

Development of Microteaching Guide Book Based on Hybrid Learning to Improve Teaching Skills of Prospective Teachers

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ABSTRACT

The lack of microteaching guidebooks makes prospective teacher students confused when preparing microteaching lessons. This development research aimed to produce a Micro Teaching Teaching Material Book Based on Hybrid Learning to improve the Teaching Ability of Christian Religious Education Prospective Teachers at Tarutung IAKN Christian Religious Education Study Program. The type of research and development research method used was a quantitative method. This study adapts and combines the CDP (Courseware Development Process) instructional development model, with development research procedures, according to Borg and Gall. The six stages of developing the CDP instructional model include: 1) analysis, 2) design, 3) development, 4) formative evaluation, 5) implementation, and 6) summative evaluation. Operational testing of the product was a manual, electronic manual and electronic micro teaching-based teaching book for hybrid learning. The results of the validation in the form of expert assessments of material, media, and language expert lecturers and products in the feasibility test of micro-teaching guidebooks based on hybrid learning to students in field trials were 90.78%. So it can be concluded that the feasibility of micro-teaching guidebooks based on hybrid learning for students and lecturers in field trials is included in the very feasible and valid category to be used as teaching materials.

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1. INTRODUCTION

Teaching is an obligation that is the main task of a teacher. Teaching is a professional job that requires special expertise through education and experience. A teacher must have the ability and skills to teach in theory and practice to create a good teaching and learning process (Maharani, Kholid, Pradana, & Nusantara, 2019). One of the efforts in preparing the ability of prospective teachers or to improve the ability of teachers to carry out complex learning tasks, can be done by having a training or learning process using a more simplified and more popular approach or learning model called micro teaching.

Microteaching is a performance training method that is clearly designed by isolating the component parts of the teaching process, so that prospective teachers are able to master each component one by one in a simplified teaching situation (Hasibuan & Moedjiono, 2009). Microteaching is a performance-based learning method whose technique is carried out by training basic teaching competency components (teaching skills) in a simplified learning process in terms of teaching competency aspects, student management, material mastery, and time management. Microteaching is directed in the context of establishing teacher competency as a learning agent as contained in UU No 14 Tahun 2005. It means that microteaching needs to be taught to prospective teacher students as a provision for them to go directly into the field, because microteaching can hone their teaching skills, starting from lesson planning, learning process and also evaluating learning outcomes (Darsinah, Salsabila, & Febriana, 2021; Jon & Sari, 2019; Pagarra & Syamsiah, 2019; Sulastri, Bahtiar, Putri, & Inayati, 2020; Susantini, Kholiq, Yonata, Maulida, & Faizah, 2014).

Microteaching is one of the prerequisite courses as a practical field experience in schools for students majoring in education (Khuriyah, 2017). Microteaching is designed using a small scale to develop teaching skills, increase knowledge and the professional attitude of a teacher (Supiyanto, 2017). Microteaching activities, at TTI tertiary institutions, are teaching courses especially in equipping students in semester 6 to have teacher competence through simplified teaching simulation activities (Ardi, 2014). Microteaching learnings are always developed in line with the applicable curriculum and study programs so that they are able to meet the needs of prospective educators (Prasetyo, 2015). It can be said that microteaching is a compulsory subject for students majoring in education.

Microteaching for prospective teacher students emphasizes the transmission of objective knowledge where the teacher is the main source of information. However, in the conventional method, micro-teaching by students as prospective teachers is not sufficient. Therefore, teaching goals become shifted and student-centred, so that they are measurable, achievable, relevant and timely (Remesh, 2013). Microteaching allows maximizing each teaching skill because it includes aspects of listening, observing and practicing them (Afifah, 2017).

All competencies must be owned by prospective Christian Religious Education teachers, especially a Christian Religious Education teacher must have the ability to teach and master the subject matter well, be able to manage classes well, be able to manage teaching and learning programs, master the basics of education, use the media and learning resources, managing offline and online teaching and learning interactions (Nababan & Taruli, 2021). As an educator, you are required to master learning in the classroom, starting from planning, processing, and evaluating learning outcomes.

The PAK study program, as the management unit, only provides a teaching practice assessment format. The thing that is of concern in this study is the need for teaching materials that are adapted to the areas of competence with the desired graduate learning outcomes. The Christian Religious Education Study Program (PAK) aims to produce PAK teachers who are superior and have spirituality. With the profile of graduates becoming teachers who have attitudes and values, knowledge, general skills and special skills in accordance with the Study Program Curriculum which refers to Kerangka Kualifikasi Nasional Indonesia (KKNI). Current technological developments make maximum use of it in the world of education, both for online and offline learning, both of which are often called hybrid learning. Hybrid learning is an approach that combining face-to-face instructions with online-based computer-mediated instructions or referred to as a pedagogical approach (O'Byrne & Pytash, 2015). Hybrid learning is learning that synchronizes traditional learning with e-learning.

Hybrid learning combines formal and non-formal education programs, a combination of face-to-face classroom methods or face-to-face learning activities with online learning or technology-based learning (Wibawanto, 2021). The hybrid learning model is learning to provide learning model content in a variety of media (including, but not limited to traditional, web-based, computer-based, and video teletraining) to keep up with current learning needs (Brilian, 2015; Watson, 2008). In other words, hybrid learning is a learning model that provides a solution when face-to-face learning cannot be carried out due to certain constraints. Hybrid learning that is most often put forward is a definition that combines various learning media modalities, a definition that combines various learning methods, learning theories, and pedagogical dimensions, as well as a definition that combines online learning with face-to-face (Graham, 2005). So that learning based on hybrid learning is a combination of face-to-face learning activities with online learning activities from the aspects of learning theory, approaches, and learning models to achieve learning goals.

The supporting components of the learning process are textbooks, which are essentially the guidance of teachers/lecturers and students as teaching and learning resources. In the realm of education, books are one of the supporting parts of the continuity of education. According to Mintowati (2003), textbooks are one means of successful teaching and learning process. A textbook is a written work in a book model that is used by teachers in the continuity of teaching and learning (Lubis, 2004). Several previous studies that reviewed the development of microteaching guidebooks include: Megawati & Trisnawati, (2022). The microteaching module was developed for online learning. Furthermore, a microteaching guidebook was also developed for prospective PAUD teachers using a 4-D development model. The results obtained are that the guidebook meets the criteria of being effective and can be used. From the research results, there has been no research that has developed a microteaching manual on hybrid learning.

2. METHODS

Place of research conducted in the Department of Christian Religious Education (PAK) at the Faculty of Christian Education (FIPK) Institut Agama Kristen Negeri (IAKN) Tarutung, Tapanuli Utara on April 2022 until November 2022. The research subjects were 65 semester students of the Department of Christian Religious Education (PAK), consisting of 27 males and 38 females. The research used is the type of research and development (research and development). This study adapts and combines the CDP (Courseware Development Process) instructional development model, with development research procedures according to Borg and Gall. The six stages of developing the CDP instructional model include: 1) analysis, 2) design, 3) development, 4) formative evaluation, 5) implementation, and 6) summative evaluation. The research and development stages of the CDP model are as follows:

1. Preliminary research, which includes data collection through literature studies, interviews with several students, lecturers supporting Micro teaching courses, and study program leaders to find out the needs in the field.
2. Planning, which includes determining the abilities needed for the learning model to be developed, the formulation of learning objectives to be achieved, teaching and learning activities, evaluation systems, and assessment of instructional materials.
3. Development of initial prototypes, which include the design of each instructional unit, preparation of evaluation instruments, development of textbooks integrated with video tutorials, and editing. The purpose of integrating textbooks with video tutorials is to create learning media that enables students to study independently and effectively, especially when they have to study online.
4. Formative evaluation, which includes initial try-out (individual), first revision, small group tryout, second revision (if needed), final editing. In this stage, the instrument validation will also be carried out by experts.
5. Implementation, namely by applying a blended learning learning model for Micro teaching courses that have been developed in the classroom, as well as observing and recording student performance during the implementation process.

6. Summative evaluation, which is the final stage, namely analyzing data obtained from the results of program implementation, to then be evaluated and determined whether the instructional model developed can be used or not, or whether modifications are still needed or not.

2.1 Data Collection Technique

The data collection technique used is descriptive qualitative and quantitative data analysis techniques. The combination of these two analytical techniques is related to a series of research stages in the development of a choir learning model, starting from problem identification, research objectives, research models and theoretical assumptions that underlie this research activity. The data collection was carried out as follows: 1) Literature Study, to collect data in the form of documents that include government regulations or policies related to offline and online learning or Hybrid Learning; 2) Interviews, carried out as a stage of needs analysis of stakeholders (students, course lecturers, study program leaders) about how important the product being developed is; 3) Questionnaires, which are used in the formative evaluation stage and get feedback regarding the model being developed; 4) Learning Outcomes Test, in the form of an assessment rubric (which will later be validated in advance by an evaluation expert) on student performance in this course as a teaching test or in the form of teaching practice.

2.2 Data Analysis Technique

The data from the interview results were analyzed by selecting interview transcripts, coding the data, narrating (both qualitatively, numbers and tables) the data, interpreting the data, then presenting the data. Questionnaire data were analyzed using a Likert Scale, which was modified into four levels with the following scoring criteria:

Table 1. Questionnaire Scoring Criteria

Response	SCORE	
	Positive Statement	Negative Statement
Very Good (SB)	4	1
Good (B)	3	2
Not Good (KB)	2	3
Bad (TB)	1	4

The results of the questionnaire data regarding the responses or assessments of experts and respondents to the quality or feasibility of the products developed were then analyzed using descriptive statistics using formulas:

$$\text{Validity} = \frac{\text{total score}}{\text{maximum total score}} \times 100\%$$

Table 2. Validity Criteria

No.	Percentage	Criteria
1.	85,01%-100,00%	Very valid, can be used without improvement
2.	70,01%-85,00%	Moderately valid, usable but needs minor improvements
3.	50,01%-70,00%	Less valid, needs major improvement
4.	01,00%-50,00%	Invalid, cannot be used

The developed book is declared valid if the combined validity results show more than 70% (Akbar, 2013).

Data on learning outcomes and effectiveness criteria The KKM score set for the micro teaching course is 75 (qualitative grade B). The final scores of the respondents were analyzed by adding up the scores of the Mid Semester Teaching Practice Exams (with a proportion of 40%) and the scores of the

End of Semester Teaching Practice Exams (with a proportion of 60%). Both tests are in the form of practice. If the final test score is still below 75, then students are given the opportunity for remedial twice, and if after remedial students get scores above 75, then the score given is still limited to KKM, namely 75.

3. FINDINGS AND DISCUSSION

The type of research conducted is research and development (R&D). The research product which is the result of development is micro-teaching materials based on hybrid learning. The development procedure used in this research is an adaptation of the Courseware Development Process (CDP) instructional development model, with stages of (1) preliminary research, (2) planning stage (3) development, (4) Formative Evaluation (5) product implementation, (6) Summative evaluation. Based on the research and development carried out, the following research results were obtained.

3.1. Preliminary Research Stage

The preliminary research stage is the first step taken in developing hybrid learning-based micro teaching materials. Kekang (2013) mentions that hybrid learning is learning that combines traditional learning with e-learning learning. Hybrid Learning mixes formal and non-formal education programs, combines face-to-face learning activities (face-to-face classroom method) with online technology-based learning (Wibiwanto, 2020). The Hybrid Learning Model is learning to provide learning model content in a variety of media (including, but not limited to, traditional, web-based, computer-based, and video teletraining) to keep up with current learning needs (Brilian, 2015; Watson, 2008). At this stage, a needs analysis is carried out related to the needs of learning materials, learning models and processes as well as student characteristics. The method used in the needs analysis stage is observation and documentation.

Observations were made on micro teaching which was carried out by 6 lecturers. The results of observation and documentation concluded that supporting lecturers are lecturers who are competent in their fields and are creative in delivering material. But the lecturer has not been able to create a comfortable atmosphere during learning. Lecturers are too focused on delivering material and practices that are not optimal, and student participation and activeness have not been optimally accommodated. Based on the description of the needs analysis of the model problems and the learning process as well as the characteristics of the student learning styles, it can be concluded that the micro-teaching course requires teaching materials based on hybrid learning that are able to improve understanding, skills, and character in face-to-face learning and distance learning.

3.2. Planning Stage

Based on the needs analysis, the research products designed through hybrid learning-based micro-teaching materials are research products produced to support the form of micro teaching materials books. Initial research products that have been designed, and then validated by experts. Validation is carried out to obtain valid contributions and information. The validators are lecturers who are competent in their respective fields of expertise, namely Dr. BP and Dr. AGP, M.Pd.K as a material expert, Dr. ET is a media expert in design/modelling, MS, M.Pd is a linguist. Criticism and suggestions from experts given during validation become input for researchers to revise the product. Furthermore, at the limited trial stage in an effort to improve the quality of models and research products to be applied in expanded trials.

Product revisions are described as follows.

1. Evaluation experts provide suggestions for improvement at the stage of the learning outcomes evaluation process. It is necessary to explain techniques for measuring the level of mastery in the cognitive, affective, and psychomotor aspects so that they are more measurable and authentic.

2. During the small trials, users of the research products provided input for improvements to the teaching materials manual so that students' abilities to become prospective PAK teachers in using hybrid learning-based micro-teaching materials were clearer.
3. The final revision of the research product after going through an expanded or field trial is carried out in a textbook. After product revision is carried out, the next step is to carry out construct validity and validation of the feasibility of the contents of the research product so that it can be used during field trials.

3.3. Development Stage

The validation results obtained from the validation results form the basis for revising the initial research product in perfecting the research product so that it is suitable for use in learning. The content validity of the hybrid learning-based micro teaching textbook content was obtained by distributing the product to 5 experts (material experts, design experts, and media experts) to assess the validity of the learning model textbook content. Based on the calculations, it was found that for each validity the percentage of eligibility was obtained, namely for material feasibility of 95.8%, design feasibility of 93.8% and media eligibility of 95.8% can be seen in Figure 1. The following.

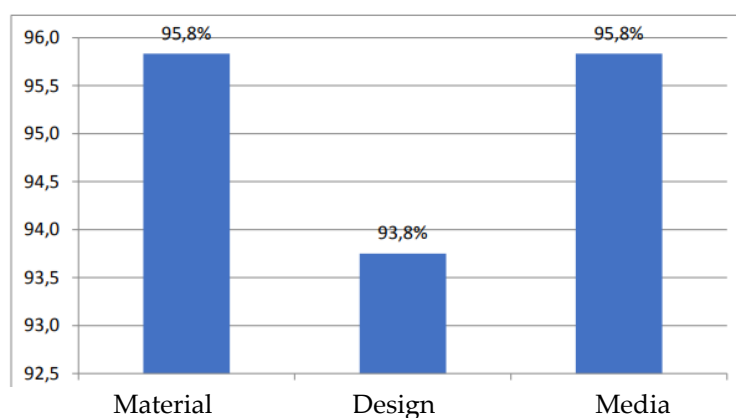


Figure 1. The Validity of Microteaching Guide Book

So it can be concluded that the validity of content validity of the hybrid learning-based micro-teaching guidebook is said to be valid so that the rational hybrid learning-based micro teaching guidebook can be used.

3.4. Formative Evaluation Stage

At this stage three activities were carried out, namely the results of evaluating the quality of the microteaching guide book one to one, small group trials, and large group trials. In the first activity, the overall average percentage of feasibility (clarity, attractiveness and usefulness) of Hybrid Learning Based Micro Teaching Books developed based on the results of one-to-one evaluation analysis was 90.3%. The results of the questionnaire data analysis, it shows that the developed module is very feasible to use.

In the small group trials, it was found that overall the average percentage of feasibility (clarity, attractiveness and usefulness) of the modules developed based on the results of the small group evaluation analysis was 90.2%. Based on the results of the questionnaire data analysis, it shows that the book developed is very feasible to use.

In large group trials or field trials, data was obtained that overall the average percentage of feasibility of the modules developed based on the results of the analysis of field trial evaluations was

92%. Based on the results of the questionnaire data analysis, it shows that the developed module is very feasible to use and without any revisions.

3.5. Implementation Stage

The fifth stage of the research is to apply a hybrid learning-based learning model for micro teaching courses that have been developed and to observe and record performances as an effort to improve teaching skills for prospective Christian Religious Education teachers. In the implementation of this stage, 39 students participated and the implementation was carried out in 4 meetings (2 offline meetings, 2 online meetings) where each meeting consisted of 2 credits or 2 x 50 minutes. Before being applied to learning, a pre-test was previously carried out to determine students' microteaching abilities before using the manual. The results of the pre-test, namely the average score is 70.

After all the activities for the fourth meeting have been completed, a post-test is carried out to see for sure the effectiveness of the learning model. For the post-test, students are asked to form small groups of three to four people, then they are asked to make a dialogue about Greetings and Introductions. Instructions for the pre-test and post-test are the same so that student progress can be seen clearly. The value obtained from this conversation is the post-test score. It is known that the average post-test score of students after remedial is $86.86 > KKM$.

3.6. Summative Evaluation Stage

The sixth stage in this study is the final stage, namely analyzing the data obtained from the results of product implementation, to then be evaluated and determined whether the instructional model developed can be used or not, or whether modifications are still needed or not. From the results of the implementation, it is known that the instructional model developed can and is appropriate to be used as a tool or learning media in hybrid learning-based micro-teaching courses for students at the IAKN Tarutung campus, Christian Religious Education study program. In addition, no further modifications are required after implementation or large group tests are performed. This can be seen from the average post-test score of students who have exceeded the KKM, which is 86.86.

4. CONCLUSION

Micro Teaching handbook based on hybrid learning as an effort to improve teaching skills for prospective Christian Religious Education teachers. It has been proven effective for use in micro-teaching courses. This is evidenced by looking at the acquisition of student learning outcomes in the field trial group after applying the developed model. Prior to the learning process using the model, an initial test was first carried out. Based on the initial test conducted, it was obtained that the average overall score of 70 students was still below the learning completeness score of 75 (KKM). Furthermore, based on the final test that was carried out after the learning process using the model, the average student's overall score was 86.86, higher than the learning completeness score set at 75 (KKM). Thus it can be concluded that the Micro Teaching handbook based on hybrid learning as an effort to improve teaching skills for Christian Religious Education teacher candidates that have been developed has been effective. Besides that, the use of models can also improve students' skills in teaching abilities. This is evidenced by an increase in the acquisition of initial test scores (pre-test), which previously was 70, which increased to 86.86 in the final test (post-test).

REFERENCES

- Afifah, N. (2017). Kualitas Keterampilan Dasar Mengajar Calon Guru Pada Mata Kuliah Microteaching Program Studi Pendidikan Biologi Universitas Pasir Pengaraian. *Jurnal Pendidikan Biologi Indonesia*, 3(1).
- Akbar, S. (2013). *Instrumen Perangkat Pembelajaran*. Bandung: PT. Remaja Rosdakarya.
- Ardi, M. (2014). Pelaksanaan Pembelajaran Micro Teaching Bagi Mahasiswa Program Studi PPKn STKIP PGRI Pontianak. *Jurnal Edukasi*, 75–84.

- Brilian, T. (2015). *Overview Hybrid Learning*. STMIK Stikom Surabaya.
- Carman, J. M. (2005). *Blended Learning Design: Five Key Ingredients*.
- Darsinah, D., Salsabila, A., & Febriana, S. (2021). Development of Guidelines for Micro Teaching in Early Children Education Faculty of Universitas Muhammadiyah Surakarta. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, 12(2), 159–167. <https://doi.org/10.17509/cd.v12i2.37463>
- Graham, C. R. (2005). Blended Learning System: Definition, Current, and Future Directions. In *The Hand Book of Blended Learning*.
- Hasibuan J.J. dan Moedjiono. (2009). *Proses Belajar Mengajar*. Bandung: Remaja Rosda Karya.
- Jon, E., & Sari, A. P. (2019). Pengembangan buku ajar microteaching bernuansa islami dalam meningkatkan pendidikan karakter mahasiswa calon guru. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 5(2), 88. <https://doi.org/10.29210/120192368>
- Kekang, H. (2013). In *The Hybrid Learning Basic Formed-Correctly Guiding Future Classroom Teaching's Education Idea and Teaching Concept*. 61–72.
- Lubis. (2004). *Asesmen Berkelanjutan, Konsep Dasar, Tahapan Pengembangan dan Contoh*. Surabaya: UNESA University Press.
- Maharani, S., Kholid, M. N., Pradana, L. N., & Nusantara, T. (2019). Problem Solving in the Context of Computational Thinking. *Infinity Journal of Mathematics Education*, 8(2), 109–116.
- Megawati, M., & Trisnawati, W. (2022). The development of a micro-teaching module for online learning. *International Journal of Educational Studies in Social Sciences (IJESSS)*, 2(2), 54–61. <https://doi.org/10.53402/ijesss.v2i2.47>
- Nababan, A., & Taruli, D. (2021). HUBUNGAN PEMBERIAN PENGUATAN PEMBELAJARAN MELALUI DARING DENGAN MOTIVASI BELAJAR PADA MASA PANDEMI COVID-19. 14(1), 105–115.
- O'Byrne, W. I., & Pytash, K. E. (2015). Hybrid and Blended Learning: Modifying Pedagogy Across Path, Pace, Time, and Place. *Journal of Adolescent & Adult Literacy*, 59(2), 137–140.
- Ozonur, M. (2019). Evaluation of Pre-service Teacher's Views Related to Microteaching Practice. *Universal Journal of Educational Research*, 1226–1233.
- Pagarra, H., & Syamsiah, S. (2019). The Development of Microteaching Learning Model For International Class Program Of Elementary School Teacher Education. *ICSTEE*, 1–7. <https://doi.org/10.4108/eai.14-9-2019.2290048>
- Prasetyo, F. A. I. dan A. (2015). Evaluasi Kesesuaian Perkuliahan Microteaching Pendidikan Fisika Terhadap KKNI di UIN Sunan Kalijaga Yogyakarta. *Jurnal Inovasi Pendidikan IPA*, 36–45.
- Remesh, A. (2013). Microteaching, an efficient technique for learning effective teaching. *Journal of Research in Medical Sciences: The Official Journal of Isfahan University of Medical Sciences*, 18(2), 158.
- Sulastri, S., Bahtiar, M. D., Putri, D. M., & Inayati, R. (2020). Pengembangan Buku Pengajaran Mikro Berbasis Life Based Learning Untuk Meningkatkan Kapabilitas Mahasiswa Pada Matakuliah Kemampuan Dasar Mengajar. *Jurnal Pendidikan Akuntansi (JPAK)*, 8(1), 1–8. <https://doi.org/10.26740/jpak.v8n1.p1-8>
- Susantini, E., Kholiq, A., Yonata, B., Maulida, A. N., & Faizah, U. (2014). Development Microteaching Handbook for Lecturer, Student, and Learning Laboratory Crew of Science and Mathematic Faculty. *International Journal of Education*, 6(3), 229. <https://doi.org/10.5296/ije.v6i3.5913>
- Watson, J. (2008). *Blended Learning: The Convergence of Online and Face-to-face Education*. Florida: Nacol.
- Wibawanto, T. (2021). *Memaksimalkan Pembelajaran di Saat Pandemi Melalui Hybrid Learning dengan Portal Rumah Belajar*.