



Need Analysis in the Development of Tolerance Attitude Assessment Instrument in Android-Based PPKn Learning

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Abstract

The problem found by the researcher is 100% of the 8 teachers that do not have a teacher's manual and the Android app for assessing tolerance in learning PPKn has not been implemented. Need analysis in the development of tolerance attitude assessment instruments on Android-based PPKn learning is carried out with the aim of identifying teacher needs to create a teacher's manual containing tolerance attitude assessment instrument in PPKn learning and Android application. The research method used the first stage of Research and Development (R&D) of the 4D model (define, design, develop and assess). Qualitative data analysis is used to describe the data triangulation model. First observation was found in the absence of attitude assessment sheet and assessment rubric in Lesson Plan (RPP). The result of the interview stated that the teachers had difficulty in making an attitude assessment instrument so that the teachers needed a teacher's manual containing an instrument of tolerance attitude assessment in Android-based PPKn learning. The results of teacher's need analysis of 8 teachers obtained the average results of answers from 20 items namely 92.19, it meant that 100% of teachers really need a teacher's manual and android application. Teachers' manual and Android application that can be accessed through Google Drive and Play Store which can be used by teachers to assess student tolerance. The teachers can use the instrument of tolerance attitude assessment books of Android-based PPKn learning in the classroom.

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INTRODUCTION

The assessment conducted in the 2013 curriculum is authentic assessment. Authentic assessment is an assessment covering three domains, namely knowledge, attitudes, and skills (Mulyana, Hamdu, & Fitri, 2016, p.367). Assessment in the 2013 curriculum is an authentic assessment which has more complexity than the assessment in the previous curriculum, that is KTSP. The government has prepared teachers through various training, but there are still many complaints that occur in the field regarding assessment (Setiadi, 2016, p.168). Permendikbud No.66 of 2013 stipulated that the assessment of student learning outcomes includes attitude competencies (affective), knowledge (cognitive) and skills (psychomotor) carried out in a balanced manner. Assessment of learning outcomes is not only cognitive and psychomotor competencies that are assessed, but affective competencies also need to be assessed.

Learning outcomes instrument was divided into two groups, namely test and non-test. Test assessment used to examine the students' cognitive abilities. Attitude and students' skill can be examined through non-test assessment. The teachers give an assessment in learning process that cannot be separated from the realm of cognitive, attitudes and skills in order to be able to describe the success of students in learning as a whole. Research conducted (Riscaputantri & Wening, 2018, p.233) that 83.3% of teachers do not have attitude assessment instruments. In the implementation of the assessment found 93.3% of teachers did not use an attitude assessment. The unavailability of attitude instruments because the teachers have difficulty in making attitude assessment instrument. Time is also an obstacle for the teacher in making attitude assessment instrument.

Attitude assessment conducted by teachers is still difficult, especially during the process of assessment or data collection and processing of assessment results (Hidayad, 2017, p.31). Preliminary researchers in Cut Nyak Dien and Muhammad Syafe'i Clusters in Pabelan Sub-district showed that attitude assessment was not carried out in accordance with the assessment

process so that the teacher immediately assessed students' attitudes based on observations without notes. Attitude assessments conducted by teachers did not use real assessment procedures, so it is necessary to make an attitude assessment that suitable with the instructions in the 2013 curriculum.

The 2013 curriculum in learning PPKn at Elementary School is focused on the formation of students' competencies and characters, in the form of a blend of knowledge, skills, and attitudes that students can practice as a form of understanding of the concepts learned contextually. (Setiawati, 2016, p.72) explained in her research that PPKn learning itself was more dominated by cognitive dimensions improvement activities resulting in an increased portion of attitudes and skills being neglected. In the learning process of PPKn is inseparable from observing activities and performance that need an attitude of responsibility and honesty when collecting and analyzing data. The teachers are strongly encouraged to be able to develop the attitude and performance assessment instruments for students during PPKn learning.

Preliminary studies for researchers to determine the right steps in continuing the research is called need analysis. Method of interview, observation, questionnaire, and documentation study are used in needs analysis. The importance of needs analysis is to get data in the form of problems. The problem found will be developed an appropriate product and can overcome the problems obtained. The problem found through the needs analysis method is the tolerance attitude assessment in PPKn learning which has not been implemented and the absence of attitude assessment instrument. Therefore, the solution was to create a teacher's manual and an Android application containing an instrument of tolerance attitude assessment in PPKn learning.

Research and development of 4 D model in the first stage is definition (define). The definition stage is to set and define the conditions needed in making the valuation instrument. In defining activity is in the form of preliminary research, formulating the purpose of making an assessment instrument and determining the attitude evaluation strategy (Pratiwi & Fasha, 2015, p.126). The study was conducted and aimed to identify the needs of

teachers to create teacher's manual and android application that contains instruments for assessing tolerance in PPKn learning.

The benefits of Android-based tolerance attitude assessment instruments make it easy for users, especially teachers in elementary schools. Android applications are needed because it makes easier for users to work wherever and whenever, especially in terms of information. The teacher evaluates the tolerance attitude in PPKn learning at Elementary Schools according to technological developments by making Android as an application to create the development of attitude assessment instrument. The use of Android is supported by research from (Lalu Hasan Ashari, Wahyu Lestari, 2016, p.10). Smartphones are becoming a fast-growing trend that is android so that the development of performance instruments for peer assessment models can be applied in Android-based.

METHOD

The research method used is research and development (R&D). The development model used is the 4D development (define, design, develop, dissemination) by Thiagarajan. The development of tolerance attitude assessment instruments consists of 4 stages, namely: (1) defining stage, (2) designing stage, (3) developing stage, and (4) dissemination stage. The stages of the research in the new article at defining stage are to find out the teacher's needs in developing an instrument of tolerance attitude assessment in Android-based PPKn learning.

The initial research activities began with observations, distributing questionnaires, interviews, and documentation studies to schools. Observations were carried out to determine learning activities in class, student conditions, teaching materials used and the application of student attitude assessment instrument in learning process. The interview was conducted to obtain more detail information about the information obtained from the questionnaire filled out by the teacher. Documentation study to get information related to the data of teacher learning tool in the form of syllabi, lesson plans, teaching materials, evaluation, and assessment instruments.

This study was applied to the learning content of PPKn lessons on the socio-cultural diversity of the community. The study was conducted in two clusters namely Cut Nyak Dien Cluster and Muhammad Syafei Cluster with 8 elementary schools such as SDN Segiri 02, SDN Segiri 01, SDN Tukang, SDN Karanggondang, SDN Bendungan, SDN Sukoharjo, SDN Terban, and SDN Jembrak. The research subjects were 8 teachers of grade V at elementary school.

The research instrument used to collect data consist of documentation study sheets, questionnaires, and interview sheets. Documentation study sheets are made in the columns to determine whether there are components of learning tools. Questionnaire sheet in the form of a checklist yes no question used to get information from teachers about learning PPKn at school, teacher experience, assessment instruments, the teacher needs to make an instrument of tolerance attitude assessment, and the use of Android mobile for assessment. Interview sheet with closed questions to get more clear information about the teacher's answers that are filled out on the questionnaire. Data analysis techniques used qualitative techniques and quantitative techniques.

RESULTS AND DISCUSSION

This research was initiated by distributing questionnaires, interviews and documentation studies to 8 teachers of grade V Elementary School in the Cluster of Cut Nyak Dien and Muhammad Syafei in Pabelan Sub-District. The initial research was conducted to analyze field needs in learning process and assessment of students. There are several problems identified, namely PPKn, assessment methods, assessment instruments and the use of device technology. The results of the questionnaire, interview, and documentation study were conducted by the researchers related to each item that can be described as follows.

PPKn learning is important to be mastered and implemented by students. The basic concept of PPKn to make the students be master competencies (material) is targeted, also designed to make the students know, realize / care, and internalize character values (Lusiana & Wahyu,

2013, p.2). Law No. 20 of 2003 stated that there are 20 characters that can be applied in PPKn learning or other learning that teaches character education integrated with the subjects. The items of character values include: relate to God (1. religious), relate to oneself (2. Honest, 3. Responsibility, 4. Healthy Life Style, 5. Discipline, 6. Hard work 7. Self-confidence 8. Self-employment, 9. Think logically, critically, creatively, and innovatively, 10. Independent 11. Curious, 12. Love knowledge) relate to others, (13. Be aware of rights and obligations, 14. Obey with social rules, 15. Appreciate the work and achievements of others, 16. Courteous, 17. Democratic), related to the environment (18. Social care and the environment), associated with national values (19. Nationalists 20. Respect for diversity).

Tolerance is one of the national character values that need to be developed and familiarized with the students. Tolerance attitude can grow from an early age if the students have good tolerance. Tolerance can be taught in (inside) learning as well as outside learning. Tolerance is meant to be generous in association, patience, tolerance, being tolerant or giving freedom to the position of others even if it is contrary to one's own position (Suharyanto, 2013, p.198). Indicators of tolerance developed by Tillman as quoted (Wahyudi, 2017, p.65) the points of reflection from the character of tolerance are (a) peace is the goal; (b) tolerance is open and receptive to various difference; (c) tolerance respects for individuals and differences; (d) tolerance is mutual respect for others; (e) the origin of intolerance are fear and ignorance; (f) the origin of tolerance is love; (g) if there is no love there is no tolerance; (h) those who know to respect the good in others and situations have tolerance; (i) tolerance means facing a difficult situation; and (j) tolerance for the inconveniences of life by letting go, easy, and letting others.

PPKn learning assessment is adjusted to the 2013 curriculum, which is the assessment of attitudes, knowledge, and skills, so that PPKn and learning assessment can measure all aspects of the assessment of aspects of attitude, knowledge, and skills. In fact, the teachers had difficulty in making an assessment, especially attitude assessment. The

teachers lacked understanding in making the attitude assessment instrument evident from the assessment made by the teacher while learning, the teacher assessed student attitudes without using observation sheets and student rubrics. Learning Citizenship Education did not only focus on aspects of knowledge but also aspects of attitude and skills. (Setiawati, 2016, p.75) explained in her research that PPKn learning itself was more dominated by cognitive dimension improvement activities resulting in an increased portion of attitudes and skills being neglected.

The success of achieving student competence will be largely determined by the teachers' experience and knowledge in developing, and using measurement tools that have been constructed in a real way (Rahmawan, Eris Fahmi, Sumaryanto & Supriyadi, 2016, p.84). The data showed that most teachers understand PPKn learning assessment but in conducting the assessment, they did not make an observation sheet and assessment rubric for attitude and performance assessment. Meanwhile, for cognitive assessment, the teacher arranged the grid and made test questions for assessment.

The assessment in the teacher's book is incomplete, showing the assessment of attitudes, especially the attitude of students tolerance, it occurred when the researcher conducted a documentation study in the classroom before learning takes place. Teachers have a perception that the existing assessment books are in accordance with applicable curriculum standards, so the teachers are reluctant to create new instruments. The teacher considered the existing assessment is appropriate to be used to assess. The fact that there is an attitude assessment in the assessment book is not suitable for the 2013 curriculum.

Revision of 2013 curriculum improvements was made and changed related to the students' attitude assessment contained references or examples of instruments for attitude assessment that teachers could use for each assessment technique. Examples of instruments for attitude assessment were given in the form of a rating scale that includes the intensity of possible attitudes observed in the students appeared and then the final results were calculated using the mode. The

most recent improvement on the 2013 curriculum specifically for attitude assessment is the emphasis that attitude assessment can be achieved through indirect teaching and assessment carried out through the learning process (Permendikbud No. 23, 2016).

The factors that make teachers need practical instruments, namely the teachers are preoccupied with teaching and class administration make the teachers have two sides of activity outside of teaching hours, so that if it assisted with practical assessment instruments can be used at any time and the teacher work is reduced. The students will get an ideal score based on the students' attitudes and behavior, because basically every student's right is to get ideal and pure results from the attitudes and behaviors possessed by the students.

The observation results of class V in Cut Nyak Dien Cluster and Muhammad Syafei Cluster at Elementary School in Pabelan Sub-District, Semarang District obtained information that in the assessment process the teacher judged only based on cognitive and skills assessment in the assessment book. The aspects of attitude assessment are still general in the absence of indicators to assess the students' attitudes and behavior. The assessment guidelines are still incomplete because there are no observation sheets yet and there are no assessment rubrics. The assessment had traditional, meaning that the teacher evaluated at the end without seeing the process of student activities in learning, so the teacher's assessment is still subjective. Attitude assessment has not been done in learning process at that time. The attitude assessment based on the curriculum was carried out through observation, self-assessment, and peer assessment techniques (Setiadi, 2016, p.170). (Darmansyah, 2014, p.15) added that self-assessment techniques consist of open self-assessment techniques and scale assessment techniques semantic differential. The students' attitude assessment was expected to be fulfilled through each technique applied by educators.

The implementation of self-assessment and peer evaluation in learning activities has not been carried out. Teachers used more assessment in the form of tests, quizzes, and question and answer

which is a type of cognitive assessment. Self-assessment and peer-assessment models can have a positive impact on the personality development of the students. The positive impact of using self-assessment and peer-assessment in the classroom can improve the students' self-confidence (Muslich, 2014, p.145)

The results of interview with the teachers of grade V SDN in Cut Nyak Dien and Muhammad Syafei Clusters in the Pabelan Sub-District, Semarang District obtained information that the lack of grade V teachers' understanding developed the indicators of tolerance. The instrument for evaluating the attitude of tolerance, lattice, and rubric assessment have not been made by the teacher. Making attitude assessment instruments are in the form of rubrics, the teachers still had difficulties in creating attitude assessment instruments so there are fewer rubrics on attitude aspects assessment. Research (Mulyana et al., 2016, p. 368) explained that the use of attitude assessment instruments was still limited in the form of small notes held by teachers, without any special instruments used to assess the students' attitudes, such as observation sheets, self-assessment sheets, or even peer evaluation sheet. Although an assessment sheet is created, it is limited to the format of the table that the teacher must fill in without any criteria in the format attitude assessment table.

The teacher had an android-based handphone and the school is equipped with Wi-fi facilities but it has not been utilized to support learning activities as an assessment tool. The technology is integrated with the assessment process that is one of the strategies to create learning goals (Lestari, Hasan, & Taufik, 2016, p.10). The sophistication of smartphone equipped with Android application can support the world of education, especially in the teaching and learning process. Android applications can be downloaded at Play Store so that it is possible to support learning, especially for teachers and students, they can use at school and at home to help learning process.

The researcher took the data from the fifth-grade teachers of the Cut Nyak Dien Cluster and Muhammad Syafei Cluster in Pabelan Sub-District, the total was 8 teachers through need

analysis questionnaire. Need analysis questionnaire was given to the teachers to find out if further action was needed regarding the development of Android-based tolerance attitude assessment instrument in order to help the process of assessing the teachers. Need analysis will answer the difficulties encountered by the teachers when learning process, especially at the assessment stage. The development of assessment instrument made by the researchers was expected to assist the teachers in doing assessment practically. Need analysis will be the beginning study of the researcher in conducting and providing further solutions for teachers to develop Android-based tolerance attitude assessment instrument.

Needs analysis questionnaire was filled out by the fifth-grade teachers in the Cut Nyak Dien Cluster and Muhammad Syafei Cluster in Pabelan Sub-District, Semarang District, the total was 8 teachers. Data processing was performed by the researcher using Microsoft Excel manually. The results of the analysis of teacher needs with a questionnaire instrument were conducted by the researcher involving 8 teachers at Elementary School, namely Sukoharjo State Elementary School, Jembrak State Elementary School, Karanggondang State Elementary School, Bendungan State Elementary School, Segiri 02 State Elementary School, Segiri 01 State Elementary School, State Elementary School Tukang and SD Negeri Terban produce the following data:

1. 100% of teachers understood the importance of PPKn learning.
2. 100% of teachers implemented assessment in PPKn learning.
3. 87.5% of teachers understood the assessment in PPKn learning.
4. 62.5% of teachers assessed cognitive skill in PPKn learning.
5. 100% of teachers implemented attitude assessment in PPKn learning.
6. 87.5% of teachers did not make attitude assessment instrument.
7. 62.5% of teachers did not make observation sheet for attitude assessment.
8. 100% of teachers did not use scale in assessing the students' attitude in PPKn learning.
9. 62.5% of teachers did not make grid for attitude assessment instrument in PPKn learning.

10. 62.5% of teachers did not make rubric assessment in attitude assessment instrument in PPKn learning.
11. 100% of teachers understood attitude assessment technique in PPKn learning.
12. 100% of teachers did not implement attitude assessment technique in PPKn learning.
13. 87.5% of teachers needed the attitude assessment instrument in PPKn learning.
14. 100% of teachers needed the tolerance attitude assessment instrument in PPKn learning.
15. 87.5% of teachers needed grid tolerance attitude assessment.
16. 100% of teachers needed rubric tolerance attitude assessment.
17. 87.5% of teachers needed the technology to assist the teachers in assessing attitude of PPKn learning.
18. 75% of teachers needed *handphone* to assess attitude in PPKn learning.
19. 87.5% of teachers needed an innovation such as attitude assessment instrument application on *handphone* to assess the students' attitude.
20. 100% of teachers needed attitude assessment instrument application that is easy and practical for teachers to assess students' attitude.

The result of teachers' questionnaire based on the answer for each item can be seen in table 1.

Table 1. The result of teachers' questionnaire.

No. Item	Total
1	.100*
2	.100*
3	.93.75*
4	.62.5*
5	.100*
6	.93.75*
7	.62.5*
8	.100*
9	.81.25*
10	.87.5**
11	.100**
12	.100*
13	.93.75*
14	.100*
15	.93.75*
16	.100*
17	.93.75*
18	.87.5*
19	.93.75*
20	.100*
Average	92.19

Based on table 1.1, the result of the questionnaire showed that the average results of the answer from 20 statements are 92.19, it meant that 100% of teachers really needed a teacher's manual and android application that contains the instrument of tolerance attitude assessment in PPKn learning.

The results of fifth-grade teachers' questionnaire in Cut Nyak Dien Cluster and Muhammad Syafei Cluster in Pabelan Sub-District, Semarang District really needed the practical attitude assessment instrument in processing the assessment in the classroom according to 2013 Curriculum in teachers' manual book and Android-based application of tolerance attitude assessment instrument.

CONCLUSION

The results of need analysis and discussion, it could be concluded that need analysis to create teachers' manual and Android-based application of tolerance attitude assessment instrument in PPKn learning was very necessary and needed to be made.

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