



Project Based Learning Business Communication Teaching Materials to Improve Vocational School Students' Work Readiness

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Abstract

This research aims to develop business-based communication teaching materials Project Based Learning (PjBL) which is valid and tests its effectiveness in increasing the work readiness of Vocational High School (VHS) students. This research uses the ADDIE development model which includes stages Analysis, Design, Development, Implementation, and Evaluation. The development of teaching materials is carried out based on analysis of student and industry needs, as well as validation by material experts, learning media and practitioners. The research results show that the teaching materials developed are valid and effective in improving students' business communication skills. The test results show a significant increase in pretest and posttest scores, which indicates that students are better prepared to face the world of work after using this teaching material. Apart from that, this research also found that the integration of technology in PjBL learning and collaborative learning can help students develop soft skills that are important for success in the world of work. Based on the research results, it is hoped that this teaching material can be implemented more widely in vocational schools to improve the quality of vocational education in Indonesia.

INTRODUCTION

The problem of unemployment from time to time is still a major problem Indonesian country. Data from BPS shows that Indonesia's open unemployment rate (TPT) is still at 5.32%. Even though Indonesia's TPT has decreased from August 2022 by 0.54%, this figure is still relatively high because the 2020 - 2024 National Medium Term Development Plan (RPJMN) target of 3.6% - 4.3% has not been met. Based on data from International Monetary Fund (IMF) In August 2023, Indonesia was listed as the 58th country with the highest number of unemployed people in the world and 2nd in ASEAN.

Competitive human resources can be formed through the education process. Wijaya & Utami (2021) say that the imbalance between the number of vocational school graduates and industrial absorption capacity causes unemployment. Setiawaty and Fahmi (2022) also said that the gap in the quality of vocational school graduates and the quality required by the world of work causes unemployment. According to Suwartika et al. (2021), one of the obstacles for vocational school graduates to get a job is their lack of attitudes and critical thinking skills.

Achmadi et al. (2020) in their research showed that critical thinking skills are at the top of the list of competencies that are really needed in the world of work. The results of this study illustrate that the world of work requires graduates who have critical thinking skills. Thus, the educational unit, as an educational center, can plan learning that aims to improve students' critical thinking abilities.

Vocational High School is a type of secondary education that specifically prepares graduates

to become experts, skilled, and ready to enter society (Khurniawan et al., 2019). Graduates of this vocational education are expected to be able to work according to their skill competencies to meet the needs of the job market (Hartanto et al., 2019; Kemendikbudristek RI, 2020). Chapter 15 of the National Education System Law Number 20 of 2003 explains that vocational education is secondary education that prepares students to work in certain fields. The direction of development of vocational secondary education is oriented towards meeting job market demands (Hasanefendic et al., 2016). The workforce needed is human resources who have competence according to their field of work, have adaptability and high competitiveness (Herbert et al., 2020).

Data from BPS also states that the unemployment rate for vocational school graduates in August 2023 will reach 9.60%. This figure makes VHS the education unit with the largest contributor to unemployment. This is certainly not in accordance with the aim of Vocational Schools, namely to produce skilled workers who are ready to be placed in the world of work. The high unemployment rate for vocational school graduates shows that there are problems, including the skill competency of vocational school graduates who do not meet the requirements as expected by industry (Mukhlason et al., 2020). Employability skill or generic skill as a skill that must be possessed by a prospective worker according to the characteristics of the current work climate (Gill, 2018). Employability skill considered very important because current job characteristics require initiative, flexibility and a person's ability to handle different tasks (Lenihan et al., 2020). Employability skill including (1) basic skills including reading, writing and arithmetic; (2) interpersonal skills including communicating and working in a team; and (3) personal attributes, including the ability to learn and how to deal with changes that always occur in society (Márquez-García et al., 2020).

Communication is the most important factor in the flow of the human economy, one of which is in the economic sector such as business economics. The business economy has enormous competitiveness, especially in this era of progress. In line with the rapid economic growth from within and outside the country and economic changes and fluctuating business activities, therefore the successors of the global economy in Indonesia in particular really need ideas and concepts for correct and appropriate communication methods in running their business and enterprises, as is the case to achieve the desired target, namely getting profits from customers (consumers) so that the business continues to progress. This business-based communication supports students' competency to enter the business world, where VHS students are educated to be ready to work and enter the field. Therefore, this subject is very important to study.

METHODS

This study employed the Research and Development (R&D) methodology, utilizing the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). This model was chosen for its capability to integrate various learning components in a structured manner and to provide room for continuous evaluation throughout the development process.

The population in this study consisted of all students of SMK Negeri 9 Bandar Lampung who have the need to enhance their work readiness by mastering business communication competencies. The research sample was purposively selected from this population, focusing on students from specific study programs relevant to the research objectives. During the limited trial stage, the research subjects included eight vocational high school students who participated in the initial evaluation of the teaching materials developed using the Project-Based Learning (PjBL) approach.

Research Procedures

The stages in this research method are described as follows:

Analysis

The analysis stage aimed to identify the students' needs in the learning process and the factors affecting their work readiness. The analysis was conducted using a fishbone diagram approach to examine aspects such as learning media, teacher quality, and the competencies of vocational

school graduates.

Design

Based on the analysis results, teaching materials were designed to achieve learning objectives that enhance students' work readiness. This design included the development of business communication learning media using the PjBL approach, tailored to provide relevant and practical learning experiences.

Development

After completing the design, the development of teaching materials involved validation by subject matter experts, learning media experts, and practitioners. This validation process aimed to ensure the teaching materials met the criteria for feasibility and relevance.

Implementation

The implementation stage involved testing the teaching materials in a classroom setting with vocational high school students as research subjects. Students used these materials in their learning activities to evaluate their effectiveness in improving business communication skills and work readiness.

Evaluation

Evaluation was conducted at each development stage to address any identified shortcomings. The final evaluation included data analysis from the trial, comparing pretest and posttest results using statistical methods such as paired sample t-tests.

RESULTS AND DISCUSSION

This hypothesis test is used to measure whether providing material influences knowledge or not. In this case the research team used interpretation or interpretation of the paired sample t-test results with SPSS 16.0 and found the following results:

Table 1. Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 pretest	56.4000	20	17.50048	5.53414
posttest	87.8000	20	11.36075	3.59258

In this output it can be seen that the average pretest score is 56.4 and posttest 87.8 with the number of respondents being 10 people. Because the posttest > pretest score or $87.8 > 56.4$, this means that descriptively there is a difference in the average posttest and pretest scores.

Table 2. Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 pretest & posttest	20	.024	.946

The output above shows the results of the relationship between the two pretest and posttest variables. Based on the output above, it can be seen that the correlation coefficient value is 0.024 with a significance value of 0.946. Because the significance value > correlation coefficient or $0.946 > 0.024$. So it can be said that there is a relationship between the pretest variables and the posttest variables.

Table 3. Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pretest-- posttest E1	-3.14000	20.63008	6.52380	-46.15787	-16.64213	-4.813	19	.001

In this third output, it is known that the significant value is $0.001 < 0.05$, so it is concluded that there is a difference between the pretest and posttest results, which means that there is an influence of using the Getting to Know Lampung application in increasing the results of knowledge about Lampung culture in repatriated students.

Another way to test the hypothesis is in the paired sample t test by comparing the calculated t value with the t table. Based on the output above, it is known that the t count is -4.813. The resulting negative value is because the average posttest learning outcomes are smaller than the pretest. In the context of a case like this, the calculated t value can have a positive meaning. So t count > t table or $4.813 > 2.228$. So it is concluded that there is a difference in the average pretest and posttest, which means there is an influence of the use of teaching materials to increase vocational school students' work readiness.

Development of Business Communication Based Teaching Materials Project Based Learning Valid

Development of business-based communication teaching materials Project Based Learning (PjBL) in this research aims to produce teaching materials that are valid and relevant to the needs of vocational school students in preparing themselves for the world of work. The validity of these teaching materials is measured through various stages of development, especially through the validation process by material experts, learning media and practitioners.

The ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model is used as the basic framework in developing this teaching material. This model was chosen because of its ability to integrate various complex learning components and provide space for continuous evaluation throughout the development process. According to Prasetyo and Andriani (2018), the ADDIE model is effective in producing structured teaching materials that suit modern learning needs.

Evaluation of teaching materials is carried out through formative and summative assessments. Formative assessment is carried out during the development and implementation process, while summative assessment is carried out after implementation to measure the success of teaching materials in achieving learning objectives. The evaluation results show that this teaching material is not only

valid but also effective in increasing vocational school students' work readiness. Overall, the development of this teaching material has met the established validity criteria and has succeeded in producing teaching materials that are relevant to the needs of students and industry. This teaching material can be used as a model for developing business communication teaching materials in other vocational schools in Indonesia.

Effectiveness of Business Communication Based Teaching Materials Project Based Learning to Improve Work Readiness of Vocational School Students

The effectiveness of PjBL-based business communication teaching materials in increasing vocational school students' work readiness is measured through trials and student performance assessments before and after using these teaching materials. The research results showed a significant increase in students' work readiness, which was marked by an increase in pretest and posttest scores as well as an increase in business communication skills observed during the

learning process.

Overall, this research shows that PjBL-based business communication teaching materials are effective in increasing vocational school students' work readiness. This improvement can be seen from various aspects, including improving communication skills, mastery of technology, and development of soft skills. This teaching material can be an effective solution for vocational schools in Indonesia in preparing their students to enter an increasingly complex and dynamic world of work.

CONCLUSIONS AND SUGGESTIONS

Based on the research results and data analysis, it can be concluded as follows this research succeeded in developing PjBL-based business communication teaching materials that are valid and relevant to the needs of vocational school students. The validity of these teaching materials is confirmed through a validation process by material experts, learning media experts and educational practitioners. The ADDIE development model used in this research has proven to be effective in producing structured teaching materials that comply with educational standards. This teaching material is designed to support the achievement of business communication competencies which are important for vocational school students' work readiness. The PjBL-based business communication teaching materials developed in this research have proven to be effective in increasing vocational school students' work readiness. This is proven through significant increases in pretest and posttest scores, as well as improvements in business communication skills observed during the learning process. The PjBL approach allows students to learn through real-life experiences that mimic world-of-work situations, develop practical skills, and integrate technology in learning. Apart from that, the collaborative learning implemented in PjBL also helps students develop soft skills that are much needed in the world of work, such as leadership, cooperation and time management. The overall results of this research indicate that the teaching materials developed can be an effective model for use in other vocational schools in preparing students to enter an increasingly complex and dynamic world of work.

To increase the success of implementing business-based communication teaching materials Project Based Learning (PjBL), support is needed in the form of improving technological infrastructure, teacher training, and collaboration with industry. Adjustments in project duration and development of student portfolios as tools evaluation is also important. By implementing these suggestions, it is hoped that PBL-based teaching materials can be more optimal in preparing vocational school students to face challenges in the real world of work.

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