

**TECHNOLOGICAL PEDAGOGICAL CONTENT
KNOWLEDGE IN TEACHING ANALYTICAL EXPOSITION
TEXT FOR 11TH GRADE AT KESUMA INDAH PADANG
SIDIMPUAN SENIOR HIGH SCHOOL**

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ABSTRACT

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The objectives of the study were to find out the components of TPACK in teaching analytical exposition text and to reveal how the TPACK is implemented in teaching analytical exposition text for students. The study was conducted by using descriptive qualitative method which investigated an English teacher and students at grade 11th as the subject of the research. The techniques of collecting the data were observation, video recording, and interview. The results of the study showed that the components of TPACK as proposed by Mishra and Koehler (2006) such as content knowledge (CK), pedagogical knowledge (PK), pedagogical content knowledge (PCK), technological knowledge (TK), technological content knowledge (TCK), technological pedagogical knowledge (TPK), and technological pedagogical content knowledge (TPACK) were found in teaching analytical exposition text. It is also found that the implementation of TPACK as suggested by Harris and Hofer (2009), was conducted through five basic process, such as (1) determining the goals of the learning, (2) choosing the most appropriate methods as well as strategies that can be used to enhance students' learning experience, (3) selecting and sequencing what kind of activities that students will engage in during the learning, (4) determining how students can be assessed based on the learning goals and their achievement, and (5) selecting what kind of tools and resources will be used to help students achieve the learning goals.

Keywords: TPACK, analytical exposition text, teaching writing

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I. INTRODUCTION

As stated by Depdiknas (2003: 6), there are 4 language skills as the center of English teaching, namely listening skill, speaking skill, reading skill, and writing skill. Flynn and Stainthorp stated that writing is a medium for humans to communicate with one another. Among the four language skills, writing is categorized as a complex skill because writing involves multiple cognitive abilities. Writing, on the other hand, is critical because all students require good writing skills to meet their academic and work needs. For example, when applying for a scholarship or fulfilling a job requirement that requires applicants to have good oral or written English skills, they should be able to write an essay paper.

Since Curriculum 2013 is a text-based learning process, text is used in the majority of learning activities. Based on English syllabus, there are several genres of writing that should be mastered by the students at senior high school, such as recount text, narrative text, descriptive text, procedural text, analytical exposition text, explanation text, etc. From these various texts, the researcher will only focus on the analytical exposition text. The English syllabus requires students at grade eleventh to be competent to write analytical exposition text related to the actual issues presented by the teacher. In order to produce a proper analytical exposition text, students must create an analytical exposition text by sharing ideas with their partner.

Students are expected to think critically about the phenomena around them when writing analytical exposition texts. Amelia (2021) said that in writing this kind of text, students should believe in the idea and

arguments are significant. In line with that, some evidences are needed to support the claim. By writing analytical exposition text, the students are required to be capable of creating a text which can encourage the readers if the idea is crucial and significant by taking attention to its social functions, generic structure, and language features.

On the other hand, technology is increasingly being used in educational contexts. Within the using of technology in education system, teaching and learning process becomes more efficient and effective. Indeed, teacher has a significant role to be able to implement and integrate technology. As stated by Koehler and Mishra (2008), besides paying attention to the pedagogy and content of teaching, teachers also need to consider the using of technology in teaching activities. Within the using of technology, it will be helpful for the teacher to discover the media from internet in teaching and learning process, especially when teaching analytical exposition text.

The following issues regarding to the implementation of TPACK in teaching analytical exposition text were discovered during the researcher's observation and interview with the English teacher and students at grade eleventh at Kesuma Indah Padangsidempuan Senior High School.

First, it found out that most of eleventh grade students struggled in writing analytical exposition text. The data of students' performance in writing analytical exposition text showed that only 8 students out of 24 in class eleventh one science class met the criteria of minimum completeness. In other words, two-thirds of the total students in eleventh one science

failed to comprehend writing this kind of text. Second, the students recognize a lack of resources for compatible technologies or media to support their learning activities. According to the interviews conducted with the students, the majority of the students stated that they did not have sufficient and compatible media or technology facilities in their own home. Hence, teachers as the facilitator must be able to manage this situation within the using of TPACK. Finally, it was discovered that the majority of students struggle to write texts using the general framework. According to Anderson and Anderson (1997) these three general structures should be used in the correct sequence to give subjects or ideas textual significance.

Based on the explanation above, it is necessary for the writer to do a research entitled “Technological Pedagogical Content Knowledge in Teaching Analytical Exposition Text at 11th Grade at Kesuma Indah Padangsidempuan Senior High School”. Therefore, in this research, the writer will clearly aim to see the components of TPACK that are found in teaching and reveal its implementation during the teaching and learning activities.

II. REVIEW OF LITERATURE

1. Technological Pedagogical Content Knowledge (TPACK)

a) The Nature of TPACK

Shulman's (1986) concept of pedagogy and content knowledge - the two types of knowledge domains that teachers should integrate in teaching and learning process - was the foundation for the development of the TPACK framework. He

described that the interactions among teachers will influence the understanding of knowledge and technology to develop the potential classroom activities. Further, in 2006, Mishra and Koehler extended this theory by adding technology and knowledge as the third set that created a new framework named Technological Pedagogical Content Knowledge (TPACK). It is a framework that based on content, pedagogy, and technology.

b) The Components of TPACK

As cited from Mishra and Koehler (2006); Cox & Graham (2009); Chai et al. (2011); TPACK is categorized into various types of knowledge with three primary knowledges: content knowledge, pedagogical knowledge, and technological knowledge; and its mutually integrated knowledges: pedagogical content knowledge, technological content knowledge, and technological pedagogical knowledge; and the core of these knowledge is Technological Pedagogical Content Knowledge (TPACK). Therefore, the components of TPACK itself is formulated in table 1.1 as follows:

Table 1.1. Components in the TPACK framework

Component	Descriptions
CK	This component refers to the knowledge of specific topic or subject to be taught or learned.
PK	This component refers to the knowledge of classroom management, lesson plan development and implementation, student learning, and assessment are all indications of teaching methods, processes, and practices.

PCK	This component refers to the knowledge needed to design and implement effective content without using technologies.
TK	This component refers to the knowledge of emerging technology, such as the familiarity to operate systems and computer, as well as proficiency with standard software and web-based applications.
TCK	This component refers to the knowledge of how to use technology to presents the material or content without taking attention to pedagogy or teaching.
TPK	This component refers to the knowledge of how to use various technologies in teaching without regard for the subject matter.
TPACK	This component refers to the knowledge of enhancing the complex interplay of technological, pedagogical, and content knowledge.

c) The Implementation of TPACK Framework in ELT

English Language Teaching (ELT) enables teachers to create English lessons that allow students to experiment with and use information using technology, the technology used should aid in the student's interpretation of the learning process and make it easier for the student to think critically.

When designing English learning with the TPACK framework, consideration must be given to the integration of pedagogy, content, and technology from various perspectives. This can be considered from the start of learning activities, learning methods, expected student activities, assessments, and evaluations. The curriculum and curriculum development should

be considered, and the learning activities should improve students' knowledge, skills, learning attitudes, and experiences. The selection and application of technology in English language learning necessitates consideration of students' critical thinking, communication, collaborative, and creativity.

d) TPACK in Scientific Approach

The 2013 curriculum uses a scientific learning approach through 5M, namely observing, experimenting, associating, asking questions, and communicating. According to Hosnan (2014), the scientific approach's learning objectives are that students should be able to improve their thinking power, particularly in HOTS (high order thinking skills) skills/high-level thinking capabilities, and be able to use technology in learning activities. Therefore, TPACK belongs to Scientific Approach because one of the indicators of scientific approach implementation based on curriculum 2013 is the using of HOTS and TPACK in teaching and learning process.

e) The Use of You-tube in TPACK

YouTube's ease of use makes one believe that teachers are no longer necessary, however, teachers do still play a vital role when incorporating YouTube and videos in the classroom, because they are the ones who choose the appropriate videos, initiate and guide discussions to meet a certain aim (Clifton & Mann, 2011).

2. Writing

Writing is a continuous process of planning, organizing, reevaluating, and reorganizing, according to Boardman (2002). In order to be present in their writing, the writer must consider several aspects of writing. They were content, organization, vocabulary, grammar, and mechanic (Jacobs, et al. 1981). There are several genres in writing that should be comprehended by the students, such as recount, narrative, procedure, report, exposition, explanation, etc. From several genres in writing above, this research will be specifically discussed and focused on analytical exposition text as kind of text which will be taught at grade eleventh.

3. Teaching Writing in ELT

According to Brown (2007: 8), teaching is guiding and facilitating learning, enabling the learner to learn, and creating the conditions for learning; thus, teaching cannot be separated from learning. teaching writing is dependent on teachers' ability to teach effectively in order to improve their students' abilities. Teachers are widely believed to require an appropriate framework, such as the Technological Pedagogical Content Knowledge (TPACK) framework, in order to contribute to their students' writing accomplishment.

4. TPACK in English Teaching

Tai and Chuanh's (2012) study with in-service English teachers helped to answer this problem of prioritizing any "aspect" of

TPACK. In their study, they designed TPACK-in-action model and followed 5 steps: 1) Modeling, 2) analysis, 3) demonstration, 4) application and 5) reflection. This design becomes more meaningful when taken into consideration with their idea on why and how to use technology: “Teachers need to know why they do what they do” (p. 1). Accordingly, they stated that “in order to transfer their TPACK knowledge to their own classrooms, to authentic learning environments, using technology while learning to integrate it effectively is a must” (p.2); therefore, they provided modeling, demonstration and more importantly application in their workshop.

5. Analytical Exposition Text

An analytical exposition text is a particular kind of writing that aims to persuade readers that there is a problem, according to Sudarwati (2007:116). A text that simply gives one side of an argument is called an expository text. By outlining one side of an issue, an expository text seeks to convince its audience.

III. RESEARCH METHODOLOGY

In order to investigate at how TPACK is used to teach analytical exposition text and reveal its implementation, this study used descriptive qualitative research design. As stated by Creswell (2012), a qualitative study will examine and comprehend the meaning of individuals or groups who share a social or human concern. This study conducted in SMA S Kesuma Indah Padangsidimpuan. The subject of the research was English teacher at SMA S Kesuma Indah Padangsidimpuan. To obtain the data, the

researcher used observation and interview techniques. To ease the process of data collection, the researcher used field note, video recording, and interview sheet instruments.

IV. RESULTS AND DISCUSSION

1. The Components of Technological Pedagogical Content Knowledge (TPACK) in Teaching Analytical Exposition Text

The researcher observed three meetings concerning the analytical exposition text topic. The researcher used observation and interview techniques. After observing the teaching and learning process, the researcher analyze that the components of TPACK found in teaching analytical exposition at grade 11th as follows:

Table 4.1. The Components of TPACK in Teaching Analytical Exposition

Text

No	Meeting	Activity	TPACK Components	Description
1.	March 28th, 2022	Beginning	Technological Knowledge (TK)	The teacher arranged all of the equipment and content to be taught during the first meeting in the teacher's office, which included books, marker, pens, laptop, flash disk, and remote control for the projector screen.
		Pre-activity	Content Knowledge (CK)	The teacher did a cross check on student's attendance, asked the previous

				subject taught, and offered a brief piece of advises to the student.
		Whilst-activity	Technology Content Knowledge (TCK)	The teacher then showed a brief video about an extreme sport to the students as a brainstorming phase
		Main activity	Technological Pedagogical Knowledge (TPK)	The teacher utilized Power Point to discuss the material to make the explanation clearer.
			Content Knowledge (CK)	At the end of the lesson, the teacher reflected on the analytical exposition text.
2.	April 5th, 2022	Pre-activity	Content Knowledge (CK)	The teacher started the teaching-learning process by recalling students' memory of previous meeting's analytical text.
		Whilst-activity	Pedagogical Knowledge (PK)	The teacher ordered the students to form a group and rearrange a paragraph from the text "Playing Extreme Sports" as a group project.
			Technological Pedagogical Knowledge (TPK)	The teacher used YouTube to present a video explanation of how to use conjunctions in order to help the student to understand
			Technological	The teacher used her

			Knowledge (TK)	laptop, projector screen, mini sound system, and school Wi-Fi to show the related video from YouTube.
		Main Activity	Technological Content Knowledge (TCK)	The teacher opened Google after watching the video and looked for an online game that represent “Simple Present Tense”.
			Pedagogical Knowledge (PK)	To get the students more engaged, the teacher invited them to stand up and play a Snowball game.
3.	April 11th, 2022	Pre-activity	Content Knowledge (CK)	The teacher started the teaching-learning process by reviewing the students' memories from the previous meeting about an analytical exposition text.
		Whilst Activity & Main Activity	Pedagogical Knowledge (PK)	Teacher asked students to develop their ability by creating their own text and encouraged the students to collaborate with a classmate to revise their analytical exposition text, and they did peer-correction and feedback.
			Technological Pedagogical Knowledge (TPK)	Teacher assigned homework to the students, instructing

				them to correct their own analytical exposition text at home before posting it on their Instagram accounts.
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During the first meeting, the teacher presented the class a film. According to Harmer, using a movie or video while teaching can enhance the learning process by allowing pupils to see the language rather than just hear it (2001:282). Because the talks in the videos are straightforward, people can recall them. The teacher then used Power Point to display an analytical exposition text. According to Segundo and Salazar, Power Point, a component of Microsoft Office, enables instructors to produce presentations with a professional appearance in the classroom (2011). According to Ozaslan and Maden (2013), Power Point presentations assist to hold students' attention by making the topic more entertaining.

The teacher asked the students to form groups and complete group projects at the second meeting. Dornyei (2005) claims that group work among students can significantly improve motivation. Cooperative learning, according to Brown (1994), is important for learners because it allows them to share their knowledge. Vygotsky (1978) believes that each student has potential that can be realized through interaction with others. The teacher then showed a YouTube video explanation of Simple Past Tense and played an online game. In their study, Clifton and Mann (2011) discovered that using YouTube video to increase critical awareness, engagement, and deep learning in students. They stated that YouTube

can be utilized to engage students, motivate creative teaching strategies, and illustrate theoretical material.

The third meeting was when the teacher requested the students to write their own recount texts, which they then presented to their peers for critique and correction. According to Witbeck (1976), peer editing helps students get better at writing by making it easier for them to spot mistakes. He stated that peer correction was significantly more successful than teacher correction. The student was then instructed to post their project on Instagram by the teacher.

The researcher found that the teacher used a scientific approach in the last meeting of the lesson. According to Hosnan (2014), the scientific method calls for students to learn through a cognitive process, construct knowledge, and do knowledge searches while they are learning. This strategy works well in English, especially while writing (Hosnan, 2014). As the curriculum 2013 requirement that teachers must be able to design lessons or develop lesson plans (RPP) that characterize the new learning paradigm as described above by integrating the principles of Technological Pedagogical and Content Knowledge (TPACK), the researcher found that the teacher in this school were already develop the lesson plan that met the requirements of curriculum 2013 to the students.

2. The Implementation of Technological Pedagogical Content Knowledge (TPACK) in Teaching Analytical Exposition Text

Mishra and Koehler suggest that TPACK should guide curriculum development and teacher education. To apply TPACK to the classrooms, Judith B. Harris and Mark J. Hofer worked with colleagues from universities around the

United States to create Activity Types. The implementation of TPACK as suggested by Harris and Hofer (2009), was conducted through five basic process, such as (1) determining the goals of the learning, (2) selecting the most appropriate methods as well as strategies that can be used to enhance students' learning experience, (3) selecting and sequencing what kind of activities that students will engage in during the learning, (4) determining how students can be assessed based on the learning goals and their achievement, and (5) selecting what kind of tools and resources will be used to help students achieve the learning goals.

As what happens in the field, the researcher found that in implementing the TPACK in the classroom, the teacher have been implied several process or stages as proposed by Harris and Hofer (2009). First, the teacher determined the goals of the learning. It derived from the learning objectives in the lesson plan of eleventh grade students KD 3.4 and 4.4 that the objectives of learning analytical exposition text are students will be able to analyze the elements of exposition in a sentence, understand the structures and language features of analytical exposition text, and make an analytical exposition about an issue.

Second, the teacher selected the most appropriate methods as well as strategies that can be used to enhance students' learning experience. Through this process, the teacher utilize the interactive method which is considered beneficial for both the learners and the teachers especially in writing exercises. Active learning strategy is chosen to enhance students' learning experience because participation makes the teacher understand which part of the lecture has gotten more attention. Such smart tactics or quick questions in between lectures make the

student learn better and faster.

Third, the teacher selected and sequenced what kind of activities that students will engage in during the learning. Through this process, the teacher implied several activities such as brainstorming phase before starting the new material, discussion and group project, and reflection at the end of the learning activities to recalling the students' memory of the subject matter that have been taught.

Fourth, the teacher determined how students can be assessed based on the learning goals and their achievement. Through this process, the teacher implied peer-correction and feedback on students to see how they could elaborate and revise their own project.

Fifth, the teacher selected what kind of tools and resources will be used to help students achieve the learning goals. Through this process, the teacher used digital source, such as power point presentation to help her in present the materials, and online game to enhance students' attention, besides the tool that are used by the teacher were laptop, projector screen, mini sound, system, and school Wi-Fi.

V. CONCLUSION AND SUGGESTIONS

A. Conclusions

The following conclusions were reached regarding the components of TPACK and its implementation in teaching analytical exposition writing:

- 1) The first discovery revealed that the components of TPACK, such as content knowledge (CK), pedagogical knowledge (PK), pedagogical content knowledge (PCK), technological knowledge (TK),

technological content knowledge (TCK), technological pedagogical knowledge (TPK), and technological pedagogical content knowledge (TPACK) were found in teaching analytical exposition text.

- 2) The second discovery revealed that the implementation of TPACK as proposed by Harris and Hofer (2009), was conducted in the classroom through five basic process, such as determining the goals of the learning, choosing the most appropriate methods as well as strategies that can be used to enhance students' learning experience, selecting and sequencing what kind of activities that students will engage in during the learning, determining how students can be assessed based on the learning goals and their achievement, and selecting what kind of tools and resources will be used to help students achieve the learning goals.

B. Suggestions

This section contains recommendations for English teachers and the next researchers who want to conduct TPACK research.

- 1) For English Teachers

Teachers as the one that have responsibility in providing the qualified teaching process should be able to implement TPACK in their classroom. Teachers should understand the technology that will be used comprehensively and select appropriate technological content for their students at various levels. Furthermore, the researcher advised the teacher to use TPACK throughout the activities (pre and post).

- 2) For Students

The researcher suggested that the students as the one who will receive the advantages of the implementation of TPACK should be able to use the technology to be able to adapt the needs of educational technology.

3) For Future Researcher

The researcher advised the next researcher who wanted to investigate the same topic to conduct the research from different kind of numerous technological systems that used in TPACK, other materials, and different levels of students.

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