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Assessment Instrument of Social Attitude and Science Learning Outcomes of Grade IV Elementary School

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A B S T R A K

Penelitian ini bertujuan untuk menghasilkan instrumen penilaian sikap sosial dan hasil belajar IPA yang valid dan reliabel pada Tema 8 kelas IV SD. Penelitian ini merupakan penelitian pengembangan yang dilaksanakan menggunakan model 4 D dengan 4 tahapan antara lain: *define* (pendefinisian), *design* (perancangan), *development* (pengembangan), *dissemination* (penyebaran), namun tahap penyebaran tidak dilaksanakan karena keterbatasan waktu. Metode pengumpulan data yang digunakan adalah kuesioner dan tes pilihan ganda. Instrumen yang dikembangkan untuk mengukur sikap sosial adalah kuesioner sedangkan instrumen yang dikembangkan untuk mengukur hasil belajar IPA adalah tes pilihan ganda. Instrumen ini divalidasi oleh dua ahli dalam bidang sikap sosial dan IPA. Hasil penelitian menunjukkan validitas isi kuesioner sikap sosial dan hasil belajar IPA sangat tinggi dengan nilai 1,00. Pengujian validitas butir menunjukkan dari 30 butir soal kuesioner sikap sosial 28 soal dinyatakan valid, sedangkan dari 30 butir soal tes hasil belajar IPA 25 soal dinyatakan valid. Hasil reliabilitas instrumen sikap sosial dinyatakan sangat tinggi dengan nilai $r_{1.1}$=0,88 dan reliabilitas tes hasil belajar IPA juga sangat tinggi dengan nilai $r_{1.1}$= 0,82. Daya beda instrumen tes hasil belajar IPA dinyatakan pada kriteria baik dengan nilai 0,74, sedangkan untuk tingkat kesukarannya berada pada kriteria sedang dengan nilai 0,65. Hasil ini menunjukkan bahwa instrumen penilaian sikap sosial dan hasil belajar IPA dinyatakan dalam kualifikasi baik dan layak untuk digunakan.

A B S T R A C T

This study aims to produce instruments for assessing social attitudes and learning outcomes of valid and reliable Natural Sciences in Theme 8 of Grade IV elementary school. This research is a development study using the 4D model with four stages: defining, design, development, dissemination. The dissemination phase is not carried out due to time constraints. Data collection methods used were questionnaires and multiple-choice tests. The instrument developed to measure social attitudes was a questionnaire, while the instrument developed to measure science learning outcomes was a multiple-choice test. This instrument was validated by two experts in the field of social attitudes and Science. The results showed the content validity of the social attitude questionnaire and the science learning outcomes were very high, with a score of 1.00. The item validity test showed that of the 30 items on the social attitude questionnaire, 28 questions were declared valid. In comparison, out of the 30 items on the test of science learning outcomes, 25 items were valid. The results of the reliability of the social attitude instrument were stated to be very high with a score of $r_{1.1}$ = 0.88, and the reliability of the science learning outcomes test was also very high with a score of $r_{1.1}$ = 0.82. The Natural Science learning outcomes test instrument's different power is expressed in good criteria with a score of 0.74. The difficulty level is in the medium criteria with a score of 0.65. These results indicate that the instrument for evaluating social attitudes and science learning outcomes is expressed in good qualifications and is suitable for use.

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1. Introduction

Quality Human Resources (HR) are needed to prepare Indonesia's vision for a golden generation in 2045. HR is required to be able to compete and be adaptive to any changes. Many developed countries have proven that the factor that most determines a nation's success is the quality of its human resources, not its natural wealth (Sudarsana, 2016). Education has a very important role in forming quality human resources. Through quality education, this nation can compete with other nations.

Education at the primary school level has a very important role in learning at the next level. Therefore, education in elementary schools must be considered. For the education process to run well, of course, adequate facilities and infrastructure are needed. One of the infrastructures needed is a school. School is a place to carry out formal learning. Schools as institutions aim to guide, direct and educate certain age groups in classrooms led by teachers to study graded curricula (Kurniawan, 2015).

2013 curriculum is the current curriculum in elementary schools. The education process in the 2013 curriculum is more holistic so that it touches a wider scope, the cognitive, affective, and psychomotor domains (Setiadi, 2016). In the 2013 Curriculum, the learning process is carried out using a theme integrated into several subject matter. Learning using a theme or thematic is expected to produce students who have good attitudes, skills, and knowledge so that learning becomes more meaningful.

Thematic learning currently applied has led to several changes in learning activities, including the assessment system. Hidayah (2015) argues that thematic learning provides breadth and depth of curriculum implementation and offers students many opportunities to bring up dynamics in education to continue improving their abilities and quality. If the main aspect of assessment in the previous curriculum was knowledge, in the 2013 curriculum, the three aspects, attitudes, knowledge, and skills, have their respective weights, especially in attitude. It causes the scope of the object being assessed to be wider. Assessment is a very important aspect of implementing educational programs.

Assessment is a decision-making process from information obtained by measuring learning outcomes using media in the form of tests and non-tests (Nurhadi, 2018). The assessment is the process of collecting data from students to see the achievement of learning objectives. The data collected can be both qualitative and quantitative. Data processing results will be used as the basis for students' decision-making and subsequent learning (Arifian, 2015). Teachers must assess objectively so that decisions on student status in attitudes, knowledge, and skills are not wrong. To support the assessment process, a teacher requires a tool in the form of an assessment instrument. This assessment instrument is used as a tool to collect data to be measured. The instrument is also very important in the appraisal process because if the instrument used is not correct or appropriate. The results are not relevant to what is being measured. Irrelevant results will influence teacher policies in making the right decisions.

Based on the three aspects of the assessment, the attitude aspect will be difficult to measure. In contrast, in assessing knowledge and skills, the indicators are clear enough and easier to observe (Zaini, 2015). In Permendikbud Nomor 81 A Tahun 2013 concerning Curriculum Implementation, the objects of attitudes that need to be assessed in the learning process are attitudes towards the subject matter, attitudes towards teachers or teachers, attitudes towards the learning process, and attitudes relating to scores or norms related to a subject matter.

Attitude is a person's behavior tendency in responding to something to a stimulus in the surrounding environment. Attitude can also be interpreted as an establishment or belief embedded in someone that causes an action or deed (Wiguna, 2017). Furthermore, Imas & Sani (2014) stated that attitude is the scores or life view owned by someone who gives birth to an expression or expression. Concerning learning in schools, students can give a positive or negative response. A large positive response can certainly make students even more interested in learning. So the attitude has a big share of the success of a lesson. For this reason, the assessment of the attitude aspect must be given greater attention because it can affect other learning outcomes in the aspects of skills and knowledge.

There are two kinds of attitude competency assessment in the 2013 curriculum: spiritual attitudes and social attitudes. The spiritual attitude can be seen from the faith and piety of students towards their religion. Meanwhile, social attitudes can be seen from the behavior of students towards teachers and friends. Gusviani (2017) states that spiritual attitudes can be raised at the beginning of learning, beginning with prayer, while social attitudes can be more manifested in core activities. Chaplin (in Lestari, 2015) states that social attitude is a person's tendency to behave towards other people in one particular way.

Furthermore, Tiara & Sari (2019) stated that a social attitude is an expression or action of a person responding to something in his daily social life or every behavior. Furthermore, according to Mutafidoh &

Wibowo (2017), social attitudes include honesty, discipline, responsibility, care, courtesy, and responsibility. The factors that influence social attitudes consist of internal and external factors. Internal factors include his selectivity, choice, and interests to accept and process influences that come from outside. At the same time, external factors are in the form of group interactions that can occur in the family and human interactions with human culture results that reach them through communication media (Dewi, 2018).

Data collection on the assessment of social attitudes must be carried out with care and using appropriate instruments. The many dimensions of social attitudes that must be evaluated by the teacher can be solved by selecting the right instrument and reaching all dimensions of these social attitudes. One of the instruments that can be used is a questionnaire or a questionnaire. Surahman & Mukminan (2017) states that teachers' assessment of social attitudes carried out by teachers is one of the important things students must achieve when participating in school learning. With this, it is expected to control students so that the learning atmosphere becomes ideal and conducive. Students' positive social attitudes can certainly liven up the learning atmosphere to improve students' understanding of the material being learned. Therefore, social attitudes can also affect student learning outcomes in the aspect of knowledge.

One of the subject matter in the 2013 curriculum that students' social attitudes can be influenced is Natural Science. Science is a subject matter taught in elementary schools. The content of this lesson mainly discusses natural events or phenomena that exist in this life. Learning Science teaches a concept and the process of finding something and skills in finding a concept. The content of this lesson is the study of all events that occur in nature. In fostering, students' abilities to think, work, and behave scientifically, science learning should be done systematically (Widiantono, 2017). Widiana (2016) states that the role of science learning at the elementary school level is very important because students 'initial knowledge greatly affects students' interests and tendencies in learning Science at the next level. This kind of learning process requires a good social attitude. A good social attitude affects better science learning outcomes.

Sudijono (in Sutrisno & Siswanto, 2016) states that learning outcomes are an evaluation that can provide an overview of aspects of the thinking process (cognitive domain) and reveal other psychological aspects. Aspects of scores or attitudes (affective domain), and aspects of skills (psychomotor domain).) attached to each student. It means that a holistic description of student achievement can be revealed through learning outcomes after going through learning. Meanwhile, Dimyati and Mudjiono (in Pebriana, 2017) state that learning outcomes result from an interaction of learning and teaching actions. Furthermore, Sudana & Wesnawa (2017) stated that learning outcomes occur in students resulting from learning processes involving cognitive, affective, and psychomotor aspects.

Meanwhile, science learning outcomes are the results obtained by students after participating in science learning. Learning outcomes are one of the most important components in education. Therefore the teacher must be able to make the right instrument to measure student learning outcomes. Fanani (2018) states that teachers' assessment of learning outcomes aims to monitor, evaluate student processes during learning, progress in learning, and improve student learning outcomes on an ongoing basis so that the right assessment will certainly produce good educational output.

Based on the results of interviews conducted with fourth-grade teachers of SDN Gugus II, Kecamatan Buleleng. The problems above also occur in this Gugus. There are difficulties in assessing students' social attitudes. There is no social attitude assessment instrument yet according to the steps to make an instrument. The teacher has difficulty developing an instrument for assessing social attitudes and learning outcomes in Science following the assessment standards. It is reinforced by the results of observations that have been made in Cluster II, Buleleng District. The results show that students do not focus on science learning and students' social attitudes are still low. These problems have an impact on the low learning outcomes of science learning.

The problems described above have an impact on the low learning outcomes of science learning. Based on the results of documents obtained by the fourth-grade teacher of SDN Gugus II Kecamatan Buleleng, it was found that the problem of learning outcomes for the midterm test (UTS) in the odd semester of fourth-grade science subject content was still below the minimum completeness criteria (KKM). The results of recording documents can be presented in Table 1 below.

Tabel 01. Data Nilai UTS Semester Ganjil Muatan Pelajaran IPA Kelas IV SD di Gugus II Kecamatan Buleleng Kabupaten Buleleng Tahun Pelajaran 2019/2020

No	School Name	Mid-term Average Score	KKM	Number of students	Total			
					Complete	%	Not Complete	%

1	SDN 1 Penarukan	66,25	68	24	11	46	13	54
2	SDN 2 Penarukan	69,72	71	18	8	44	10	56
3	SDN 3 Penarukan	65,16	68	31	12	39	19	61
4	SDN 4 Penarukan	64,82	67	28	10	36	18	64
5	SDN 5 Penarukan	65	68	15	7	47	8	53
Total				116	48	41	68	59

Based on the data shown in Table 1, it can be seen that the scores of the fourth-grade students of Cluster II, Buleleng District, were still many students who were under KKM. From 116 students, only 48 students, or 41%, had completed while the rest, 68 students or 59%, had not.

It is what underlies it so that researchers are interested in conducting a research entitled "Development of Assessment Instruments for Social Attitudes and Science Learning Outcomes for Class 4 SD on Theme 8 of My Living Areas." 8 Where I Live.

2. Method

This research was conducted using research and development (Research and Development). Research and development are processes or methods of testing and developing a product (Sugiyono, 2015). This research is developing an instrument for assessing social attitudes and learning outcomes in fourth-grade Science at the theme of my residence area. The development of social attitude instruments belongs to the affective domain assessment and will be measured using the non-test method. Meanwhile, the development of instruments in assessing science learning outcomes belongs to the cognitive domain assessment. This study will be measured by the test method, multiple choice. Science learning outcomes are the accumulation or score of students' acquisitions during science learning. Learning outcomes are obtained after students are given multiple-choice questions with four answer choices (a, b, c, and d). The test used was compiled based on a grid of questions made with the revised bloom taxonomic arrangement.

Meanwhile, each questionnaire item consists of positive or negative statements. Students will be provided with five elective offers and choose one of them. The options offered include: strongly agree (SS), agree (S), doubt (R), disagree (TS), and strongly disagree (STS). In this study, the questionnaire pattern used follows a Likert scale. (Koyan, 2011: 53) states a Likert scale: each item consists of a statement, the respondent can choose one of the five bids. The method of scoring is presented in Table 2.

Table 02. The Score of Likert Scale

Pilihan Jawaban	questions / statements	
	Positive	**Negative**
Sangat setuju	5	1
Setuju	4	2
Ragu	3	3
Tidak setuju	2	4
Sangat tidak setuju	1	5

The development stages in this study use the 4 D model. According to Thiagarajan (in Sugiyono, 2015),.The 4D development model consists of 4 stages: defining is the initial stage, and as a basis for conducting research which includes: initial analysis, student analysis, task analysis, and the formulation of objectives, the design is the stage for preparing and making the initial design of an instrument for assessing social attitudes and learning outcomes in Science, the preparation of grids and initial design, development aims to obtain validation from experts and product testing (instruments). Which has been made, which includes the stages: limited trials, extensive trials, and revisions, and dissemination is the stage of using instruments that have been developed and tested extensively. Of the four stages, the dissemination stage was not carried out due to time constraints.

The subject of this study was an instrument for assessing social attitudes and learning outcomes in Science. Ridha (2017) states that research variables are attributes, scores , or properties of objects, individuals/activities with many specific variations between one another determined by researchers to be studied and searched for information and conclusions drawn. The variables in this study were social attitudes and science learning outcomes. The data collection method in this instrument development

research uses two methods: questionnaires and tests. Student social attitude data were collected using a questionnaire technique, while the students' science learning outcomes were collected using the test method. This test method is used to measure students' cognitive domains. Koyan (2011) states that a questionnaire is a list of questions that respondents must fill in. Simultaneously, the test is a planned and systematic tool used to measure certain behavior and describe it with the help of certain numbers or categories (Koyan, 2011).

This study's data analysis method includes analysis of the validity, reliability, different power of the questions, and difficulty level. This validity analysis consists of content validity and item validity. The instrument that has been designed will be tested for its validity by experts who master the field. The content validity test in this study used the Gregory formula. In the test item validity test, to test the validity of the social attitude questionnaire items whose data is polytomic, Carl Pearson's product-moment correlation formula is used. The learning outcome test data is in the form of a dichotomy. The technique used to measure the validity of the test items is the point-biserial correlation technique. Reliability is a measurement of the accuracy or level of consistency of a test to calculate dichotomous data, the Kuder Richadson 20 (KR-20) formula is used. While the reliability test of the social attitude questionnaire was analyzed using the Alpha Cronbach formula. Koyan (2011: 140) states, "the distinguishing power of questions is the ability of the test to distinguish between smart and less intelligent students." If the test is given to children classified as smart, more will be answered correctly, whereas if it is given to students who are classified as less capable, more will be answered wrong. Koyan (2011: 140) states, "the distinguishing power of questions is the ability of the test to distinguish between smart and less intelligent students." It means that if the test is given to children classified as smart, more can be answered correctly, whereas if it is given to students who are classified as less capable, more will be answered incorrectly. Analysis of the difference in the power of the questions and the difficulty level was carried out on the science learning outcomes test.

3. Result and Discussion

The research data showed that the questionnaire's content validity on social attitudes and science learning outcomes was very high. Based on the instrument's validation with two experts in social attitudes, the results of the 30 questions were all stated to be very relevant by the two assessors. Assessor 1 stated that the 30 questions on the questionnaire were very relevant, and assessor two also stated that the 30 questions were very relevant. The validity of the social attitude questionnaire's contents obtained a score of 1.00 if converted into a coefficient table of content validity. Then the score is categorized as very high. The same thing happened to the science learning outcome test, based on instrument validation results conducted by two experts in Science. The results showed that the first assessor and second assessor stated that all 30 items were very relevant. The results obtained a score of 1.00 if converted into the content validity coefficient table. Then the score is categorized as very high.

In the validation stage of the social attitude instrument, the two experts, first and second assessors, provided comments and suggestions: First Assessor provided input related to the questionnaire statement's editorial to avoid the words never, always, and the like. Meanwhile, assessor 2 provides input to reinforce negative and positive statements on the social attitude questionnaire. Whereas in the validation of the multiple-choice test instrument for science learning outcomes, in general, two science experts, first assessor, and second assessor, provided comments and suggestions regarding the suitability of cognitive levels between indicators and questions, typing errors, sentence editorial problems, and the systematics of writing the right questions. Testing the items' validity showed that of the 30 items on the social attitude questionnaire, 28 questions were valid, and two were declared invalid. The summary of the results of the validity of the social attitudes questionnaire is presented in Table 3.

Table 03. Validity Test of Social Attitudes Questionnaire Items

Question Number	Result	Total
1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19, 20,21,22,23,24,25,26,27,28,29	Valid	28
4,30	**Not Valid**	**2**

This result is obtained from the comparison of r count with r table = 0.24. A test item is declared valid if the calculated rpbi is greater than the rpbi table. Then the item is said to be valid if r count> 0.24. In this study, each test item's validity was carried out with Microsoft Office Excel 2010 for Windows computer program. In testing the test items' validity for science learning outcomes, the results obtained

from 30 items, 25 questions were declared valid, and five were declared invalid. The summary of the validity of the test items is presented in Table 4.

Table 04. Validity Test of Science Learning Outcomes Test Items

Question Number	Result	Total
1,4,5,6,7,8,9,10,12,13,14,15,16,17,19, 20,21,22,23,24,26,27,28,29,30	Valid	25
2,3,11,18,25	Not Valid	5

This result is obtained from the comparison of r count with r table = 0.24. A test item is declared valid if the calculated rpbi is greater than the rpbi table. Then the item is said to be valid if r count> 0.24. In this study, each test item's validity was carried out with Microsoft Office Excel 2010 for Windows computer program.

In the next stage, a reliability test is carried out to determine the consistency of a test. Reliability test is only done on questions that are declared valid. Based on the calculation results, the social attitude instrument's reliability was declared very high, with a score of r1.1 = 0.88. The science learning outcomes test's reliability was also declared very high, with a score of r1.1 = 0.82. These results indicate that the social attitude questionnaire and science learning outcomes test are reliable because they have a very high coefficient score

The test instruments are stated in good criteria with a score of 0.74. Based on the analysis results of the difference in the science learning test items. It was found that the three items were very good, eleven items were good, and eleven items were quite good. In the analysis of the difficulty level, the science learning achievement test was in the medium criteria with a score of 0.65. Based on the difficulty level of the science learning outcomes, three science learning test results had difficulty, twelve items had a moderate difficulty level, and ten test items had an easy difficulty level.

The development of an instrument for assessing social attitudes and learning outcomes in Science on my living area's theme uses the 4D model. This model consists of 4 stages the stage of define (definition), design (design), development (development), and dissemination (deployment). The deployment stage was not carried out due to time constraints.

The definition stage includes initial analysis, student analysis, task analysis, and formulation of objectives. The preliminary analysis found that an assessment of social attitudes and science learning outcomes was needed. The student analysis results found that the problem was student attitudes and students' knowledge of science learning, which was still lacking. The results of the task analysis indicate the content or material to be measured in an outline. In the formulation of objectives, achievement indicators are prepared, which are guided by basic competencies.

The design stage is carried out to determine and prepare a design for an instrument for assessing students' social attitudes and learning outcomes in Science. This design process includes the preparation of grids and initial design. This grid's arrangement is made to determine the material limitations and guide making the questions. Whereas in the initial design, the questionnaire statement items and the science learning outcomes were compiled based on the grid that had been made.

The development stage is the stage that is carried out to obtain validation from expert tests and carry out test instruments that have been made. Validation of expert tests is carried out with science experts, lecturers who are teaching science courses. After guidance and validation are obtained from expert tests, comments, and suggestions, revisions will be made. The revised results are then ready to be tested in an initial product (instrument).

At this development stage, based on the results of the validation of the expert test of the social attitude assessment instrument and science learning outcomes, it was found that in each of the 30 item items, all of them were stated to be very relevant. The result of the content validity calculation was 1.00, with the coefficient category was very high. The instrument trial's implementation on 65 respondents showed that in the social attitude instrument of 30 questions, 28 questions were declared valid, and two questions were declared invalid. Whereas in the science learning outcome instrument, from 30 items, 25 questions were declared valid, and five questions were declared invalid. The reliability analysis results showed that the social attitude instrument obtained r1.1 = 0.88, and the science learning outcome instrument was r1.1 = 0.82. Based on these calculations' results, each instrument has a very high degree of reliability when viewed from the reliability criteria.

From the analysis of the questions, it is known that the instrument of the fourth-grade science learning outcomes is obtained that three items are very good, 11 items have good distinguishing power, and 11 items have quite good distinguishing power. Furthermore, the difficulty level analysis found that three items had a difficult difficulty level, 12 items had a moderate difficulty level, and ten items had an easy difficulty level. Overall, the difficulty level of the science learning achievement test is 0.65, and if it is converted into the difficulty level criteria, it has a moderate difficulty level. Based on the expert test's validation analysis results and the trial analysis results, the assessment instrument can be continued to the dissemination stage. However, due to time constraints, the dissemination stage could not be carried out.

In this development research, produced an instrument for assessing social attitudes and learning outcomes in Science. The resulting instrument is following the assessment standards and the steps in making the instrument. It makes the teacher no longer has difficulty in assessing students' social attitudes and student learning outcomes. Through this instrument, the teacher can appropriately assess student learning outcomes according to each student's abilities. Nurhadi (2018) states that assessment is a decision-making process from information obtained by measuring learning outcomes using media in tests and non-tests. The implementation of the assessment uses a measuring instrument or what is often called an instrument. The selection of instruments in the assessment is very important, so it is studied according to the problem in developing the instrument in this study. A questionnaire or questionnaire measures social attitudes. This instrument was chosen to streamline time because of the limited number of teachers to observe a large number of students, and teachers will get honest answers to the problems they are experiencing. In this questionnaire, a statement is provided, and students choose five alternative answers that have been provided following the Likert scale pattern. Science cognitive learning outcomes are measured using multiple-choice tests to reach a wider range of subject matter. The selection of this instrument is very important so that the measuring instrument can measure precisely the object to be measured. In line with this, Dachliyani (2019) states that an instrument is a tool that meets academic requirements so that it can be used as a tool to measure a measuring object or collect data about a variable. Instruments are important in assessment and research. It is emphasized again by Arifin (2017), which states that the instrument has a very important function in research, to reveal a fact into data. If the instrument used in a study has good quality, then the data obtained will follow the field's facts or actual conditions.

This study's results align with Kuntoro & Wardani (2020) research to develop social attitude instruments using a Likert scale. The use of a Likert scale allows respondents to choose five alternative answers that have been determined. It is following the author's research, who also uses a Likert scale with five alternative answers, strongly agree (SS), agree (S), disagree (KS), disagree (TS), and strongly disagree (STS). The initial product trials results in this relevant research showed that the statement items' results were declared valid. Meanwhile, the instrument reliability test showed the instrument was declared very reliable. The instrument for assessing social attitudes that consists of 30 statement items is valid and reliable. This relevant research supports that using the Likert scale in the instrument is suitable for measuring social attitudes. This research is also supported by Hardiani (2017) research. In his research, he developed a social attitude assessment instrument. In this study, the assessment instrument used to measure students' social attitudes was a questionnaire. The results of product trials show good results, so it can be concluded that the assessment of social attitudes using a questionnaire instrument is feasible to use.

Another research supporting the research (Arif, 2017) developed a cognitive test instrument with multiple-choice test types. It is the same as the author's research, which also uses a multiple-choice test with four alternative answer choices, a, b, c, and d. The results obtained in this relevant research are the validator's assessment of the prototype cognitive test made declared to meet the valid criteria based on the content validity analysis results. The field test results showed that the analysis of each item's content validity obtained a cognitive test that was declared valid as many as 46 items out of 50 items. The cognitive test reliability testing results using the Cronbach Alpha coefficient show that the test results have shown consistent results. Based on the results of expert validation and field trials, it was stated that the cognitive tests on the respiratory system material met the valid and reliable criteria. This relevant research proves that the use of multiple-choice tests is appropriate to measure students' cognitive levels. Another research that supports the use of multiple-choice tests in measuring students' cognitive levels is research conducted by Wardhani & Putra (2016) to develop a standard cognitive test instrument on science subject content. This assessment instrument's development uses an instrument in the form of a multiple-choice test consisting of 4 answer choices. The research results show that the validity score is very valid, and product testing is very good. So it can be concluded that the assessment instrument with multiple-choice forms can be used to measure students' cognitive learning outcomes in Science. This

research is also supported by relevant research conducted by Taufiq (2015), whose research develops cognitive tests based on the revision of Bloom's Taxonomy. It is in line with the author's research guided by the revised Bloom Taxonomy in preparing the science learning test instrument that has been made. This relevant research indicates that the cognitive test has a valid category based on the expert validator's assessment. The reliability results show that the two types of questions are in the reliable category. These results indicate that revised Bloom's Taxonomy is needed to prepare test instruments to produce valid and reliable tests. Based on some of the previous research results, social attitude questionnaire assessment instruments and multiple-choice tests are feasible. It can be a solution for teachers to assess student science learning outcomes in affective and cognitive aspects.

4. Conclusion

Based on the results of the study, it can be concluded that the results of the analysis in the development of the social attitude assessment instrument are very good, with a very high category for content validity and for the validity of items from 30 questionnaire questions 28 questions were declared valid. And the reliability results of the social attitude questionnaire are stated to be very high. Meanwhile, the science learning outcomes instrument's analysis results were categorized as good, with a very high category for the content validity and the item validity analysis from 30 questions. 25 questions were declared valid. The results of the reliability of the science learning test instrument were stated to be very high. The science learning test instrument's different power is stated in good criteria, while the level of difficulty is in the medium criteria. From the validity, reliability, differentiation, and level of difficulty, it can be concluded that the science learning outcomes test is good and feasible to use. Based on the results of this study, some suggestions can be given as follows. Students are expected to answer questions honestly and seriously, whether it's a social attitude questionnaire or a science learning outcome test. Teachers are expected to make instruments for assessing social attitudes and science learning outcomes according to the rules for arranging instruments so that students' abilities can be measured accurately. The principal is expected to facilitate and support this instrument's development for assessing social attitudes and learning outcomes in Science.

References

Arif, W. P. (2017). Pengembangan Tes Kognitif pada Materi Sistem Pernapasan. *Jurnal Biotek*, *5*(2), 108–122. https://doi.org/10.24252/jb.v5i2.4283

Arifian, F. D. (2015). Penilaian Autentik sebagai Pemandu Pembelajaran. *Jurnal Pendidikan dan Kebudayaan Missio*, *7*(1), 133–141. http://dx.doi.org/10.23887/jisd.v4i4.26580

Arifin, Z. (2017). Kriteria Instrumen dalam Suatu Penelitian. *Jurnal Theorems (the Original Research of Mathematics)*, *2*(1), 28–36. http://dx.doi.org/10.31949/th.v2i1.571

Dachliyani, L. (2019). Instrumen yang Sahih: Sebagai Alat Ukur Keberhasilan Suatu Evaluasi Program Diklat. *MADIKA: Media Infomasi Dan Komunikasi Diklat Kepustakawanan*, *5*(1), 57–65. https://ejournal.perpusnas.go.id/md/article/view/721

Dewi, A. F. A. (2018). Hubungan Komunikasi Keluarga dengan Sikap Sosial Siswa. *Basic Education*, *7*(30), 3–8. http://journal.student.uny.ac.id/ojs/index.php/pgsd/article/view/13521/0

Fanani, M. Z. (2018). Strategi Pengembangan Soal HOTS Pada Kurikulum 2013. *Edudeena*, *2*(1), 57–76. https://doi.org/10.30762/ed.v2i1.582

Gusviani, E. (2017). Analisis Kemunculan Sikap Spiritual dan Sikap Sosial dalam Kegiatan Pembelajaran IPA Kelas IV SD yang Menggunakan KTSP dan Kurikulum 2013. *EduHumaniora | Jurnal Pendidikan Dasar Kampus Cibiru*, *8*(1), 96. https://doi.org/10.17509/eh.v8i1.5127

Hardiani, I. N. (2017). Pengembangan Pengembangan Instrumen Penilaian Sikap Sosial Pembelajaran IPS Kelas IV SD. *E-Jurnal Mitra Pendidikan*, *1*(6), 615–628. https://e-jurnalmitrapendidikan.com/index.php/e-jmp/article/view/146

Hidayah, N. (2015). Pembelajaran Tematik Integratif di Sekolah Dasar. *Terampil: Jurnal Pendidikan Dan Pembelajaran Dasar*, *2*(1), 34–49. https://doi.org/10.24042/terampil.v2i1.1280

Imas, K., & Sani, B. (2014). Implementasi Kurikulum 2013 Konsep dan Penerapan. *Surabaya: Kata Pena*.

Koyan, I. W. (2011). *Asesmen dalam Pendidikan*. Singaraja: Universitas Pendidikan Ganesha Press.

Kuntoro, B. T., & Wardani, N. S. (2020). Pengembangan Instrumen Penilaian Sikap Sosial Pembelajaran Tematik Kelas III SD. *Jurnal Ilmiah Wahana Pendidikan*, *6*(2), 163–175. https://doi.org/10.5281/zenodo.3752471

Kurniawan, M. I. (2015). Tri Pusat Pendidikan Sebagai Sarana Pendidikan Karakter Anak Sekolah Dasar. *PEDAGOGIA: Jurnal Pendidikan*, *4*(1), 41. http://ojs.umsida.ac.id/index.php/pedagogia/article/view/71/77

Lestari, N. D. (2015). Identifikasi Sikap Sosial Siswa Kelas V SD. *Basic Education*, *4*(8).

Mutafidoh, S., & Wibowo, E. W. (2017). Analisis Pelaksanaan Penilaian Sikap Sosial Siswa Berdasarkan Kurikulum 2013. *Primary: Jurnal Keilmuan Dan Kependidikan Dasar*, *9*(01), 79–92. http://jurnal.uinbanten.ac.id/index.php/primary/article/view/418

Nurhadi, N. (2018). Manajemen Penilaian Pembelajaran Menggunakan K13. *AL-HAYAT: Journal of Islamic Education*, *2*(1), 63–78. https://alhayat.or.id/index.php/alhayat/article/view/20

Pebriana, P. H. (2017). Peningkatan Hasil Belajar Matematika Dengan Menerapkan Pendekatan Pendidikan Matematika Realistik Indonesia (PMRI) Pada Siswa Kelas V SDN 003 Bangkinang. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, *1*(1), 68–79. https://doi.org/10.31004/cendekia.v1i1.9

Penyusun, T. (2013). Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 81A Tahun 2013 Tentang Implementasi Kurikulum. *Jakarta: Kemdikbud*.

Ridha, N. (2017). Proses Penelitian, Masalah, Variabel, dan Paradigma Penelitian. *Jurnal Hikmah*, *14*(1), 62–70. http://jurnalhikmah.staisumatera-medan.ac.id/index.php/hikmah/article/view/18/0

Setiadi, H. (2016). Pelaksanaan Penilaian Pada Kurikulum 2013. *Jurnal Penelitian dan Evaluasi Pendidikan*, *20*(2), 166. https://doi.org/10.21831/pep.v20i2.7173

Sudana, I. P. A., & Wesnawa, I. G. A. (2017). Penerapan Model Pembelajaran Kooperatif Tipe STAD Untuk Meningkatkan Hasil Belajar IPA. *Jurnal Ilmiah Sekolah Dasar*, *1*(1), 1–8. http://dx.doi.org/10.23887/jisd.v1i1.10128

Sudarsana, I. K. (2016). Peningkatan Mutu Pendidikan Luar Sekolah Dalam Upaya Pembangunan Sumber Daya Manusia. *Jurnal Penjaminan Mutu*, *1*(1), 1. http://dx.doi.org/10.25078/jpm.v1i1.34

Sugiyono. (2015). Metode Penelitian & Pengembangan (Research and Development). *Bandung: Penerbit Alfabeta*.

Surahman, E., & Mukminan, M. (2017). Peran Guru IPS Sebagai Pendidik dan Pengajar dalam Meningkatkan Sikap Sosial dan Tanggung Jawab Sosial Siswa SMP. *Harmoni Sosial: Jurnal Pendidikan IPS*, *4*(1), 1–13. https://doi.org/10.21831/hsjpi.v4i1.8660

Sutrisno, V. L. P., & Siswanto, B. T. (2016). Faktor-Faktor yang Mempengaruhi Hasil Belajar Siswa pada Pembelajaran Praktik Kelistrikan Otomotif SMK di Kota Yogyakarta. *Jurnal Pendidikan Vokasi*, *6*(1), 111–120. https://doi.org/10.21831/jpv.v6i1.8118

Taufiq, A. U. (2015). Pengembangan Tes Kognitif Berbasis Revisi Taksonomi Bloom pada Materi Sistemreproduksi untuk Siswa SMA. *Jurnal Biotek*, *3*(2), 1–17. http://portalriset.uin-alauddin.ac.id/bo/upload/penelitian/penerbitan_jurnal

Tiara, S. K., & Sari, E. Y. (2019). Analisis Teknik Penilaian Sikap Sosial Siswa dalam Penerapan Kurikulum 2013 di SDN 1 Watulimo. *EduHumaniora| Jurnal Pendidikan Dasar Kampus Cibiru*, *11*(1), 21–30. https://doi.org/10.17509/eh.v11i1.11905

Wardhani, D. F., & Putra, A. P. (2016). Pengembangan Instrumen Tes Standar Kognitif pada Mata Pelajaran IPA Kelas 7 SMP Di Kabupaten Banjar. *Proceeding Biology Education Conference*, *13*(1), 75–82. https://jurnal.uns.ac.id/prosbi/article/view/5658

Widiana, I. W. (2016). Pengembangan Asesmen Proyek Dalam Pembelajaran IPA di Sekolah Dasar. *JPI (Jurnal Pendidikan Indonesia)*, *5*(2), 147–157. http://dx.doi.org/10.23887/jpi-undiksha.v5i2.8154

Widiantono, N. (2017). Penerapan Model Pembelajaran Interaktif untuk Meningkatkan Aktivitas dan Hasil Belajar IPA Siswa Kelas 5 SD. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, *7*(3), 199–213. https://doi.org/10.24246/j.scholaria.2017.v7.i3.p199-213

Wiguna, A. (2017). Upaya Mengembangkan Sikap Spiritual Dan Sosial Peserta Didik Berbasis Psikologi Positif Di Sekolah. *AL-ASASIYYA: Journal Of Basic Education*, *1*(2), 47–61. http://dx.doi.org/10.24269/ajbe.v1i2.684

Zaini, H. (2015). Karakteristik kurikulum 2013 dan Kurikulum Tingkat Satuan Pendidikan (KTSP). *El-Idare: Jurnal Manajemen Pendidikan Islam*, *1*(01), 15–31. http://jurnal.radenfatah.ac.id/index.php/El-idare/article/view/288