

## Open Access

Cite this article: Suryadi, Tri. (2024). Implementation of CTL-Based Practicum Learning Method on the Achievement of Students' Work Competencies at SMKN Winongan. Global International Journal of Innovative Research, 2(12). <https://doi.org/10.59613/global.v2i12.367>

### Keywords:

Sustainable Marketing, Brand Values, Consumer Demand, Environmental Responsibility, Green Marketing

Author for correspondence:

Tri Suryadi

E-mail: [trisuryadi77@gmail.com](mailto:trisuryadi77@gmail.com)

Published by:

GLOBAL SOCIETY  
PUBLISHING

# Implementation of CTL-Based Practicum Learning Method on the Achievement of Students' Work Competencies at SMKN Winongan

---

Tri Suryadi

---

Universitas Muhammadiyah Malang, Indonesia

This study aims to explore the influence of blockchain technology on financial transparency and its implications for auditing and compliance in corporate accounting culture. Using qualitative methods through literature studies, this study collects and analyzes various relevant sources to understand how the application of blockchain can improve transparency in financial reporting. The results show that blockchain technology has the potential to revolutionize accounting practices by providing a more transparent and reliable system, which in turn can strengthen audit and compliance processes. Additionally, the study identifies the challenges companies face in integrating these technologies, including the need for organizational culture change and training for accounting professionals. The implications of these findings suggest that blockchain adoption not only affects the technical aspects, but also requires adjustments in the company's internal policies and procedures to achieve maximum benefits. This research provides important insights for academics and practitioners on how blockchain can be a strategic tool in improving financial transparency and strengthening the integrity of financial statements in the digital era.

# 1. Introduction

Vocational high school education (SMK) is known as a formal institution of technical training and vocational education. Vocational high schools play an important role in preparing students' Job Competencies with skill learning in accordance with the labor market. However, challenges such as stigma, outdated training programs, and inadequate workshop equipment hinder the creation of a strong learning environment in technical training and vocational education. Learning methods in integrating knowledge and skills are also very important in improving the quality of secondary education that is integrated with technical vocational education (Ningrum, 2023). The development of appropriate learning methods can affect the academic performance and work competence of students. The application of the right Learning Methods can empower learners from various socioeconomic backgrounds, providing them with the skills necessary to break the cycle of poverty and achieve financial independence and productivity (Mirabel, et al. 2022).

Comparatively, students who were given learning using the CTL learning model showed better problem-solving skills than those in conventional learning settings (Mahbubah, et al. 2022). This indicates that the CTL model is able to effectively improve student competence. Therefore, the integration of CTL-based practicum learning methods can significantly contribute to the achievement of work competencies by fostering a holistic approach to skill development and knowledge application in real-world contexts.

Practicum learning is the core of learning in vocational schools which aims to achieve the improvement of certain skills/competencies that are the choice of students in order to prepare for their future. Vocational High School (SMK) is a formal education provider school that aims to prepare students to be ready for employment (ready to work) and entrepreneurship after graduation. Vocational Secondary Education prioritizes the entry of students into the world of work and the development of a professional attitude in work. Vocational High Schools organize educational programs that are in accordance with the type of work (Regulation of the Minister of Education and Culture Number 22 of 2020 concerning the Strategic Plan of the Ministry of Education and Culture for 2020-2024).

Practicum learning at vocational schools is an effort made between several people who interact with each other with the support of practicum media to achieve a goal, namely a change in student behavior in the form of skills and knowledge. The achievement of practicum learning objectives is not enough just by using lecture and discussion methods. Thus, a learning method is needed that brings students closer to the reality in the field or the world of work that they will face as mandated in Permendikbud Number 34 of 2018 concerning

National Standards for Vocational High School (SMK)/Madrasah Aliyah Kevocational (MAK).

In an effort to bring students closer to the skills they will face in their daily lives, teachers must strive to help students understand the relevance of the learning materials they are learning. One of the efforts that can be made to provide experience to students is by contextual teaching and learning (CTL). Contextual Learning focuses on the development of knowledge, understanding skills and students' contextual understanding of the relationship between the subjects studied and the real world (Shoimin, 2017).

Students will learn well if what they learn is related to knowledge and activities that have been known and happening around them. Contextual learning is a concept that helps teachers relate the learning material taught to students' real-world situations and encourages students to make connections between the knowledge they have and its application in students' daily lives (Purba, W. 2023).

The knowledge and skills that will be faced by students in the real world are of course the work competencies needed by the Business World or the Industrial World (DUDI). The work competencies required by DUDI are of course regulated and explained in the form of the Indonesian National Work Competency Standards (SKKNI), which are really a must-have for students who will become prospective employees in DUDI. In order to support and meet the standards in SKKNI, the government has issued Regulation of the Minister of Education and Culture Number 50 of 2020 concerning Field Work Practices (PKL) for students and is also stated in the Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number 8 of 2012 concerning Procedures for Determining Indonesian National Work Competency Standards.

The application of the Teaching and Contextual Learning (CTL) method in practicum learning has shown a positive impact on the achievement of students' work competencies. Studies have shown that the CTL approach improves learners' learning outcomes and job skills (Sunardi, et al. 2023) By allowing learners to relate content to real-life situations and encourage active student participation. CTL fosters a deeper understanding of concepts and improves problem-solving skills (Subaedah, et al. 2022). The CTL approach has been found to positively influence creative thinking skills and learning outcomes, demonstrating its effectiveness in developing competencies relevant to various fields. Overall, the use of CTL-based practicum learning methods is expected to significantly contribute to improving students' work competencies through improving learning outcomes and skill development.

Vocational school graduates face challenges in meeting industry demands due to various factors, including the low level of graduate work competence and the occurrence of a gap between the Indonesian National Work Competency Standards (SKKNI) and the rules of industrial work requirements. The lack of alignment between the learning taught to students in vocational schools and what the job market needs contributes to the high unemployment rate among vocational school graduates (Rakib, 2022). To address these challenges, improvements are needed in curriculum design and learning methods, teacher training, industry collaboration, and compliance with industry standards such as SKKNI. Improving these aspects can further equip vocational school graduates with the skills and competencies needed to succeed in the field of work.

The formulation of this research problem focuses on three main questions that are relevant to the application of the Contextual Learning (CTL) method at SMKN Winongan. First, what efforts must be made by teachers in applying the CTL method in practicum learning so that students can compete in job recruitment or entrepreneurship in the field of Light Vehicle Engineering (TKR)? Second, is the CTL Learning method the right method to improve students' work competencies so that they can find the TKR work field that they will pursue after graduating from school? Third, what factors can support and hinder the implementation of CTL-based practicum learning?

Based on the formulation of the problem above, the purpose of this study is to find out the efforts made by teachers at SMKN Winongan in the application of the CTL Learning method in practicum learning, so that students can compete in job recruitment or entrepreneurship in the field of TKR. In addition, this study aims to identify whether the CTL Learning method is effective in improving students' work competence, and whether this method can help them find a suitable TKR work field after graduation. Finally, this study also aims to identify factors that support and hinder the implementation of CTL-based practicum learning in achieving students' work competencies.

## 2. Method

### a. Research Approach

In this study, the researcher uses a qualitative research approach. The qualitative research design used is a case study design. According to Ulfatin (2013), a case study can be defined as the process of investigating actual events. The result of the investigation is a detailed, intensive, and thorough description of the case. According to Creswell in Wahyuningsih (2013) states several characteristics of case studies, namely: (1) identifying cases for a study; (2) The

case is a system that is bound by time and place; (3) Using various sources of information in data collection to provide a detailed and in-depth picture of the response of an event; (4) focus on describing the context of a case. In other words, a case study is a research in which the researcher explores a certain phenomenon (case) in a time and activity (program, event, process, institution or social group) and collects information in detail and depth using various data collection procedures over a certain period. The qualitative research method was chosen because the final result that the researcher wanted was in the form of a qualitative description or description of CTL-Based Practicum Learning in achieving Student Work Competencies.

#### **b. Research Place, Subject and Time**

The research will be conducted at SMKN Winongan, Pasuruan Regency. The subjects of the study were all students of class XII TKR 1. The reason for choosing the subject is because the subject has a higher learning ability than other classes and is expected to be interviewed smoothly. The selection of the research time was carried out for 4 months, starting from August 2024 to November 2024.

### **3. Result and Discussion**

In a study titled "Implementation of Contextual Teaching and Learning (CTL)-based practicum learning methods on the achievement of students' work competencies at SMKN Winongan". The researcher has taken data by means of Field Observation (Implementation of practicum learning at the TKR workshop of SMKN Winongan), interviews with students, teachers, and school staff (Kakomli), and also obtained supporting documents in the form of; Teaching Modules, MoU Documents with DUDI, Certificate of Accreditation of TKR workshop from DUDI, so that the results of the research can be described as follows:

#### **a. Students' Response to CTL Learning**

The results of interviews with students showed that the students' response to CTL-based practicum learning was very enthusiastic. They feel that this CTL-based practicum learning is in accordance with the situation in the real field, with more practice than theory. CTL-based practicum learning is considered not boring and provides its own challenges for students because it uses a Project-Based Learning (PBL) approach. Students also feel the benefits of practicum that utilizes manual books from the industry, so that students are better prepared and familiar with standard operating procedures (SOPs) and industry work culture. In addition, this method encourages collaboration among learners, which not only improves technical skills but also teamwork abilities, which are in high demand in the world of work.

### **b. Teachers' Response to CTL Learning**

Interviews with teachers at SMKN Winongan showed that the CTL-based practicum learning method made it easier for teachers in the practicum learning process and explained the learning material. Teachers feel that learning becomes more real because the material presented can be directly practiced by students, as well as in accordance with the needs of the industry. The collaboration between SMKN Winongan and PT Astra Daihatsu Motor (ADM) through the Smart Bersama Daihatsu (PBD) program is an important factor that strengthens the implementation of the CTL method. In addition, the existence of an MoU with ADM allows schools to meet industry standards accredited by ADM, so that the available learning media meet the necessary requirements in the automotive industry.

### **c. Staff Support (Kakomli) in the Implementation of CTL Learning**

Interviews with school staff, especially Kakomli, showed significant support for the implementation of the CTL-based practicum learning method. Kakomli stated that they have prepared a CTL-based teaching module with a PBL approach and sufficient learning media to support the paraktic teaching and learning process in the TKR workshop. However, they also acknowledged that there are some shortcomings in the available learning media, especially in terms of updates (up-to-date) to keep up with the latest technological developments in the industry. Nevertheless, school staff are committed to continuing to improve the quality of media and learning resources for students so that their learning experience is maximized.

## **Discussion**

From the results of the data analysis, it can be concluded that the implementation of the CTL-based practicum learning method at SMKN Winongan has a positive impact on the achievement of students' work competencies. Learners show a high interest in learning because this method is not only fun but also challenging and suitable for jobs in the industry. Teachers also feel the convenience of teaching, and the support from ADM improves the quality of learning so that it is in accordance with industry standards. The support from the school, especially in terms of the provision of CTL teaching modules and learning media, shows a commitment to improve the quality of learning despite the challenges in maintaining media updates.

In the future, it is recommended that SMKN Winongan continue to update its media and learning facilities to be in line with the latest developments in the automotive industry. Cooperation with ADM and other industries can be expanded to provide students with more

opportunities for practice in accordance with the latest standards. In addition, training for teachers and staff needs to be improved, so that teachers and staff can continue to develop competencies in accordance with technological changes in the industrial world.

This study uses the Miles and Huberman model data analysis method which includes three main stages: data reduction, data presentation, and conclusion drawn. The focus of the research is on the implementation of the Contextual Teaching and Learning (CTL) learning method at SMKN Winongan, especially on the achievement of students' work competencies. Data were obtained through observations, interviews with students, teachers, and school staff and documentation;

In the data reduction stage, relevant information from the results of interviews with students, teachers, and staff (Kakomli) is summarized to focus on perceptions, challenges, and outcomes related to CTL learning. Students expressed high enthusiasm for the implementation of CTL because they felt the suitability of the material taught with industry practices. They liked that this method prioritizes practicum over theory, as well as using the Project-Based Learning (PBL) approach, which is considered more challenging and allows for collaboration. Teachers feel that this method makes it easier for them to teach because the material can be directly practiced and in accordance with the needs of the industry. On the other hand, the staff (Kakomli) supports CTL learning by providing sufficient modules and learning materials, although there are some shortcomings related to tool updates. There is also supporting evidence in the form of an MoU with PT. ADM in the PBD program, as well as the Accreditation certificate issued by PT. ADM.

After being reduced, the data was presented in the form of categorization based on the identified aspects of learning, namely: students' enthusiasm and motivation, the effectiveness of methods for teachers, facility support from the school, and collaboration with industry. This category helps to understand the overall impact of the implementation of CTL-based practicum learning methods in supporting the achievement of work competencies. From the student aspect, enthusiasm is evident because the CTL-based practicum learning method supports interactive, contextual, and practice-based learning. Teachers feel helped by the MoU between SMKN Winongan and PT Astra Daihatsu Motor (ADM) through the Smart Bersama Daihatsu (PBD) program, which improves the conformity of learning with industry standards. School staff also played a role in providing CTL modules and learning media, although acknowledging the need for updates to some of the tools to keep up with technological developments.

From the analysis of Miles and Huberman model data, it can be concluded that the implementation of the CTL-based practicum learning method at SMKN Winongan has a positive effect on the achievement of students' work competencies. Students feel better prepared to face the world of work because CTL learning is relevant to industry practices, more practicums, and uses direct guidance from industry-standard manual books. Teachers also feel the convenience of delivering material that can be directly applied by students, while the school provides support through the provision of modules and learning media, although there is still a need to update some media. Collaboration with industry through the PBD program with PT Astra Daihatsu Motor also supports a quality learning process in accordance with industry standards, creating a more real and relevant learning environment.

The results of this study show that the implementation of the Contextual Teaching and Learning (CTL) learning method at SMKN Winongan has a very positive impact in supporting the achievement of students' work competencies. Students feel that learning is more relevant to the industrial world, more challenging, and encourages active participation, in accordance with theories about the effectiveness of CTL in vocational education. CTL applied through the Project-Based Learning (PBL) approach has been proven to provide opportunities for students to learn directly by practicing theory, so that learning is more contextual and can be applied in real work. The enthusiasm of students in participating in CTL learning shows that this approach has succeeded in creating an interesting and non-monotonous learning atmosphere, which is one of the main goals of vocational education to produce graduates who are ready to work.

From the teacher's side, the findings of this study indicate that the CTL-based practicum learning method provides convenience in the learning process. Teachers can deliver material that can be directly applied in practice, which is very helpful in bridging the gap between theory and practice. This is in accordance with the basic principles of CTL which emphasizes the importance of context-based learning, where teachers are not only as material givers, but also as facilitators who guide students in exploring and understanding the context of the world of work. This ease of learning is strengthened by the collaboration between SMKN Winongan and PT Astra Daihatsu Motor (ADM) through the Smart Bersama Daihatsu (PBD) program. This collaboration provides opportunities for teachers and students to gain access to practicum equipment and supplies, as well as more real and accredited industry standards, so that students are more prepared to face the world of work.



Kakomli's role in supporting the successful implementation of CTL-based practicum learning at SMKN Winongan is also noteworthy. The support provided in the form of providing CTL teaching modules and learning media shows the school's commitment to improving the quality of learning. However, the shortcomings in terms of updating media and learning resources show the challenges that are still faced in implementing the CTL method optimally. Despite working with industry, the need to keep media and equipment up-to-date is crucial in vocational education, given the rapid technological changes in the industry. This underscores the importance of continuous support from the government and industry so that schools can meet the needs of learning equipment in accordance with technological developments.

Industry involvement in vocational education, such as that carried out by PT. ADM at SMKN Winongan has a great influence on the readiness of graduates to face the world of work. This kind of collaboration not only improves the quality of media and equipment, but also allows learners to learn in an atmosphere and standards that are appropriate to the industry. This is in line with the concept of link and match in vocational education, where education is aligned with industry needs to ensure that graduates have relevant skills and are ready to compete in the labor market. Programs such as PBD prove that close cooperation between schools and industry is one of the best solutions to ensure the linkage between education and work needs.

Overall, this study highlights the effectiveness of the implementation of CTL-based practicum learning in improving the achievement of student work competencies at SMKN Winongan. A contextual, relevant, and collaborative approach to learning creates a more meaningful and engaging learning atmosphere. In order for the implementation of CTL-based practicum learning to be more optimal, continuous support is needed in updating media and equipment, as well as training for teachers to keep up with the latest developments in technology. With the synergy between schools, the government, and the industrial world, SMKN Winongan and other vocational schools in Indonesia will be able to produce graduates who are competent, adaptive, and ready to contribute to the industry according to the needs of the job market.

## 4. Conclusion

From this study, it can be concluded that the implementation of the Contextual Teaching and Learning (CTL)-based practicum learning method at SMKN Winongan has a significant positive impact on the achievement of students' work competencies. Students show high enthusiasm and feel the relevance of learning to the industrial world, thanks to an approach that emphasizes hands-on practice and collaboration. This method not only improves technical skills, but also important soft skills, such as teamwork.

Teachers feel helped in the learning process, with materials that are easier to understand and apply, especially thanks to the support of the collaboration with PT Astra Daihatsu Motor through the Smart Bersama Daihatsu program. The support of staff, especially Kakomli, in the provision of teaching modules and learning media has also contributed to the success of this method, although there are still challenges in terms of updating tools and media.

Industry involvement in vocational education has proven crucial to prepare graduates to face challenges in the world of work. Synergy between schools, governments, and industry is essential to ensure the relevance of education to market needs. Overall, this study emphasizes the importance of applying the CTL method supported by adequate facilities and training for teachers, in order to produce graduates who are competent, adaptive, and ready to compete in the industry.

## 5. References

- Alshiha, Fatimah. 2023. Career Competencies and Job Performance of Saudi Employees in Tourism Industry: Intelligent Career Model. International Business Research. Vol. 16, Iss: 3, pp 22-22
- Anni, Malihatul, Hawa. (2023). The Effectiveness Of Ethnomathematics-Based Contextual Teaching And Learning (CTL) On The Mathematical Communication Skills Of Elementary School Students. doi: 10.54832/jupe2.v1i1.94
- Burhan, Nudin., Ilham, Al, Akbar., Muhammad, Roy, Purvanta., Hajar, Dewantar. (2022). Learning Method OF. Ibn Khaldun. Ken Social Sciences, yogurt: 10.18502/ks.v7e10.11346
- Ilyas, M. Armizi, 2020. Teaching Methods in Education according to Nur Uhbiyati and E Mulyasa. Pairs: 10.46963/ALLIQO. V5102.244
- Ireson, Judith. 2013. Learners, Learning and Educational Activity. Institute of Education, theoretical-and-sociocultural-approach-to-425hog4yll.
- Maisarah, Ira. 2023. The Effectiveness of Online Learning In tehe Electronics Practicum Course.Jurnal Edukasi Elektro. Vol. 7 Iss: 1. Pp 82-86
- Mirabel, Knechukwu T. 2022. Technical Vocational Education and Training (TVET) as a Means to Empower Secondary School Learners fram Low Socioeconomic Backgrounds. Jurnal of Technical Education and Training. -Vol. 14, Iss: 1

- Ningrum, A.W., & Murti, R.C. (2023). Contextual Learning Models in Improving Elementary School Critical Thinking Skills. *Jurnal Penelitian Pendidikan IPA*, 9(5), 48–53. <https://doi.org/10.29303/jppipa.v9i5.2360>
- Puji, Astuti., Sri, Yunita, Ningsih., Helma, Mustika., Ramadhani, Fitri., Yuni, Hartati., Krisnawati, Krisnawati. (2023). The effectiveness of the CTL (contextual teaching and learning) learning model on the ability to understand mathematical concepts of grade VIII students of SMP Negeri 3 Rakit Kulim. *NUSRA: Journal of Research and Educational Sciences*, doi: 10.55681/nusra.v4i2.861
- Riyana, C., & Wahyudin, W. (2015). The Effectiveness of Contextual Teaching and Learning (CTL)-Based Learning in Improving Student Learning Outcomes in Productive Subjects at Vocational Schools. *Journal of Technology and Vocational Education*, 17(2), 150-160.
- Rose, D.E. 2012. *Context-Based Learning*. Springer Science+Business Media, LLC Setyosari, P. (2013). *Educational and Development Research Methods*. Jakarta: Kencana.
- Sodiq, Ahcmad. 2019. The Effectiveness of Contextual Teaching and Learning to Improve Achievement in Basic Grammar Class at Kampung Inggris Language Center Pare Kediri. Psychology Department, Faculty of Educational Psychology, State University of Malang
- Subaedah, Siti. & Amalia, 2022. The Influence Of Contextual Teaching And Learning (Ctl) Models On English Learning Outcomes. *International Conference on Education, Islamic Studies, and Local Wisdom (ICEIL)*. Vol. 1 No. 1 (2022). <https://doi.org/10.46870/iceil.v1i1.470>
- Sukmadinata, N. S. (2013). *Curriculum Development: Theory and Practice*. Bandung: PT Remaja Rosdakarya.
- Sutirman, 2022. Students' Perceptions of Practicum Learning Media Used During the Covid-19 Pandemic. *Journal of Education Technology*. Volume 7, Number 1, 2023 pp. 80-89 P-ISSN: 2549-4856 E-ISSN : 2549-8290
- Wulandari, Jeni. 2022. Identification of Customer Service Competencies at People's Credit Banks Using the Job Competency Assessment (JCA) Method. *Journal of Business Perspectives* Volume 5, Number 1, May 2022, (32-41)
- Zen, A.P., 2022. The Potential of Mixed Reality in Online Practicum Learning. *ITB Journal of Sociotechnology*. Volume 21, No. 3, November 2022
- Zhao, Yiyun & Fedzechkina, Masha. 2020. Learners' harmonic preferences are modulated by lexical retrieval difficulty. *Proc Ling Soc Amer* 5(1). 708–721. <https://doi.org/10.3765/plsa.v5i1.4758>.