are not measured in this study. Suggestions for further research are to conduct more in-depth research by combining qualitative and quantitative approaches to gain a deeper understanding of the dynamics of strategic partnerships and the factors that influence organizational independence nationally and internationally.

## 5. Conclusion

The conclusion of this study is that the Community Work Training program specifically for Vocational High Schools is focused on developing human resources for graduates of Senior High Schools and Vocational High Schools so that graduates are ready to work, independent, and able to create jobs. In times of rapid economic growth, this program is very important to face the challenges faced by Vocational High School graduates in finding jobs. By involving various stakeholders, including educational institutions, religious organizations, trade unions, and the media, to provide job skills training that is aligned with the needs of industry and the specific community of Vocational School. This collaborative approach, called Penta Helix, brings together elements of education, industry, government, community, and media to have a profound impact on organizational independence. The results of the study found that there is a close relationship between education and the success of the training program, with the education variable providing the most significant contribution to organizational independence. Evaluating the partnerships built periodically allows for identifying strengths and weaknesses and optimizing existing resources. Designing programs that incorporate community and industry input is also important to create a sense of ownership that increases participation. Despite the challenges of uncertain government funding, actively exploring alternative funding sources to support its operations, including sponsorship and crowdfunding. The use of technology in training is also continuously explored to reach more participants. By implementing systematic impact measurement, it not only benefits individuals but also strengthens the local economy through increasing unemployment of Vocational School. This program is expected to produce graduates who are not only ready to work but also able to create new job opportunities in Pontianak.

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## Authors contributions

Iwan Ramadhan, Imran and Adhalia Zatalini, were responsible for the design and revision of the report and publication. Fauziah Sri Wahyuni and Hadi Wiyono, were responsible for data collection. Iwan Ramadhan drafted the manuscript

Imran and Adhalia Zatalini revised it. All authors read and approved the final manuscript. In writing this report there was no special agreement.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### **Data sharing statement**

No additional data are available.

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