Kesesuaian Komponen Buku Penilaian Harian Guru IPA SMP (Biologi) di Bekasi

The Suitability of the Components of the Daily Assessment Book for Junior High School IPA Teachers (Biology) in Bekasi

Adisti Ratnapuri* dan Fajar Adinugraha

Prodi Pendidikan Biologi-Universitas Kristen Indonesia, Kota Jakarta Timur, 13630, Indonesia

*Corresponding author: adisti.puri@uki.ac.id

Abstract. The Teacher's Daily Assessment Book is a form of teacher management. In fact, not all teachers are able to complete it. Therefore, the purpose of this study was to determine the format of the teacher's daily assessment book and to describe the suitability of the components of the daily assessment book in junior high school science teachers (biology). The research method used was field research with observation and interview techniques. The informants in the study were 10 junior high school science teachers (Biology) in Kecamatan Rawalumbu, Bekasi. All the respondents (100%) have document completeness in books 1 and 4. Unfortunately, not all the respondents have document completeness in books 2 and 3. Looking at the document completeness in book 2, only 50% of the respondents have document completeness. In Book 3, none of the respondents had 100% document completeness. The range of document completeness was from 69.23% to 84.62%. Finally, not all teachers have 100% complete documents in the workbook. This may be due to the administrative burden. This research is expected to provide insight into the need to balance the quality of teaching and the administrative burden on teachers.

Keywords: Assessment, Science Teacher, Teacher Daily Assessment Book, Workbook Format

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1. Introduction

Assessment is defined as a systematic process of collecting and processing various information to measure students' learning achievement [1]. The Ministry of Education and Culture since the 2013-2014 academic year began to establish a 2013 Curriculum implementation policy that continues to experience structuring. Objects that undergo structuring and refinement emphasize natural phenomena, social phenomena, artistic phenomena, and cultural phenomena [2].

The supporting administration for assessment that teachers must have an assessment guidebook for teachers. This guide includes the assessment of learning outcomes by teachers and the level of educational units. The purpose of assessment of learning outcomes and assessment of students' attitudes by teachers is to monitor and evaluate the continuity of the learning process,
the progress of learning outcomes, the improvement of learning outcomes and the improvement of students' attitudes periodically and continuously in order to become even better. Graduate competency standards must be achieved, so it is necessary to assess learning outcomes at the educational unit level. Therefore, the assessment guidelines must include the three concepts of Bloom's assessment (knowledge, skills, and attitudes), the processing and follow-up of assessment results, assessment instruments and formats, and the existence of instructions for filling out transcripts [1].

In general, the purpose of conducting an assessment is to determine the level of success with indicators of achievement of national educational goals and learning objectives set by the school. Therefore, teachers must be able to conduct learning assessments using a variety of assessments. Assessment must follow standardized procedures and standards to be effective. At the primary and secondary levels of education, there are three assessments of learning outcomes: assessment by teachers (educators), assessment by schools, which is generally in the form of learning outcomes assessment report cards (educational unit level), and assessment by the government in the form of simultaneous assessments of national exams (Raharjo, 2014). This assessment also appears in the teacher's daily assessment book.

The teacher's daily assessment book is fundamental for learning activities. The teacher's daily assessment book contains different types of assessments obtained through different assessment techniques. The ideal assessment book must include three main aspects of assessment in accordance with the 2013 Curriculum Assessment Standards, namely aspects of knowledge, skills, and attitudes. Each aspect has components in the form of instruments that must also meet the assessment standards.

Unfortunately, some teachers do not realize the importance of the teacher’s daily assessment book. Researchers found several facts related to the suitability of the components of the format of the teacher's daily assessment book. The first observations were made in 2019 during the implementation of the 2013 curriculum. The finding is that there are still schools where the format of the components of the gradebook is not in accordance with the assessment standards set by the 2013 curriculum. There are still many teachers' daily assessment books that do not contain assessment components such as attitude, skill, and knowledge assessment components that should be more complete.

Based on this, researchers are interested in conducting research on several science (biology) teachers on the analysis of the format components of the science (biology) teacher's daily assessment book and the suitability of the instrument with ideal assessment standards. Urgency analysis of the components of the format of the daily assessment book for science (biology) teachers, which can provide an overview of the assessment study topics listed in the teacher's daily assessment book. Then, it can be sorted and analyzed to be grouped according to the criteria of the assessment standard. Therefore, this analysis will help to provide information about the science (biology) teacher's
daily assessment book in accordance with the assessment standards.

Research activities on this analysis will be a form of evaluation of the ideal daily assessment book to produce suitability so that it can be a reference for improving the science teacher's daily assessment book (Biology) to become a value book whose components are in accordance with the ideal assessment standard instrument. The purpose of this study was to determine the format of the teacher's daily assessment book and describe the suitability of the daily assessment book components for junior high school science teachers (Biology).

2. Methods

Research Method
The research method in this study is field exploration. This research leads to a content analysis of the implementation and suitability of the components of the teacher's daily assessment book and its format with the ideal assessment standards. The research was conducted from March 2021 to March 2022.

Population and Sample
The population was from private Junior High Schools in Bekasi, with Kecamatan Rawa Lumbu as the sample. The number of Junior High Schools in Kecamatan Rawalumbu was 24. The sampling technique used was convenience sampling. This research was conducted in 10 private Junior High Schools. These private Junior High Schools are: SMP Bani Taqwa, SMP Bisnis Informatika, SMP Intelektika, SMP Melati Indonesia, SMP Mutiara Baru, SMP PGRI Rawalumbu, SMP Widya Nusantara, SMP Taman Siswa, SMP Tunas Global, and SMP YAPISA.

Data Collection and Analysis Techniques
The data collected in this study include the format of the daily assessment book for science teachers (biology) and the suitability of the components of the daily assessment book for junior high school science teachers (biology). The data collection techniques used are observation techniques and interview techniques.

Data on the format of the daily assessment book of science teachers (Biology) referred to in this study are documents in workbooks 1, 2, 3, and 4. This data was collected through observations and interviews. The observation grid for teachers' workbooks can be seen in Table 1. Data were analyzed using descriptive statistics.

Table 1 Workbook observation grid

<table>
<thead>
<tr>
<th>No</th>
<th>Aspects and Statement Items</th>
<th>Number of Instrument Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher's Workbook 1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Teacher's Workbook 2</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Teacher's Workbook 3</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Teacher's Workbook 4</td>
<td>3</td>
</tr>
</tbody>
</table>

Data on the suitability of the components of the Daily Assessment Book for Junior High School science teachers (biology) were collected using interview and observation techniques. The data analyzed using descriptive statistics. Descriptive statistics involve calculating percentages and describing them in bar and pie charts. Data were also analyzed per workbook for completeness.
Respondents are teachers who teach Junior High School science in the field of biology. The total number of respondents was 10 teachers. Respondents in this study were coded A1 through A10. All teachers have a Bachelor of Education or Bachelor of Science degree. A total of 10% of the teachers were certified, while the rest were not. The length of time respondents had worked as teachers also varied. 30% worked ≤2 years, 40% worked 3 to 5 years, 20% worked 6 to 9 years, and 10% worked ≥10 years. The data are shown in Figure 1.

The format of the daily assessment book of the observed private secondary school science teacher (biology) is book 1, book 2, book 3, and book 4. This study was conducted during the transition period of the 2013 curriculum change to the Merdeka curriculum. Therefore, the contents of each workbook are adjusted to the state of document completeness based on the curriculum used. The data on the completeness of each component of the science teacher assessment book are presented in Table 3.

Table 3. Completeness of the Daily Assessment Book of Science Teachers (Biology) in Junior High School

<table>
<thead>
<tr>
<th>Code</th>
<th>Book 1</th>
<th>Book 2</th>
<th>Book 3</th>
<th>Book 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>100.00%</td>
<td>100.00%</td>
<td>84.62%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A2</td>
<td>100.00%</td>
<td>80.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A3</td>
<td>100.00%</td>
<td>100.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A4</td>
<td>100.00%</td>
<td>100.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A5</td>
<td>100.00%</td>
<td>90.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A6</td>
<td>100.00%</td>
<td>90.00%</td>
<td>84.62%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A7</td>
<td>100.00%</td>
<td>100.00%</td>
<td>76.92%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A8</td>
<td>100.00%</td>
<td>90.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A9</td>
<td>100.00%</td>
<td>100.00%</td>
<td>69.23%</td>
<td>100.00%</td>
</tr>
<tr>
<td>A10</td>
<td>100.00%</td>
<td>90.00%</td>
<td>76.92%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

The results in Table 3 show that the completeness of science teachers' daily assessment books varies. All respondents (100%) have document completeness in books 1 and 4. Unfortunately, not all respondents have document completeness in Books 2 and 3. Looking at document completeness in Book 2, only 50% of the respondents have document completeness. The remaining 50% of respondents had 80% to 90% document completeness. In Book 3, none of the respondents had 100% document completeness. The range of document completeness was 69.23% to 84.62%. Looking at the average completeness, Book 1 and Book 4 were the most complete, followed by Book 2 and Book 3. The data is shown in Figure 2.
Book 1 consists of Book 1 Cover, Learning Outcomes/KI-KD Indicators, Learning Objectives, ATP/Syllabus, and Teaching Modules/RPP. Learning outcomes are an expression of educational objectives in the form of a statement about what students are expected to know, understand, and be able to do after completing a period of learning [3]. The term learning outcomes was used in the Merdeka Curriculum. The 2013 curriculum uses the term basic competencies. Basic competencies are the competencies of each subject for each grade, consisting of attitudes, knowledge, and skills related to the core competencies [4]. These learning outcomes need to be understood by the teacher and then translated into learning objectives [5].

The learning objectives in the Merdeka Curriculum must refer to the learning outcome set by the government, which is contextualized by the teacher according to the characteristics of the school by reflecting important points in learning and can be tested by various types of assessments [5], [6]. The components of audience, behavior, condition, and degree are considerations for formulating learning objectives that are appropriate to the learning environment [7]. Learning objectives in Curriculum 2013 are related to basic competencies and indicators. These learning objectives are then derived from the Flow of Learning Objectives for the Merdeka Curriculum and the Syllabus for the Curriculum 2013.

The Flow of Learning Objectives (Alur Tujuan Pembelajaran) is derived into several dimensions and then reduced to various indicators [8]. This statement is different from the 2013 curriculum, which reduces learning objectives to indicators. In the 2013 curriculum, the syllabus is derived from the learning objectives. The syllabus is part of the learning subsystem that consists of or is connected to each other in order to achieve the objectives [9]. The flow of learning objectives is used to create teaching modules in the Merdeka Curriculum, and the syllabus is used to create learning implementation plans (RPP) in the 2013 Curriculum.

A teaching module is a unit of teaching and learning that is packaged as a whole and systematically in the form of a set of planned learning experiences that are arranged to help students achieve a number of formulated objectives [6], [10]. Teaching modules are a substitute for lesson plans that are formatted and varied in nature, which include learning material and content, learning methods, interpretation, and evaluation techniques that are systematically and stunningly arranged to achieve the expected success indicators [6]. Teaching modules are used in the Merdeka Curriculum, while lesson plans are used in the 2013 Curriculum. The lesson plan is a lesson plan that is developed in detail with reference to the curriculum, textbooks, and teachers’ guides. The lesson plan includes: (1) school/madrasah identity, subject, and class/semester; (2) time allocation; (3) KI, KD, competency
achievement indicators; (4) learning materials; (5) learning activities; (6) assessment; and (7) media/tools, materials, and learning resources [11].

Book 2 consists of the Book 2 cover, Teacher Code of Ethics, Teacher Pledge, Code of Conduct, Teacher Habits, Educational Calendar, Time Allocation, Annual Program, Semester Program, and Teacher Agenda Journal. The Teacher Code of Ethics is the basis for the behavior of Indonesian educators in carrying out their professional responsibilities in the field of education [12]. Code of ethics as a control of all professional activities related to the profession [13]. A code of conduct is a set of rules to be followed that regulates daily life and contains sanctions for those who violate it [14]. Rules for teachers must really be rules that they must follow with full awareness, not because of pressure or coercion [15].

Habituation is an activity performed continuously or repeatedly by a group of people [16], [17]. Teacher habituation can take the form of behaviors such as coming to school on time, providing examples and guidance so that children get used to throwing garbage in its place, and keeping shoes on shoe racks [17]. The educational calendar is a time schedule for students' learning activities during a school year [18], [19]. The educational calendar includes the beginning of the school year, actual school weeks, actual school/madrasah days, and holidays [18], [20].

Time allocation is the time required to master each competency [20]. The preparation of time allocation and the selection of subjects that need to be done to focus students on deepening and strengthening their understanding of the subject matter [21]. The annual program is a plan for determining the time allocation for a year, including the number of instructional hours in accordance with the applicable curriculum structure and the breadth of material to be mastered by students [20]. The yearly program is developed directly by the teachers before the beginning of the school year [22].

The semester program is an elaboration of the annual program, i.e., things that will be implemented and achieved in one semester [22]. The semester program is a learning program that contains basic competencies, themes, sub-themes, and time allocations for one week [20], [23]. The teacher's agenda journal usually contains the day or date, time, competencies, materials, indicators, achievements, and student absences [24]. The format of the Teacher's Agenda Journal varies from institution to institution.

Book 3 consists of Book 3 Cover, Student Attendance, List of Values, Moral Evaluation, Analysis of Formative/Summative Assessment Results, Learning, Improvement, and Enrichment Programs, Teacher/Student Handbook List, Teaching Schedule, Student Absorption, Collection of Question Grids, Collection of Questions, Analysis of Question Items, and Problem Improvement. The completeness of Book 3 documents is the least complete among Book 1, 2, and 4 documents. The average completeness score is about 73.85%, which is still above 70%.

Student attendance includes two meanings, namely school attendance and non-school attendance [25]. Attendance is an important component
in finding out student attendance data [26]. The grade list is a summary of student grades [27], [28]. The grade list varies depending on the name. Currently, the grade book is integrated into an electronic system.

Character is built through the evaluation of noble character [29]. The evaluation of students' morality is based on the concepts of religiousness and affective characteristics [30]. In a balanced evaluation system, summative and formative evaluation are integral parts of information collection as they are interrelated [31]. Formative evaluation is used to assess the implementation of the learning process at each meeting and can be seen from the lesson plan, while summative evaluation is used to evaluate the program through tests at the end of the program and in writing [32].

Enrichment programs can be interpreted as providing additional or expanded experiences and skills to students who are identified as exceeding their learning completeness [33], [34]. Enhancement or remediation refers to matters related to improvement to overcome and help students who have not achieved learning completeness [34]. The teacher/student handbook list contains learning resources in the form of books used by teachers and students in learning. Teachers, as the main controllers of classroom learning, must pay close attention to the students' books and teachers' manuals provided by the government [35].

A teacher's lesson plan is the division of time he or she spends teaching students in school [36]. The availability of the number of teachers and the number of subjects requires extra effort to arrange the teaching schedule [37]. Absorption is defined as a student's ability to absorb or master the material he learns according to the subject matter taught by his teacher [37]. Absorption is the teacher's benchmark for knowing the student's ability to master and understand material in the teaching and learning process [38].

Creating a grid that contains question indicators will help teachers design questions according to test objectives [39]. A grid can be defined as a matrix of information that can be used as a guide for writing and assembling questions into a test [40]. Item sets consist of questions that are presented to students in various forms. Types of tests can be multiple-choice, matching, true/false, and short-answer [41]. A good test must meet several requirements, namely: it must be efficient, it must be standardized, it must have norms, it must be objective, it must be valid, and it must be reliable [42]. Therefore, it is necessary to analyze the items.

Item analysis needs to be done to test the quality of each item and a set of questions in different aspects, which can be done qualitatively or quantitatively [43]. Item analysis can be done through expert validation, validity, reliability, level of difficulty, discriminating power, and the effectiveness of examiners [44]. Item analysis can provide information about the merits and demerits of a question and provide guidance for improvement [45].

Book 4 consists of the book cover, self-assessment, and follow-up program. Self-evaluation can be carried out by the teacher or collaboratively, i.e., together with the principal,
supervisor, or peers [46]. Based on this evaluation, a follow-up plan is developed. The follow-up plan is a plan of activities to be carried out after reflection and evaluation of the previous activity [47].

A knowledge competency assessment is conducted to measure the level of student achievement in aspects of knowledge that include memory or memorization, comprehension, application or use, analysis, synthesis, and evaluation. This assessment is conducted by the teacher [48], [49]. In essence, the implementation of assessment in each education unit must refer to and be guided by the Education Assessment Standards and other assessments deemed relevant to the 2013 Curriculum.

The limitation of this study is the lack of respondents because it only takes samples around Bekasi. In addition, it is also necessary to analyze the assessment used by Merdeka Curriculum schools. This is because the research conducted is during the transition period from the 2013 curriculum to the Merdeka curriculum, so the data obtained is a mixture of the 2013 curriculum and the Merdeka curriculum. In addition, it is necessary to develop an application that makes it easier for teachers to create educational administration.

In designing a curriculum for science subjects, especially biology, it is also necessary to consider the learning approach used. Learning approaches that can be used include the natural environment approach, the scientific approach, and the local wisdom and culture approach [50], [51]. Teachers also need to provide supportive learning media according to students’ characteristics, such as learning modules [52]. In addition, biology education also needs to prioritize environmental protection [53] to support the SDGs, especially goal number 4, namely quality education.

4. Conclusions

The Science Teacher Assessment Book in Junior High School consists of Book 1, Book 2, Book 3, and Book 4. All respondents (100%) have document completeness in books 1 and 4. Unfortunately, not all respondents have document completeness in books 2 and 3. When looking at document completeness in Book 2, only 50% of the respondents have document completeness. The remaining 50% of respondents had 80% to 90% document completeness. In Book 3,

none of the respondents had 100% document completeness. The range of document completeness was 69.23% to 84.62%. Looking at the average completeness, Book 1 and Book 4 are the most complete, followed by Book 2 and Book 3. This is possible because the contents of Books 2 and 3 are more numerous and complicated. In the future, it is necessary to develop a simple and inexpensive application to make it easier for teachers to compile a daily assessment book.

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Daftar Pustaka


