



# Accounting Teacher's Perception of Project-Based Learning

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**Abstract.** The ability to think creatively is one of the essential abilities that any learner must have. Creativity can help students develop their problem-solving abilities. According to the 2013 curriculum, teachers must foster and improve their students' capacity for creative thought. One choice is to develop inventive learning models using project-based learning. Learning through projects. The instructor evaluates the students' comprehension during the teaching and learning process. The curriculum could be implemented using the project-based learning methodology. The purpose of this study is to understand the attitudes of teachers toward project- or task-based learning. Twenty certified accounting teachers from the public and commercial sectors from the Vocational High School Palembang in South Sumatra took part in the qualitative methodology-based study. Data were collected for this investigation.

**Keywords:** Accounting · Learning · Project-Based · Teacher

## 1 Introduction

The specific implementation of the education plan differs slightly from that of general education schools, senior high schools, and religious high schools because professionalism is prioritized in vocational high schools. According to the abilities they have chosen, teachers must be able to construct lessons that can inculcate professionalism in their students. In order to enable students to engage in active learning, the teacher's chosen teaching method must foster inventiveness, freedom, comfort, and enthusiasm. The project-based learning paradigm is a method of instruction that prioritizes the needs of the students and piques their curiosity. With this method, students can get started right away on learning assignments based on the topics or key competencies to be taught.

The purpose of this study was to ascertain the opinions of teachers of vocational high school students working in both public and private institutions. Future research should take into account how educators feel about project-based learning. These are the research questions we came up with for this study: What do academics think of project-based learning at technical high schools?

To understand their surroundings, people organise and interpret significant events using perception. Both positive and negative behavior is influenced by a person's emotions. Regardless of how we feel about someone, good deeds always come after. In this study, the opinions of the teachers regarding the activity-based learning technique for accounting at vocational high schools are studied. After interacting with human objects, knowledge outcomes might be classified as either positive or bad. A good concept should take into account all information, whether it is known or unknown, as well as the ongoing responses to its application.

This is consistent with the viewpoint [1] perception is the process of understanding a stimulus that is picked up by the five senses. Then, through inference and message interpretation, which is known as perception, observations about things, events, or relationships are made [2]. The process of perception is the conversion of the stimuli from the five senses into an understanding [3]. According to [4] perception has a big impact on how motivated and interested students are in the teaching and learning process.

According to the aforementioned point of view, perception can be viewed as a negative hypothesis that describes all knowledge (both known and unknown) and action that does not follow what is understood. The effectiveness of any activity is always influenced by how things are viewed in respect to positive and negative concepts. A person's capacity to generate a good or negative opinion depends on how he balances all of the information in his head with what he sees. In project-based learning Project Based Learning, students collaborate in groups to solve issues from real-world scenarios while concurrently participating in educational activities.

This fits with the research [5] project-based Critical thinking abilities, a scientific mindset, and self-efficacy are consequences of the learning model and performance assessment of students. The research tool included a critical thinking test, a survey of students' attitudes toward science, and a student self-efficacy questionnaire. Then following that [6] the findings demonstrate that students who learn through PBJL and real evaluation also have improved critical thinking abilities, scientific attitudes, and self-efficacy in science learning. Based on [7] there are ten steps to project-based learning, including: a) Describe the concept or area of study; b) pinpoint the problem. c) Examining problems, d) Understanding pertinent experts, and e). Pick the 5W + 1H way of troubleshooting. f) Project planning; g) Project execution. Summarizing, evaluating, and j) reflecting.

Problem-based learning and project-based learning are two problem-based learning methodologies that were examined in the research findings for their characteristics and mode of implementation Project Based Learning [8]. This article compares and contrasts the two teaching approaches, highlighting the main differences between them in terms of principles, models, and roles of instructor and learner. According to [9] the research findings look at two different problem-based learning methodologies, project-based learning and problem-based learning (PBL), and their characteristics and methods of implementation Project Based Learning. This page will assist teachers in becoming better teachers by comparing the two teaching approaches and highlighting the key differences between them [10]. Approaches to project-based learning have a great deal of promise to develop engaging and important learning opportunities for adult learners preparing for the workforce.

After taking into account the aforementioned point of view, it is concluded that project-based learning is a student-centered instructional technique that provides students with a rewarding educational experience. The results of project-based learning lay the groundwork for the concepts and learning experiences that students eventually acquire. The emphasis on students' in-depth investigation of the subject is a feature of project-based learning. Students are successfully engaged in deep learning when they use an inquiry-based approach to address important, real-world problems and conundrums.

Project-based learning in vocational high schools refers to institutions created to give students specific skills for work options and personal independence after graduation from college. This is consistent with the viewpoint [11] as one of the key institutions involved in preparing the workforce, vocational high schools are expected to be able to keep up with the changing market demands. According to [12] high-quality instruction is encouraged at vocational high schools, and students are expected to be able to combine their different interests.

Then in keeping with [13] the Permendiknas Regulations No. 22 and No. 23 Th. 2006, which control the content standards and graduation competency standards for basic and intermediate units of knowledge, provide that vocational high schools are a part of the plan and execution of national understanding [14]. Cite the minister of culture and education's 2013 decree about the vocational madrasah aliyah/high school curriculum. The 2013 vocational high school/madrasah aliyah curriculum is the one that will be used at these institutions beginning with the 2013–2014 academic year. The 2013 vocational high school/vocational madrasah aliyah curriculum is made up of the core curriculum framework, curriculum structure, syllabus, and subject guidelines [15]. According to the aforementioned point of view, vocational schools work to help employees gain the skills they need to start their careers, advance within them, and perform their jobs successfully and effectively. This group includes understanding, information, behavior, work ethics, and appreciation.

Although there has been substantial earlier research on teachers' perceptions of project-based learning, researchers have not yet identified how teachers interpret project-based learning, particularly in accounting classes at Indonesian vocational high schools known as SMK. This study will have a big impact for three reasons. Theoretically, it is hoped that this study will contribute to the body of knowledge in order to enable future investigations into the major problems associated with the application of the learning model. The results of this study should provide guidance on how to implement project-based learning in the classroom, especially when instructing speaking. Professionally, it is anticipated that this research will inspire accounting teachers to include project-based learning in the accounting teaching and learning process at vocational high schools.

Relevant research [16] evaluations of student portfolios show that a project-based learning approach aids students in developing their abilities [17]. Project-based learning can encourage action-based learning by presenting students with demanding tasks such as the opportunity to choose their own learning activities, collaborate on projects, and eventually produce useful commodities. This will help students answer specific problem questions [18] project-based learning has been the subject of numerous prior studies, but none have examined how accounting teachers, particularly those at vocational high schools, view them. Theoretically, this research can improve, refine, and further explore

critical issues related to the usage of learning models, which is just one of four fundamental reasons why it is very important. The findings of this study should clarify how project-based learning, namely the accounting cycle, can be used to teach accounting.

The purpose of this study is to persuade accounting teachers to implement project-based learning into vocational secondary school accounting instruction by utilizing tools that can enhance student learning outcomes and current case studies, from a professional standpoint.

## 2 Method

This study was conducted to ascertain the views of vocational high school teachers in the city of Palembang regarding project-based learning. It used a descriptive research methodology and a qualitative technique. Analysis, description, and summarization of circumstances revealed through interviews or observations are essential components of effective research. The effectiveness of the teaching and learning process while employing a project-based learning approach is a topic of interest for researchers. This is consistent with the belief [19] descriptive study seeks to identify current or historical occurrences and describe them. Although, according to [20] when conducting qualitative research, which emphasizes the importance of deduction and the definition of specific situations, inductive analysis is usually employed. The descriptive aspect of qualitative research.

The information from the interviews was thoroughly categorized using the methods advised by [21] found that managing technological data operations at all stages, from research to completion, is important. Stages of data analysis include: 1) Data reduction. Documentation of interview data must be accurate and thorough. Summarizing, choosing the most important elements, focusing on what is important, and looking for themes and patterns are all steps in the reduction of information. b) the dissemination of knowledge. Visualizing the data comes after the data has been reduced. Technical studies may convey data in an abstract, graphical, chronological, or narrative format. Understanding what's happening and making plans for the future based on what you know are made simple by looking at the facts. c) Information collecting or verification. Results so far are tentative and subject to change once more compelling information becomes available.

The data gathering approach involved twenty accounting teachers from ten vocational high schools in Palembang, which had three public schools and seven private institutions. The research sample consisted of 20 instructors from vocational high schools in Palembang City, South Sumatra Province, with two teachers from each research school being interviewed. 5 educators with 7 to 10 years of experience in the field were chosen as informants for this study, then 7 educators with 6–4 years of experience in the field of accounting, and finally 8 educators with 3 years of experience. Statistical information from semi-structured interviews As stated by [22] structured interviews, that is, interviews where the data required is predetermined by the interviewer.

Semi-structured interviews are a useful tool for discovering how accounting teachers feel about project-based learning in the classroom. The information was gathered through semi-structured interviews that employed stationery, audio recorders, and digital cameras. This in-person, semi-structured interview with twenty accounting teachers lasted thirty minutes per teacher.

### 3 Results and Discussion

This section describes the findings and an analysis of the information obtained through semi-structured interviews with three accounting teachers from vocational high schools in Palembang City, South Sumatra Province, who are members of the Subject Teacher Consultative Forum. The analyzed data can be used to characterize the teacher's impression of project-based learning by asking the following study questions:

- a) How does the teacher feel about Sekolah Menengah Kejuruan's project-based curriculum? Five questions, including what are your understanding of project-based learning? Were used to interview twenty participants in order to gather information for the study.
- b) At what stages have you used project-based learning in your classroom? Which of the three project types have you actually finished?
- c) Project Based Learning Lucas (1. Begin with an important issue, 2. Design the Project, 3. Create a Schedule, 4. Monitor the Students and Project Progress, 5. Evaluate the results, 6. Reviewing the experience)
- d) CDP Doppelt (1. Design goal, 2. Field of inquiry, 3. Solution choices, 4. Selecting the preferred solution, 4. Operation Steps, and 5. Evaluation.
- e) Project Based Learning STEAM Laboy-Rush (1. Reflection, 2 Research, 3. Discovery, 4. Application, and 5. Communication.
- f) Based on question number 2, how would you describe yourself? Can Accounting subjects benefit from project-based learning?
- g) What do you consider to be the negatives and positives of project-based learning, based on your implementation of this learning paradigm?
- h) What do you think about project-based learning in general and how does it apply to vocational high schools? (Table 1)

Numerous facts uncovered by researchers are interpreted as study findings after doing research and analyzing the data acquired. In order to find answers to their study questions, researchers tried conducting interviews. As a result of transcribing and analyzing the data collected, the researchers learned various instructor perceptions about project-based learning. The following provides more information along with a transcript analysis of the data amassed (Tables 2, 3, 4 and 5).

It must be optimized, supported, maximized, and motivated, and the government or other parties must contribute in some way, such as by giving teachers training so they can carry out learning more effectively, particularly when using Project-Based Learning in the teaching and learning process, particularly in Vocational High Schools.

The results of the interviews with accounting teachers show that; based on 20 questions, the teacher stated that knowing and learning this is knowledge that develops focus, teaches students to solve problems both independently and in groups, and has tangible results from the planned project, for example a product that can help someone's problem so as to present a solution to the problem. This fits with the research [23] the outcomes demonstrate that project-based learning can be successful even with little teacher direction. The findings back up a teaching strategy with so much promise that, at least for some students, it merits extensive further research to fully realize its tremendous potential for

**Table 1.** Accounting Teachers' Interview Results About, How Well-Versed Are You in Project-Based Learning?

<b>Correspondent</b>	<b>Answer</b>
1	The teaching approach is focused on observing actual pupils and the problems they must tackle in groups to solve in daily life.
2	Which is one of the best ways to practice and learn the foundation of a dream project.
3	Project-based learning can teach pupils to be intelligent.
4	Students engage in project-based learning, a type of instruction, in a classroom or learning facility.
5	Projects are used in this learning strategy to move students through several stages of learning.
6	Imagination or numbers can be produced through the creative learning process.
7	Students' learning is accelerated by this planned learning. Students can use their real-world creations or academic work to exhibit their abilities and knowledge.
8	Project-based learning is a teaching approach where instructors use projects as learning resources over the course of various phases.
9	a teaching strategy where the project serves as a vehicle for learning through specific stages.
10	Project-based education places an emphasis on learning effectiveness.
11	Learning that challenges pupils to use their imagination to complete the project they designed
12	Learning is a method that is interesting since it helps teachers be more effective.
13	In vocational high schools, project-based learning or fieldwork practices are frequently implemented.
14	The end outcome is highlighted during the learning process.
15	Contractors can optimize pupils' manufacturing skills by using learning.
16	Learning that inspires productivity and self-assurance also reveals students' abilities and original thoughts.
17	Direct learning yields a tangible output as the end result.
18	By constructing a product as a solution, students who learn this skill can find immediate solutions to the difficulties they encounter in daily life.
19	Learning is enjoyable and calls for teamwork and focus to deliver the finest project possible.
20	Putting an emphasis on personal or collaborative learning with objectives.

**Table 2.** Accounting Teachers' Interview Results About, What Are The Steps of Implementing Project-Based Learning as a Teaching Strategy in Your Classroom, and Which of The Three Types of Projects Have You Completed?

PJBL Lucas (1. Start with essential question, 2. Design Project, 3 Create Schedule, 4. Monitoring the Students and Progress Of Project, 5. Assess the outcome, 6. Evaluation the experience. CDP Doppelt (1.Design purpose, 2. Field of inquiry, 3. Solution alternatives, 4. Choosing the preferred solution, 4. Operation Steps, 5. Evaluation. PjBL STEAM Laboy-Rush (1. Reflection, 2 Research, 3. Discovery, 4. Application and 5. Communication.

Correspondent	Answer
1	PJBL Lucas and PjBL STEAM Laboy-Rush
2	CDP Doppelt and PJBL Lucas
3	PJBL Lucas and CDP Doppelt
4	CDP Doppelt
5	PJBL Lucas, CDP Doppelt and PjBL STEAM Laboy-Rush
6	PJBL Lucas and CDP Doppelt
7	PJBL Lucas and PjBL STEAM Laboy-Rush
8	PjBL STEAM Laboy-Rush
9	PJBL Lucas
10	PJBL Lucas and PjBL STEAM Laboy-Rush
11	PjBL STEAM Laboy-Rush
12	PjBL STEAM Laboy-Rush
13	CDP Doppelt and PjBL STEAM Laboy-Rush
14	PJBL Lucas, CDP Doppelt
15	PJBL Lucas, CDP Doppelt and PjBL STEAM Laboy-Rush
16	PJBL Lucas
17	CDP Doppelt
18	PJBL Lucas
19	PjBL STEAM Laboy-Rush
20	PjBL STEAM Laboy-Rush

self-directed, peer-led learning [24]. Research findings on the advantages and disadvantages of projects and teamwork are widely acknowledged. Project-based courses follow the same guidelines and requirements as ordinary projects. Benefits can be maximized and drawbacks can be minimized by careful and thorough planning, comprehension of stakeholders and their demands, effective design, appropriate testing, quality control, and continual management.

Next, it may be inferred from the results of interviews about the various project-based learning models used that teachers at teacher high schools have used three different kinds of projects, including Project Based Learning Lucas, CDP Doppelt, and Project Based

**Table 3.** Accounting Teachers' Interview Results About, Do You Believe That Project-Based Learning Is Appropriate For Use in Accounting Courses, Based On Question Number Two?

Correspondent	Answer
1	Very Appropriate
2	Perfect once
3	in keeping
4	Very Appropriate
5	in keeping
6	in keeping
7	in keeping
8	in keeping
9	in keeping
10	in keeping
11	Very Appropriate
12	Very Appropriate
13	Very Appropriate
14	Very Appropriate
15	Very Appropriate
16	in keeping
17	Very Appropriate
18	Very Appropriate
19	in keeping
20	Very Appropriate

Learning STEAM Laboy-Rush. This fits with the research [25] the results of this study show that the experimental class, which uses a project-based learning approach, is more successful than the control class, which uses contextual learning to teach students in grade IV about changes in the physical environment. North District, SDN Ikan Lodan, Semarang [26]. The findings demonstrate that (1) there are three key phases to the implementation of Project Based Learning, namely planning, execution, and evaluation; (2) there are five benefits to implementing Project Based Learning during the COVID-19 period; and (3) there is one drawback. Project Based Learning will be used during COVID-19.

Is project-based learning suitable for use in accounting courses, according to the results of the interview? The usual instructor evaluates the project-based learning paradigm as "Very Appropriate" in subjects like accounting. According to studies, this [27] the project-based learning paradigm can raise students' achievement, according to study results pertaining to learning outcomes. Additionally, students claim that project-based learning can enhance their aptitudes, character, and knowledge more effectively



**Table 4.** Accounting Teachers' Interview Results About, Based on Your Application of This Learning Paradigm, What Do You Think Are the Shortcomings and Positives of Project-Based Learning?

Correspondent	Answer
1	The benefits include incorporating students directly, having research activities, working through the project implementation learning process, and having special education. The disadvantage is that projects take a long time to finish.
2	Its benefits include being one of the best training models for cultivating a variety of fundamental skills that students need to have, such as critical thinking abilities, decision-making skills, creative abilities, and problem-solving abilities. At the same time, it appears effective for fostering students' self-confidence and self-management. Students could find it challenging to comprehend the vulnerability.
3	Strengths Detailed research examines The importance of the specific subject being studied Key terms The availability of research activities designed to test student focus and seek out answers to teacher-posed questions is the primary justification for this strategy. Because of the trial, weaknesses are hard to concentrate on and take a lot of time.
4	Students' active participation in the learning process results in a project that is enjoyable but complicated.
5	This learning approach essentially goes beyond producing any problem-solving abilities, but the process takes time.
6	This model allows students enough time to make judgments when it is implemented. Concentrate, be thorough, and finish the project. There is no denying that some kids struggle to concentrate (some do not succeed in completing the project)
7	Students who are learning how to utilize projects as a learning tool see themselves in the real world, which can result in reality, and this creates an impediment because it takes a long time to finish the project.
8	It's enjoyable, fosters independence, and sharpens problem-solving abilities, but it takes a while to finish a project.
9	Real and direct learning requires teamwork, and the team must be cohesive because a project will fail if the team is not.
10	Drawbacks of a learning approach that promotes student participation in addressing a variety of open-ended challenges and applying your knowledge while working on projects takes a while
11	A very effective educational model is used to help students build self-confidence, problem-solving skills, and an understanding of higher order thinking skills. However, it has the drawback that it is challenging to work with kids who lack confidence.

(continued)

**Table 4.** (continued)

<b>Correspondent</b>	<b>Answer</b>
12	Creating a learning model that takes a long time but is based on the level of thinking development of students during meaningful work
13	It takes time to teach pupils in a way that will enable them to complete activities with confidence, comfort, and an enthusiasm in learning. It must be optimized, supported, maximized, and motivated, and the government or other parties must contribute in some way, such as by giving teachers training so they can carry out learning more effectively, particularly when using Project-Based Learning in the teaching and learning process, particularly in Vocational High Schools.
14	This model enables students to explain their project; they would do well in terms of posing questions to be answered, choosing a subject to research, and outlining the research activity to be carried out, but there is a chance of failure.
15	The teacher's role in education includes acting as a consultant, providing information and practical experience, inspiring discussion and problem-solving, and making sure that students are motivated to finish projects. This model's flaw is that projects take a very long time to complete.
16	A project that supports the learning model uses several planning, research, and production steps to enhance students' reading skills and capacities, but it can take a while.
17	Understanding-based projects are designed to be used in challenging assignments that take a lot of time and require research students to comprehend.
18	The use of student learning skills, socio-emotional growth, and students' diverse thinking skills, which students need in real life and can produce products, are the advantages of this model. However, it has the disadvantage that if the project fails, the product cannot be produced, so it must be focused.
19	possessing precise information and qualifications for fact-finding (can be seen, heard or read). Creating research strategies, getting consistent data, having debates, and making conclusions takes time.
20	able to develop information, freedom of view critically, from sharing knowledge with no others and cooperating to succeed. Having a common objective and seeing that everyone is working toward it by developing specialized skills that are helpful for ongoing problem-solving but have the drawback of taking a long time to process

than conventional teaching and learning techniques, and learning through practice can boost students' motivation to learn more. These findings can enhance theories relating to teaching and learning methods and assessment [28]. Contribute by highlighting the project-based results learning approach as a chance for students to develop theory and

**Table 5.** Accounting Teachers' Interview Results About, What Are Your Thoughts on Project-Based Learning, Particularly as it Relates to Vocational High Schools?

Correspondent	Answer
1	Teachers must optimize learning
2	Teachers at the vocational high school must support students.
3	Need for optimization
4	must receive backing, especially from the principal
5	It must be backed by top-notch school facilities and infrastructure.
6	Need to get better again
7	must have strong backing
8	Need to be maximized
9	The school must properly launch and prepare it.
10	It may be greatly enhanced and encouraged by the teachers.
11	Teachers must optimize learning
12	must receive backing, especially from the principal
13	Must be supported well
14	Need to be optimized
15	Infrastructure support is required as well.
16	The need for continued government and educational stimulus
17	Well Motivated
18	To ensure that instructors are more effective in carrying out learning, particularly when utilizing appropriate and right learning methods, there needs to be support from the government or other parties.
19	Must continue to support
20	There is knowledge that can inspire teachers to use creativity in implementing learning, and it needs to be leveraged once more.

practice through experimentation with real practice-related difficulties. Use an example and compare classrooms from various eras, taking the teacher's perspective into account.

What do you think about the weaknesses and strengths of project-based learning, from the experience of using this learning model? was a question that the instructor asked, and her response was based on the interview results. The teacher came to the conclusion that the advantages of the project-based learning model include involving students directly in learning, connecting learning to the real world, implementing research, combining different learning resources, combining with knowledge and skills, carried out, and implemented from research. It takes a while, which is a drawback, and there is a big risk of not producing anything.

This fits with the research [29] after two years, students who are exposed to critical thinking and innovative learning environments significantly improve in these areas.

There were found to be significant differences in pre-questionnaire questioning, and the differences grew over the course of the study. The findings emphasize the value and importance of case-based evaluation methodologies to “evidence-based education.” [30]. In this study, engineering design processes are integrated into STEM project-based learning to see what effects they have on students’ development of technology conservation. It also looks at the cognitive structures of technology teachers and how they create engineering design in technology learning activities. Engineering design thinking in teachers’ cognitive frameworks.

What do you think about the use of projects in the teaching and learning process, especially in technical high schools? The teaching and learning process needs to be maximized, supported, motivated, and optimized, as a result of the teacher’s statement. The government or other parties can assist by, for instance, providing teachers with training so they can more effectively carry out learning, particularly when using project-based learning in the teaching and learning process, especially at vocational high schools. This fits with the research [31] the implementation had positive outcomes for the personality development of the students. The lack of resources, the society’s model that places the emphasis of schools on cognitive growth, and the diversity of students were impediments to cultural education.

According to the findings [32] the idea of motivation is strongly correlated with professional learning, and specifically, collaborative learning. The conclusions offer ideas for more research as well as the development of an integrative and theoretical framework for understanding teacher motivation and professional development. Based on their observations made while training teachers, the researchers came to the conclusion that teachers should implement instructional programs in their classes. The Learning Implementation Plan researchers have taken note of this. Of course, offering guidance on how to teach the program is a great idea. The instructor must consider a variety of elements while using the project-based learning approach, including the needs of the students, the curriculum, and the quantity of pupils.

The demands of the students, those related to the curriculum, and the number of students are only a few of the considerations the instructor must make when implementing the project-based learning method. Content must be planned based on the results of the analysis of student needs in order for students to successfully study accounting. It must also be relevant to the curriculum. A project-based learning approach can help students gain information that will improve all aspects of their competency in developing a shared accounting cycle. In particular for graduates of vocational high schools, it helps pupils develop accounting skills and use them to get a solid future job.

The average mid-semester test score was 86% in the Quite Good category, which led researchers looking at project-based learning to conclude that students’ enthusiasm for learning accounting was very strong. Without a doubt, the conclusions are in line with the research’s findings [33]. This study discovered that PBL significantly affected pupils’ speaking abilities. It is also a successful way for teaching speaking since it encourages students to take initiative and be creative while completing projects and participating in class. In order to further develop students’ speaking skills, it is highly advised to use this teaching strategy in speech classes [34]. The findings indicate that (1) both project-based learning and problem-based learning have an effect on students’ creativity

and critical thinking, (2) that there is a difference between project-based learning and problem-based learning in terms of student creativity, and (3) that both project-based learning and problem-based learning had the same effect on students' positive thinking.

The findings of the research [35] for this study's data collection, observation sheets, pre- and post-test results, and student worksheets were all used. The analysis employed simple regression analysis (test). The remaining 43.6%, which includes cognitive and psychomotor objectives, are taught through project-based learning models, which are used in 56.4% of student learning activities. Extra variables outside the model can explain the data. Additional research findings [36] the results of the study show that project-based learning can improve the quality of learning across a variety of disciplines, especially economic learning, which is clear from the study's methodology and results. Students can also learn about economics, particularly accounting, through project-based learning. Then [37] project-based learning may improve student learning outcomes and computer class activities, according to the study's findings. Particular proficiency with an accounting computer program.

## 4 Conclusion

This study investigates how teachers in vocational high schools feel about project-based learning. The results provide an examination of what students require in order to study accounting efficiently and completely, especially for accounting courses that are strongly tied to the curriculum and the needs of the workplace in the 4.0 age. Project-based learning strategies, which are used to improve students' accounting knowledge, increase motivation, develop students' self-confidence and sense of responsibility, and motivate students to be more active and creative, are well-known to teachers. The semi-structured interviews cited above suggest that most teachers see project-based learning, which takes place in the classroom during teaching and learning, favorably, despite some downsides such a lengthy duration.

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