



Development of Supplementary Textbook Based on the Local Wisdom of Bangkalan

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ABSTRACT

One effort to make it easier for students to understand thematic material is to include the content of their own local wisdom in learning. Unfortunately, at this time, no supplementary textbooks contain local wisdom content. This research and development aim to produce a supplementary textbook product based on Bangkalan local wisdom that is valid, effective, and practical to improve students' cognitive outcomes. This research procedure uses a 10-step design from Borg and Gall. The results of expert validation of the developed textbooks were 86%. In comparison, the validation from practitioners was 93%, each indicating that the products developed were classified as very valid and feasible to use. The effectiveness of the product is seen from the classical learning outcomes that is equal to 100%, indicating complete and effective learning. The practicality of the product is assessed from the average value of the student and teacher questionnaire responses, which is 93% and the observation of the implementation of teacher and student learning with the results of 94%, each of which shows very practical criteria. The results of the study indicate that the supplementary textbook product based on Bangkalan local wisdom that was developed is very valid, effective, and practical so that it is suitable for use in classroom learning.

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1. INTRODUCTION

Based on the Circular of the Ministry of Education and Culture regarding implementing the 2013 curriculum, thematic learning must pay attention to the principles of preparation and development according to the conditions of the education unit. Some of them are cultural background, norms, values and student environment. From this circular, one of the challenges for teachers is to develop innovative learning according to the characteristics of the environment where students live (Rozhana & Anwar, 2019). One effort that can be done is to include local wisdom content in learning.

Local wisdom is the norm of the people of an area that is believed to be true and is used as a guide in carrying out daily activities (Suastra, Jatmiko, Ristiati, & Yasmini, 2017). This local wisdom-based learning makes students attached to real situations in their local environment (Wagiran, 2012), helps students understand the relationship between their worlds and what they learn (Priyambodo & Wulaningrum Safira, 2017), and helps students get to know their own local culture (Chusna, Ekowati, & Kuncahyono, 2019). In other words, including the content of local wisdom makes learning more contextual, meaningful so that it is easier for students to understand (Nuraini, 2018).

Based on the results of a preliminary study at SDN Demangan 1 Bangkalan, it shows that the school has several potentials that allow it to incorporate local wisdom content in learning. However, the existing potentials cannot be utilized optimally in supporting teachers to include Bangkalan local wisdom content in learning. This makes thematic learning not contextual and not in accordance with regional characteristics and students' daily life experiences, so that most students find it difficult to understand thematic material. After research, this is because the teacher does not have a supplementary textbook based on Bangkalan local wisdom. The school only uses teacher and student books from the Ministry of Education and Culture as the main textbook.

The problem of educator self-development is indeed a problem that often occurs and is very crucial in the world of education in Indonesia (Zuriah, Sunaryo, & Yusuf, 2016). The reality that occurs in the field shows that most teachers still use conventional textbooks that are monotonous and ready to use, without any effort to develop and compile their own textbooks which of course can be more in line with the conditions and characteristics of their students (Ariyani & Wangid, 2016). This risks making learning meaningless and inefficient.

To overcome these problems, it is necessary to develop a supplementary textbook based on local wisdom of the Bangkalan area. Supplementary textbooks are additional reading books that are used to support the use of the main textbook (Kurniasari, Rusilowati, & Subekti, 2014). The development of supplementary textbooks based on Bangkalan local wisdom in this study was carried out to facilitate teachers in including Bangkalan local wisdom content in the classroom so that students can recognize their own local wisdom and better understand thematic material.

Several eligibility criteria must be tested to develop supplementary textbook products in this study, including validity, effectiveness, and practicality tests. The validity test is carried out to determine the level of conformity of product development with the theory and whether its existence can have a better impact than before it was used (Sugiyono, 2019). The effectiveness test is carried out to determine whether the product is effective in helping the achievement of learning objectives and making students master the contents of the developed supplementary textbook. At the same time, the practicality test is carried out to

determine the level of applicability of using the product or whether or not the product can be used in the classroom (Akbar, 2017).

2. METHODS

This research conducted Research and Development (R&D) that will produce a supplementary textbook product based on Bangkalan local wisdom for grade IV theme 7 sub-theme 1. The development model used is a procedural model, with research and development procedures used is a 10-step design from Borg & Gall model conducted research and information collecting, planning, develop preliminary product, preliminary field testing, preliminary product revision, main field testing, main product revision, operational product testing, operational product revision, and dissemination and implementation. The stages are described as in Figure 1 below.

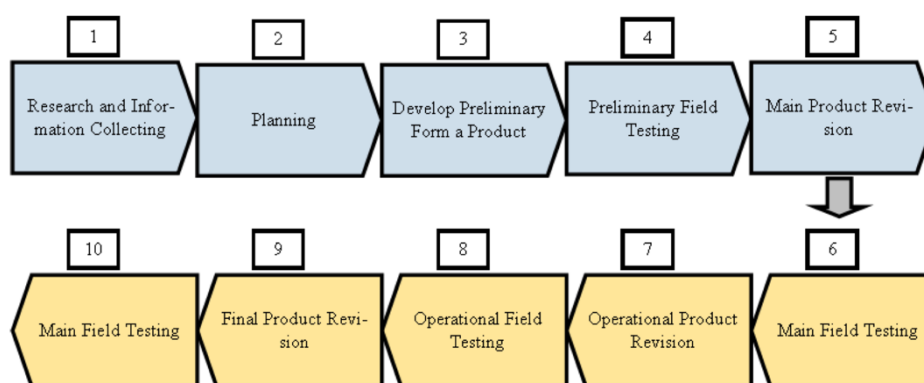


Figure 1. Borg & Gall model R&D research stages

Test subjects include teachers and students of class IVA SDN Demangan 1 Bangkalan and experts on material, language, textbook design, and culture. Thus can produce a supplementary book that are feasible to use for fourth grade elementary students.

3. RESULT AND DISCUSSION

3.1 The Validity of the Supplementary Textbooks

The validity test is carried out so that the developed supplementary textbook has high validity and is suitable for use in learning. Textbooks with high validity mean that the textbooks have a high level of conformity with the supposed development theory (Akbar, 2017). The validity test in this study was carried out through a validation test of experts and practitioners in terms of material, language, textbook design and culture.

The validity test in terms of material was carried out to assess the material's suitability level in the supplementary textbook with the characteristics of students and KI KD in the syllabus and curriculum (Tinja, Towaf, & Hariyono, 2017). Regarding material, the supplementary textbook's validity level based on the expert validation test got a score of 86% with input related to writing, use of punctuation marks, and capitalization. Scores in the criteria are very valid and can be used without revision. At the same time, the practitioners got a score of 95% without input. Scores with criteria that are also very valid and deserve to be used without revision.

In terms of language, a validity test is also needed to assess the level of suitability of the use of supplementary textbook language with the theory of ideal language use according to PUEBI, and the level of development and characteristics of target students (Anwar, Ruminati, & Suharjo, 2017). As a result, the supplementary textbook's validity level based on the expert validation test got a score of 75% with input related to spelling and punctuation that must be adjusted to PUEBI. Scores in the criteria are quite valid and can be used with minor revisions based on expert input. Meanwhile, practitioners got a score of 95% with input related to the consistent use of local spelling. Scores with very valid criteria and deserve to be used without revision.

The validity test in terms of textbook design is also needed to assess whether the supplementary textbook designs developed have met the characteristics of textbooks in general based on relevant theories, for example, related to layout, attractiveness of illustrations, legibility and others (Anggraeni, 2017). Regarding textbook design, the supplementary textbook's validity level based on the expert test got a score of 97% without input. Scores fall into the very valid category and can be used without revision. Meanwhile, practitioners got a score of 92% without input. Scores with very valid criteria and can be used without revision. In terms of culture, validity testing by cultural experts and practitioners who are also Bangkalan people needs to be done to ensure that the contents of supplementary textbooks related to the content of local wisdom of the Bangkalan Region are appropriate.

Based on the field's reality, in the field can be accounted for (Suherli, 2008). The validity level of the supplementary textbook based on the expert validation test got a score of 89% with input to add references and improve the layout of pictures and writings. Scores in the criteria are very valid and can be used without revision. Meanwhile, practitioners got a score of 93% without input. Scores with criteria that are also very valid and deserve to be used without revision. The final score of the validity of the supplementary textbook product seen from the average validation results of experts and practitioners got a score of 90% with very valid and usable criteria.

3.2 The Effectiveness of Supplementary Textbooks

The effectiveness of the supplementary textbook product was obtained from the cognitive learning outcomes test for grade IVA students. The test is used to test the effectiveness because this instrument is suitable for use if the competence to be assessed is in the form of mastery of students' knowledge (Akbar, 2017). The following is a table of student learning outcomes for class IVA SDN Demangan 1 Bangkalan.

Table 1. Student Learning Outcomes for Class IV

Subject	Value	Description
1	80	Complete
2	85	Complete
3	85	Complete
4	85	Complete
5	75	Complete
6	90	Complete
7	100	Complete

Subject	Value	Description
8	85	Complete
9	90	Complete
10	70	Complete
11	80	Complete
12	85	Complete
13	80	Complete
14	95	Complete
15	90	Complete
16	100	Complete
17	100	Complete
18	90	Complete
19	80	Complete
20	85	Complete
21	100	Complete
22	90	Complete
23	80	Complete
24	85	Complete
25	95	Complete
26	95	Complete
27	70	Complete
28	70	Complete
29	90	Complete
30	100	Complete
31	85	Complete
32	80	Complete
33	85	Complete
34	85	Complete
35	95	Complete
36	90	Complete
Total	3195	
Average	89	

This effectiveness trial's results obtained an average of 89 learning outcomes with 100% of students completing classically. Because the number of students who completed 85%, it was concluded that the supplementary textbook based on Bangkalan local wisdom was effective and could be used in the learning process.

The Practicality of Supplementary textbooks

The product's practicality level is seen from the results of the response questionnaire and the observation sheet on the implementation of teacher and student learning. The response questionnaire instrument can be used to assess the applicability of the product (Akbar, 2017). This is supported by another theory which states that efforts to collect data at the trial stage can use questionnaires and observation techniques to determine the use of research products in the trial process (Sanjaya, 2013).

The results of the practicality test of the teacher's response questionnaire got a score of 96%, while the student response questionnaire got a score of 89%. The average teacher and student response questionnaire scores were calculated and obtained a score of 93% with very practical criteria. There is also based on the results of observations on the implementation of teacher and student learning, each of which obtained a score of 96% and 92%. The results of observations on the implementation of teachers and students are on average so that they get a score of 94% with the criteria implemented. Based on the results of the questionnaire responses and observations of the implementation of learning from teachers and students both showed that the supplementary textbook products based on Bangkalan local wisdom that were developed were very practical and implemented or could be used.

Based on the results of expert and practitioner validation tests, cognitive learning outcomes tests, questionnaire responses and observations on the implementation of teacher and student learning, it shows that the supplementary textbook product based on Bangkalan local wisdom that was developed is valid, practical, and effective so that it is suitable for use in the thematic learning process in class IVA. This supplementary textbook product also gives a good impression and very positive feedback from teachers, students and from the school.

4. CONCLUSION

Based on the results and discussion of the research on Development of Supplementary Textbooks Based on Local Wisdom in Bangkalan, the Theme of the Beauty of Diversity in My Country, the following conclusions were obtained:

1. The validity of the supplementary textbook product from the average validation results of experts and practitioners obtained a percentage of 90% indicating very valid criteria so that the product is feasible to use.
2. The effectiveness of the supplementary textbook product is seen from the competency test for cognitive learning outcomes for class IVA referring to the KKM, showing that 100% of students complete the KKM, so it can be said that the product is in the criteria of being effective and can be used.

The practicality of the supplementary textbook product as seen from the results of the teacher and student response questionnaires, obtained a percentage of 93% with this percentage showing very practical criteria. While the results of the average observation of the implementation of teacher and student learning obtained 94% results with the criteria implemented, so it can be said that the product is feasible to use

5. REFERENCES

- Afandi, M. I., & Zulaeha, I. (2017). Keefektifan buku pengayaan menulis teks hasil observasi bermuatan multikultural berbasis proyek baca tulis untuk peserta didik smp. *Seloka: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 6(2), 187-199.
- Anwar, M. F., Rumiati, & Suharjo. (2017, Oktober). Pengembangan modul pembelajaran tematik berbasis kearifan lokal kabupaten sumenep kelas IV subtema lingkungan tempat tinggalku. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 2(10), 1291-1297.
- Ariyani, Y. D., & Wangid, M. N. (2016). Pengembangan bahan ajar tematik integratif berbasis nilai karakter peduli lingkungan dan tanggung jawab. *Jurnal Pendidikan karakter*, 6(1), 116-129.
- Chusna, L. N., Ekowati, D. W., & Kuncahyono. (2019). Modul pendamping pembelajaran tematik berbasis kearifan lokal blitar di kelas IV SD. *Indonesian Journal of Primary Education*, 3(1), 81-92.
- Defina, D. (2018). Model Penelitian dan pengembangan materi ajar BIPA (Bahasa Indonesia bagi Penutur Asing). *Indonesian Language Education and Literature*, 4(1), 36-51.
- Kurniasari, D. A., Rusilowati, A., & Subekti, N. (2014). Pengembangan buku suplemen IPA terpadu dengan tema pendengaran kelas VIII. *Unnes Science Education Journal*, 3(2), 462-467.
- McKagan, S. B., Perkins, K. K., & Wieman, C. E. (2010). Design and validation of the quantum mechanics conceptual survey. *Physical Review Special Topics-Physics Education Research*, 6(2), 1-17
- Muzayyanah, A., Wijayanti, A., & Ardiyanto, A. (2020). Pengembangan lembar kerja peserta didik (LKPD) tematik berbasis HOTS (Higher Order Thinking Skill) kelas IV Sekolah Dasar. *Jurnal Pijar Mipa*, 15(5), 452-457.
- Moore, G. F., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., & Baird, J. (2015). Process evaluation of complex interventions: Medical Research Council guidance. *BMJ*, 350.
- Nuraini, L. (2018). Integrasi nilai kearifan lokal dalam pembelajaran matematika sd/mi kurikulum 2013. *Jurnal Pendidikan Matematika*, 1(2), 1-17.
- Priyambodo, E., & Wulaningrum, S. (2017). Using chemistry teaching aids based local wisdom as an alternative media for chemistry teaching and learning. *International Journal of Evaluation and Research in Education (IJERE)*, 6(4), 295-298.
- Rozhana, K. M., & Anwar, M. F. (2019). Pengembangan modul berbasis daerah trenggalek untuk menumbuhkan sikap peduli lingkungan. *Jurnal Bidang Pendidikan Dasar*, 3(2), 39-46.
- Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 32-43.
- Suastra, I., Jatmiko, B., Ristiati, N., & Yasmini, L. (2017). Pengembangan Karakter Berdasarkan Kebijakan Lokal Bali dalam Pengajaran Fisika di SMA. *Jurnal Pendidikan IPA*

Indonesia, 6(2), 306-312.

- Suherli, K. (2008, Juni 15). Keterbacaan Buku Teks Pelajaran Berdasarkan Keterpahaman Bahasa Indonesia . *Jurnal Bahasa dan Sastra* , 2(8), 122-132.
- Tinja, Y., Towaf, S. M., & Hariyono. (2017, September). Pengembangan bahan ajar tematik berbasis kearifan lokal sebagai upaya melestarikan nilai budaya pada siswa sekolah dasar. *Jurnal Pendidikan: Teori Penelitian, dan Pengembangan*, 2(9), 1257-1261.
- Vermeeren, A. P., Law, E. L. C., Roto, V., Obrist, M., Hoonhout, J., & Väänänen-Vainio-Mattila, K. (2010, October). User experience evaluation methods: current state and development needs. *Proceedings of the 6th Nordic conference on human-computer interaction: Extending boundaries*, 521-530.
- Wagiran. (2012). Pengembangan karakter berbasis kearifan lokal hamemayu hayuning bawana. *jurnal pendidikan karakter*, 2(3), 329-340.
- Widiana, I.W. (2016). Pengembangan asesmen proyek dalam pembelajaran ipa di sekolah dasar. *JPI (Jurnal Pendidikan Indonesia)*, 5(2), 147-157.
- Zuriah, N., Sunaryo, H., & Yusuf, N. (2016). IbM guru dalam pengembangan bahan ajar kreatif inovatif berbasis potensi lokal. *Jurnal Dedikasi*, 13(3), 39-49.