

Instrument Development on Character Value Assessment at Grade IV Elementary School Students

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Abstract—This study aims to develop a valid and practical character value assessment instrument for elementary schools. The instrument developed was in the form of an observation guide which consists of 78 items and is based on the five main values of the National Character (Religious, Communal Work, Nationalist, Independent, and Integrity) and the competence of grade IV elementary school subjects. The assessment instrument was developed using the ADDIE model: (1) Analyze, (2) Design, (3) Develop; (4) Implement; and (5) Evaluation. This study involved experts and linguists on character education as well as practitioners or elementary school teachers. The research instrument used was a validation questionnaire for character education experts and linguists as well as practitioners (teachers) and a product practicality questionnaire for teachers. The data obtained in the form of validation data from character education experts and evaluation experts as well as linguists and teachers as practitioners. Finally, it is concluded that the development of the instrument on students' character value assessment resulted in 74 final product items that were categorized as valid and practical. Thus, the product is suitable to use as an assessment tool for students' character value at grade IV elementary school.

Keywords—*development of the instrument, character value, elementary school students, assessment.*

I. INTRODUCTION

In the Indonesian world of education, the character is an aspect that is being promoted intensively. The government through the *Nawacita* program has launched revitalization values of the nation's character through the Strengthening Character Education program. The urgency of implementing this program is based on four things: (1) human resource development as the capital foundation of national development; (2) facing a condition of moral and character degradation; (3) facing the dynamics and challenges of the global era; and (4) build up and preparing competitive of Indonesian golden generation 2045 that has the spirit of Pancasila [1].

The implementation of the Strengthening Character Education program carried out using various techniques and strategies. At the formal education level including elementary

school, Character Education is implemented by optimizing the role of the education trip center, namely schools, parents, and the community. The optimization of trip-center education is carried out through class-based approaches, school culture, and society [1]. The implementation of the Strengthening Character program at the formal education unit level is also supported by the 2013 Curriculum. The character values that are strengthened through this program reflected in the core competencies of the 2013 curriculum affective domain. Character strengthening in the 2013 curriculum supports the class-based approach, where aspects of character values (affective domains) are taught integrated into learning, interrelated with aspects of knowledge and skills. The three of them are taught in a balanced and mutually supportive manner. To determine the success level of 2013 curriculum learning, especially the development of character values is carried out through assessment activities.

Assessment is one component that is closely related to the implementation of learning including Strengthening Character Education at schools. Assessment is an effort to collect data or information using multiple techniques and multiple sources that are used as a basis for decision making [2] - [3] - [4]. The data or information means data about the process and learning outcomes that have been implemented in the classroom, both learning outcomes of learning content and aspects of learning (affective, cognitive, psychomotor). Based on the data obtained from the assessment activities, teacher make decisions that describes the achievement of learning objectives by students.

Assessment is also needed to find out how far the level development of student character values is being developed through the Strengthening Character Education program. The data from the assessment are used to determine the follow-up and final decisions by the teacher. Do students experience the development of character values after the program was implemented otherwise there are no changes that occur in students' character scores. The data of assessment result also shows the implementation progress of the program, what needs to be evaluated, as well as further decisions related to strengthening the character values of students in schools. When collecting data on the development of student character

values, the teacher needs an instrument or measuring instrument. The character value assessment instrument was developed by the teacher, referring to the character values developed at the class level/ school scope [1]. The form of the instrument developed by the teacher can refer to the form of student affective assessment in the 2013 curriculum, namely observation sheets, self-assessments, peer-to-peer assessments, anecdotal records, and student affective development journals [5] - [6].

There are still many teachers who have not developed an assessment instrument to record the development of student character values in their class. Teachers only focused on developing cognitive tests and assessments [2]. This is due to; (1) teachers' low understanding on the concept of assessment and development instruments in the affective domain (character values); (2) many attended trainings that were theoretical; (3) misconceptions between assessment instruments and value recapitulation; (4) and the teacher's lack of time to develop and implement of affective assessments (character scores) [5] - [7] - [8]. Therefore, based on the explanation above, this study aims to develop a valid and practical assessment instrument for the character values of elementary school students.

II. METHODS

This research is a type of research development (Research & Development). Research and Development is a research model that describes the flow or procedural steps that must be followed to produce and validate a particular product in the field of education [9] - [10]. The development design used in this model is the ADDIE development model, which are Analyzing, Designing, Developing, Implementing and Evaluating [11].

Data collection in this study was quantitative and qualitative. Quantitative data were obtained from the results of expert validation using a product validation questionnaire for the character value assessment instrument for grade IV elementary school students, data on the results of assessments by teachers as users of the developed products, and data from product trials in the field. Afterwards, qualitative data were obtained based on data in the form of criticism, suggestions, input from the validator and teacher as instrument users, as well as field notes obtained through researcher observations during implementation. The trial subjects in this research were two expert lecturers on character education and educational evaluation, language experts, two grade IV teachers as practitioner validators from SDIT Mutiara Hari Districts and SD Tamansiswa Turen Malang Regency, five teachers as limited trial subjects from SDN Peresak Bebuak Kopang, SDN 2 Polehah Malang City, SDN Pagak Malang, SDIT Mutiara Hari Malang Districts and SD Tamansiswa Turen, Poor Districts.

The data analysis technique used in this study was the validity test of the instrument expert, the instrument practicality analysis. The validity analysis was intended to determine whether the instrument product being developed has the content and construct validity. Validity test technique was carried out by conducting a product formative test on educational evaluation expert character/ field of study experts using a product validity questionnaire. This study involved lecturers at Faculty of Teacher Training, University of

Mataram and teachers as validators. The results of the validator's assessment were then analyzed to determine the criteria for the validity product that being developed.

The product was seen from its practicality. A product is said to be practical if 1) it is easy to implement; (2) easy to remove; (3) easy to administer; and (4) effective and efficient of time and cost [12] - [13] - [14]. Practicality testing is carried out by testing the product in the field to users in this case, teachers. The results of the assessment by the user will be analyzed using formula [2] and compared with the criteria as specified.

Indicator of achievement in this research and development is the preparation of a valid, effective, and practical assessment instrument for the character value of grade IV elementary school students, so that this assessment instrument is ready to be used by the elementary school teachers.

III. RESULTS AND DISCUSSION

Results and discussions of this research described and discussed three main points, which are: 1) product characteristics; 2) results validity test of content, construct, and language product; and 3) results of product instrument practicality test. The explanation is as follows.

A. Results

The product developed in this study was an assessment instrument for the character value of grade IV elementary school students in the form of observation instrument for teachers. The arrangement instrument grid was based on the five main values of the National Character (Religious, Communal Work, Nationalist, Independent, and Integrity) also the competency of social and spiritual attitude values of the fourth grade elementary school in the 2013 curriculum. After the grid was made, the items were arranged in the observation instrument according to the indicators compiled. The initial design details and the results of the product revision (prototype) can be seen in the Table I.

TABLE I. ROTOTYPE OF THE CHARACTER VALUE ASSESSMENT INSTRUMENT FOR THE GRADE IV ELEMENTARY SCHOOL

No	Character Value	Amount of grain items	Amount of revised items
1.	Religious	25 items	21 items
2.	Nationalist	16 items	16 items
3.	Communal Work	17 items	17 items
4.	Independent	4 items	4 items
5.	Integrity	16 items	16 items
Total		78 items	74 items

The product prototype was tested for three times. The first trial was conducted to test the content validity and construct validity of character education experts and linguists. After being revised, the product was tried again by two teachers (limited trial) to see the validity of the content and constructs of practitioners as users. The third trial (small group trial) was conducted on five elementary school teachers to see the practicality of the product when it was used to collect the character values of elementary school students in the field. At the end of each trial, evaluation and revision and elimination of invalid items were carried out to produce a final instrument product. Based on the three trials, it was found that the revised assessment items initially totaled 78 items reduced to 74 items. From the revised results, the items on the religious

character value were reduced to 21 items because 4 items were invalid. Whereas, there was no reduction in the items number in the value of nationalist characters, cooperation, independence, and integrity, due to all items were valid.

The product of the student character value assessment instrument was then validated by five experts, one character education expert, one education evaluation expert, one linguist, and two teacher practitioners. The results of the character education expert validators are presented in the following table.

TABLE II. RESULTS OF CHARACTER EDUCATION EXPERT VALIDATION AND EDUCATIONAL EVALUATION

Types of Instruments	Validity Indicators	Acquisition Value		Average	Percentage	Category
		Validator 1	Validator 2			
Validation of character education experts and Educational Evaluation	Relevance, Completeness, Accuracy, Clarity	87,5	81,9	84,7	84,7%	Very Valid

Based on the assessment validity of character education experts and educational evaluations in Table IV above, the developed instrument obtained a high enough value from each validator. The values obtained were 87.5 and 81.9, while the mean was in the very valid category, reaching a value of 84.7. This shows that the instruments developed are relevant to the applicable curriculum as well as the concept of character in the five main values of the nation's character, which are religious, nationalist, communal work, independence, and integrity. In addition, the instrument is also clear enough to be used as a means of collecting character values so that it has accuracy in interpreting the levels of character values achieved by grade IV elementary students.

Besides being assessed for feasibility in terms of construct and content, products are also assessed in terms of linguistic validity. The prototype and instrument lattice was handed over to one linguist lecturer to assess the validity of the prototype in terms of language. The following is a detailed assessment of the results of the linguist validation.

TABLE III. RESULTS ON VALIDATION OF LINGUIST EXPERTS

Kinds of Instruments	Validity Indicators	Acquisition Value	Percentage (%)	Category
Linguist Validation	Relevance, Completeness, Accuracy, Clarity	83,3	83,3	Very Valid

Based on the Table III, the acquisition value of linguist validation was 83.3%. This indicates that the instrument developed is in the very valid category in terms of language. The instrument is declared complete, has high readability, clear, and appropriate language rules based on expert. Furthermore, the researcher also involved the teacher as a validator and expert practitioner. The results of practitioner validation can be seen in the following table.

TABLE IV. PRACTITIONER VALIDATION RESULTS

Types of Instruments	Indicator Validity	Acquisition Value		Average	Percentage	Category
		P1	P2			
Empirical Validation of Practitioners	Relevance, Completeness, Accuracy, Clarity	87,5	83,3	85,4	85,4%	Very Valid

Practitioner validation involves two teachers who assess the assessment instrument products that have been developed by researchers with indicators of relevance, completeness, accuracy, and clarity. The results assessment by the first practitioner was 87.5 and the second practitioner was 83.3 with an average of 85.4 which was in the very valid category. Besides assessing from a quantitative point of view, practitioners also provide input and suggestions in qualitative form to improve the instrument. The input from practitioners in general is good. However, it needs to be made easier in the assessment guide section and value inference. Based on this input, the assessment guidelines and grade inference were revised and simplified so that it could be easily used by teachers in the field.

The third product trial was carried out by testing the validation results of the fourth grade teachers in five different schools. The trial at this stage was carried out to assess the practicality of the product when it was implemented to record the character values of grade IV students. The research instrument used was the practical instrument from the teacher. The product practicality test is carried out through direct assessment by the teacher of the instrument product. Teachers try to apply and used the developed product then the teacher makes an assessment based on the practicality criteria provided. The details of the product practicality assessment results are described in the Table V.

TABLE V. RESULT OF PRACTICALITY ASSESSMENT OF PRODUCT USE

Types of Instruments	Indicator	Acquisition Value					Average	Percentage (%)	Category
		P1	P2	P3	P4	P5			
Empirical Validation of Practitioners	Practicality, Clarity, Efficiency, and Completeness	86,3	84	88,6	81,8	79,5	84,04	84,04	Very Parctical

Based on the Table V, it can be seen that the product practicality value based on the assessment of five teachers at grade IV elementary school obtained a high value, range from 79.5 to 88.6. The final mean of the assessment also shows that the practicality of the product is quite high, which is 84.04%. This value indicates that the instrument developed is very practical so that it is suitable to be used to record and see the development of character values for fourth grade elementary school students. The instrument is stated to be easy to use, applies, process, administrate, and report. In addition, the instrument stated to have good clarity, efficiency, and completeness as a means of recording the character values of grade IV elementary students.

Even though it is stated quantitatively practical, there are some suggestions and criticisms from the teacher. The items of the instrument are good, appropriate, clear and measurable. However, several things can be taken into consideration by the developer to improve this product, including: (a) In the column "Achievement Level of student affective aspects" it is easier to understand if the criteria alphabet is replaced with a score (1, 2, 3); (b) to make scoring easier, it is recommended to add a column for the total score at each assessment point; (c) it will be easier if the maximum total score is written directly by the developer to minimize the error in calculating the score; and (d) need to be revised in the section on the use of the term functional difficulties because not many teachers understand it. Based on the input from the teacher above, the instrument product was revised in the section on student achievement levels, the addition of the total score column for each aspect, and the use of word editorial that was more commonly understood by the teacher, for example students with special needs. The revision does not add or reduce data collection items as well as the content of character values in a broad manner. The revision is only technical in the use of words, adding to the total column, and changing the form of attainment from letter translation to detailed numerical description.

B. Discussion

The product of instrument development of a quality assessment character value of grade IV elementary students was tested for its validity and practicality. Validity is one of the important things in ensuring the quality of the data results of a data collection tools or assessment instrument. Validity refers to the extent to which the accuracy of a measure or data collection tool in carrying out its measuring function [13] - [15] - [16] - [17]. This development research uses two types of validity tests that are expert validity test and validation by practitioners, both of which test the content validity and construct validity.

The results of product validity test for character education experts and educational evaluation experts shows that the product developed is quite valid in terms of construct and

content with a percentage of value acquisition of 84.7%. In addition, the results of the validity assessment by practitioners obtained a value of 85.4% from the average assessment of two practitioners. This shows that the product is in the very valid category so that it is theoretically feasible as a means of collecting student character values and according to the needs of the curriculum to measure the character values of grade IV elementary students. Based on the results of the construct and content validity test, it can be said that the instrument developed was following the needs of the curriculum and the data collection on the character values of elementary school students. Therefore, content developed in the instrument is following the applicable curriculum, in this case the 2013 curriculum [4] - [14] - [18].

In terms of construct, the instrument developed is also deemed appropriate to record the character development of grade IV elementary students. The construct means the concept of character values demanded by the main values of the National Character in the Strengthening Character Education movement and the value of socio-spiritual attitudes in competence. Due to fulfills the content and construct validity aspects, the instrument developed has met the requirements of recording what should be recorded, namely the development of character values contained in the curriculum, and the construct has also fulfilled the concept of character values in the Five Main Values of National Character, namely Religious, Independent, Nationalist, Communal Work and Integrity [12] - [13] - [18]. Although the product validity tests value is quite high in terms of content validity, construct validation and language, revisions are still made to correct deficiencies of the developed product.

Apart from content validity and construct validity, this assessment instrument was also tested on linguists. The validity of language was tested to ensure the appropriateness of the instrument in terms of the use of language in the preparation of data collection tools. Good language will support the ease in using and reporting the results of data collection on an assessment instrument [19]. Therefore, it is important when compiling or developing a data collection instrument to carry out a linguistic feasibility test. As a result, an assessment of 83.3% was obtained so that the instrument was declared feasible in terms of language. Each statement item in the instrument has a complete structure, according to the recorded attitude value aspects which is clear, precise and less ambiguity [19].

This finding is conformable with the results of previous research [20] concerning the development of a psychomotor domain assessment instrument for fifth grade elementary school students. An assessment instrument that has a high

validity value in terms of language makes it possible to provide ease of use, interpretation of results, and reporting. So that the instrument developed has a high level of usefulness and application in elementary schools.

The practicality of assessment instrument is the conveniences that exist in the assessment instrument during the stages of preparing, using, interpreting/ obtaining results, as well as the ease of storing [3] - [12] - [13] - [17]. The practicality test was carried out by providing an assessment instrument of the character value of the validation results to five teachers at grade IV as instrument users in the field.

Based on the practicality value, the value is 84.04 with the very practical category. The high practicality value indicates that the instrument is suitable to be used to record the development of character values for fourth grade elementary school students due to the instrument that is easy to use, understand, cultivate and report results. The developed student character assessment instrument is stated to be very practical and feasible in terms of users, namely teachers so that it can be used to record the development of character values for grade IV elementary school students and support the implementation of the Strengthening Character Education (PPK) program by the Ministry of Education and Culture.

This result is also consistent with previous studies [5] - [21] concerning the development of assessment instruments in primary schools. The achievement of high practicality values indicates that the assessment instrument product developed is suitable for use as a means of collecting data on the development of character values for fourth grade elementary school students. This is because the instruments developed are easy to understand, easy to use, time efficient in use, and easy to process data and report the results by teachers in elementary schools [12].

The character value assessment instrument in this study has several strengths and weaknesses. The advantage of the product is that the instrument was test for its validity in terms of content and construct validity for character education experts, educational evaluation experts, linguists, and practitioners in the field. Practicality of the product was also tested on teachers from three different regions, which are Malang City, Malang Regency and Kopang District, Central Lombok Regency, so that the product quality criteria were met, which are valid and practical instruments.

Thus, the product limitation being developed is that it can only be used to record the development of grade IV students in certain basic competencies. The reliability test and empirical validation have not been carried out due to the COVID-19 pandemic. In addition, the use of products in the field requires teacher skills in understanding, using, applying, training and guiding students in order to internalize character values as expected so that the Strengthening Character Education Program can run optimally.

IV. CONCLUSION

The form of the instrument is the question of character value observation guidelines by taking the content of the five main values of national character, that are religious,

independent, nationalist, mutual cooperation, and integrity of the Strengthening Character Education program. In the initial stage, 78 items were developed from the five main values of national character and basic social and spiritual attitudes for grade IV elementary school. The prototype was equipped with a grid along with technical implementation and processing of results data. The results of two expert validation, character education and evaluation education experts, one linguist and two practitioners showed that the character value assessment instrument developed was valid. This can be seen by the percentage value by the validator in the aspect of construct validity and the content in the very valid category. The linguist validation also shows that the instrument is very valid in terms of linguistic feasibility. From 78 items in the initial prototype, 74 items were valid. In addition to expert validation, the instrument was also tested on five teachers at grade IV elementary school. The practicality value obtained from the average assessment by five teachers shows that the assessment instrument developed is very practical. Based on the analysis that has been carried out, it is concluded that the assessment instrument for the character scores of grade IV elementary school students is valid and practical so it is feasible to be used in measuring and recording the character scores of grade IV elementary school students.

Finally, the development of assessment instruments for student character scores has not been carried out by many teachers in elementary schools. Therefore, it is necessary to carry out further research and development to create a broader character value assessment instrument, especially in grades 4, 5, and 6 of elementary schools. Further research is expected to conduct more expert validity tests, field trials on a large scale, and disseminate development products in the form of character value assessment manuals for elementary school students.

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