

**PENGEMBANGAN MODEL CONTEXTUAL TEACHING LEARNING MELALUI
PROJECT BASED LEARNING UNTUK MENINGKATKAN KEMAMPUAN
MENULIS BAHASA INGGRIS**

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Abstrak

Penelitian ini bertujuan untuk mengembangkan dan menguji efektivitas model Contextual Teaching and Learning (CTL) yang diintegrasikan dengan Project-Based Learning (PjBL) dalam meningkatkan kemampuan menulis bahasa Inggris mahasiswa. Penelitian ini menggunakan metode Research and Development (R&D) dengan model ADDIE yang terdiri dari tahap analisis, desain, pengembangan, implementasi, dan evaluasi. Partisipan dalam penelitian ini adalah 69 mahasiswa Program Studi Kesehatan Masyarakat Universitas Ubudiyah Indonesia. Instrumen yang digunakan meliputi tes menulis (pre-test dan post-test), observasi, dan kuesioner. Hasil penelitian menunjukkan bahwa nilai rata-rata pre-test sebesar 54.2 meningkat menjadi 76.8 pada post-test. Hasil uji t berpasangan menunjukkan bahwa peningkatan tersebut signifikan secara statistik. Selain itu, hasil observasi menunjukkan bahwa mahasiswa lebih aktif dan terlibat selama proses pembelajaran, sedangkan hasil angket menunjukkan respon positif terhadap model pembelajaran yang diterapkan. Sebagai kesimpulan, model CTL yang diintegrasikan dengan Project-Based Learning efektif dalam meningkatkan kemampuan menulis bahasa Inggris mahasiswa. Model ini juga meningkatkan motivasi, partisipasi, dan keterlibatan mahasiswa dalam proses pembelajaran, khususnya dalam konteks pendidikan tinggi.

Kata Kunci: Contextual Teaching and Learning; Pembelajaran Berbasis Projek; Kemampuan Menulis; Pengembangan Model Instruksional

***DEVELOPMENT OF A PROJECT-BASED CONTEXTUAL TEACHING AND LEARNING
MODEL TO IMPROVE ENGLISH WRITING SKILL***

Abstract

This study aims to develop and examine the effectiveness of a Contextual Teaching and Learning (CTL) model integrated with Project-Based Learning (PjBL) in improving students' English writing skills. The research employed a Research and Development (R&D) method using the ADDIE model, which consists of analysis, design, development, implementation, and evaluation stages. The participants of this study were 69 students from the Public Health Study Program at Universitas Ubudiyah Indonesia. The instruments used in this study included writing tests (pre-test and post-test), observation and questionnaires. The results showed that the mean score of the pre-test was 54.2, which increased to 76.8 in the post-test. The result of the paired sample t-test indicated that the improvement was statistically significant. In addition, the observation results revealed that students were more active and engaged during the learning process, while the questionnaire results showed positive responses toward the implemented learning model. In conclusion, the CTL model integrated with Project-Based Learning is effective in improving students' English writing skills. It also enhances students' motivation, participation, and engagement in the learning process, particularly in the context of higher education.

Keys words: Contextual Teaching and Learning; Project-Based Learning; Writing Skills; Instructional Model Development

INTRODUCTION

Writing skill is one of the essential competencies in learning English, alongside listening, speaking, and reading skills. Writing not only requires mastery of vocabulary and grammar but also the ability to organize ideas systematically so they can be understood by readers. In the context of English as a foreign language, writing ability serves as a key indicator in measuring learners' success in using the language productively. However, various studies indicate that learners' English writing skills are still relatively low. This condition is still commonly found at the higher education level, even though writing in English is a crucial skill that university students must possess, especially in the era of globalization that demands international communication competence.

Many students face difficulties in constructing grammatically correct sentences, developing ideas into coherent paragraphs, and using appropriate vocabulary according to context. These challenges are often influenced by limited vocabulary mastery, insufficient understanding of sentence structures, and low motivation in participating in writing classes.

In addition, the process of teaching writing is often still mechanical, where students are asked to write based on lecturers' instructions without being provided with clear context or real-life experiences that could help them develop ideas. The use of less contextual teaching methods and limited student involvement in the learning process also contribute to the slow development of writing skills. As a result, students tend to lose interest in writing and struggle to express their ideas creatively. Therefore, a learning approach is needed that can connect learning materials with students' real-life experiences, making the learning process more meaningful and encouraging active participation.

One approach that can be used to address these issues is Contextual Teaching and Learning (CTL). The CTL approach emphasizes the connection between learning materials and real-life situations experienced by learners so that they can understand concepts more deeply. Through this approach,

students are encouraged to relate what they learn to their daily life experiences, making learning more relevant and applicable.

In addition to the contextual approach, the integration of Project-Based Learning (PjBL) can also enhance student engagement in the learning process. Project-based learning provides opportunities for students to work collaboratively in completing projects related to real-life situations. Through these activities, students not only learn concepts but also produce tangible outputs as a result of the learning process.

For example, in English writing classes, students can be assigned a "Health Education Writing Project." In this project, students are required to gather information on a health-related topic within the field of Public Health, such as safe medication use, the dangers of antibiotic misuse, or the importance of reading drug labels. Subsequently, students write a short article in English on the chosen topic and present it in the form of a leaflet, health education poster, or mini booklet that can be used as educational media for the community. Through this activity, students not only practice writing in English but also connect their writing skills with their academic discipline.

This study was conducted among 69 final-year students of the Public Health Study Program at Universitas Ubudiyah Indonesia. The selection of final-year students was based on the consideration that they already possess sufficient foundational knowledge of English as well as a better understanding of the field of public health, enabling them to produce more contextual and applicable writing.

Although various studies have shown that contextual approaches and project-based learning can improve learning motivation and critical thinking skills, the development of a learning model that specifically integrates Contextual Teaching and Learning with Project-Based Learning in teaching English writing for health students is still limited. Therefore, this study aims to develop a project-based Contextual Teaching and Learning model that can be effectively applied in

teaching English writing, particularly for students at Universitas Ubudiyah Indonesia.

The developed model is expected to create a more active, contextual, and meaningful learning process, thereby improving students' English writing skills in ways that are relevant to their field of study. This study also aims to examine the development process of the project-based Contextual Teaching and Learning model in English writing instruction for final-year Public Health students at Universitas Ubudiyah Indonesia, as well as to evaluate its effectiveness in improving their writing skills. Ultimately, this research seeks to integrate two learning approaches—Contextual Teaching and Learning (CTL) and Project-Based Learning (PjBL)—into a single English writing instructional model.

Furthermore, it is expected that the development of a contextual learning model aligned with the field of Public Health will provide students with opportunities not only to learn English writing but also to relate it to public health topics. This research not only tests the effectiveness of a teaching method but also develops a new instructional model along with its learning tools, such as modules, project guidelines, and writing assessment instruments. The developed model produces project-based learning outputs such as health leaflets, medication education posters, or mini booklets in English that can be used as community education media. Thus, this study is expected to contribute to the development of more contextual, innovative, and relevant English learning models that meet the needs of students in the health field.

METHODOLOGY

This study employed a Research and Development (R&D) method aimed at producing a new instructional model in the form of a project-based Contextual Teaching and Learning (CTL) model for teaching English writing. This method is not only intended to test the effectiveness of a learning model but also to develop, validate, and assess the feasibility of the resulting model.

The development of the instructional model was carried out using the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. Each stage of the ADDIE model was integrated with the instructional syntax of Contextual Teaching and Learning (CTL) combined with Project-Based Learning (PjBL), which was applied in the process of teaching English writing.

Table 1

Integration of Contextual Teaching Learning and Project-Based Learning in English Writing Instruction

No	Stage in ADDIE	Syntax of CTL-PjBL	Learning Activities
1	Analysis	Contextual Orientation, Problem Identification	Identifying learning needs and linking the material to the public health context
2	Design	Project Planning	Designing an English writing project
3	Development	Information Gathering, Project Development	Ss gather information and compose their writing
4	Implementation	Project Presentation	Ss present the project results
5	Evaluation	Evaluation and Reflection	Assessment of ss' writing and reflection on the learning process

Next, stages 1 and 5 were carried out by the lecturer, while stages 2, 3, and 4 were conducted by the students. In stage 1, the lecturer connected the learning materials with real-life situations relevant to the field of public health, such as health education or healthy lifestyle practices. In stage 5, the lecturer provided feedback on students' written work and conducted reflection on the learning process that had been implemented.

Meanwhile, in stage 2, students determined a writing project topic related to public health, such as creating a health education article in English. This was followed in stage 3 by gathering information related to the chosen topic and composing an English text based on the information obtained. In stage 4, students presented the results of their writing projects in front of the class and explained the content of their work.

This study was conducted in the Public Health Study Program at Universitas Ubudiyah Indonesia, with participants consisting of students enrolled in the English course during the ongoing semester. The sample size of this study was 69 students, selected using total sampling technique, in which all students participating in the course were included as research subjects.

The data collection technique used was a writing skills test, aimed at measuring students' English writing ability through a pre-test and post-test. The pre-test was conducted during the second meeting, before the implementation of the project-based Contextual Teaching and Learning model, with the topic "Healthy Lifestyle for University Students." Students were asked to write a short paragraph consisting of 100–150 words within 30 minutes.

At the twelfth meeting, students took the post-test to determine the improvement in their English writing skills after the implementation of the project-based CTL model, with the topic "The Importance of Health Education for the Community." Students were given 40 minutes to complete their writing, consisting of 150–200 words. At this stage, students were expected not only to write but also to review their work, such as

correcting grammatical errors, spelling, or sentence structure. The additional 10 minutes provided an opportunity for students to revise their writing. In writing assessment, more flexible time is often given in the final test to allow students to express their ideas more effectively. This is important because writing ability is not only measured by speed but also by the quality of content, organization, and language accuracy.

In this study, data were also collected through observation to examine and determine the level of student activity during the learning process using the project-based CTL model. Observations were conducted by an observer throughout the learning activities involving 69 students from the Public Health Study Program at Universitas Ubudiyah Indonesia. The observation was guided by ten indicators of student activity related to their engagement in the learning process. In addition, to identify students' responses to the implementation of the developed learning model, a written questionnaire was also distributed to the participants.

All data obtained in this study were analysed using descriptive analysis techniques, learning outcome improvement analysis, and model effectiveness testing. Descriptive analysis was used to describe observation results, student responses, and the implementation process of the learning model. The analysis of learning improvement was conducted by comparing pre-test and post-test scores, while the effectiveness of the model was analysed using statistical testing (t-test) to determine whether there was a significant improvement in students' writing skills after the implementation of the project-based CTL model.

RESULT AND DISCUSSION

The assessment aspects used to evaluate students' writing consisted of five components. Content refers to the clarity of ideas and the relevance of the topic. Organization involves the structure of the paragraph and the flow of the writing. Grammar assesses the accuracy of language use. Vocabulary evaluates the appropriateness

and variety of word choices. Mechanics focuses on spelling, punctuation, and overall writing conventions.

Table 2
The Result of Pre-test

No	Score Category	Score Range	Number of Students	%
1	Very Good	81-100	3	4,35 %
2	Good	61-80	15	21,74 %
3	Enough	41-60	30	43,48 %
4	Poor	21-40	18	26,09 %
5	Very Poor	0-20	3	4,35 %
TOTAL			69	100 %

Based on the pre-test results, the average score of students' English writing ability was 54.2, which falls into the fair category. This result indicates that most students still experienced difficulties in writing in English, particularly in the use of grammar, idea development, and appropriate vocabulary selection. In addition, some students still made errors in sentence structure and punctuation usage. This condition indicates that students' English writing ability is still relatively limited.

Students' English writing skills still need to be improved through the implementation of a more effective and contextual learning model. Therefore, in this study, a project-based Contextual Teaching and Learning model was applied, which is expected to significantly enhance students' English writing ability.

Table 3
The Result of Post-test

No	Score Category	Score Range	Number of Students	%
1	Very Good	81-100	18	26,09 %

2	Good	61-80	35	50,72 %
3	Enough	41-60	12	17,39 %
4	Poor	21-40	4	5,80 %
5	Very Poor	0-20	0	0 %
TOTAL			69	100 %

Based on the post-test results, the average score of students' English writing ability was 76.8, which falls into the good category. This result indicates that there was an improvement in students' English writing skills after the implementation of the project-based Contextual Teaching and Learning model. Students appeared more capable of developing ideas, using more varied vocabulary, and constructing English sentences with better structure.

To determine the effectiveness of the project-based Contextual Teaching and Learning (CTL) model in improving students' English writing skills, an analysis was conducted using a statistical test, namely the paired sample t-test. This test was used to compare students' pre-test and post-test scores.

Table 4
The Comparison Result of Pre-test and Post-test

Type of test	Average Score	Number of Students
Pre-test	54,2	69
Post-test	76,8	

Based on the table above, it can be seen that the average pre-test score was 54.2, while the average post-test score increased to 76.8. This indicates that there was an improvement in students' English writing ability after the implementation of the learning model. Meanwhile, a t-test was conducted to determine whether this improvement was statistically significant. The following are the results of the t-test from this study.

Table 5

The Result of t-score

Remarks	Score
T value	12,47
T table	1,995
Significance Level	0,05
Conclusion	t value > t table

Based on the results of the t-test calculation, the calculated t-value was 12.47, while the t-table value at a significance level of 0.05 with degrees of freedom ($df = 68$) was 1.995. Since the calculated t-value is greater than the t-table value ($12.47 > 1.995$), it can be concluded that there is a statistically significant improvement in students' English writing ability after the implementation of the project-based Contextual Teaching and Learning model.

Thus, the learning model developed in this study has been proven effective in improving the English writing skills of students in the Public Health Study Program at Universitas Ubudiyah Indonesia. The results obtained from observations of 69 students, based on ten indicators of student activity related to their engagement in the learning process, can be seen in the table below.

Table 6

The Result of Observation

No	Indicators of Students' Activity	Average Score	Category
1	Ss pay attention to the lecturer's explanation of the learning context	4.3	Very Good
2	Ss understand the given learning topic	4.1	Very Good
3	Ss actively identify project topics or problems	4.0	Good
4	Ss participate in group discussion	4.4	Very Good

5	Ss search for information relevant to the project	4.2	Very Good
6	Ss are able to organize ideas for English writing	3.7	Baik
7	Ss work collaboratively with group members	4.5	Sangat Baik
8	Ss compose their writing based on the project topic	4.0	Baik
9	Ss present their project results in front of the class	4.1	Sangat Baik
10	Ss show interest and motivation in learning	4.4	Sangat Baik

The average overall score of student activity was 4.19, which falls into the good to very good category. Based on these observation results, it can be concluded that most students demonstrated a high level of participation during the learning process using the project-based Contextual Teaching and Learning (CTL) model. Students were actively engaged in discussions, searching for information, and collaborating with group members in completing the writing project.

The most prominent student activities were seen in the indicators of group collaboration (score 4.5) and participation in group discussions (score 4.4). This indicates that the assigned project activities successfully encouraged students to learn collaboratively. In addition, students also showed high interest and motivation in participating in the learning process, especially when they were asked to develop writing based on topics related to the field of public health.

The contextual approach used in the learning process helped students understand the connection between English language materials

and their field of study. Thus, the observation results indicate that the implementation of the project-based Contextual Teaching and Learning model was able to enhance student activity and engagement in the process of learning English writing. Another finding was obtained from the questionnaire distributed to 69 students of the Public Health Study Program at Universitas Ubudiyah Indonesia after the implementation of the project-based Contextual Teaching and Learning model. The purpose of this questionnaire was to identify students' responses to the application of the learning model used in improving their English writing skills.

Table 7
The Result of Questionnaire

N o	Statement	Average Score	Categor y
1	The project-based CTL learning model makes the learning process more interesting	4.4	Very Good
2	This learning model helps me understand English writing materials	4.2	Very Good
3	Project activities help me develop writing ideas	4.3	Very Good
4	Group discussions help me organize my writing better	4.4	Very Good
5	This learning model increases my motivation to learn English writing	4.3	Very Good
6	This learning model helps me improve my English vocabulary	4.1	Very Good
7	The assigned project is relevant to the field of public health	4.5	Very Good

8	I feel more confident in writing in English	4.0	Good
9	This learning process helps me collaborate with my classmates	4.4	Very Good
10	This learning model is effective in improving English writing skills	4.3	Very Good

Based on the questionnaire results, it can be seen that most students gave positive responses to the implementation of the project-based Contextual Teaching and Learning (CTL) model in learning English writing. Students stated that the CTL model made the learning process more engaging and interactive, especially through project activities that allowed them to develop their writing ideas more freely and creatively. In addition, group discussions helped students better understand the material and organize their writing more effectively.

Projects related to public health topics were also considered relevant to the students' field of study, making the learning process more contextual and meaningful. Overall, the questionnaire results indicate that the implementation of the project-based CTL model not only improved students' writing skills but also enhanced their learning motivation, collaboration, and confidence in writing in English.

Based on the research questions and the results obtained from the three instruments above, the discussion can be categorized into three main points: the development of the project-based Contextual Teaching and Learning model, the process of developing the model, and the effectiveness of the model.

1. Development of the Project-Based CTL Model

The development of the project-based CTL model in this study aimed to create a learning model that could improve students' English writing skills, particularly for Public Health

students at Universitas Ubudiyah Indonesia. This model was developed in response to the low writing ability of students as indicated by the pre-test results, where the average score was still in the fair category. The developed project-based CTL model emphasizes the connection between learning materials and students' real-life contexts. In this study, the context is related to the field of public health, enabling students not only to learn general English writing but also to write based on topics relevant to their discipline. Through this model, students are given the opportunity to learn actively through project activities that require them to gather information, engage in discussions, and collaboratively develop writing ideas. Thus, the learning process is no longer lecturer-centered but focuses more on student involvement. This model also allows students to produce tangible outputs in the form of English writing related to public health topics, such as health education articles or health information media.

2. Process of Developing the Project-Based CTL Model

The model development process in this study followed the ADDIE framework, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. In the analysis stage, the researcher examined students' needs in learning English writing. The results showed that most students still had difficulties in developing ideas, using appropriate vocabulary, and constructing grammatically correct sentences. In addition, previous teaching methods did not provide sufficient opportunities for students to practice writing actively. The next stage, design, involved planning the project-based CTL model to be implemented in the learning process. At this stage, the researcher developed the instructional syntax, designed project activities, and prepared learning materials to support English writing instruction. The development stage involved creating the learning materials and research instruments used in the study. The model was adjusted to the characteristics of Public Health students

so that the materials would be more contextual and relevant to their field of study. The implementation stage was the application of the developed model in classroom learning activities. Students engaged in various project-based tasks such as identifying public health topics, collecting relevant information, composing texts in English, and presenting their work in front of the class. The final stage, evaluation, involved assessing both the learning process and students' outcomes. This was conducted by comparing pre-test and post-test results, as well as analysing observation data on student activities and their responses to the implemented learning model.

3. Effectiveness of the Project-Based CTL Model

The results of this study demonstrate that the developed model is effective in improving the English writing skills of Public Health students at Universitas Ubudiyah Indonesia. This is evidenced by the increase in students' average scores from pre-test to post-test. The pre-test average score was 54.2, while the post-test average increased to 76.8. This improvement indicates that after the implementation of the project-based CTL model, students were able to write in English better than before. In addition, the results of the statistical test using the t-test showed that the calculated t-value was higher than the t-table value, indicating that the improvement in students' writing ability was statistically significant. This confirms that the learning model developed in this study has a positive effect on improving students' English writing skills. Observation results also revealed that students became more active during the learning process. They were more engaged in group discussions, actively sought information related to project topics, and demonstrated greater confidence in presenting their writing. Furthermore, the questionnaire results showed that most students responded positively to the implementation of this learning model.

They felt that project activities helped them develop writing ideas, improve their English vocabulary, and make the learning process more engaging and meaningful.

Therefore, it can be concluded that the implementation of the project-based CTL model not only improves students' English writing skills but also enhances their learning motivation, learning activities, and overall engagement in the learning process.

CONCLUSION

Referring to the results and discussion presented earlier, it can be concluded that this study successfully developed a project-based Contextual Teaching and Learning (CTL) model designed to improve students' English writing skills. The developed model emphasizes the connection between learning materials and students' real-life contexts, particularly those related to the field of public health. Through project activities, students not only learn writing theoretically but also produce written outputs relevant to their field of study.

The model development process followed the ADDIE stages—analysis, design, development, implementation, and evaluation—and was implemented in the learning process and evaluated using various research instruments such as writing tests, observations, and student response

questionnaires. The results of the study indicate that the developed project-based CTL model is effective in improving students' English writing skills. This is evidenced by the increase in the average score from 54.2 in the pre-test to 76.8 in the post-test. In addition, the results of the statistical test using the t-test show that the improvement is statistically significant. Observation results also reveal that students became more active during the learning process, while questionnaire results indicate that students responded positively to the implementation of the learning model.

Thus, it can be concluded that the project-based CTL model developed in this study is effective in improving the English writing skills of students in the Public Health Study Program. For the advancement of knowledge, particularly in English language learning, the project-based Contextual Teaching and Learning model can be used as an alternative instructional model to improve students' writing skills, especially by linking learning materials with students' fields of study. Students are expected to utilize project-based activities as a means to develop their English writing skills more actively, creatively, and contextually. Future researchers are encouraged to develop similar learning models for other English skills such as speaking, reading, or academic writing, and to apply them in different study programs in order to obtain broader research findings.

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