

Developing Local Content Reading Material based on TPACK Framework for Seventh Grade Students

Maulidia Mutiara Masayu

University of Palangka Raya

mmmasayu@gmail.com

Misrita

University of Palangka Raya

misrita@edu.upr.ac.id

Elanneri Karani

University of Palangka Raya

elanneri@edu.upr.ac.id

Abstract

This research aims to develop a material for seventh graders, with the topics of Local Content based on TPACK framework. The local content specifically used to fulfil the requirement of mover school curriculum to accommodate the students' background in the learning process. This research uses the model of ADDIE in R&D manner. From the first step of analysis, the data gathered from observation, document analysis and initial interview with the teacher as the need analysis. Design as the second process, is a phase where the data interpretation from the gathered data met the TPACK framework, to combine the Technological knowledge, Content knowledge, and Pedagogical knowledge. A qualitative analysis of data triangulation later be showcased to see the relations of TPACK and local content. After finishing the design, a development of suitable material based on the data triangulation will turned into instruction, procedure, and material by the researcher. Prior to the deployment of the end product of the material, there is a process of validation to meet the feasibility and ability of both students and teacher to use the new material. To conclude the process, both implementation and evaluation consecutively done by the researcher to answer the need analysis as the findings of the end product. So, the new material can be accepted by the teacher and students of seventh grade at SMP to improve their learning process.

Keywords: Local content, TPACK, ADDIE, Mover School

INTRODUCTION

The curriculum of *Sekolah Penggerak* or Mover School Operational Curriculum is one of the newest curriculums applied in Indonesia. According to Ministry of Education Republic of Indonesia, *Sekolah Penggerak* is a catalyst to fulfil the vision of education in Indonesia (Ministry of Education, 2021). Unlike the previous curriculums, this curriculum focuses on teacher's independence, creativity and initiative to conduct the learning process in the class accustomed to students' potentials, thus the students holistically improve on the learning outcome with outstanding teachers and principals to lead the curriculum (Afrina et al, 2022). The curriculum has not applied in all schools in Indonesia, yet gradually implemented by some schools whom teachers have completed the *Guru Penggerak* or Mover Teacher workshops and obtain the certificate.

The Mover school curriculum aims to:

1. Improve competence and character in accordance with the profile of Pancasila students;
2. Ensure equal distribution of education quality through capacity building programs for principals who are able to lead educational units in achieving quality learning;
3. Build a stronger education ecosystem focused on improving quality; and
4. Create a collaborative climate for stakeholders in the field of education both at the school, local government, and government scope.

As the curriculum started to be implemented since academic year 2020-2021, there are several researches which point out the evaluation since then. One of the previous researches, Muji et al made an evaluation to teacher and student's perspective of Mover school curriculum, the results as following:

- The teachers and the students are more comfortable, as the materials and the students' grading are made based on the students' need, including the learning styles, potentials and diverse interests of students.
- The learning process no more aims to shape the students in certain goals, yet respects the students' favors.
- The curriculum also formulated by the schools directly, so it can be adjusted to the schools' contextual real-life need, for example there are different needs from school at urban area and the one at rural area. The curriculum is able to accommodate it. (Muji et al, 2021)

Thus, there is a need to include the local content to improve students' understanding and familiarity based on the contextual need by their daily activities or cultural background in the learning material. Local content in material, according to Utami et al (2014) is a process of involving local culture in materials which effectively help students to gain more understanding toward the content, since it closes to their daily life. Including local content is beneficial, not only for improving students' reading comprehension, but also for enriching their local content knowledge (Monica & Vianty, 2019).

In particular, this research take the local culture of Central Kalimantan as the example of the local content developed in the material. Based on the researcher's findings, the local culture not really covered by the existed materials. The materials, such as textbook and worksheet or LKS mostly printed by big publishers in Java, which influence the content to be more Java-centric. For students in Central Kalimantan, who mostly come from Dayakese (Maanyan, Ngaju, Ot Danum, Katingan, etc.), and some others from Banjarese, Javanese, Bugis, Batakese etc., the materials did not meet their cultural background. As the result, students not really engaged to the material. There is a gap of their background knowledge and the learning material.

RESEARCH DESIGN

The research was conducted in Research and Development method. Research and Development method is the research method that is used to produce certain product and validate the product (Sugiyono, 2010). The product of this research in the form of material of teaching reading. ADDIE model is a suitable model to validate the product, As the name, this model consists of five stages: (A)nalysis, (D)esign, (D)evelopment, (I)mplementation, and (E)valuation (Branch, 2009).

The data gathered from observation, document analysis (textbook, syllabus and curriculum), and initial interview with the teacher as the need analysis in the first step of analysis. Based on the need analysis, the researcher designs the needed material, along with the framework of TPACK, to include the local content in the material. The data triangulation is including in this phase, to combine and compare the existing material and the need analysis, to set the suitable needed material. After the researcher set the design, the development phase continues to create the instruction, procedure, and material, to be later performed by the teacher in the implementation phase. Prior to the implementation phase, validation by experts should be done before released the end product of the material. The implementation and evaluation phases should consecutively execute to see the end result of the material.

FINDINGS

Analysis had to do first because it is important to see the actual need of students, aimed goals in curriculum, available facilities, and suitable method of learning. Actual need of students can be known from observation and survey or interview to students, to know their initial knowledge or vocabularies they know beforehand. Aimed goals in curriculum is important to meet the students' goals and basic skill the students' need to acquire. To choose the suitable method of learning, teachers have to know the available facilities that can be reach by the students to follow the learning process.

All the answers will be turned into interview transcripts and document analysis.

1. Document Analysis

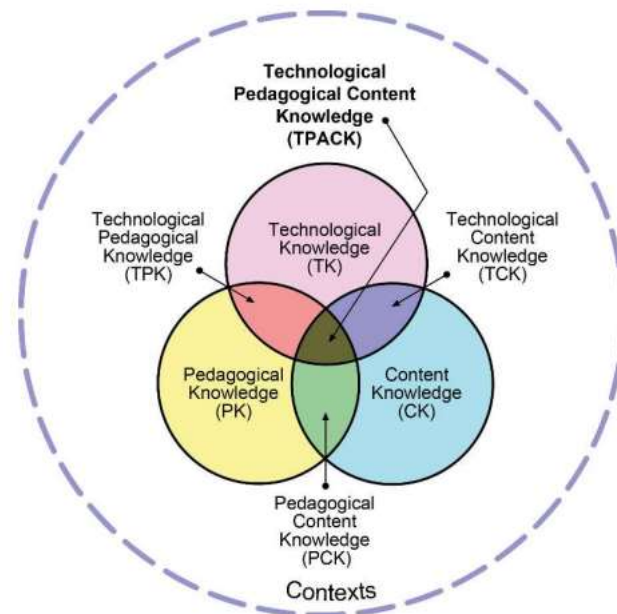
The analysis by documents will be conducted by analyzing the documents related to the research topic, such as student textbook, syllabus and curriculum used by teachers, and previous researches related to teaching reading, the use of mobile application in teaching reading, et cetera.

2. Interview

After conduct the document analysis to get initial information, the next step is interview. The researcher has prepared some questions that attached in appendix of this proposal, for both students and teacher. By interviewing the student, hopefully the research might able to know student's need. Meanwhile the teacher is interviewed according the guide given in the appendix as well, to get the information and data regarding the learning process in class, so the researcher can measure the suitable procedure of the material to improve the learning's progress.

After the analysis step is done, the researcher moves to the next step. The design step is aimed to find the suitable method based on need analysis conducted beforehand. To meet the suitable material, the researcher will use the TPACK framework.

TPACK framework was first introduced by Mishra and Koehler (2006), to explain how technology is pedagogically used to teach content in 21st century teaching and learning. TPACK stands for The Technological Pedagogical Content Knowledge, which elaboratively explain through the Venn diagram, combining Technological Knowledge (TK), Content Knowledge (CK), and Pedagogical Knowledge (PK), as can be seen below.



Unlike the usual printed material, TPACK combines the teacher's pedagogical knowledge with Information and Communication Technology (ICT) (Angeli & Valanides, 2009). The use of ICT platform of teaching and media, help to integrate the newest update of information and instructional activities in teaching for EFL teachers. Teacher can effectively design and conduct instruction based on technology and describe the knowledge for effective pedagogical practice (Lehiste, 2015).

TPACK for teaching English has both advantages and disadvantages. Advantages of TPACKS are namely:

1. TPACK enables teachers transfer the content knowledge to the students and helps students learn better through the practice and their experience dealing with the technological term (Misirli, 2016).
2. TPACK allow teacher to be creative in managing the media used to deliver the materials, not only stuck with the traditional media such as paper poster, physical book, etc.
3. Teacher can invite student to participate in learning, by assign them creative assignments like record vlogs or post selfies on their social media with topics decided by the teacher.
4. Teacher act as facilitator and information provider in the classroom with TPACK learning (Jagtap, 2016). Thus, students can be actively participated and acquire more knowledge directly in the process.

Meanwhile the disadvantages, which can also be classified as challenge for teachers who implement the TPACK in their classrooms are:

1. Teachers deal with IT or technology literate. Not all teachers are having good literacy of technology, especially senior teachers and teachers in remote area with insufficient technology exposure. Teachers have to be encouraged the importance of technology in their classroom, by socialization, workshop, and training conducted by school or government (the state office of education or ministry of education).

2. The support of internet connection. In 2022, when internet already used massively worldwide, there are some areas which still not covered with good internet connection, or even electricity. The use of technology has to be dealt by the teacher by combining the learning in online and offline, and use technology which is offline-friendly or less-electricity consumed. There are some applications can support offline mode that can be used by teachers with bad internet connection.

3. Skill to elaborate the ideas. With thousands and even millions information provided in the internet, sometimes teachers are overwhelmed by the information. They need to stick to the lesson plan or core competence related first, then filter the information from internet which fit to topics.

This research aims to take part of those three knowledges, by following:

- Technological Knowledge: The use of technology, by the use of computer or electronic gadgets to deliver the material
- Content Knowledge: The content formulated based on need analysis (Local content)
- Pedagogical Knowledge (PK): The delivering method by the teacher during implementation (based on Mover School curriculum)

The Development phase is the process of authoring and producing the materials. In this phase, other than self-producing the materials, the researcher develops instruction and procedures how to utilize the material for both the teacher and students.

At the implementation phase, the deployed new material monitored whether it is easily used by the teacher in teaching reading for seventh grade elementary students with procedure that instructed by the researcher. In this phase, observers assigned to lookout and monitor the feasibility of the application in learning process. The result of the observation sheet will be analyzed and used to revise the suitable contents of the material, its utilizing procedure, and teaching learning process.

To conclude the process of evaluation, the researcher set to record time data of the implementation, interpret the result, revise activities, and revise contents. Besides, in this stage if the data has been revised, it should be validated by experts. The experts' validation needed to know that material development met the need analysis, easy to use, and feasible as a material in the reading learning. If the experts asked to revise/add the data in the product, the researcher must revise/add the data. All data gathered from experts' validation and revision become as basis to complete the final product of the material.

CONCLUSION

The researcher developed a reading material for seventh grade students at junior high school with the curriculum of mover school. The new curriculum sets the teacher to modify the material to the students' contextual real-life situation, to create familiarity and easiness for students to understand the reading material. It is combined with the need analysis, which the result indicated that the students and teacher require a new material to accommodate the local content. This research utilized the ADDIE model and TPACK framework to elaborate the requirements, starting from Analysis, Design, Development, Implementation, and Evaluation. The whole process, as explained in the findings section, the result product of new material should meet and solve the problems according to need analysis. The TPACK framework to infuse the local content as the topics in the material. So, the materials suit the Mover school curriculum, as well narrowing students' gap of background knowledge, by provides them material which familiar and easier to understand as they find it in the daily life.

REFERENCES

- Afrina, M., Siska, J., Agusta, O. L., Sasongko, R. N., & Kristiawan, M. (2022). The policy of mover school as a catalyst for improving the quality of education. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 8(1), 108-115.
<https://jurnal.iicet.org/index.php/jppi/article/download/1639/1024>
- Angeli, C., & Valanides, N. 2009. Epistemological and methodological issues for the conceptualization, development, and assessment of ICT-TPCK: Advances in technological pedagogical content knowledge (TPCK). *Computers & Education*, 52, 154–168.
https://www.academia.edu/download/26126799/2009_tpck
- Branch, R.M., 2009. Instructional design: The ADDIE approach. Springer Science & Business Media.

- Jagtap, P. 2016. Teachers Role as Facilitator in Learning. *Scholarly Research Journal*, 3(17), pp 3904–3905.
https://www.academia.edu/download/49615969/5_PRAKASH_JAGTAP.p
- Ministry of Education. 2021. Program Sekolah Penggerak 2021 [Motivator School Program 2021] <https://sekolah.penggerak.kemdikbud.go.id/wp-content/uploads/2021/02/Paparan-Program-SekolahPenggerak.pdf>
- Ministry of Education. Decree of the Minister of Education, Culture, Research and Technology No. 162 of 2021. <https://penggerak-simpkb.s3.ap-southeast-1.amazonaws.com/portal-programsekolahpenggerak/wp-content/uploads/2021/07/14142514/Salinan-Distribusi-II-Kepmen-162-tentang-PSP.pdf>
- Mishra, P., & Koehler, M. J. 2006. Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
<http://bibliotecadigital.mineduc.cl/bitstream/handle/20.500.12365/17687/29/Technological%20pedagogical%20content.pdf?sequence=1&isAllowed=y>
- Misirli, Z. A. 2016. Integrating Technology into Teaching and Learning in. D William. Ihlara *Journal of Educational Research* (December), pp 37–48.
<https://dergipark.org.tr/en/download/article-file/397253>
- Monica, S. and Vianty, M., 2019. Developing local content-based instructional graded reading materials for reading level three students. *Linguistic, English Education and Art (LEEA) Journal*, 3(1), pp.1-16.
<https://journal.ipm2kpe.or.id/index.php/LEEA/article/download/792/477>
- Muji, A. P., Gistituati, N., Bentri, A., & Falma, F. O. 2021. Evaluation of the Implementation of the Sekolah Penggerak Curriculum Using the Context, Input, Process and Product Evaluation Model in High Schools. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 7(3), 377-384.
<https://jurnal.iicet.org/index.php/jppi/article/viewFile/1231/890>
- Sugiyono. 2010. *Metode Penelitian Kuantitatif dan Kualitatif dan R&D*. Bandung: Alfabeta
- Utami, I.A.M.I., Nitiasih, P.K. and Artini, L.P., 2014. Developing culture-based supplementary reading material for the eighth grade students of smp laboratorium singaraja. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 2(1).
<https://ejournal-pasca.undiksha.ac.id/index.php/jpbi/article/view/1096/844>

