Blended Learning in Teacher Profession Education (PPG) of Germany Education as The 21st Century Teacher Training Model

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Abstract

This study aims to solve problems related to the policy of Teacher Professional Development (TPD) program. This research produces a syllabus of in-office TPD for the German language to solve problems faced in the field; it is necessary to provide provision and preparation for lecturers so that the preparation and implementation of learning have the same standards and goals and the percentage of pedagogic material is more than the professional content. Meanwhile the composition of the competency test is otherwise. In this study, a new policy of TPD is formulated based on 21st century competencies and 21st century learning models that have been successfully applied in Australia, namely a life skills-based learning approach, or known as life- based learning. This framework has become the flagship program for learning innovation at the State University of Malang. The research employed a research and development method that begins with problem identification or problem formulation. The syllabus design is created and developed based on performance and needs analysis, and oriented to the principles of teacher training in the 21st century. These principles are reflected in the syllabus which contains pegadodic competences, professional competence, the ability to use digital media through blended learning and digital-based learning. Based on the results of the validation by German learning experts and suggestions from users, it can be concluded that the PPG German syllabus design is feasible to use. Nevertheless, it is necessary to refine the time allocation according to the needs and clarity of evaluation and assessment.

Keywords: pedagogic, professional, syllabus, German

INTRODUCTION

The Ministry of Education and Culture (Kemendikbud) continues to strive to improve the quality of educators in Indonesia through a program to increase teacher professionalism, namely Teacher Professional Education (TPE). However, the implementation of TPE raises several problems in the field. The problems encountered during the implementation are as follows. (1) It needs provision for lecturers so that the preparation and implementation of learning have the same standards. (2) Teaching practice cannot be fully implemented in the classroom, because most schools implement an independent teaching and learning activity unit (UKBM). (3) The percentage of pedagogics material is more than the professional contents.

Research on professional teacher training has been been carried out in China in a complex way. It has focused on teachers' learning in a school-based context, and rarely explores how teachers might develop in other situations. Adopting a cross- border framework, this study examines the professional learning process of teachers when they participate in Master Teacher Studios in mainland China. Through a qualitative case study approach, this study summarizes four learning mechanisms: seeking differ-

ences in common, developing through formal and informal coordination, breaking gaps and expanding one's boundaries, and practicing a wholehearted learning. Furthermore, intrapersonal, interpersonal and institutional factors contribute to the preparation of professional teachers.

Based on the problems identified, it is necessary to prepare a workshop syllabus that can accommodate the needs in the practice. The syllabus draft designed is needed as input for policy makers to be used as material for revising the available syllabus. Thus the product of syllabus development here is expected to be a solution to the problems.

A similar research has been done in Yogyakarta (Triwinarni, 2016). It has proved that the implementation of TPE among Islamic Education teachers faced several obstacles. It, then, proposed a couple of recommendations; 1) the participants should prepare well for their participation in professional and pedagogical training, 2) the organizers should prepare equipment that support learning or activities during PPG, so that the schedule of activities and the timing of their implementation can be done well as planned. The development of the TPE syllabus in the German language is carried out based on the problems that arise in its implementation at the State University of Malang in 2018.

The development of TPE syllabus in German language is based on the development model principles of Four-D Model (Thiagarajan. Semmel, and Semmel, 1974). It consists of 4 development stages, namely Define, Design, Develop, and Disseminate. The results of the evaluation on the syllabus implementation become the basis for revision. Thus, it is expected that the syllabus will be declared feasible and becomes part of the solution in evaluating the implementation of TPE in German education in Indonesia. The results of the study provide an overview of the ideal syllabus model for training German language teachers in accordance with the demands of teacher competence in the 21st century.

Equal Qualifications of Work and Professions in the Global Era

In order to overcome the gap between education and the real work, in 2010 universities in Indonesia agreed on "Mutual Recognition Agreement (MRA)" as the basis for implementing equal qualifications from various fields of work and professions in the global era" (Ministry of Research, Technology and Higher Education, 2016). Through Presidential Regulation Number 8 of 2012, the Indonesian National Qualifications Framework (INQF) was issued as a measure of the qualifications of Indonesian education graduates. Indonesian tertiary institutions use the qualification level as a measure of learning outcomes used in the preparation of the study program curriculum. The establishment of the ability of graduates is in the Graduate Learning Outcomes (GPO) which includes several elements, namely attitudes, knowledge, general skills, and special skills that refer to the Higher Education National Standards (HENS) and the INQF levels. HENS is a standard unit covering the standards of national education, research and community service (Ministry of Research, Technology and Higher Education, 2016). GPO formulation refers to INQF, especially with regard to elements of specific skills, namely job skills. According to INQF, undergraduate qualifications are at level six, namely "having the ability to apply, study, design, and utilize Science and Technology, and solve problems" (Curriculum and Learning Team, Directorate of Learning and Student Affairs, 2014).

In this 21st century teachers are not only required to have the ability to teach and manage teaching and learning activities well, but also to create good relationships between students and the school community. They have to master technology to improve the quality of teaching and reflect continuously on their learning practices (Darling , 2006). In order to achieve professional teacher skills, an effective professional development is needed, namely through guidance. Through a mentoring, a good professional relationship and community of professional learners will be built so that it can improve the quality of teaching and learning in schools. The mentoring is an assistance from an individual to another individual and is usually carried out by individuals who are considered more senior or have more proficiency in improving teaching professionalism (Andriani, 2010).

The 21st century curriculum design is prepared with an emphasis on the productivity of

higher education to produce work-ready graduates. In the millennium era, the focal point of creating a workforce is through lifelong learning that prepares the future and social interests of the students (Bosanquet, Winchester-Seeto, and Rowe, 2010). According to Grando and Calonge (2014), a 21st century curriculum design that is ready to produce a workforce can be done through the provision of a digital laboratory. The facilities provided are the realities inside and outside the classroom so that students get learning experiences. Correia (2014) suggests a work- based curriculum approach by placing students as partners for corporates. This approach is a response to the demand to produce work-ready graduates who can be entrepreneurial, think critically, solve problems, and take initiative. The theory and concept of life skills-based learning make it possible that there are two advantages to life-based learning. First, this concept can intuitively articulate and legitimize what is familiar and known. Second, life skills-based learning provides future insights so that students can easily provide examples from their own life experiences of how to learn from various sources.

MATERIALS AND METHODS

This study employed a research and development method that begins with problem identification or formulation. The research data to obtain in this study is data that focuses on the results of the syllabus development. The data collection is carried out using the chosen approach and strategy based on a number of certain parameters or indicators. The analysis is carried out by examining carefully and thoroughly criticizing not only the existing syllabus, but also on the formulation basis of the developed syllabus design.

The development of the TPE syllabus on German language education is based on the principle of the Four-D Model (Thiagarajan, Semmel, and Semmel, 1974). The model consists of 4 development stages, namely Define, Design, Develop, and Disseminate. The Define stage is for determining and defining the requirements of learning. This includes five main steps, namely front end analysis, participant analysis, task analysis, concept analysis and formulation of learning objectives.

Front end analysis aims to raise and determine the basic problems faced in learning, as reason of a syllabus development. A participant analysis is to identify their characteristics according to the training syllabus design. These include background academic abilities, cognitive development, and individual or social skills related to the learning topic, media, format and selected language. A concept analysis is carried out to identify the main concepts to be taught, arrange them in a hierarchical form, and break down individual concepts into critical and irrelevant things. It is needed to identify declarative or procedural knowledge in German language material as material for the preparation of the syllabus to develop.

The formulation of learning objectives is useful for summarizing the results of concept analysis and task analysis to determine the behavior of the research object. The collection of objects becomes the basis for making tests and designing learning devices which are then integrated into the learning device material that will be used by researchers.

The design stage aims to create a design of the necessary syllabus. The Develop (Development) stage aims to produce development products. Its main purpose is to produce the final form of the training syllabus after going through revisions based on input from experts / practitioners and test result data. The steps taken at this stage are as follows: (1) expert validation (expert appraisal) and (2) developmental testing. Field trials were carried out to obtain direct input in the form of responses, reactions, comments from participants, and observers to the learning tools that had been compiled. Trials, revisions and retries are continuously carried out until a consistent and effective product is obtained.

The dissemination stage is carried out to promote the product to be accepted by users, whether individuals, a group, or a system. It can also be done through a process of transmission to related learning practitioners in a particular forum, for example in the Indonesian German Language Teachers Association forum or the German Language Teacher Conference, and German language lecturers from PPPPTK Bahasa Jakarta. This dissemination aims to get input, corrections, suggestions, assessments, to improve the final

product development.

Expert validation was carried out through a questionnaire sent to learning material experts. The results of the questionnaire were used to determine the quality of the syllabus being developed. The suggestions required to revised the syllabus were also collected from an open questionnaire for users. The data were then analyzed using domain analysis to determine the relationship between problems, findings, and solution.

RESULT AND DISCUSSION

The front-end analysis is to set the basic problems in the learning. Its focus is to conduct a performance analysis in order to identify and clarify the problems faced and determine solutions to improve the quality of German language teacher training TPE. It includes several activities, namely (1) reviewing existing syllabus documents, (2) interviewing TPE participants in 2018, (3) analysing the needs of instructor (need anlysis of instructor), and (5) analysing th needs of participants (needs analysis of the participant).

Based on the analysis of the teacher training syllabus in TPE, it was found that the training syllabus has covered pedagogical and professional competences. Most of the professional competence materials are presented in the online stage, and the pedagogic part is presented in the offline session. The language level required from this training is German language competency level B1 [CEFR]. However, participants do not need to take the Z Certified Deutsch B1 exam organized by the Goethe Institut Indonesian as proof of proficiency in German at level B1.

In detail, the activities carried out at the needs analysis stage are as follows

(1) identifying the syllabus elements of the TPE training in 2018, and (2) identifying the needs of the instructors and of the participants.

Interviews with participants related to online learning activities and workshops held at the S-1 German Language Education Study Program, State University of Malang. The difficulties identified were divided into three stages, namely, the online stage, the workshop stage, and the practical stage at school. The problems faced during online activities are as follows. (1) the online activities can save their time, because

teachers do not need to leave school too long. (2) Online materials (material content, learning media via video, audio-related material) should be better prepared so that they will be easier to learn. (3) A problem of internet network connections was identified. As a result some participants had difficulties to complete their assignments on time.

The difficulties of the participants during the workshop include (1) The duration should be resonsidered. Leaving school for 2-3 months has an impact on the teaching and learning process for their students. In case of providing a substitute teacher, the schools have to provide the fees, which is not easy to solve. (2) The content of the workshop materials and exam materials should be reviewed. Most of the exam material is professional material, but in the workshop schedule pedagogical material dominates the workshop implementation. (3) The place for the workshop should consider the distance of the participants.

The difficulties at the teaching practice stage in schools were identified as follows.(1) the time for the practice implementation can be reduced, since the participants are teachers who have sufficient experience of teaching in schools. (2) The schedule for the teaching practice until the performance test should consider the school's academic timing, so that the performance test will not interfere with the school exam schedule.

The problems of the participants on the online learning activities are as follows. (1) Some pedagogical materials do not fit to the applicable curriculum. (2) Not all participants can communicate well in German both in the discussion and in answering exercises. Needs analysis data was also obtained through interviews with instructors who were also lecturers in the German language education. The following is the data from interviews with the lecturers. (1) In general, participants always try to be active in completing the exercises given to online activities and workshops, however, the learning outcomes of professional field generally have not been optimal according to the expected results. Some participants can master pedagogical and professional competences well, but there are still many participants who have professional competence under the expected standard, namely B1 [CEFR]. (2) The participants have personally consulted their problems related to decreased motivation, interest or

concentration, and also have discussed the possible causes and solutions. (3) It is necessary to select a method that places the participants as the main actors of learning in order to improve their abilities and the learning outcomes. The method must be adapted to the material provided, their level of language skills, and the facilities they have. (4) Not all participants actively participate in learning activities. Those with good abilities tend to be more active in class, while the weak group tend to be silent and passive participants in the learning.

Based on these findings, it is necessary to prepare a syllabus that accommodates the needs of the participating teachers in their current positions, namely a training that presents pedagogical and professional material proportionally and preparation of the Deutsch B1 Z Certified exam facilitated by the Goethe Institute so that at the end of the activities, the participants already have proof of their mastery of German language competency level B1. The preliminary observation [needs analysis stage] identified the needs of instructors and participants as well as the readiness of the TPE training. The next step is to develop a TPE of German education syllabus. It includes: (1) selecting the content of the syllabus, (2) identifying themes and learning materials for the syllabus, and (3) selecting the source and materials for training. The syllabus contains pedagogical and professional competences for online activities, workshops, and field practice. Each competency is presented in the same duration. The syllabus development was carried out based on the learning syllabus design that has been prepared. The syllabus design includes: (1) subject names, (2) basic competencies, (5) training materials, (6) learning resources. The syllabus is prepared by closely considering the components that have been planned. The dissemination process is a final stage of the development. It was to promote the product for the target users. The spreading can also be carried out through a process of transmission to related learning practitioners in a particular forum, for example in the Indonesian German Language Teachers Association forum or the German Language Teacher Conference, and German language lecturers from PPPPTK Bahasa Jakarta. The dissemination is also to get input, corrections, suggestions, assessments, to improve the final product development.

The dissemination is also done through Forum Group Discussion (FGD) and open questionnaires for language PPPTK lecturers. It was carried out with the participation of foreign researchers from Auckland University. The results of the discussion can be concluded as follows. The problems identified were: (1) how to activate participants in online activities ?, (2) How to bring up speaking exercises in online activities ?, (3) How to activate participants whose mastery of German is heterogeneous?, (4) How to solve the variety of language skill level among the participants, and (4) How to make feedback effective for tutors on online discussions? The discussions resulted in several solutions for improving the ideal German teacher training syllabus in the 21st century. Some of the inputs given are as follows.

(1) Group work in small groups or partners in doing online assignments with the aim that participants can work together and provide mutual assistance as they encounter difficulties. (2) Participants are given the opportunity to comment on each other from the perspective of their role as experienced teachers. Therefore, the exercises given should accommodate this. To present speaking skills in online activities, it is suggested that the use of audio data and comments to give participants the opportunity to communicate. This can be done if participants experience problems with the internet network if direct communication using video calls is hard to do. It is recommended that online learning should be well prepared by providing rules, implementation instructions, information about the facilities to use, and an explanation of communication strategies that can be used to make it easier for participants to communicate during online and offline learning.

To maximize the implementation of online learning in the pedagogical field, the PEP model (Praxiserkundunsprojekt) can be used. In PEP activities, participants work in groups online. Each group consists of three people (tridem). The activity begins with identifying the problem in learning and each group must formulate the problem in an interrogative sentence. Furthermore, each group prepares a solution to the problems found. The next step is to design a learning implementation plan (LIP) together. For this aim, we need facilities that accommodate the needs of the group in communicating on the platform. If

this is not possible, then participants can use digital media that can help them communicate with each other. Based on the lesson plans, each group member tries out the lesson plans in their respective classes. This requires documentation in the form of videos, photos, or other media to support future activity reports. In the final stage each group prepares a PEP report and uploads it on the platform so that all the participants can access and comment on it. The assessment for for the group and the individuals was based on the reports and videos uploaded. Based on the steps of the data obtained in the development activities, the following is an analysis table of these data. The analysis stage includes several activities, namely (1) reviewing the syllabus documents, (2) reviewing semester learning, (3) reviewing lecture program units, (4) analyzing lecturer needs, and (5) analyzing student needs.

The results of the syllabus development were socialized to the language instructors of PPPTK in Jakarta. To find out their feedback as the users, a questionnaire was distributed; it addresses the points of (1) general expert opinion regarding the syllabus being prepared, (2) the relevance of the syllabus to the needs of today's ideal teachers, (3) whether or not the components in the syllabus are in accordance with the expected characteristics of the current teacher, and (4) suggestions that need to be addressed. Material experts argue that the syllabus has met the criteria as a syllabus for teacher training which consists of professional and pedagogical competences. In addition, the syllabus has accommodated the digital- based learning and integrated the four language skills. The syllabus also requires standardizing the German language skills of teachers at level B1. In sum, the syllabus can be used according to current needs in Indonesia and is ideal for improving teacher competence. It contains pedagogical and professional material for German language teachers in Indonesia, which are demands and requirements that must be recognized as professional teachers. In addition, some of the requirements, that the syllabus must fulfill in order to suit the needs of teachers in the 21st century, are visible in the syllabus being developed, namely containing competencies to be mastered by the teacher, social competence in online and offline learning methods, teacher competence in mas-

tering digital media, the ability to prepare learning media both conventional media and digital media.

Discussion

This syllabus was developed in response to the fact that a syllabus was needed to accommodate the need of TPE training for the German language teachers. The syllabus used in in-service TPE training has accommodated the competencies they need. However, it had not been arranged proportionally between pedagogic and professional competences. In addition, there is no standardization of language skills of participants at level B1 (CEFR).

From the needs analysis it is known that online materials should be better reviewed so that it will easy to understand for the participants to understand. In addition, professional material needs to be added to face-to-face workshops, so that at the same time participants can prepare for the B1 standard exam (Z Certified Deutsch). Thus, it is hoped that at the end of the PPG activity the participants will be able to master the pedagogical competence in accordance with the demands of teachers in the 21st century and have competency in international standard German language level B1 as evidenced by the B1 test certificate from the Goethe Institute.

In accordance with the Thiagarajan model of learning design used in this study, the analysis consists of performance analysis and needs analysis. Performance analysis is needed to identify the conditions for implementing PPG and what improvements need to be made. Meanwhile, needs analysis is used to identify what competencies the participants should master so that learning outcomes can be realized. The analysis is combined with the ideal 21st century teacher principles which are used as the basis for the preparation of the syllabus. It can be concluded that the resulting product results are influenced by the results of performance analysis, needs analysis, and the ideal teacher principles of the 21st century.

Thus, it can be said that the mismatch between the conditions in the field and the expected conditions can affect the quality of learning and training outcomes. The performance problems of participants, instructors, and final examination results as well as the competency test are the

problems of instructors and participants and they also become the basis for the preparation of the syllabus. As Kanuka (2006) said, the syllabus includes the process of determining learning objectives, determining strategies and techniques, as well as learning media to achieve learning objectives. The implementation of a syllabus requires support from the institution as users and it must be based on a needs analysis.

The design as part of the development stage accommodates the results of the performance analysis and needs analysis, as well as the ideal teacher principles of the 21st century with its coverage including goal setting, determining strategies and techniques, and adequate media. In reality, the design stage does not only consider the results of the analysis, but also the objectives of TPE determined by Ristekdikti. As the basis for the development of the TPE syllabus, the design has accommodated the analysis results and the principles of the ideal 21st century teacher.

To develop the TPE syllabus, a learning strategy is needed to accord with a blended learning. It is a learner-oriented method presented through inductive learning. Through inductive learning, the participants are required to be able to find patterns and rules based on examples and models presented in online activities and workshops.

Learning by modeling is considered to be more effective than other methods because students are assisted to produce the same product as a model. This fact is consistent with what Muijs and Reynolds (2008) claiming that modeling is more effective than verbal explanation. The modeling is expected to be a learning strategy for participants. Thus, it can be concluded that in order to prepare a good syllabus for use, it should not only be oriented towards learning outcomes, but must pay attention to how the product can be used according to the conditions and needs of the participants and prepare them to be able to learn independently through literacy skills, multimeda mastery, the ability to cooperate with others, and the ability to think analytically.

In accordance with the design development stage of the 4-D model from Triagarajan, the development stage covers the activities to realize product design development. The con-ceptual framework that has been established at the design stage is realized into a product. The concept that underlies product development is based on the design and product specifications that have been determined at the design stage. The development stage is not the end result of a development. The resulting product is prepared for dissemination and socialization for further revision based on expert suggestions oriented towards preparing the ideal teacher of the 21st century. The results of the dissemination of the syllabus through a group discussion forum (FGD) show several things that must be considered in order to be accommodated in the preparation of the syllabus. The distribution of pedagogic and professional competences must be distributed equally. In addition, various social interactions are needed both on online activities and face-to-face workshops to help participants work together in solving the problems at hand. Communication strategies can be presented and become part of the material presented so that participants can participate in discussions in online and face-to-face activities.

As stated by Meyer (2005) that quality learning must meet several elements, including the existence of a clear learning structure consisting of processes, objectives, clarity of learning content, life-oriented, developing habits of collaboration, using various methods, and implemented in a conducive situation. Based on the idea, the implementation of the TPE syllabus in German education has met the requirements so that the training can run well. However, the design and preparation must be adjusted to the conditions of the participants in each study program even though there is a conformity with the learning objectives to achieve. Based on the results of material expert validation, FGD, and open questionnaires, it was found that several things became material for revisions of the product. Subsequently the product was revised with the aim that the product met the requirements of the syllabus for the preparation of an ideal teacher in the 21st century. The syllabus has been revised based on expert input on German learning materials, as well as input during the FGD.

As stated by Nieveen and Folmer (2013), the evaluation stage is necessary for the development of a product. The focus is testing to produce the desired product. The desired results relate to

the objectives of the development research undertaken. To get a quality product, it is necessary to do continuous evaluation. Thus, the learning designs and teaching materials are not permanent, but need to be evaluated periodically and updated as needed.

CONCLUSION

The research has resulted in a TPE syllabus for German education oriented to the needs of teachers in the 21st century. The development process is based on the Triagarajan model development process which consists of: (1) the definition stage [Define], (2) the design stage [Design], (3) the development stage [Development], and (4) the dissemination stage [Desiminate].

The syllabus design is designed and developed based on performance analysis and needs analysis and oriented to the principles of teacher training in the 21st century. These principles are reflected in the syllabus which contains pegadodic competences, professional competence, the ability to use digital media through blended learning and digital-based learning.

The components validated by material experts are to determine its feasibility so that it can be used in the next program. Its feasibility is clearly seen from the answers of the German language learning experts. In general, the syllabus contains components in ideal teacher training, namely pedagogical competence, professional competence, cooperative learning, use of multimedia, and blended learning. A few notes to include are (1) Social interaction should be included in the syllabus or through group assignments, (2) The use of communication strategies needs to be included in the syllabus to support a good process of online and face-to-face learning, and (3) feedback resource includes the instructor and also colleagues. Based on the validation results of German learning experts and suggestions from users, represented by the instructors of PPPTK Jakarta, it can be concluded that the syllabus is feasible to use. Nevertheless, it is necessary to refine the time allocation according to the needs and clarity of evaluation and assessment.

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