

The Development of Differentiated Learning Material for Teaching English to 6th-grade Students in Elementary School

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Abstract

The use of teaching materials to teach English language in the classroom is an important aspect and must be paid attention to English language teachers in classroom learning. This research aims to develop teaching materials that are varied and differentiated in activities using 3 learning methods consisting of problem-based learning, project-based learning, and discovery learning. Apart from that, the teaching materials developed are also differentiated in material content that adapts to students' learning styles, consisting of 4 learning styles: visual, aural, read/write, and kinaesthetic. In this part of developing teaching materials, researchers went through 2 comprehensive stages: design and development. The design stage consists of creating a matrix that is used as a reference in developing teaching materials, and selecting material, and the final stage is making a draft using Word. In the development stage, researchers went through stages consisting of designing a draft as well as developing media for activities, a revision process for the draft developed, finalization based on the results of revisions to the product, and assessments from experts.

Keyword: Differentiated Learning Material, Students Learning Style, Problem-Based Learning, Project-Based Learning, Discovery Learning.

Abstrak

Penggunaan bahan ajar untuk mengajar bahasa Inggris di kelas merupakan aspek penting dan harus diperhatikan guru bahasa Inggris dalam pembelajaran di kelas. Penelitian ini bertujuan untuk mengembangkan bahan ajar yang bervariasi dan terdiferensiasi aktivitasnya dengan menggunakan 3 metode pembelajaran yang terdiri dari pembelajaran berbasis masalah, pembelajaran berbasis proyek, dan pembelajaran penemuan. Selain itu, bahan ajar yang dikembangkan juga dibedakan isi materinya yang menyesuaikan dengan gaya belajar siswa, terdiri dari 4 gaya belajar: visual, aural, baca/tulis, dan kinestetik. Pada bagian pengembangan bahan ajar ini, peneliti melalui 2 tahap yang komprehensif yaitu desain dan pengembangan. Tahap perancangan terdiri dari pembuatan matriks yang dijadikan acuan dalam pengembangan bahan ajar. Peneliti melalui tahapan yang terdiri dari perancangan draft sekaligus pengembangan media kegiatan, proses revisi terhadap draft yang dikembangkan, finalisasi berdasarkan hasil revisi produk, dan penilaian dari ahli.

Kata Kunci: Materi Pembelajaran yang Dibedakan, Gaya Belajar Siswa, Pembelajaran Berbasis Masalah, Pembelajaran Berbasis Proyek, Pembelajaran Penemuan.

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INTRODUCTION

Teaching materials are one of the important media that must be considered in implementing English language learning in the classroom. Teaching materials in independent curriculum-based learning are an urgency that must be considered. According to the Ministry of Education, Culture, Research and Technology (2022), in the independent curriculum, material packaging and learning focuses more on essential materials and focuses on developing student competencies. Apart from that, according to the

Ministry of Education, Culture, Research and Technology (2022), in this curriculum students and teachers are given freedom in learning, which means students learn comfortably and more freely. In this curriculum, teachers can also be more creative and innovative in developing learning, both teaching media and learning methods. So it can be concluded that in this independent curriculum, teachers can be creative in developing teaching materials that are more varied and differentiated according to student needs and learning in grade 6.

To be able to create active and innovative learning, teachers must of course develop teaching materials that are differentiated and varied both in terms of content and materials and by students' learning styles. In the learning process, creating differentiation both in learning methods and teaching materials is very important to implement, which according to Tomlinson (2000) states that teaching addresses the differences of each student by adapting teaching based on student's needs. In differentiated learning, teachers create varied learning according to student's needs so that they can create meaningful learning for students which can help them to develop their skills, interests and talents in learning. Apart from that, learning and teaching materials must also be differentiated according to student needs and student learning styles, which according to Fleming (2001), student learning styles consist of four learning styles, namely visual learning styles, aural learning styles, read/write learning styles, and kinesthetic learning style or also known as V-A-R-K. Developing teaching materials based on student learning styles can be done to create enjoyable learning for students because they can learn according to their learning style. By varying students' needs and learning styles, students can learn according to their needs and desires.

Apart from differentiating in learning styles, the content and materials in a teaching material can also be varied with the local cultural content around us which, according to Garcia & Pantao, (2021), states that culture is related to language learning because it is related to communication and daily life. Therefore, in language learning, culture can be used as an interactive method in teaching culture as well as language to students more precisely and relevantly. By having variations in material content that add cultural content, it can provide new learning experiences for students so that students can have a lot of learning experiences and at the same time introduce local culture to students through language learning.

Nowadays, it is closely related to technology, where the teaching materials currently used have also been developed using technology such as design applications and books packaged in the form of electronic books. With this electronic book innovation, it can help in the English learning process, especially in 6th grade. According to Sari et al., (2022), electronic books in learning that support classroom activities have an important role in improving learning, where the use of electronic books in classroom learning can make it easier for teachers to deliver information and knowledge to students. In

addition, the use of electronic books not only develops student communication and collaboration but also helps students to improve their ability to think critically and also their creativity.

This research has carried out an empirical review of several studies with topics developed by researchers, namely the development of differentiated learning materials for class 6. Previous research was carried out by Hertiki, (2018), Sari et al., (2021), Zuhdi, (2020), Abidasari et al., (2021), Farih, (2018), Utami et al., (2022), Edo et al., (2023), Widodo, (2022), Juwita, (2019), Usman et al., (2020), Kurniawati et al., (2021). From those previous studies, it can be concluded that the development of English language learning teaching materials has been carried out and many products have been produced, however, from these studies only three studies have been developed with products that add culture to the material. Therefore, it also can be said that the development of English language learning materials with cultural content is still very lacking. From those studies, it can be concluded that there is still a lack of research regarding the development of differentiated English language teaching materials, where the products developed are still not varied enough for learning with different student learning styles or do not cover all types of student learning styles, from research that has been done previously and still lacks distinction.

METHOD

This research uses the research method that is Design and Development (DnD) from Richey and Klein (2007). According to Richey & Klein in their book entitled Design and Development Research, DnD or Design and Development Method, where this research method consists of 4 types of stages, namely analysis, design, development, and evaluation this article discusses in detail the stages of developing differentiated teaching materials for 6th grade students of elementary school.

RESULTS & DISCUSSION

Need Analysis of Teachers and Students in Differentiated Learning Materials

Based on the results of the needs analysis carried out on 6th-grade teachers and students in the two research schools using interviews for the teacher, questionnaire for the students, and classroom observations that are quoted in the thesis developed by the researcher entitled "The Development of Differentiated Material for Teaching Sixth-Grade Students of Elementary School" which is based on analysis stages, Researchers found that teachers and students need differentiated teaching materials for English language learning in 6th grade that vary in terms of material content, instructions, and student learning styles. Apart from that, more specifically, students need teaching materials that contain interesting visualizations and contain a variety of material content with fun activities. With interesting and fun activities, it becomes one of the attractions for students to carry out learning in class. Therefore,

researchers develop differentiated teaching materials based on teachers' and student's needs by going through design and development stages, and in this article, the focus is more on discussing the development of differentiated learning materials based on material content and local Balinese culture for teaching media for 6th grade of elementary school students.

Design and Development

The stages of developing differentiated teaching materials for 6th grade students of elementary school are design and development stages where in two stages the researcher carries out the design stage through 3 stages consisting of creating a matrix and revising the matrix that has been created and developed, the second stage continues by selecting material for source material in learning English in 6th grade, and the final stage of design is making a draft in word form containing material and activities as well as instructions for the activities being developed. In the development stage, researchers went through 4 stages consisting of creating a design draft on Canva, revising the draft that had been developed, finalizing the product based on the draft that had been developed, and the final stage, namely an expert assessment of the book product that had been developed.

Design

At the design stage, the researcher went through 3 stages consisting of creating a matrix and revising the matrix that had been created and developed, the second stage continued with selecting material for source material in learning English in class 6, and the final stage of design was making a draft in word form which contains materials and activities as well as instructions for the activities being developed which are described as follows:

Designing Matrix Development Learning Material for 6th Students

The matrix that is prepared consists of several elements which include class, learning outcomes that must be achieved in that semester, topic, learning objectives, learning methods, learning activities or syntax, as well as material for each student's learning style. The second semester of English learning for class 6 consists of 5 topics, namely 'I will go to Bromo', 'I will go to Dufan', 'I will study at junior high school next year', 'I want to be a pilot ', as well as 'My dream'. This matrix is based on learning in the independent curriculum using 3 learning methods consisting of problem-based learning, project-based learning, and discovery learning.

Selecting Material for Design Differentiated Learning Material

In this process, the researcher selected material from several sources consisting of book sources and internet sources. Researchers use grammar books published by Cambridge University as reference sources in English learning materials that will be used by teachers as additional explanations. Apart from that, researchers also used several internet sources and YouTube as additional learning material for each topic.

Making a Draft of the Material on Words


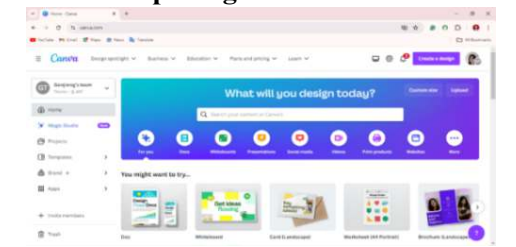
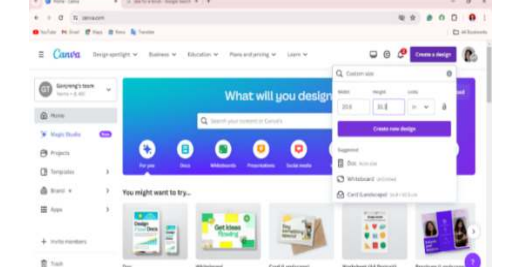
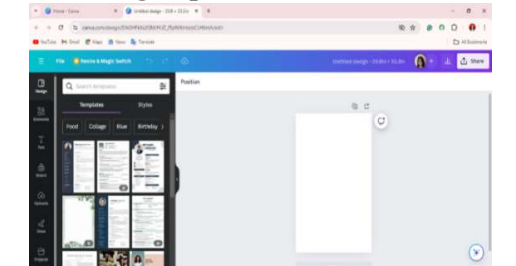
At this stage, the researcher develops a draft using words in which the researcher makes details of the material, activities, and instructions for each activity being developed. The researcher also created a draft for activity illustrations that will be developed in a live worksheet later. The draft is developed by making a draft in Word version.

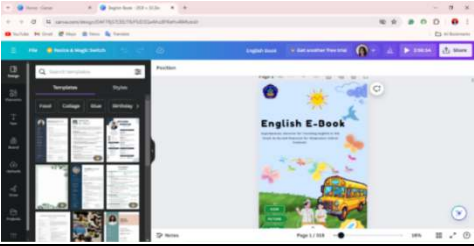
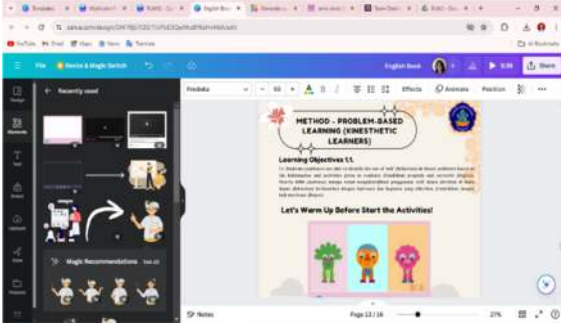
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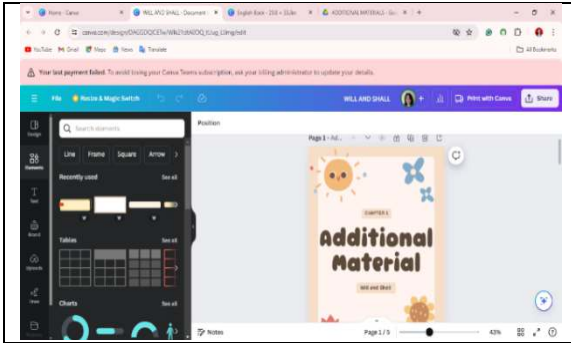
Drafting E-Book

At this stage, the researcher developed a differentiated learning material (E-Book) product using the Canva application which is described in the following table:

Table 1. Drafting E-Book

<p style="text-align: center;">Opening Canva Application</p> 	<p>This step is done by typing canva.com or typing canva in the search field and then clicking enter to go to the site you want to go to.</p>
<p style="text-align: center;">Opening Canva Web</p> 	<p>The second stage is opening the Canva web application which was previously accessed. This is the home display of Canva which is used by researchers to start creating designs for book products.</p>
<p style="text-align: center;">Selecting and Paper Size of the E-Book</p> 	<p>At this stage the researcher chooses the size for the book being developed by clicking 'Create a Design' then selecting the 'Custom Size' menu. Next, the researchers added the dimensions of the book according to the height and width in inches.</p>
<p style="text-align: center;">Making Paper Size of the E-Book</p> 	<p>At this stage the researcher makes the size of the book being developed based on the size that was previously selected. Researchers made the size of the book in A4 format with portrait orientation.</p>

<p style="text-align: center;">Making E-Book Cover</p> 	<p>At this stage, the researcher made a cover for the E-Book, starting with choosing the size for the paper used for the E-Book, then the researcher chose the color for the background, where the researcher used a sky blue background.</p>
<p style="text-align: center;">Making Design Cover for Each of the Chapters</p> 	<p>At this stage the researcher creates a design for the cover of each chapter unit by determining the colors for each chapter. Chapter 1 uses cream, chapter 2 uses sky blue, chapter 3 uses blue, chapter 4 uses cactus blooms color, while chapter 5 uses dark blue.</p>
<p style="text-align: center;">Adding Text and Material</p> 	<p>At this stage, the researcher adds text by adding a title to each activity according to learning style. For each learning style there are different elements, for the visual learning style the researcher added pictures and videos related to the material or topic of the unit. For the auditory learning style, the researcher added audio based on the topic of the unit, for the read/write learning style the researcher added supporting text based on the topic of the unit. Apart from that, for the kinesthetic learning style, researchers added several videos to warm up as well as several games and quizzes to start learning.</p>
<p style="text-align: center;">Making Instructions for Each of the Activities</p> 	<p>At this stage the researcher develops instructions for each activity in the E-Book. This instruction is made in the form of a card made using Canva and put into Google Drive to be shared with book readers. After that, the Google Drive link is converted into a barcode for scanning. Apart from the barcode, researchers also added a link so that readers and book users can access it.</p>
<p style="text-align: center;">Making Additional Material for Teachers</p>	<p>At this stage, the researcher creates and develops additional material as a source of other material that can help teachers in teaching material to students during English learning in grade 6. This additional material contains material for each unit or chapter so</p>



that teachers can know and understand the material covered will be taught to students.



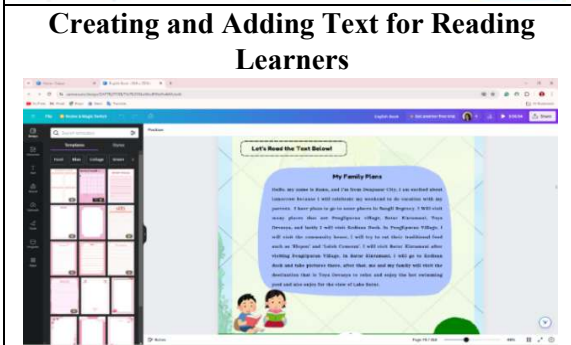
Editing Video for Visual Learners Activity

At this stage, the researcher created and edited several videos for visual learner-learning activities using an AI application and inserted and edited audio using a website <https://www.veed.io/tools/audio-editor>.



Making and Editing Audio for Auditory Learners Activity

Researchers also develop media that are used to support learning activities for auditory learners. Researchers create audio using AI websites on websites <https://elevenlabs.io/> by adding text and selecting characters as voice actors. Researchers chose 4 characters to provide voices for the characters Rama, Sita, Raka, and Dewi.



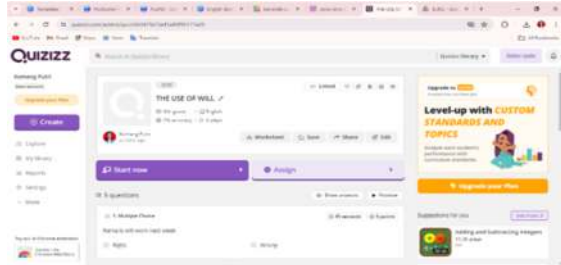


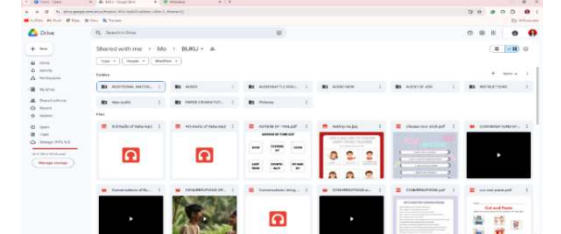
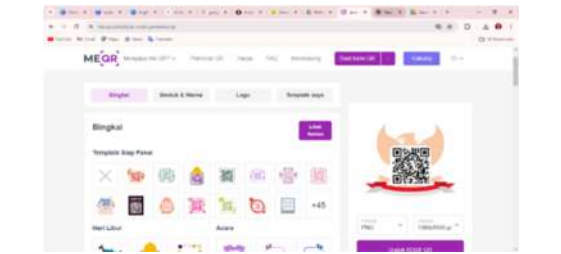
Creating and Adding Text for Reading Learners

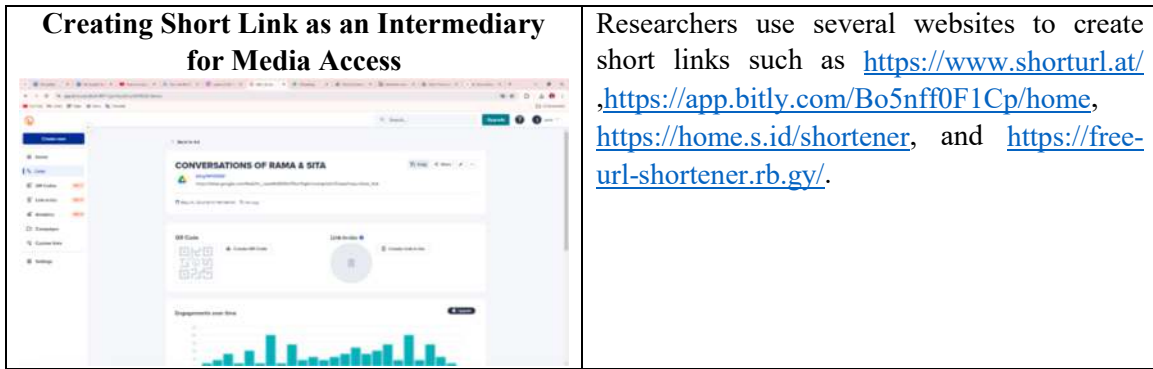
At this stage, researchers create and add texts for students with reading learning styles. The researcher created a text with a topic that was appropriate to the learning unit with a range of paragraphs ranging from only one paragraph.



Creating Topic Media for Write Learners

At this stage, the researcher creates media that is used as a medium for choosing topics for writing students to create their paragraphs. Researchers use the website <https://wordwall.net/> as a medium to make topic selection more fun and varied.

<p style="text-align: center;">Making Game Media for Kinesthetic Learners</p> 	<p>For kinesthetic learners, researchers develop games using online websites such as https://wordwall.net/, https://kahoot.com/, and https://quizizz.com/join. Researchers also use other media as media for games such as videos from YouTube in the form of quizzes or warm-up game videos before starting learning in class.</p>
<p style="text-align: center;">Creating Worksheets for Students</p> 	<p>At this stage, the researcher creates and develops worksheets that are used for students to support the implementation of learning in class based on the studied topics and activities. Researchers create worksheets using the website https://www.canva.com/ by designing a template and adding the elements needed to support the worksheets.</p>
<p style="text-align: center;">Creating Live worksheets for Students</p> 	<p>At this stage, the researcher develops worksheets that were previously created using the Canva application into live worksheets, where these live worksheets are made using the website https://www.liveworksheets.com/ by inputting worksheets in PDF or JPG form then editing the elements used for live worksheets then importing them into worksheets that can be used online and can also be saved by students.</p>
<p style="text-align: center;">Putting Media to Google Drive</p> 	<p>At this stage, after the researcher has finished creating media to support student activities, the researcher places them in the form of Google Drive, such as several worksheets, videos, audio.</p>
<p style="text-align: center;">Creating Barcode as an Intermediary for Media Access</p> 	<p>At this stage, the researcher develops media that has been included in Google Drive and other online media with the link developed into a barcode form to make it easier for readers and users to access the media for each activity in the book. Researchers use website https://me-qr.com/ To make the link into a barcode, on this website you can also choose the design for the barcode you want.</p>



Finalizing of the E-Book

After the revision stage, the next stage continues with the finalization of the book that has been developed by the researcher, where the final book contains 431 pages including the front cover and bibliography. This book contains 5 units or chapters, each chapter has a different color. This book contains activities and additional material that can be accessed by teachers to teach the material to students. This additional material can be accessed on the front page in the section on how to use the book. This book is designed according to the independent curriculum and adapts to the learning objectives and achievements in that phase. This book also contains varied material and activities using 3 different learning methods consisting of problem-based learning, project-based learning, and discovery learning by containing activities that focus on each student's learning style. Researchers also added a section and place for reflection for teachers and students which can be scanned on the barcode provided so that teachers and students can reflect on the learning that has been carried out. Apart from that, this book also uses designs related to local Balinese culture, which is the final part of this book. For visualization of this teaching material, you can see the following link: <https://shorturl.at/ANB7c>.

Assessment from Experts Judgment

The assessment of products that have been developed by researchers is carried out in the expert judgment stage, where the use of experts at this stage consists of 2 experts, namely experts 1 and 2, through 2 evaluation stages, namely first evaluation and final evaluation. In this expert judgment, the formula from Nurkancana and Sunartana (1992) is used, which can be seen in the following table:

Table 2. Formula of Nurkancana and Sunartana (1992)

Formula	Criteria
$X \geq Mi + 1,5Sdi$	Very Good
$Mi + 0.5Sdi \leq X < Mi + 1.5Sdi$	Good
$Mi - 0.5Sdi \leq X < Mi + 0.5Sdi$	Average
$Mi - 1.5Sdi \leq X < Mi - 0.5Sdi$	Below Average
$X < Mi - 1.5Sdi$	Poor

Based on Table 2, the book criteria from Nurkancana and Sunartana consist of 5 categories, namely very good, good, average, below average, and poor with intervals that is can be seen in the following table:

Table 3. Accumulated Scores for Each of the Criteria in the Nurkancana and Sunartana Formula (1992)

Interval	Mode Value	Criteria
$X \geq 4.5$	5	Very Good
$3.5 \leq X < 4.5$	4	Good
$2.5 \leq X < 3.5$	3	Average
$1.5 \leq X < 2.5$	2	Below Average
$X < 1.5$	1	Poor

Based on Tables 2 and 3, the results of the first evaluation given by experts 1 and 2 are described in the following table:

Table 4. Results of First Evaluations from 1st Expert and 2nd Expert

Expert	Mean	Criteria
Expert 1	4,96	Very Good
Expert 2	4,91	Very Good

Based on Table 4, it can be concluded that at the first evaluation stage, expert 1 gave an average score of 4.96, which based on the formula from Nurkancana and Sunartana (1992) can be categorized as very good. Apart from that, expert 2 gave an average rating of 4.91 and based on the formula from Nurkancana and Sunartana (1992) it can be categorized as very good. Therefore, in this first evaluation, it can be concluded that the assessments given by the two experts provide a very good category for the teaching material. However, in these first evaluations, the researchers received comments and suggestions for improving the teaching materials from the two experts. Both experts provided comments and suggestions on the same matter, namely in terms of grammar. Apart from that, expert 2 also added comments and suggestions to improve image quality as well as consistency in the writing and size of the writing used. Based on the comments and suggestions given by the expert on the teaching materials, the researcher carried out a revision process and continued to the final evaluation stage where the results of the final evaluations can be seen below:

Table 5. Results of Final Evaluations from 1st Expert and 2nd Expert

Expert	Mean	Criteria
Expert 1	5	Very Good
Expert 2	4.96	Very Good

Based on Table 5, it can be concluded that after the revision process based on comments and suggestions provided by experts, the results obtained from expert 1 were with a mean of 5 which could be categorized as very good, and expert 2 gave a value with a mean of 4.96 which could be categorized as very good. So it can be concluded from this final evaluation that after the researcher carried out the

revision process, the researcher got more value than before so the learning materials developed were categorized as very good.

The development of differentiated teaching materials is carried out through three main stages consisting of design, development, and assessment from experts. Based on the design stage, the researcher has created a design for differentiated teaching materials by designing a matrix, selecting materials and activities, and making a draft in the form of words. Next, the researcher continued in the development process, where the researcher developed material in the form of Canva editing and created online media for students in each learning style. After the material and media development process, the researcher continued to the consultation and revision stage of the teaching materials developed and the researcher continued to the revision and finalization stage by the results of the revision provided by the supervisor.

Apart from that, researchers continued to the expert assessment stage through two stages, namely first evaluations and final evaluations. The differentiated teaching materials developed by researchers for grade 6 elementary school students have gone through the design, development, and evaluation stages, where based on the teaching materials that have been developed by the researcher, the researcher received a score in the first evaluation with a score of 4.96 and 4.91 given by the expert. 1 and 2 with the criteria for books that fall into the "very good" category. Furthermore, at the final evaluation stage, the researcher obtained results, namely 5.00 from expert 1 and 4.96 from expert 2, where the criteria based on this value was "very good" so that based on this category, the book developed by the researcher could be categorized as "very good" in aspects of content differentiation, culture, and others. Similar findings were also obtained in research from Sari et al., (2021), Zuhdi, (2020), Farih, (2018), Utami et al., (2022), Widodo, (2022), Juwita, (2019), Usman et al., (2020) where the research carried out for media development is included in the very good category and can help students in learning English in the classroom.

CONCLUSIONS

In this development stage, the researcher carries out the development process by going through the design and development stages as well as assessments from the two experts, where based on the assessments obtained, the teaching materials developed can be categorized as 'very good' according to the aspects assessed by the experts. Apart from that, the development of teaching materials is carried out based on an analysis of the needs of teachers and students for teaching materials, where teachers and students need teaching materials that are differentiated and varied in terms of material content, activities that vary according to the needs of students, their learning styles, instructions and explanations material on the topics studied as well as teaching materials that vary in local cultural content. It is hoped that the development of differentiated teaching materials can help teachers in the process of learning English in

class 6 so that they can create meaningful learning for students and help students improve their skills, interests, and talents in learning English.

REFERENCES

- Abidasari , E. , Sabgini , K.N.W. , & Inayati , N. (2021). Development of Bright English Textbooks for Grade 6 Elementary School in Batu City.*PIONEER: Journal of Language and Literature*, 13(1), 26.<https://doi.org/10.36841/pioneer.v13i1.899>
- Edo, A., Ajr, N., & Ambarwati, E. K. (2023). *Analysis of English Textbooks for Grade IV Elementary School Students*.8 (1), 1–16.
- Farih, A. (2018).*Developing English Books for Young Learners Using Fun English*. 249–256.
- Fleming, N. D. (2001) Teaching and Learning Styles:VARK Strategies.
Honolulu:VARK-Learn
- Garcia, K.A., & Pantao, J.G. (2021). Cultural Sensitivity and Teacher Classroom Management.*International Journal of Professional Development, Learners and Learning*, 3(1), ep2108. <https://doi.org/10.30935/ijpdll/11093>
- Hertiki, H. (2018). Developing English Teaching Materials for Young Learners. *Jet Adi Buana*, 3(1), 29–39. <https://doi.org/10.36456/jet.v3.n1.2018.1541>
- Juwita, O. and RP (2019).*DEVELOPMENT OF ENGLISH TEACHING MATERIALS BASED ON LOCAL LEARNING FOR PRIMARY SCHOOL STUDENTS*.4 (10), 103–115.
- Ministry of Education and Culture. (2022). Pocket Book: Questions and Answers for the Independent Curriculum. *Ministry of Education, Culture, Research and Technology, Ministry of Education, Culture, Research and Technology*, 9–46. <http://repositori.kemdikbud.go.id/id/eprint/25344>
- Ministry of Education, Culture, Research and Technology & Standards, Curriculum Agency, and A. P. (2022). Minister of Education, Culture, Research and Technology Regulation Number 039 of 2022 concerning Evaluation of Educational Books. In *Ministry of Education and Culture* (Problem 021).
- Ministry of Education, Culture, Research, and T. (2022). SD/MI Curriculum Structure. *School Curriculum Structure*.
- Kurniawati, L., Wahyono, E., Mulyasari, E., & Kurniawati, L. (2021). *Analysis of Learning Materials for Elementary Students Analysis of Learning Materials Introduction to Learning Materials for Elementary Students*. 126–134
- Sari, S.Y., Rahim, F.R., Sundari, P.D., & Aulia, F. (2022). The importance of e-books in improving students' skills in learning physics in the 21st century: Literature Review.*Journal of Physics: Conference Series*, 2309(1). <https://doi.org/10.1088/1742-6596/2309/1/012061>

- Tomlinson, CA (2001). *How to Differentiate Teaching in Mixed Ability Classes*.
[https://doi.org/10.1016/0300-483X\(87\)90046-1](https://doi.org/10.1016/0300-483X(87)90046-1)
- Usman, H., Lestari, I., & Pelenkahu, N. (2020). *English E-Books for Elementary School Students: Research with Design Based on a Whole Language Approach*.397 (Icliqe 2019), 735–741.
- Utami, W., Sya, M. F., & Hidayat, A. (2022). *Developing English learning materials for grade 4 students*.2 (6), 231–240.
- Widodo, J. (2022). *DEVELOPMENT OF INTERACTIVE MATERIALS AT PT.14* (2), 383–400.
<https://doi.org/10.37680/qalamuna.v14i2.3284>
- Zuhdi, U. (2020). *Development of Young Learner Materials for English Language Teaching*.387 (Icei), 249–251. <https://doi.org/10.2991/icei-19.2019.57>