



TPACK Implementation on Energy Topic: Reading Comprehension and Feasibility of Teaching Material

Zulkarnaen *), Shelly Efwinda, Nurul Fitriyah Sulaeman
Mulawarman University

Abstract:

This research is the "Development" stage of the type of R&D research with the ADDIE Model (Analyze, Design, Development, Implementation, and Evaluate). The teaching material developed in this study is a Handout entitled "TPACK Implementation on Energy Topic" to improve the teaching skills of preservice teachers. This study describes the reading comprehension and feasibility of teaching material. The research instrument was a reading comprehension test sheet and a feasibility assessment sheet. One hundred eighty-four students filled in the comprehension test at one of the universities in Indonesia from the Department of Physics, Chemistry, and Biology Education. A feasibility Assessment reviewed by experts was conducted. The results showed that 1) The overall reading comprehension of teaching material was in the high level of an understanding category (independent category), 2) The Feasibility Assessment on the graphic and the language feasibility aspect were both in the very feasible category, 3) The Feasibility Assessment on the content feasibility aspect, presentation feasibility aspect, and contextual assessment aspect were all in the very feasible category. Based on these results, it can be concluded that teaching materials can be used in further research to be implemented and evaluated to improve the teaching skills of preservice teachers.

Keywords:

TPACK, energy, reading comprehension, feasibility

(*) Corresponding Author:

zulkarnaen@fkip.unmul.ac.id

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INTRODUCTION

In education, teachers play an essential role in the management and continuity of learning. One of the reasons for student's inability to understand science concepts is the difficulties experienced by some science teachers in teaching (Terra et al., 2020). From the results of several researchers (Schibechi et al., 2004), 40% - 90% of student achievement is influenced by teachers' ability to carry out learning in class. Teacher education, teacher abilities, and teacher experience are closely related to the successes obtained by students.

Developments in science and technology increase the education system's challenges (Rivai et al., 2019). The rapid growth of technology brings changing demands for teacher competence, one of which is integrating ICT into teaching (Chai et al., 2020). Preservice science teachers need to have the ability to use ICT in teaching, especially during this Covid 19 pandemic (Susanti & Mukminin, 2022). Teacher training to integrate technology effectively in classrooms is indispensable in today's digital society (Baier & Kunter, 2020). The effective use of educational technology is an issue that has become the focus of educators in recent years (Aktaş & Özmen, 2020). It is not only students who are expected to have the ability to be able to integrate technology into learning, but these skills

also need to be possessed by teachers (Putri et al., 2020). In the current era of the 4th Industrial Revolution, in carrying out physics learning, teachers or preservice teachers are required to master physics content and integrate pedagogical skills, content, and technology into learning. This corresponds to the TPACK framework. So, it can be said one of the indicators of teacher quality is having excellent teaching skills within the TPACK framework.

TPACK is an urgent, meaningful, and exciting topic to be researched in today's new era of learning. TPACK is a competency teachers must face in the 21st-century education era (Putri et al., 2020). The TPACK framework's basis is to understand that teaching is a complex activity that rests on many types of knowledge. (Mishra & Koehler, 2006). Many recent studies have raised issues related to TPACK—starting with research on teachers' readiness to use technology in learning, such as research by Jwaifell et al. (2018), which aims to investigate teacher readiness to teach within the TPACK framework. A study by Simaremare et al. (2020) determines the components in TPACK as specific competencies for 21st-century teacher competencies. The research results show that teachers in North Sumatra accept and are ready for 21st-century learning. Research on factors affecting preservice teachers' readiness to use technology, for example, a study by Tiba & Condy (2021). The research results show that these influencing factors include preservice teachers' experience in technology use training activities, supporting technology facilities, and support from supervising teachers for modeling technology use. Research by Cahyani et al. (2021) which shows that TPACK female and male teachers in science instruction for students with special needs are in the very good and good categories.

TPACK is essential to teach in teacher development programs (Terra et al., 2020; Castéra et al., 2020). Therefore, teacher preparation programs must focus on mastering and integrating subject matter and pedagogical and technological knowledge (Nuangchalerm, 2020). Preservice teachers should be taught how to use technology to provide their knowledge and skills in professional practice (Tiba & Condy, 2021) to create effective learning and teach in the new era (Terra et al., 2020). However, studies show that preservice teachers are not adequately prepared to teach using technology (Mpungose, 2020; Tiba & Condy, 2021). Research on the TPACK profile of preservice teachers also shows that the TPACK of preservice teachers still needs to be improved. However, the knowledge of technology, pedagogy, and content possessed by teacher students is inadequate to face the challenges of the 4th industrial revolution due to insufficient training received from institutions (Mpungose, 2020).

Efforts are needed to develop the TPACK of preservice teachers so that they have quality teaching skills. This study aimed to create teaching materials related to TPACK entitled "TPACK Implementation on Energy Topic." The choice of energy topic is one of the essential topics in the sustainable development goals (SDGs) (Rieckmann, 2017). Several studies on teaching materials related to the TPACK framework have shown benefits for users. For example, they relate to its effect on the pedagogical competence of science teachers (Wilujeng et al., 2020) and improving problem-solving skills (Purwaningsih et al., 2020). However, there has been no research on developing teaching materials related to TPACK, which seeks to improve the teaching quality of preservice teachers. Therefore, researchers are interested in developing teaching materials associated with TPACK that can be used to improve the teaching skills of preservice teachers.

Through interviews with several students in one of Indonesia's universities, it was also known that students did not know about the TPACK framework. Research conducted by Efwinda & Mannan (2021) shows that the TPACK ability of preservice physics teachers in one of the universities in Indonesia is not yet in the good category. Their ignorance of this framework is suspected of affecting their teaching skills using technology, where this skill is one of the competencies needed by teachers today (Chai et al., 2020). One of the

first steps for students to learn more about TPACK is using teaching materials that discuss TPACK and how to implement it. Teaching skills within the TPACK framework require a first understanding of TPACK, which can be facilitated using appropriate teaching materials. Teaching materials have been proven to provide various benefits for their users, for example, research by Purwaningsih et al. (2020) and research by Sholiah et al. (2020). From the previous studies mentioned earlier, no one has focused on improving preservice teachers' teaching skills within the TPACK framework through the development of teaching materials. Even though students as preservice teachers are not yet real teachers, they need to be introduced to and learn to implement the TPACK framework as early as possible to teach well, both in practical teaching lectures.

The Teaching Practice Course at the Faculty of Teacher Training and Education in one of Indonesia's universities is known as the Field Orientation (Indonesian: Pengenalan Lapangan Persekolahan II, abbreviated PLP). The scope of activities in the Teaching Practice Course in the 2020/2021 academic year includes students having direct experience with the guidance of teachers at schools in planning, preparing, implementing, and evaluating learning activities through real or online classes (Team of Faculty of Teacher Training and Education Mulawarman University KKN-PLP, 2020).

Based on the background stated above, a teaching material was developed as a Handout, "TPACK Implementation on Energy Topic," which can be used in teaching practice courses to improve the teaching skills of preservice physics teachers. This handout contains a summary of the theory about the meaning and importance of TPACK to be understood by teachers and preservice teachers, TPACK components, and guides in making learning lesson plans based on the TPACK framework. It is equipped with concept analysis, concept maps, Content Representations, examples of the learning lesson plan, and worksheets for students on the Energy Topic. The selection of the Energy Topic is to be used as an example in this handout because it is one of the essential topics to discuss related to Education for Sustainable Development (ESD). This handout is expected to add insight into TPACK-based teaching skills in the Energy topic and other physics topics. It can be a companion learning resource in implementing the Teaching Practice Course for students to compile and prepare for implementation, learn well, and keep up with the times, especially technological developments.

Before the developed teaching materials can be used, the teaching materials need to be tested first. As a first step, testing includes testing the reading comprehension level and the feasibility of teaching materials based on expert judgment. Therefore, this study aims to describe the reading comprehension and feasibility of teaching material that were developed to improve preservice teachers' teaching skills by answering the following questions:

1. What is the category of reading comprehension level of the teaching material "TPACK Implementation on Energy Topic"?
2. What is the teaching material's feasibility category on the graphic and language feasibility aspect?
3. What is the teaching material's feasibility category on the content feasibility, presentation feasibility, and contextual assessment aspects?

METHODS

Types, Location, and Time of Research

This research is the "Development" stage of the type of R&D research with the ADDIE Model (Analyze, Design, Development, Implementation, and Evaluate)

merupakan model yang paling umum digunakan dalam pengembangan suatu produk (Aldoobie, 2015). The other stages will be continued in the following research. The teaching material developed in this study is a Handout entitled "TPACK Implementation on Energy Topic." This study describes reading comprehension and the feasibility of teaching materials "TPACK Implementation on Energy Topic," developed for use in teaching practice courses at one of Indonesia's universities to improve preservice teachers' teaching skills. This research was conducted from January to November 2020.

Participants

The participants in this study were 184 prospective teachers at a university in Indonesia from the Biology, Chemistry, and Physics Education Study Program. Participant details are presented in Table 1.

Table 1. Detail of Participants

Study Program	Gender	Number of participants			
		2 nd Semester	4 th Semester	6 th semester	
Biology Education	Male	4	0	4	0
	Female	36	13	13	10
Chemistry Education	Male	11	4	4	3
	Female	59	11	44	4
Physics Education	Male	13	3	8	2
	Female	61	16	30	15
Total		184	47	103	34

Research Instruments

Research instruments in the form of:

1. Reading comprehension test sheet to determine the level of reading comprehension in teaching materials. The reading comprehension test is carried out to test whether the reading in the developed teaching materials has been presented well so that the reader can determine the main idea of the reading correctly and understand the reading easily. The comprehension test sheets were distributed via Google form and filled in by 184 prospective teachers from Physics, Chemistry, and Biology Education at a university in Indonesia.
2. Feasibility assessment sheet to determine the feasibility category of teaching materials "TPACK Implementation on Energy Topic" for use in teaching practice courses covering aspects of graphic feasibility, feasibility in terms of the language used, the feasibility of content, feasibility of contextual aspects, and feasibility of material presentation. The teaching materials' feasibility test was assessed by five technology experts in learning and six material experts.

Data Analysis Technique

Reading Comprehension

An example of a reading comprehension test is presented in Figure 1.

Bacalah teks berikut untuk menjawab soal No.1-3!

Saat ini, perkembangan di bidang teknologi terus mengalami kemajuan yang pesat dan membawa perubahan di berbagai bidang pekerjaan manusia. Namun, pada kenyataannya perkembangan teknologi di bidang pendidikan, belum banyak membawa perubahan pada penyelenggaraan proses pendidikan. Masih banyak guru yang belum memanfaatkan perkembangan teknologi ke dalam pengajaran mereka. Padahal, jika dimanfaatkan dengan baik, pemanfaatan perkembangan teknologi ini dapat menciptakan pembelajaran yang lebih efektif dan efisien.

1. Ide pokok paragraf di atas adalah ... *

Jawaban Anda

2. Bagaimana keterpahaman paragraf tersebut? *

Mudah

Sulit

Figure 1. An example of a reading comprehension test

Reading Comprehension of Teaching materials is analyzed in the following steps:

1. Calculating the answers to the main idea, understanding questionnaires, and multiple-choice questions that were answered correctly by students, each consisting of 10 questions.
2. The assessment is based on the rubric presented in Table 2.

Table 2. Rubric for Assessment of Teaching Material' Reading Comprehension Test

Reading Comprehension Test	Assessment	
	Answer	Score
Writing the main idea	True	1
	False	0
Level of Understanding	Easy	1
	Difficult	0
Multiple Choice	True	1
	False	0

3. Divide the total score obtained by the received score, then multiply by 100%. Then, categorization was carried out based on the category of reading comprehension in Table 3.

Table 3. Criteria for Reading Comprehension

The Percentage of Understanding	The Level of Reading Comprehension
$60\% < x \leq 100\%$	High (Independent Category)
$40\% < x \leq 60\%$	Moderate (Instructional Category)
$x \leq 40\%$	Low (Difficult Category)

Feasibility of Teaching Materials

The feasibility of teaching materials is seen in the questionnaire responses from various experts. The questionnaire developed was based on the National Education Standards Agency's assessment criteria to assess the feasibility of teaching materials (BSNP, 2014). Teaching materials that experts have evaluated are classified in the following criteria. Validation to evaluate the teaching material's feasibility, being carried out by experts, consisting of lecturers and teachers of Physics subjects. The assessment is

carried out in the form of giving a qualitative score on each item to be assessed, and the score is divided into four assessment criteria, namely: 1) Very Good with a score of 4; 2) Good with a score of 3; 3) Less with a score of 2; 4) Very Less with a score of 1. Furthermore, the score is calculated by dividing the total score obtained by the maximum score, then multiplying by 100%. The calculation results in a percentage are then grouped based on the score interpretation criteria seen in Table 4.

Table 4. Percentage Range and Qualitative Criteria for Eligibility of Teaching Materials

The Range of Percentage	Criteria
$75\% < x \leq 100\%$	Very Feasible
$50\% < x \leq 75\%$	Feasible
$25\% < x \leq 50\%$	Less Feasible
$x \leq 25\%$	Not Feasible

(Sudjana, 2005)

Research Procedure

The flow of procedures (adapted from Hess & Greer, 2016) carried out as a research process to the development stage can be seen in Figure 2:

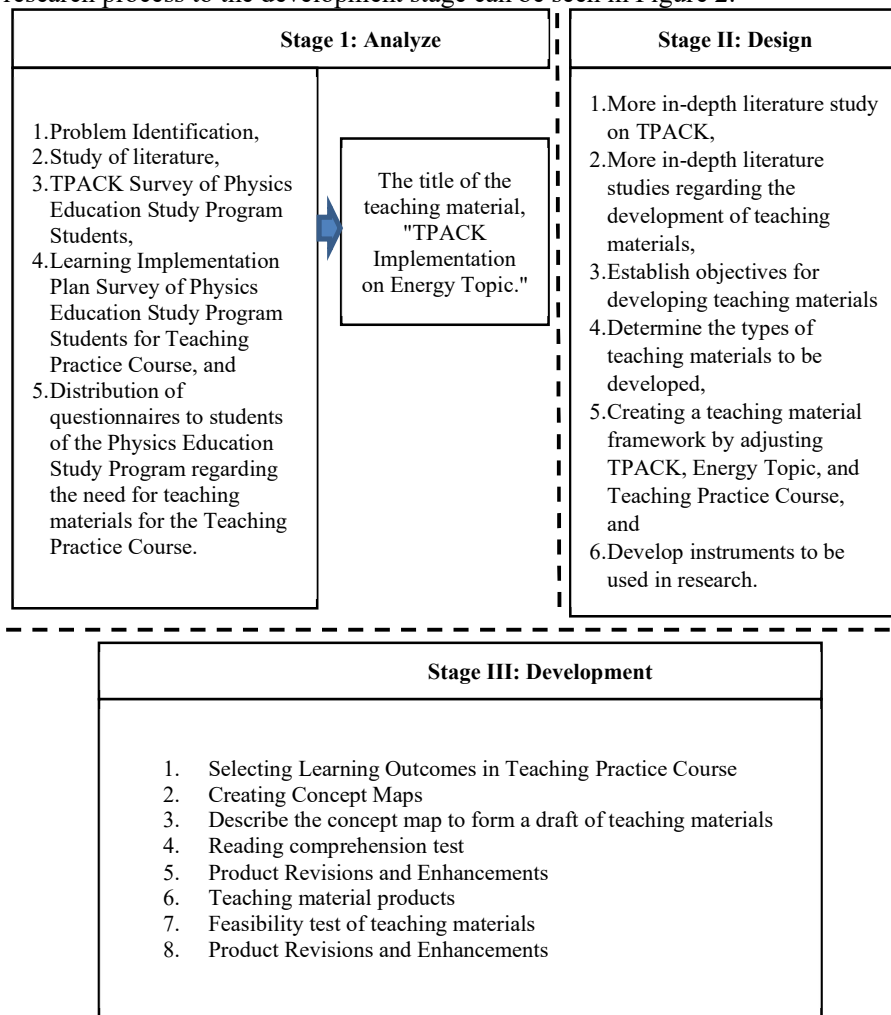


Figure 2. Research Procedure

This teaching material was developed with learning outcomes including students being able to:

1. Identify the components of TPACK,
2. Describe each TPACK component,
3. Describe the TPACK
4. Provide examples of each TPACK component,
5. Develop a TPACK-based learning implementation plan

The concept map contains an outline of the subject matter contained in teaching materials, including:

1. Part 1. Introduction
 - a. Introduction to the Teaching Practice Course Course
 - b. Background for the preparation of teaching materials
 - c. The purpose of preparing teaching materials
2. Part 2. TPACK
 - a. General Definition and Explanation
 - b. TPACK components
 - c. TPACK-based Lesson Plan preparation guide
3. Bibliography
4. Appendix
 - a. Basic competencies descriptions related to High School Level Energy Topics
 - b. Energy Resources Concept Analysis
 - c. Energy Resources Concept Map
 - d. Example of Content Representation Answers on Energy Topics
 - e. Examples of Lesson Plans related to Energy Topics
 - f. Examples of Worksheets related to Energy Topics

RESULTS & DISCUSSION

Results

Reading Comprehension

The teaching material draft that has been developed consists of 90 pages. The teaching material draft is then tested to determine the text's level of understanding or reading of the teaching material. The comprehension test is carried out by providing ten paragraphs representing the entire contents of the teaching material. Paragraph 1 regarding technological developments in various fields of human work. Paragraph 2 about the importance of teachers having the ability to integrate technology into learning. Paragraph 3 regarding the introduction of the Pedagogical Content Knowledge (PCK) framework. Paragraph 4 on the history of the opening of the PCK framework. Paragraph 5 regarding the importance of TPACK for teachers to have.

Paragraph 6 concerning the Definition and Scope of Content Knowledge (CK). Paragraph 7 concerning the Definition and Scope of Pedagogical Knowledge (PK). Paragraph 8 concerning the Definition and Scope of PCK. Paragraph 9 concerning the Definition and Scope of Technological Knowledge (TK). Paragraph 10 concerning the Definition and Scope of Technological and Pedagogical Knowledge (TPK). The comprehension test for each section was measured by three types of questions, namely (1) writing the main idea of the paragraph, (2) level of understanding, and (3) multiple-choice questions related to the content of the section. A paragraph is said to be easy if students can determine the main idea of paragraphs correctly, students find it easy to understand

paragraphs, and students correctly answer multiple-choice questions. The results of the understanding test analysis are presented in Table 5.

Table 5. Acquisition of Comprehension Level Score of Teaching Material Texts

Paragraph	The Average Percentage			Overall	The Level of Reading Comprehension
	Biology Education	Chemistry Education	Physics Education		
1 st Paragraph	79	82	80	80	High (Independent Category)
2 nd Paragraph	73	73	75	73	High (Independent Category)
3 rd Paragraph	69	68	69	69	High (Independent Category)
4 th Paragraph	62	65	62	63	High (Independent Category)
5 th Paragraph	80	81	81	80	High (Independent Category)
6 th Paragraph	86	86	87	86	High (Independent Category)
7 th Paragraph	65	66	63	64	High (Independent Category)
8 th Paragraph	80	79	80	80	High (Independent Category)
9 th Paragraph	77	76	76	76	High (Independent Category)
10 th Paragraph	73	74	74	74	High (Independent Category)
The Overall Average Percentage	74	75	75	75	High (Independent Category)

Feasibility of Teaching Materials

The teaching materials developed are then tested for their feasibility to be used as teaching materials in the Teaching Practice Course. The feasibility test has been carried out twice. The feasibility test of teaching materials includes the feasibility of graphics, feasibility in terms of the language used, the feasibility of content, the feasibility of contextual aspects, and the feasibility of presenting the material. Technology experts in learning assess the aspects of graphics and aspects of language feasibility. Material experts evaluated the content's feasibility, the aspects of the contextual aspects, and the feasibility of presenting the material.

Technological Expert Assessment in Learning

The results of the feasibility assessment of teaching materials from technology experts in learning are presented in Table 6.

Table 6. Results of Feasibility Assessment of Technologists

Aspects		Percentage	Category
Graphics Aspect	Size	92,5%	Very Feasible
	Cover Design	84,3%	Very Feasible
	Teaching Material Design	87,5%	Very Feasible
The Overall Average Percentage		83,9%	Very Feasible
Use of Language	Straightforward	88,3%	Very Feasible
	Communicative	90%	Very Feasible
	Dialogue and Interactive	77,5%	Very Feasible
	Suitability with Student	90%	Very Feasible
	Development		
	Conformity with Language Rules	90%	Very Feasible
	Use of Terms and Symbols or Icons	87,5%	Very Feasible
The Overall Average Percentage		84,4%	Very Feasible

Material Expert Assessment

The results of the feasibility assessment of teaching materials from material experts are presented in Table 7.

Table 7. Result of Feasibility Assessment from Material Experts

Aspects		Percentage	Category
Content	Suitability of Material	85,4%	Very Feasible
Eligibility Aspect	Accuracy of Material	89,3%	Very Feasible
	Up-to-date	88,9%	Very Feasible
	Stimulates curiosity	84,7%	Very Feasible
The Overall Average Percentage		87,7%	Very Feasible
Presentation Feasibility Aspects	Presentation Technique	93,8%	Very Feasible
	Support for the presentation	91,7%	Very Feasible
	Presentation of Learning	81,3%	Very Feasible
The Overall Average Percentage		90,2%	Very Feasible
Contextual Assessment Aspects	Nature of Contextual	95,8%	Very Feasible
	Contextual Component	91,7%	Very Feasible
The Overall Average Percentage		93%	Very Feasible

Discussion*Reading Comprehension*

Based on Table 4. All the paragraphs tested on the reading comprehension test of teaching materials are at a high level of comprehension or are independent categories. This shows that the "TPACK Implementation on Energy Topic" can be used independently by the student as a preservice teacher with a high understanding level. The paragraph with the

highest level of readability presented in the reading comprehension test is in paragraph 6 regarding the definition and scope of CK. The paragraph with the lowest readability level presented in the reading comprehension test is in paragraph 4 about the history of the introduction of PCK.

Feasibility of Teaching Materials

Assessment on the Aspects of Graphics and Aspects of Language Feasibility "Handout Implementation of TPACK on Energy Materials" was assessed by five technology experts in learning consisting of 4 lecturers and one teacher. The analysis results show that the teaching materials are feasible, as shown in Table 5. Some suggestions given by experts on these aspects to be improved and added to the draft teaching materials include the need for consistency in the layout of one paragraph with another, clarifying the separation between sentences or paragraphs, and adjusting the placement of titles, subtitles, and illustrations. It is necessary to create interactive communication. Teaching materials must also add sentences that motivate students to each TPACK indicator. For example, in the TPK component section in teaching materials, it is recommended to invite and encourage students to 1) learn several applications other than those recommended in teaching materials (technological integration that can be integrated into learning and explained in teaching materials, for example, the use of Hot Potatoes, Moodle, Quizizz, Schoology, Google Classroom, Edmodo, Kahoot!, Zoom, Movavi Screen Recorder applications), 2) try to develop, analyze what applications are often used in schools (for example PheT application), 3) analyze the advantages and disadvantages of these applications so that it will direct students to decide what application they will use later.

From these suggestions, then the teaching material draft was revised by 1) improving paragraph layout, 2) making the consistent separation between sentences, and 3) adding additional information to TPACK components, for example, further details on the TPK component, as well as the addition of "Columns Creative "in teaching materials that aim to make teaching materials more communicative and can invite or motivate students to identify, learn, and try some applications outside the handout. Improvements related to language aspects have been carried out. These improvements are carried out by taking into account the suitability of suggestions from experts as judgment and statements by Agusta (2018), which states that consistency of writing in sentences and their effective presentation are things that need to be done so that the information conveyed can be read pleasantly by readers.

Material Expert Assessment

The content, the contextual aspect, and the feasibility of presenting the material "TPACK Implementation on Energy Topic" were assessed by six experts: four lecturers and two teachers. Experts have the same opinion regarding suggestions for improvements for teaching materials, including 1) adding recommendations for learning strategies that support the use of TPACK, especially on the Energy Topic, and 2) adding examples of Learning Implementation Plans related to the Energy Topic.

Additional recommendations for learning strategies are inserted in the Pedagogical Knowledge (PK) component section and some more sections. It is illustrated through examples of filling in Content Representation (CoRe) (adapted from Loughran et al., 2004), lesson plans, and student worksheets for each meeting related to the Energy Topic that has been presented in teaching materials.

After the teaching materials were revised, considering the suggestions from experts, a teaching material product was produced, consisting of a cover, an introduction, a table of contents, instructions for teaching materials, a part I introduction, part II TPACK, a bibliography, and an appendix. The first part, the introduction, explains the Introduction

to Field Orientation Course (Teaching Practice Course), the background, and the purpose of preparing teaching materials. Part II contains 1) a general explanation of TPACK followed by 2) explanations and examples of each TPACK component, namely CK, PK, PCK, TK, TCK, TPK, and TPACK, and 3) guidelines for preparing TPACK-based learning implementation plans. The appendix section of teaching materials presents concept analysis tables, concept maps, Content Representation (CoRe), Lesson Plans, and student worksheets, all related to the Energy topic. The teaching materials developed are also integrated with technology, such as barcodes to links to other supporting learning resources and learning video recordings that are integrated into teaching materials, as an example of implementing the TPK component. An example display is presented in the following Figure 3:



Gambar 2.18 Tampilan Video Presentasi yang direkam menggunakan *Movavi Screen Recorder*
Sumber Gambar: Dokumentasi Pribadi

Beberapa peralatan (tools) yang ada pada aplikasi ini diantaranya merekam layar komputer dan mengeditnya (*screenshot and edit them*), merekam video *online* (*capture live stream*), merekam dalam moda layar penuh (*full screen*) atau layar sebagian (*selected area*), merekam animasi *Flash* dari sebuah *website*, atau merekam telepon video (*video call*).

j. *Platform Youtube* yang dikombinasikan dengan teknologi lain

Tidak dapat dipungkiri, bahwa *Youtube* saat ini merupakan salah satu *platform* paling populer. Pengguna internet mengunjungi *Youtube* bukan hanya untuk mendapatkan hiburan, tetapi juga untuk belajar atau mendapatkan informasi. Walaupun *youtube* dan beberapa aplikasi lainnya tidak dibuat khusus sebagai teknologi dalam pembelajaran, namun kesempatan bagi guru atau calon guru untuk memanfaatkan



Gambar 2.19 Barcode menuju Link Youtube

Figure 3. Examples of TPK implementation integration in teaching materials

The development of teaching materials is needed because teaching materials can be used to help prepare and implement the learning process properly (Usmaldi & Amini, 2019). In this era of the 4th Industrial Revolution, the ability to use the internet and technology as a learning source is necessary (Wijayanti & Ernawati, 2020). Therefore, students' understanding as preservice teachers of the TPACK framework needs to be introduced and trained to be skilled in teaching by integrating technology into learning. The analysis of the data on the feasibility of teaching materials in Table 5 and Table 6 shows that the teaching material: "TPACK Implementation on Energy Topic" is very feasible for use in the Teaching Practice course. In further research, it is hoped that this teaching material can improve the teaching skills of teachers and preservice science teachers within the TPACK framework.

CONCLUSION

Based on data analysis obtained during the research, it can be concluded that the teaching material "TPACK Implementation on Energy Topic" is very suitable to be used to improve the teaching skills of preservice teachers, with the following indicators: 1) The Reading Comprehension Test obtained an overall average percentage of 75.0% in the high level of an understanding category (independent category), 2) The Final Result of the Feasibility Assessment by technology experts in the graphic aspect obtains an average percentage of 83.9% and the language feasibility aspect of 84.4%, both of which are in the very feasible category, dan 3) The final result of the Feasibility Assessment by material experts on the feasibility aspect of the content is 87.7%, the aspect of presentation feasibility is 90.2%, and the aspect of contextual assessment is 93%. All aspects are in the very feasible category.

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