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THE DEVELOPMENT OF ASSESSMENT INSTRUMENTS NON-COGNITIVE BY TEACHERS

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Abstract. This study aims to (1) describe clearly and comprehensively about the quality of non-cognitive assessment instruments made by elementary school teachers, (2) develop procedures for developing non-cognitive assessment instruments made by teachers, (3) develop non-cognitive assessment instruments made by teachers. To realize this goal, researchers used three structured research designs. The first design is survey research to describe the quality of non-cognitive assessment instruments made by teachers. The instruments studied are survey data, which are illuminated by non-cognitive instruments constructed by the teacher in the Lesson Plan (RPP). Furthermore, from the results of a review of the teacher's non-cognitive assessment instruments, a guidebook on the procedure for developing cognitive assessment instruments made by teachers will be developed. The development of the guidebook uses development procedures (R & D). In the third draft, the researcher and the teacher developed a non-cognitive assessment instrument in the workshop. This workshop is the application of the guidebook that has been prepared. The procedure for preparing instruments uses steps (a) development of instrument specifications, (b) instrument writing, (c) instrument review, (d) instrument assembly (for testing purposes), (e) instrument testing, (f) results analysis trial, (g) instrument selection and assembly, (h) printing instruments, (i) administration of instruments, and (j) preparation of scales and norms. The whole series of studies will produce outputs (a) research reports, financial reports, and logbooks, (b) articles that have been discussed, (c) guidelines for preparing non-cognitive assessment instruments made by teachers that can be used as teaching materials and alternative materials for drafting training assessment instruments, (d) scientific publications in accredited journals, (e) a collection of validated non-cognitive assessment instruments made by teachers.

Keywords: Development; Instrument; Non-Cognitive

I. INTRODUCTION

In general, the cycle of learning activities includes planning, learning processes, and assessment of learning outcomes. The three components of the cycle do not stand alone but depend on one another. The interrelation between the three components also involves all the elements in each component. The elements of planning, such as goals, material, material, sources, and judgments, are interdependent with the elements of the learning process, namely the environment, teacher's presentation, material, process, and learning products. Likewise, planning and learning processes are tied to the elements of assessment of learning outcomes, such as the determination of the domain of assessment, the determination of material, the formulation of the grid, the construction of questions, assessment

activities, scoring, review, and reporting. Each component acts as the basis and clarification material for other components. Therefore, each component is expected to receive balanced attention from the teacher, both in the antecedent phase, process phase, and in the output phase. Good planning will succeed if the implementation is right. Information about the quality of planning, processes, and results of activities is obtained from the assessment.

Assessment has a very important role in making decisions about the position of planning and learning processes. Nitko (2010) said "poor testing materials can lead to decision-making about pupil progress and mastery and thus may be rendered ineffective an otherwise useful instructional program. Good assessment is very important because its function is also directed at finding gaps between what teachers and students expect in learning. In Akinoglu's

study (2008: 7), it was found that 35% of all research participants said that they had communication problems with their teachers. Whereas others, 25% have problems with the limit of study time and 14% have problems with finding learning resources. This finding corroborates the findings of Mering et al. (2017: 30-31) that students say the assignments given by the instructor are not well planned. So, learning decisions are a reflection of information on the assessment of learning outcomes. In other words, to get accurate data as a basis for making appropriate learning decisions, the assessment instrument is developed in accordance with the rules of writing good instruments.

Among the three components of learning activities, the assessment component "gets less attention." In practice, the teacher prefers to teach rather than carrying out the assessment, as Popham (2011: 1) suggests "although teachers like to teach, they rarely like to test". According to NA (March 20, 2018), "there are still many teachers in their schools who are lazy to make judgments" even though the 2013 curriculum requires an assessment and reporting of the results of the assessment for each basic competency (KD) formulated and the frequency of giving tests influences student learning outcomes. (Leonard, Effect of Frequency of Formative Tests on Student Learning Outcomes, Research, 2017). If the assessment lacks attention, then it can be assumed that the teacher does not get enough information about student learning outcomes and the position of planning made.

Effective assessment demands quality instruments. Quality instruments are good instruments, which meet valid, reliable, objective and practical requirements. The things that affect the instrument's validity are the level of item difficulty and its distribution and the item differentiation power. Qualitatively the instrument (item) should fulfill the requirements of stem writing, options (multiple choice), use of language, and selection of words that have special meanings and tendencies, such as the words "in general," "often," "usually," and so. To make the test instrument only the teacher has encountered its own difficulties, let alone compiling non-cognitive assessment instruments.

Non-cognitive assessment instruments are a necessity. 2013 curriculum requires a comprehensive assessment, including knowledge, attitudes, and skills. Knowledge assessment generally uses written tests or paper-and-pencil assessments, while attitude and skills assessment uses non-cognitive assessment instruments such as interviews, attitude rating scales, checklists, observation sheets, anecdotal notes, sociometry, etc. In learning plan (RPP) observed in Teacher Profession Training and Education (PLPG) all teachers experience obstacles in making attitudes and skills instruments. They generally adapt the instrument format provided in the guidebooks and learning materials, even though the instruments are also arranged "carelessly." Sometimes in RPP only is called process evaluation, uses performance appraisal, product assessment, observation assessment, but the instrument is not available. There are also those who only mention aspects of attitude assessment, such as "honest," "responsible," "polite," "discipline" but

there is absolutely no indicator rubric that explains each of these constructs. To be more applicable, measurable, and can be explained, then each construct, for example, "honest" must have operational definitions, characteristics, criteria, indicators, categories, and appropriate instruments to measure it. This instrument can be well prepared through the correct process and empirical trials.

Cases of teacher unpreparedness in designing good instruments, especially non-cognitive assessment instruments can be assessed from the antecedent phase (the preceding phase before the teacher is appointed as a teacher), transaction phase (activity process), and outcomes phase that explains the effects of activities, such as performance teacher. The antecedent phase is the preparation phase of someone becoming a teacher, for example, the extent of the material and training he receives during lectures supporting his work. The process phase is the phase of the teacher undergoing the profession as a teacher. In this phase, it can be questioned how the support of professional teacher training supports its performance, while the output phase is a phase that questions the effects of teacher performance or the learning experience that it does. The fact that there is learning material (in LPTK) learning outcomes test (2 credits) is focused on the assessment of knowledge in the form of tests (paper-and-pencil tests). The non-cognitive assessment is "ignored." The effects of these limitations are (1) the difficulties students have in constructing non-cognitive assessment instruments for the completion of the thesis and (2) the "weakness" of teacher performance in constructing non-cognitive assessment instruments. This also happened to the PLPG.

Why do teachers need to have the skills and knowledge to develop good (non-cognitive) assessment instruments? This capability is needed not only to support its performance as a teacher but also to assess the quality of commercial tests that are freely compiled and traded. With this ability, the teacher is able to filter and adapt test instruments published by the publisher. Popham (2011: 8) "skills and know-how you need regarding test development will help you evaluate the quality of commercial testing materials." There are three reasons according to Popham that teachers need to know about valuation, namely (1) because of the use of test results in determining public perceptions of educational effectiveness (assessments affect public effectiveness) - in terms of national examinations said - the teacher reads the results report (score) assessment but the results or test reports rarely affect (their views and performance) (2) the community is not interested in the process and results of the exam, unless the test results are not in line with their expectations, (2) due to the increased use of assessment students as part of the teacher evaluation process, and (3) because assessment devices, as instructional clarification, can improve instructional quality, in this case, the assessment tool clarifies learning objectives and can improve the quality of learning.

From the studies above there are two important things to be achieved in this study, namely (1) knowing the quality of non-cognitive assessment instruments made by teachers

through in-depth qualitative studies and (2) teacher-made non-cognitive development as follow-up results study of the quality of non-cognitive assessment instruments made by teachers. Knowing the quality of teachers' non-cognitive assessment instruments is done through careful review of the source of the Learning Implementation Plan document (RPP) for teachers, especially elementary school teachers. The subject of the teacher who was included in the study was taken from the Pontianak City Elementary teacher. The results of the study of the quality of non-cognitive assessment instruments made by elementary school teachers can be ascertained the aspects needed to improve teacher skills in developing non-cognitive assessment instruments. Sampling from Pontianak City was intended to give assumptions and strong pressure to policymakers (if the results proved correct that the quality of non-cognitive assessment instruments made by teachers was "not good") to pay more attention to the element of assessment as a basic factor in making policy. Teacher's non-cognitive development is a follow-up of research on the quality of teacher-made tests. So, the first stage is to study the quality of non-cognitive assessment instruments made by teachers, the second stage is the preparation of guidelines for developing non-cognitive assessment instruments made by teachers, and the third stage is the development of teacher-made tests as non-cognitive models. Thus there are three research outputs. Specifically, the research output in the form of a research report is an accurate input for LPTK to prepare the knowledge and skills of prospective teachers in aspects of the assessment of learning and learning outcomes.

II. METHODOLOGY

This research is research and development (R and D). The research phase is the collection of data and studies on the quality of non-cognitive assessment instruments made by the teacher, while the stages of developing non-cognitive assessment instruments use R and D procedures. The research procedures follow the R and D steps (Borg and Gall, 2003: 775), namely; Research and information collecting, Planning, Develop preliminary, Preliminary field testing, Main product revision, Main field testing, Operational product, Operational field testing, Final product

revision, Discrimination, and implementation. Development of non-cognitive assessment instruments using steps (a) Development of instrument specifications, (b) Instrument writing, (c) Instrument review, (d) Instrument assembly.

A. Research Subjects

The subjects of the study were 50 Primary and Private Primary School teachers in Pontianak City. The subject of research was taken randomly and aimed. The stage of the assessment of the quality of non-cognitive assessment instruments made by teachers is used simple random methods and for the development stage of non-cognitive assessment instruments selected by teachers whose instrument quality is considered "not appropriate" to "quite appropriate".

B. Research Instrument

The research techniques and instruments consist of: (a) indirect observation techniques with instruments in the form of checklists, (b) Technique of interviews with interview guide instruments, (c) Technique of documentation with instruments in the form of document notes.

C. Data Analysis Technique

Analysis of research data includes qualitative analysis of RPP documents and non-cognitive assessment instrument items constructed by the teacher. The validity of the assessment is done by categorizing the five rating scales (1-2-3-4) to "incorrect (0-1)", "incorrect (1.1-2)", "quite appropriate (2.1-3)", " Right (3.1-4) ". This scale is then converted to a value of 0.00-100.

III. RESULTS AND DISCUSSION

A. Results

Information about the quality of non-cognitive assessment instruments made by elementary school teachers was obtained from 50 Learning Implementation Plans (RPP) of SD Mujahidin Pontianak teachers, SDN 09 Sungai Raya-Kubu Raya, SDN 68 Sungai Raya, SDN 40 Sungai Kakap, SDN 13 Sungai Kakap can be seen in Fig. 1:

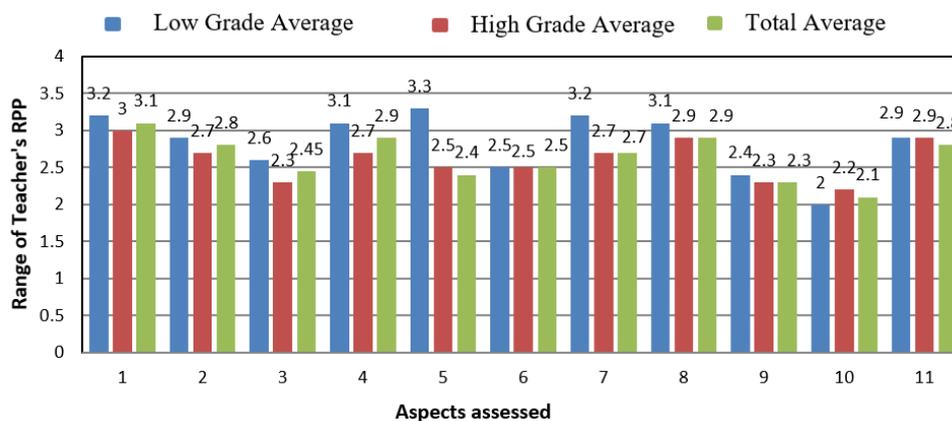


Fig.1 Ability of Low and High-Class Elementary Teachers Compile Non-cognitive Assessment Instruments

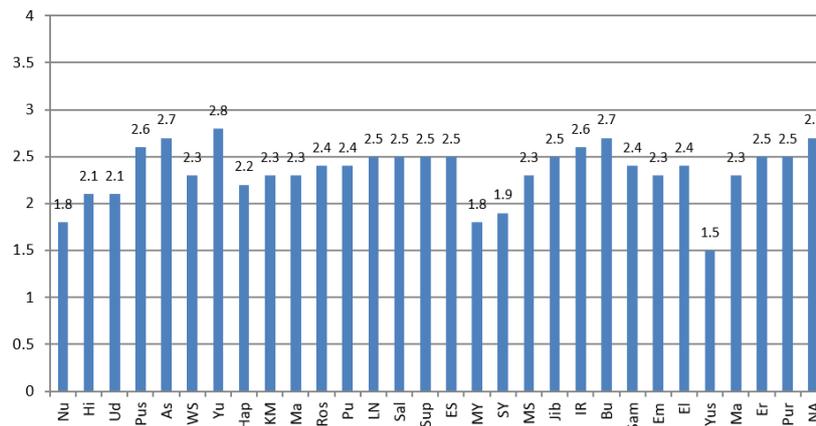


Fig. 2 Value of Elementary Teacher Non-Cognitive Instruments

In Fig. 1, it is seen that the average ability of elementary school teachers to compile non-cognitive assessment instruments ranged from 2.0 to 3.0 (quite appropriate). The pattern of decline and increase in ability between low grade and high school elementary school teachers in almost all aspects of "the same", except aspect 5 (the sentence is free from statements that are not relevant to the object in question, or the sentence is just a statement) and aspect 7 (the sentence is free from statements referring to the past). The following are graphs that illustrate the ability of individuals to compile non-cognitive instruments.

From Fig. 2, it can be seen that the average ability of elementary school teachers composes non-cognitive instruments between 1.5-2.5 (inappropriate and quite precise). Furthermore, respondents were included in workshops on the preparation of non-cognitive assessment instruments. From the results of the review of the non-cognitive assessment instrument format made by the teacher in the RPP, it was concluded:

1. In general, teachers do not construct non-cognitive assessments in lesson plans
2. Construction of assessment is unclear, or the teacher is not based on adequate skills in compiling non-cognitive assessment items (attitudes).
3. There is no uniformity of the assessment format so that there are no clear and different standards of assessment at each school.

From the workshop process for the preparation of non-cognitive instruments made by teachers, it turns out that teachers actively observe, compile, review, and evaluate their performance. They stated "although they have participated in various training, none have really discussed the comprehensive compilation of non-cognitive instruments. The results obtained from the workshop activities are "appropriate" or "appropriate" teacher instruments used as instruments for the students' non-cognitive assessment.

B. Discussion

The results of the study of non-cognitive instruments made by the teacher in the lesson plan, as described in the findings above, are still "inaccurate" in terms of aspects,

indicators, items, rubrics, assessment formats, format variations, and variations in assessment tools. In fact, "most" teachers do not make and include non-cognitive assessment instruments in the lesson plan. Although in the Assessment Guidebook for Elementary Schools (2016, 26-31) stated, "educational units can develop as needed." This, as stated, they did not get sufficient valid information to make a non-cognitive assessment instrument.

The procedures for preparing non-cognitive instruments have been quite widely discussed in the Assessment Guidebook for Primary Schools (Directorate General of Primary and Secondary Education, 2016). The book lacks systematic and continuous socialization by experts in the field of assessment. In addition, not all teachers are graduates of Teacher Training Institution (LPTK), and for LPTK graduates themselves, non-cognitive assessment material has not become sufficiently considered material. The procedure for the preparation of non-cognitive instruments prepared must be accompanied by a massive training program.

From the workshop activities, it appears and arises the courage of teachers to freely develop the non-cognitive instruments contained in the Assessment Guidebook for Elementary School (2016: 26-31) in accordance with the message in the book, that "educational units can develop as needed". Compared to what the teacher made in the RPP, the format of the workshop results were "better" both in terms of aspects, indicators, items, rubrics, assessment formats, format variations, and variations in assessment tools. Likewise, the basis of assessment, namely the theoretical and operational definitions of assessment, becomes a "strong" basis for constructing non-cognitive instruments made by teachers.

IV. CONCLUSION

The quality of non-cognitive assessment instruments made by elementary school teachers is reflected in the average ability of respondents, which are between "less" to "enough." Respondents' ability to compile non-cognitive instruments was lower in aspects (determining the focus of item ideas, making rubrics, and scoring guidelines and use of instrument languages. To help teachers become more skilled

in compiling non-cognitive assessment instruments, workshops on the preparation of non-cognitive instruments for teachers is carried out for low and high-grade teachers in elementary school. The results obtained show "there is an increase in the ability of teachers to arrange non-cognitive instruments, from" sufficient "values to" right".

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