

**THE EFFECT OF TPACK-BASED INSTRUCTION ON
STUDENTS' WRITING OF PROCEDURE TEXT
USING TPS TECHNIQUE (A QUASI-
EXPERIMENTAL STUDY)**

SKRIPSI



Presented to
IKIP PGRI Bojonegoro
in partial fulfilment of the requirements
for the degree of Sarjana in English Education

By:
Artika Dwi Rahayu
NIM. 21120005

**ENGLISH EDUCATION DEPARTMENT
FACULTY OF LANGUAGES AND ARTS EDUCATION
IKIP PGRI BOJONEGORO
2025**

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MOTTO

“You were already 50% there when you wanted it, 60% when you made your case,
and then God took care of the rest.” – Zhafira Aqyla

DEDICATION

I convey my deepest gratitude to Allah Subhanahu Wa Ta'ala, for His guidance, strength, and blessings that have enabled me to complete this skripsi. I wholeheartedly dedicate this skripsi to:

1. My beloved parents. I dedicate all of this to you. Mom, I hope this achievement marks the beginning of greater things to come. Thank you for your unwavering support, encouragement, and for always listening to my stories.
2. All the English lecturers who have provided me a valuable and insightful knowledge throughout my studies.
3. My advisors are Mrs. Meiga Ratih Tirtanawati, M.Pd and Mrs. Chyntia Heru Woro Prastiwi, M.Pd, for their patience, guidance, and continuous support throughout the process writing this skripsi.
4. All my friends at IKIP PGRI Bojonegoro who have been willing to strive together and support me along this journey.
5. Lastly, I thank myself. Thank you for bravely facing every challenge, and never giving up. Thank you for working on yourself.

ACKNOWLEDGMENT

First and foremost, all praise and gratitude to Allah SWT, whose His blessings and guidance have made it possible for the researcher to complete this skripsi. Secondly, may peace and blessings be upon Prophet Muhammad SAW, who has brought light and guidance to the world. The researcher has completed the skripsi entitled “The Effect of TPACK-Based Instruction on Students’ Writing of Procedure Text Using TPS Technique (A Quasi-Experimental Study)”. The researcher would also like to express sincere gratitude to:

1. Dr. Dra. Junarti, M.Pd. as the Rector of IKIP PGRI Bojonegoro
2. Dr. Cahyo Hasanudin, M.Pd. as the Dean Faculty of Languages and Arts Education
3. Ayu Fitriyaningsih, M.Pd. as Head of the English Education Department of IKIP PGRI Bojonegoro
4. Meiga Ratih Tirtanawati, M.Pd. as Advisor I, who helped me and giving corrections during the preparation process until the completion of this skripsi.
5. Chyntia Heru Woro Prastiwi, M.Pd. as Advisor II, who helped me and giving corrections patiently during the preparation process until the completion of this skripsi.

May Allah bless everyone for their kindness. The researcher warmly welcomes any suggestions and constructive feedback for future improvement. The researcher hopes that this skripsi will provide benefits to future researchers and for all.

Lastly, the researcher would like to express heartfelt gratitude to the beloved parents for their support and prayers, as well as to all parties who have contributed encouragement and assistance during the completion of this skripsi.

Bojonegoro, 14 July 2025
The Researcher

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STATEMENT OF AUTHENTICITY

I, the undersigned below:

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In order to uphold academic integrity, sincerely and without coercion from any parties, I hereby declare that the thesis entitled:

**THE EFFECT OF TPACK-BASED INSTRUCTION ON STUDENTS'
WRITING OF PROCEDURE TEXT USING TPS TECHNIQUE (A QUASI-
EXPERIMENTAL STUDY)**

Is the result of my own original work, and all sources of information used have been clearly cited in the reference list according to the scientific and academic code of ethics. I am aware that if any violations of scholarly ethics regarding to the authenticity of this work are found, **I personally** accept the consequences in accordance with the applicable regulations and am prepared to bear legal sanctions.

Bojonegoro, 14 July 2025



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ABSTRACT

Rahayu, Artika. D. 2025. The Effect of TPACK-Based Instruction on Students' Writing of Procedure Text Using TPS Technique (A Quasi-Experimental Study). Skripsi, English Education Department, Faculty of Languages and Arts Education, IKIP PGRI Bojonegoro, Advisor (I) Meiga Ratih Tirtanawati, M.Pd., (II) Chyntia Heru Woro Prastiwi, M.Pd.

Keywords: TPACK, Writing, Procedure Text, Think Pair Share

Technology has become an important part of education, and TPACK-based instruction serves as a teaching model that integrates three main components: technology, pedagogy, and content knowledge to support and enhance the learning process. This research aimed to examine whether teaching using TPACK-based instruction using TPS technique has an effect on students' writing of procedure text and improve their writing quality. This research was a quantitative design with a quasi-experimental study. The sample of this research were tenth-grade students at SMKN Ngasem, totalling 50 students, with 25 students in X KI 1 (as the experimental class) and 25 students in X KI 2 (as the control class). The data collected through the written test. The results of the Mann-Whitney U test showed an Asymp. Sig. (2-tailed) value of 0.045, that is less than 0.05 ($0.045 < 0.05$). This indicates a statistically significant difference in post-test scores between the two groups. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. It shows that TPACK-based instruction has a significant effect on students' writing of procedure text. Moreover, an improvement in writing quality was also found. The experimental class was found to have made progress in vocabulary as a writing skills component, while the control class showed improvement in organization. These findings suggest that TPACK-based instruction using TPS technique has a positive effect on students' writing outcomes.

ABSTRAK

Rahayu, Artika. D. 2025. The Effect of TPACK-Based Instruction on Students' Writing of Procedure Text Using TPS Technique (A Quasi-Experimental Study). Skripsi, English Education Department, Faculty of Language and Arts Education, IKIP PGRI Bojonegoro, Advisor (I) Meiga Ratih Tirtanawati, M.Pd., (II) Chyntia Heru Woro Prastiwi, M.Pd.

Keywords: TPACK, Menulis, Teks Prosedur, *Think Pair Share*

Teknologi telah menjadi bagian penting dalam dunia pendidikan, dan pembelajaran berbasis TPACK berfungsi sebagai model pembelajaran yang mengintegrasikan tiga komponen utama: teknologi, pedagogi, dan pengetahuan konten untuk mendukung dan meningkatkan proses pembelajaran. Penelitian ini bertujuan untuk mengkaji pengaruh pengajaran menggunakan pembelajaran berbasis TPACK dengan teknik TPS terhadap kemampuan siswa dalam menulis teks prosedur serta peningkatan kualitas tulisan mereka. Penelitian ini menggunakan desain kuantitatif dengan metode kuasi-eksperimen. Sampel penelitian terdiri dari 50 siswa kelas sepuluh di SMKN Ngasem, yang terbagi menjadi 25 siswa di kelas eksperimen (X KI 1) dan 25 siswa di kelas kontrol (X KI 2). Pengumpulan data dilakukan melalui tes tertulis. Hasil uji Mann-Whitney U menunjukkan nilai Asymp. Sig. (2-tailed) sebesar 0.045, lebih kecil dari 0.05 ($0.045 < 0.05$). Hal ini menunjukkan adanya perbedaan yang signifikan secara statistik pada skor post-test antara kedua kelompok. Oleh karena itu, hipotesis nol (H_0) ditolak dan hipotesis alternatif (H_1) diterima. Temuan ini menunjukkan bahwa pembelajaran berbasis TPACK memberikan pengaruh signifikan terhadap kemampuan siswa dalam menulis teks prosedur. Selain itu, terdapat peningkatan kualitas tulisan siswa, di mana kelas eksperimen menunjukkan kemajuan pada komponen kosakata, sedangkan kelas kontrol mengalami peningkatan pada komponen organisasi. Dengan demikian, dapat disimpulkan bahwa pembelajaran berbasis TPACK dengan teknik TPS memiliki pengaruh yang positif terhadap hasil tulisan siswa.

PREFACE

All praise and gratitude are hereby expressed to Allah SWT for His blessings and guidance, which have enabled the researcher to complete this research entitled, “The Effect of TPACK-Based Instruction on Students’ Writing of Procedure Text Using TPS Technique (A Quasi-Experimental Study)”. This research was motivated by the need for effective and innovative teaching methods that integrate technology, pedagogy, and content knowledge through TPACK-based instruction, which has been proven to enhance student engagement and understanding. I hope the findings of this study will contribute positively to the field of education, especially in developing more effective and engaging English language teaching approaches.

I would like to express my sincere gratitude to all those who have supported, guided, and motivated me throughout this research process, especially my advisors and colleagues who have provided valuable assistance.

May this research be useful for the advancement of knowledge and educational practices in the future.

TABLE OF CONTENTS

TITLE PAGE	i
APPROVAL SHEETS.....	ii
LEGITIMATION.....	iii
MOTTO	iv
DEDICATION.....	v
ACKNOWLEDGMENT	vi
STATEMENT OF AUTHENTICITY.....	viii
ABSTRACT	ix
ABSTRAK	xi
PREFACE.....	xii
LIST OF TABLES	xv
LIST OF FIGURES	xvi
LIST OF APPENDICES	xvii
CHAPTER I INTRODUCTION.....	1
A. Background of the Research	1
B. Research Problems.....	4
C. Objectives of the Research.....	5
D. Research Significance	5
E. Definition of Key Terminologies	6
CHAPTER II REVIEW OF RELATED LITERATURE	8
A. The Concept of Writing	8
B. The Procedure Text Concept.....	11
C. Think Pair Share.....	13
D. TPACK Framework	15
E. Review of Related Study.....	18
F. Theoretical Framework	20
G. Hypothesis.....	21
CHAPTER III RESEARCH METHOD	23
A. Research Design.....	23
B. Place and Time of the Study	24
C. The Subject of the Research.....	25

D. Data Collection Technique.....	26
E. Technique of Analysing the Data.....	26
CHAPTER IV FINDINGS AND DISCUSSION	34
A. Research Findings	34
B. Discussion	43
CHAPTER V CONCLUSION AND SUGGESTION	49
A. Conclusion	49
B. Suggestion.....	50
REFERENCES.....	51
APPENDICES	57

LIST OF TABLES

Table 3.1 Research Design for A Quasi-Experimental.....	24
Table 3.2 Research Population.....	25
Table 3.3 Sample of the Research.....	26
Table 3.4 Scoring Rubric of Writing Procedure Text.....	27
Table 3.5 Writing Skill Classification.....	28
Table 4.1 Descriptive Statistics Results	34
Table 4.2 Classification of Pre-test Scores	35
Table 4.3 Classification of Post-test Scores.....	36
Table 4.4 Normality Test of Students' Scores	39
Table 4.5 Mann-Whitney U Test Output	40
Table 4.6 Wilcoxon Test of Experimental Class	41
Table 4.7 Wilcoxon Test of Control Class.....	42

LIST OF FIGURES

Figure 2.1 TPACK Main Domains	16
Figure 2.2 Diagram Theoretical Framework.....	21
Figure 4.1 Median Score Components.....	37
Figure 4.2 Overview Mean Score	38

LIST OF APPENDICES

Appendix 1a Lesson Plan of Experimental Class	57
Appendix 1b Lesson Plan of Control Class	67
Appendix 2 Scoring Rubric for Writing Assessment.....	78
Appendix 3a Instrument of Writing for Pre-test	80
Appendix 3b Instrument of Writing for Post-test	81
Appendix 4a Students Pre-test Scores.....	82
Appendix 4b Students Post-test Scores.....	84
Appendix 5 Data Output SPSS	86
Appendix 6 Students Answer Sheets	90
Appendix 7 Surat Keterangan Selesai Penelitian	96
Appendix 8 Surat Keterangan Selesai Bimbingan	97
Appendix 9a Kartu Bimbingan Dosen Pembimbing 1.....	98
Appendix 9b Kartu Bimbingan Dosen Pembimbing 2	99

CHAPTER I

INTRODUCTION

This chapter covers an overview of background of the research, research problems, objectives of the research, research significance and definition of key terms

A. Background of the Research

In this digital era, technology has been incorporated into educational activities. A number of insights in education highlight that the use of modern technology has increased the learning outcomes and encourages greater classroom interactivity. Technology facilitates the delivery of knowledge to students in a more accessible and efficient way. Therefore, the integration of technology is needed to create more creative and innovative classroom instruction.

The integration of technology, pedagogy, and content knowledge within the instructional process is referred to Technological Pedagogical Content Knowledge (TPACK) framework (Zhang & Tang, 2021). According to Koehler et al. (as cited in Lin & Huang, 2020), this framework consists of three main domains of knowledge: (1) Technological Knowledge (TK), which refers to the ability to understand and use various digital technologies and applications; (2) Pedagogical Knowledge (PK), which involves the understanding of different teaching methods, theories of the learning, and assessment techniques; and (3) Content Knowledge (CK) is the understanding of subject-matter and knowledge across disciplines, without consideration of instructional practices. Moreover, the intersection of the core knowledge

domains leads to the formation of several integrated knowledge areas, including Technological Content Knowledge (TCK) involves understanding of how technology connect with and can improve the teaching of particular content areas, Technological Pedagogical Knowledge (TPK) refers to knowing how technology can support and transform teaching methods, Pedagogical Content Knowledge (PCK) is the understanding of how to teach specific content effectively using appropriate pedagogical strategies. At the core of these components lies the TPACK framework, which is the understanding needed to teach by combining technology, pedagogy, and content knowledge.

TPACK framework highlights the necessity of teachers having a deep and comprehensive understanding of the relationship between content, pedagogy, and technology, as this serves as a foundation for designing strategies that meet students' needs (Hajj & Harb, 2023). As a result, teachers can create engaging and creative learning environments that enhance students' active participation by applying this framework (Prayudha.S & Pradana, 2023). Furthermore, studies have shown that the learning platforms and courses designed using TPACK framework are perceived beneficial and effective for language learning experiences (Tseng et al., 2020).

According to Alisha et al. (2019), writing is considered the most challenging of all language skills due to its complex process that involves various cognitive and metacognitive tasks, including generating ideas or brainstorming, drafting, organizing, and revising. Mastery of each of these processes is essential for producing coherent and effective written communication, as writing skills are necessary for both academic purposes and

future career opportunities (Prastiwi & Pujiawati, 2019). Therefore, this study focuses on students' writing skills in producing procedure texts, since this type of text is closely related to their everyday activities. Procedure text is a written instruction that provides a sequence of actions or steps to guide readers on how to make, operate, or do something (Khoiriyah, 2021). Procedure text is one of several text genres that students are required to learn and produce. There are some generic structures of procedure text that students need to understand, such as goals, materials (ingredients or tools), and steps. Hence, students are able to write instructional text that explains how to make or do something properly by mastering procedure text.

To gain deeper insight, the researcher conducted a preliminary observation at the school where this study was carried out and held a personal interview with the English teacher on Wednesday, 11th of December 2024. Several challenges in teaching English were identified. First, many students demonstrated low motivation for participating actively during writing classes, due to low interest in English. Second, some students exhibited difficulty in expressing their ideas in written form. Third, the teacher still uses conventional teaching methods, utilizing textbook-based media, a whiteboard, and markers. This approach resulted in a classroom environment that was less engaging and interactive (Lubis et al., 2020). Lastly, most students were reluctant to bring dictionaries to school, often because they did not own one.

To address the issues identified above, it is necessary to adopt a more interactive, engaging, and technology-integrated teaching approach. One such approach is the TPACK-based instruction, which promotes the purposeful

integration of technology, pedagogy, and content to enhance learning outcomes. Through this approach, teachers can design learning experiences that are not only informative but also motivating and relevant to students' needs. Moreover, to maintain consistency in teaching activities, Think Pair Share (TPS) is applied in both groups as a teaching technique, not as the main focus of the research. In the TPS technique, each student first thinks on a question asked by the teacher, then pairs up with another student to discuss possible answers, and finally shares their ideas with the entire class (Yusuf et al., 2019).

From the explanation above, it can be understood that the integration of technology enables the creation of effective learning in the classroom. However, there remains a gap in applying TPACK framework specifically to the teaching of procedure text writing. This gap highlights the need for further research on the effectiveness of this framework in this area. Therefore, this research aims to investigate **The Effect of TPACK-Based Instruction on Students' Writing of Procedure Text Using TPS Technique (A Quasi-Experimental Study)**.

B. Research Problems

Based on the research background presented above, the researcher has identified the following research problems:

1. What is the effect of TPACK-based instruction on students' writing of procedure text?

2. How is the writing quality of students taught using TPACK-based instruction and TPS technique?
3. How is the writing quality of students taught using TPS technique without TPACK-based instruction?

C. Objectives of the Research

The research is designed to fulfil the following objectives:

1. To examine the effect of TPACK-based instruction on students' writing of procedure text.
2. To analyze the writing quality of students taught using TPACK-based instruction and TPS technique.
3. To analyze the writing quality of students taught using TPS technique without TPACK-based instruction.

D. Research Significance

The results of the research are expected to provide the following benefits:

1. Theoretical Significance

This research aims to deepen the theoretical understanding of the application of TPACK-based instruction to students' writing of procedure text. It provides further insight into how TPACK framework can serve as a foundation for technology-integrated language instruction.

2. Practical Significance

a. For Teachers

This research is expected to offer practical guidance for English

teachers in implementing TPACK-based instruction to improve students' writing performance of procedure text.

b. For Future Researchers

The findings may serve as a useful reference for future researchers who are interested in exploring the effect of TPACK-based instruction on students' writing of procedure text.

E. Definition of Key Terminologies

1. TPACK

The strong interconnection between technology, pedagogy, and content knowledge within the educational process characterizes TPACK framework (Herring et al., 2016). Furthermore, Wang et al. (2018) explain that TPACK refers to teachers' understanding of how to teach subject-specific content through the integration of appropriate pedagogical strategies and selected technological tools.

2. Writing

Writing is the ability of students to express their ideas and communicate effectively in written form. According to Brown (2004), writing is a skill that enables individuals to communicate through written language. Additionally, Jayanti (2019) highlights writing as a linguistic skill that facilitates indirect communication, especially when face-to-face interaction is not possible.

3. Procedure Text

Procedure text is a kind of text that provides a sequence of steps to

demonstrate on how to perform a task or accomplish a specific goal. Prihatna (2015) defines procedure text as a factual genre that offers instructions on how to carry out an activity. Moreover, Sari (2019) states that procedure text describes a process of creating or doing something, which is presented through several stages.

4. Think Pair Share

A cooperative learning strategy that provides students with additional time to reflect on questions through three stages: think, pair, and share is called Think Pair Share technique (Sahardin et al., 2017). Moreover, Rahmawati (2017) argues that this technique enables students to think of an issue, a problem, or idea with a partner before presenting the result to the class.