Conformity Level Analysis of Physics Daily Test Questions Based on Minimum Competency Assessment

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Abstract: This study aims to determine the level of suitability of the daily test questions of physics with Minimum Competency Assessment (MCA) for reading literacy and numeracy literacy at SMA Negeri 1 Kamang Magek class XI MIPA. This research uses quantitative and qualitative descriptive methods with steps for problem analysis, data collection, quantitative analysis in the form of validation and reliability tests, data of grid suitability, analysis of the level of conformity of daily test questions with MCA components, and reports. The data analyzed were obtained from MCA-based daily test questions, grids, and student answer sheets. The data collected was processed using a comparison of MCA aspects that are met with the total number of MCA aspects to find out the percentage of conformity of daily test questions with MCA questions. After analyzing the questions, it is proven that all items are valid. Furthermore, the results of the reliability test made by the teacher showed reliability with some 0.57 basic competencies 3.1 categorized as medium reliability, basic competencies 3.2 medium reliable categories with some 0.57, basic competencies 3.3 medium reliability with some 0.468, basic competencies 3.4 high reliability with some 0.695, and basic competencies 3.5 high reliables with some 0.603. The grids that the teacher made did not yet correspond to the grids that should have been used. The percentage of conformity rate for reading literacy was 58.54%. The percentage of suitability rate for numeracy literacy is 63.67%. Referring to the results of the analysis, it can be concluded that the level of conformity of the questions made by teachers with MCA for reading literacy is categorized as sufficient and the level of suitability of questions made by teachers with MCA for numeracy literacy is categorized as high.

Keywords: Conformity level analysis; Minimum Competency Assessment (MCA); Test instruments.

Introduction

Based on the circular letter of the Minister of Education and Culture Number 4 of 2020 concerning the implementation of education policies during the COVID-19. The national assessment is used as a substitute for the national exam. Minimum competency assessments character surveys, and learning environment surveys are used in the national assessment of students. The Ministry of Education sees the results of an national assessment as material for evaluating the quality of learning in education units and as an evaluation of the performance of educational units. Minimum Competency Assessment (MCA) is used to assess students' basic abilities in reading literacy competencies and numeracy literacy (Sani, 2021). Content, cognitive processes, and context are aspects that need to be known through reading literacy competencies and numeracy literacy. Designed learning, based on innovative and creative concepts, is expected to create learning that focuses on curriculum objectives (Siahahan, Hijriani, & Toni, 2022). According to, the MCA aspect includes the ability to think logically systematically, the ability to reason based on previously acquired concepts and knowledge, and the ability to sort and obtain information (Kemendikbud, 2020).

The grid of MCA questions for reading literacy and numeracy literacy must be made separately (Wijaya and Dewayani 2021). The components of reading literacy grid and numeracy literacy consist of different

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components. The compendium of reading literacy grids consists of text type, level, context, competence, cognitive level, question form, and indicators. The components of the numeracy literacy grid consist of domains, sub-domains, classes, contexts, competencies, cognitive levels, question forms, and indicators (Wijaya and Dewayani 2021).

The questions of levels 1 to level 6 separated by grade level are included in the reading literacy grid. Level 1 for grades 1-2, level 2 for grades 3-4, level 3 for grades 5-6, level 4 for grades 7-8, level 5 for grades 9-10, level 6 for grades 11-12 (Wijaya and Dewayani 2021). The class intended for numeracy literacy is that students are expected to be able to achieve competencies in each grades 2, 4, 6, 8, and grade 10 (Wijaya and Dewayani 2021).

The form questions used in the MCA questions for each level are in the form of multiple choice questions, complex multiple choices, matchmaking, short fills, and descriptions (Wijaya and Dewayani 2021). Multiple-choice questions are questions with possible answers that can be chosen (*option*). Complex multiple choice is an *option* question with more than one correct answer (Krissandi, et al. 2022).

When it comes to matching there are two groups of statements. The left lane is a question (premise) and the right lane is an answer (response) (Amirono and Daryanto 2016). A fill or short answer consists of a sentence that has an empty section as a place to fill in the answer (Febriana 2019). The description test is in the form of a test with simple answers or with complex answers to be able to measure student competence in all levels of the cognitive realm (Febriana 2019).

The MCA assessment guidelines are tailored to the assessment variations of each form (Wijaya and Dewayani 2021) explained the scoring guidelines. Multiple choice question forms if the student answers correctly are given a score of 1, if the student answers incorrectly is given a score of 0, complex multiple choice questions are given a score of 1 for correct answers and a score of 0 for incorrect answers, matching questions with a score of 1 for correct answers and a score of 0 for incorrect answers, fill in or short answers are given a score of 1 answer correct and a score of 0 answers incorrectly, and a blurb question with a complex answer is assigned a value of 2 for the answer meeting all the criteria of the answer key, the value of 1 for the answer does not meet the criteria of the answer key, and a score of 0 for the answer is wrong, while the description question with a simple answer is given a value of 1 for the answer that meets the answer key criteria and a value of 0 for the wrong answer.

Reading literacy is the ability that students have to understand, use, evaluate, and reflect on sharing types of texts to solve problems and develop the capacity of individuals to contribute to society (Winata, Widiyanti,

& Cacik, 2021). Numeracy literacy is the ability to think using concepts, posts, facts, and mathematical tools to solve problems in everyday life (Kurniawan & Rahadyan, 2021).

Reading literacy and numeracy literacy are competencies that are tested in MCA as a form of evaluation of basic competencies used by students in everyday life. MCA is one of the assessments carried out in national assessment in addition to character surveys and learning environment surveys. In other words, if a test is carried out based on the aspects of minimum competency assessment, it is naturally able to measure reading literacy and numeracy literacy.

If reading literacy and numeracy literacy have been measured, they can find out the abilities needed by students to communicate in everyday life. There are several studies related to the minimum competency assessment, such as the perspectives of students, teachers, and prospective physics (Adelia & Deta, 2022); analysis of student and teacher readiness (Rokhim, et al., 2021); component Minimum Competency Assessment (Kumalasani et al. 2022); *teacher learning progression* in developing Minimum Competency Assessment questions; student readiness (Perdana 2021), analysisis numeracy literacy (Megawati & Sutarto, 2021), (Rakhmawati & Mustadi, 2022) teacher respond to minimum competency assessment (Yamtinah, et al., 2022), underestimated numeracy of adult (Grotlüschen, Buddeberg, & Kaiser, 2019), (Maclnnes, 2019). The research can be used as a references.

Based on the results of observations made at SMA Negeri 1 Kamang Magek. Teachers have used minimum competency assessment-based daily assessment questions but it is not yet known whether the minimum competency assessment-based daily test questions used by teachers have correctly measured reading literacy and numeracy literacy. To find out the level of suitability of the daily test questions that have been made by the teacher with the components of the MCA questions for reading literacy and numeracy literacy, an analysis of the level of conformity was carried out.

Through this level of conformity information, teachers know the shortcomings in making minimum competency assessment-based daily test questions for reading literacy and numeracy literacy. Through this information, teachers are also able to make daily test questions that are following the context of the MCA questions for reading literacy and numeracy literacy. On this basis, the researcher analyzed the level of conformity of the Physics daily test questions with MCA for reading literacy and numeracy literacy to know the level of suitability of physics daily test questions with MCA for reading literacy and numeracy literacy at SMA Negeri 1 Kamang Magek, especially in class XI MIPA.

Method

This research uses quantitative and qualitative descriptive methods. Descriptive quantitative is a study that aims to describe phenomena using size, number, or frequency while qualitative descriptive research is a study that aims to describe data that contains meaning (Sugiyono, 2017). The research data was obtained from the grid, question manuscripts for the 5 basic competencies tested, and daily test answer sheets for physics subject students.

The subject of this study is a daily test question made by a Physics teacher at SMA Negeri 1 Kamang Magek for class XI MIPA for the July-December 2021 covering 5 Basic Competencies. Basic Competencies 3.1 Applying the concepts of torque, a moment of inertia, weight point, and angular momentum to rigid objects (static and dynamic) in everyday life. Basic Competencies 3.2 Analyzing the elasticity properties of materials in everyday life. Basic Competencies 3.3 Applying static fluid laws in everyday life. Basic Competencies 3.4 Applying the principle of dynamic fluid in technology. Basic Competencies 3.5 Analyzing the influence of heat and heat transfer which includes the thermal characteristics of a material, capacity, and heat conductivity in everyday life.

The analysis is carried out in three stages. The first step, is the grid analysis of the daily test questions. The MCA question grid format for reading literacy and numeracy literacy has its components. The reading literacy grid, it consists of text types, levels, contexts, competencies, cognitive levels, question forms, and indicators. The numeracy literacy grid consists of domains, sub-domains, classes, contexts, competencies, cognitive levels, question forms, and indicators.

The grids made by teachers are compared with the grids of MCA questions for reading literacy and numeracy literacy. The grids made by the teacher are analyzed based on the availability of the components of the MCA question grid. The results of this analysis will show the availability of MCA grid components on the daily test question grid made by the subject teacher.

The second stage, conducting quantitative analysis through validity and reliability tests. The validity and invalidity of the question items on each indicator of the daily test question were obtained through calculations using the *Product Moment Correlation* formula by comparing the calculated r-value with the r table. The instrument reliability test was tested using *the Alpha Cronbach* method and then compared the reliability coefficient value with the r table to find out whether the problem was made reliable or unreliable.

Reliable or unreliable questions made by teachers are categorized based on the calculation of reliable coefficients in the range of 0.40 to 0.60 (equally small) then instruments are categorized as instruments with medium reliability. The calculation of reliability efficiency is in the range of 0.20 to 0.40 (equally small), so the instrument is categorized as an instrument with consistently low. If a small coefficient equals -1.00 or small equals 0.20 then the instrument is categorized as an instrument with very low reliability.

The third stage is an analysis of the suitability of the question items with the MCA components for reading literacy and numeracy literacy using a report on the suitability analysis of the reading literacy component and the suitability of the numeracy literacy component. The question items that are stated to have conformity with the MCA component for reading literacy and numeracy literacy are used to determine the degree of conformity in percentage terms. The score results obtained in each question item are calculated using a comparison of the MCA aspects that are met with the total number of MCA aspects followed by categorizing the questions with a very high, high, medium, low, or very low level of conformity.

Wijaya and Dewayani (2021) states that an important aspect of the implementation of MCA in reading literacy is the availability of texts or readings that will be used as a stimulus in the preparation of questions. The daily test questions that are following the MCA questions are questions that are made to meet the MCA components. If the question item contains one of the reading literacy content, namely informational texts, and fictional texts, it is said to be following the MCA component for the content. If the question item does not contain one of the reading literacy content, it can be said that the question item is not following the MCA component.

Wijaya and Dewayani (2021) states examples of informational texts that can be used as reading stimuli in the preparation of MCA questions, including advertisements, company/ government documents (official memorandums, invitations, contracts, notices, announcements, and so on), news, articles, reports, speeches, pamphlets, brochures, newsletters, graphic info, labels (food/medicine), recipes (food/beverages), reviews (book/film reviews/dram), scientific journals, scientific research reports, guidebooks, and editorials. The MCA problem should be designed using a stimulus with diverse contexts, for example by presenting information in the form of writing, tables, graphs, and illustrations. The stimulus presented has educational, inspirational, and interesting elements, and has a novelty value (Sani, 2021).

Analysis of the level of suitability of daily test questions with MCA for numeracy literacy in terms of content, cognitive processes, and context. The content in the MCA question for numeracy literacy is numbers, geometry, measurements, algebra, as well as data and uncertainty. The cognitive processes of knowledge, understanding, and reasoning in each of them have

aspects to be used as sources of reference. Furthermore, the context of the questions created can be made based on personal, socio-cultural, and scientific contexts.

Result and Discussion

Grid Availability Analysis

The Ministry of Education and Culture provides a format for writing reading literacy grids and numeracy literacy separately. The MCA aspects contained in the grid for reading literacy consist of text types, levels, contexts, competencies, cognitive levels, question forms, and indicators (Wijaya and Dewayani 2021). Data on the availability of grids made by teachers seen from the presence or absence of grid components according to the format for writing the grids provided by the Ministry of Education and Culture in the Minimum Competency Assessment framework.

The form of writing a grid of MCA questions for numeracy literacy with the type of text in the form of informational text is shown in Table 1.

Table 1. Gird Format of Minimum Competency Assessment (MCA) for Reading Literacy

Text Type	Level	Context	Competence	Cognitive Level	Question Form	Indicator
Information Text	6	Socio-cultural	Interpret an intergrate	Understanding the idea of the text	Multiple Choice	Explain the main idea and supporting ideas in informational texts that continue to increase according to the level.

(Pusat Asesmen dan Pembelajaran, 2021)

The MCA aspect in the numeracy literacy grid consists of domains, sub-domains, classes, contexts, competencies, cognitive levels, question forms, and indicators (Wijaya and Dewayani 2021). The form of writing a grid that corresponds to the grid of MCA questions for numeracy literacy in the gemometric and measurement domains is shown in Table 2.

Table 2. Gird Format of Minimum Competency Assessment (MCA) for Numeracy Literacy

Domain	Sub Domain	Class	Context	Competence	Cognitive Level	Question Form	Indicator
Geometry and measurement	Building Geometry	11	Scientific	Using the concept of Black's Principle	Applying	Essay	Apply the principle to the thermal conditions

(Wijaya & Dewayani, 2021)

The MCA aspects available in the grid used in class XI MIPA consist of competencies, question forms, and indicators for reading literacy and numeracy literacy. The reading literacy and numeracy literacy grids are not made separate and have not fully met the writing of the MCA question grid.

The grid created by the teacher when compared to the components that must be present in the grid of MCA questions contains content, context, and levels. The grid that the teacher makes does not correspond to the components that should be present. In basic competency 3.1 with essay questions as many as 4 items of reading literacy competency components of text type, level, context, and cognitive level cannot be found in the grid made by the teacher, while for competence, question forms, and indicators found on the grid and domains, class subdomains, cognitive level contexts are not found in the grid for numeracy literacy.

The basic competency 3.2 grid uses questions in the form of essays of 4 points. In this basic competence the text type, level, context, and cognitive level are not found, while indicators, question 1 indicators, and

question numbers are made by the teacher in a grid for reading literacy. While competencies, question forms, and indicators found in grids as well as domains, subdomains, classes, and cognitive level contexts are not found in grids for numeracy literacy.

Basic competence 3.3 with the form of essay questions as many as 4 items of teacher questions make competencies, question forms, and indicators while text types, levels, contexts, and cognitive levels are not made in the grid for reading literacy. Domain components, class subdomains, and cognitive level contexts are not found in the grid for numeracy literacy. The components of the reading literacy grid found in the grid of questions made by the teacher only write down the competencies, the form of questions, and indicators.

Lattice basic competence 3.4 uses questions in the form of essays with 6 questions. In this basic competence the text type, level, context, and cognitive level are not found, while indicators, question 1 indicators, and question numbers are made by the teacher in a grid for reading literacy. While competencies, question forms, and indicators found in

grids as well as domains, subdomains, classes, and cognitive level contexts are not found in grids for numeracy literacy.

The components of the grid that correspond to the format of the MCA question grid for numeracy literacy are domains, sub-domains, classes, contexts, competencies, cognitive levels, question forms, and indicators. Domains for numeracy literacy are numbers, geometry, measurements, algebra, data, and uncertainty. Subdomains in each domain, class is a question made intended for students of what grade, context is the scope of the questions made (personal, socio-cultural, and scientific), competence is the competence of the question being tested, the cognitive level is at the level of knowing, applying, and reasoning, the form of the question there are multiple choice questions, complex multiple-choice, matchmaking, filling, and description tests, and indicators of the questions to be tested. Basic competencies 3.1, 3.2, 3.3, 3.4, and 3.5 do not describe domains, sub-domains, classes, contexts, and cognitive levels on grids created by subject teachers.

Based on the results of the analysis carried out, it can be concluded that the statement submitted by the teacher related to the grid made by combining the grid for reading literacy and numeracy literacy is not following the theory of writing the grid about MCA itself, where the grid for reading literacy should be made separately from the numeracy literacy grid. As an example of writing a question grid based on the Minimum Competency Assessment (MCA) for competence numeracy literacy follows. At the manufacture of the grid, many components that should be present are not added by the teacher. The incompatibility of the grid of questions made by the teacher should be corrected for the subsequent minimum competency assessment-based daily test questions that are following the format of the actual Minimum Competency Assessment (MCA) questions.

Quantitative Analysis of Validity Test and Reliability Test

The validity test of the daily test items of each basic competency using the *Product Moment Correlation* formula states that the question items are valid because the correlation value of the instrument is greater than the correlation value of the table (r table) with a value of 0.288. The reliability test or instrument consistent test made by the subject teacher is said to be reliable after a reliability test is carried out using *the Alpha Cronbach* equation for all instruments in each of the basic competencies tested.

Based on the interpretation of the coefficient of reliability (r_{11}) with a table r value of 0.288 the instrument used is said to be reliable. Basic competence 3.1 is 0.57 greater than 0.288 (r table), and the instrument is declared reliable with a medium reliable category. Basic competence 3.2 states the value of the coefficient of reliability some 0.57 is greater than the r table, the instrument is declared reliable with the category of medium reliable.

Basic competence 3.3 with a reliability coefficient value of 0.468 is declared reliable with a medium reliable category. Basic competence 3.4 with a reliability coefficient value of 0.695 is declared reliable with a highly reliable category. Basic competence 3.5 is declared reliable with a reliable coefficient of 0.603 with a highly reliable category.

Based on the results of the calculation of the reliability coefficient using the *Alpha Cronbach* equation, the Minimum Competency Assessment (MCA)-based physics daily test question instrument is stated to be consistent or reliable. This is influenced by the relatively small number of questions and the number of respondents in a test sample of questions. The more the number of samples, the better the reliability will be (Purwana, Rusdiana, & Liliawati, 2022).

Analysis of the Level of Conformity of the Question Details with the Components of the Minimum Competency Assessment (MCA) for Reading Literacy

The daily test questions that are following the Minimum Competency Assessment (MCA) questions are questions that are made to meet the MCA components. When the item containing one of the reading literacy content, namely informational texts, and fictional texts, is said to be following the MCA component for the content. If the question item does not contain one of the reading literacy content, it can be said that the question item is not following the MCA component.

In stating examples of informational texts that can be used as a reading stimulus in the preparation of MCA questions, including advertisements, company/government documents (official memorandums, invitations, contracts, notices, announcements, and so on), news, articles, reports, speeches, pamphlets, brochures, newsletters, infographics, labels (food/medicine), recipes (food/drink), reviews (book/film/drama reviews), scientific journals, scientific research reports, guidebooks, and editorials (Kemendikbud 2020). The MCA problem should be designed using a stimulus with diverse contexts, for example by presenting information in the form of writing, tables, graphs, and illustrations. The stimulus presented has an educational, inspirational, and interesting element and has a novelty value (Sani, 2021).

The results of the analysis showed that not all questions met the components of the MCA question. Analysis on the balance of tough objects all the points of the question are not following the MCA question

for reading literacy because it does not meet one of the reading literacy content. If the question made does not have a stimulus for reading literacy content, it can be said that the question is not following the MCA for reading literacy. Following the theory that an important aspect of MCA in reading literacy is the availability of texts or readings that will be used as a stimulus in the preparation of questions (Kemendikbud 2020)

Because the content of reading literacy is not fulfilled, subsequent cognitive processes and contexts also do not correspond to the components that should be present in reading literacy. The daily test questions totaling 4 items of questions in the form of essays do not meet the reading literacy component. The percentage of the corresponding rate of daily test questions with the MCA component for reading literacy for basic competencies 3.1 is 62.5% with a high category.

Basic competence 3.2 with elasticity learning materials and Hooke laws can also be said not to be an minimum competency assessment-based daily test question. This statement is inferred from the results of the analysis of the suitability of the reading literacy component in the absence of reading literacy content in the form of informational texts and fictional texts. The questions made by the subject teacher are not following the components of the MCA question for reading literacy because the percentage of the suitability rate is 46.88% with enough category.

The percentage of the suitability rate of daily test questions with MCA for reading literacy at basic competence 3.3 is in high category with 62.5 %. The aspect of reading literacy that is used as a source of the reading is an information text in the form of information on tourist attractions that are already known to students at SMA Negeri 1 Kamang Magek, namely Tarusan Kamang tourist attractions. The information text presented is in the form of the location of the tourist attraction, the area, and the depth of the Tarusan Kamang tourist attraction that students can use to answer questions number 1 to number 4.

Meanwhile, to answer questions number 5 and 6, information texts were presented about the aircraft's lifting style and the crash of the Sriwijaya Air 182 aircraft in the waters of the Thousand Islands regency on Saturday, January 9, 2021. The cognitive level tested in question number 1 to question number 6 meets the three cognitive processes in the MCA question, namely finding information, interpreting and integrating information, and evaluating and reflecting. It is said to fulfill the cognitive process of reading literacy because students are asked to find information to answer the questions, then understand the questions, and analyze the questions asked.

Informational texts are created with a scientific and socio-cultural context. The scope of the scientific context in the information text presented is in the form of natural symptoms encountered by students in the surrounding environment and information that can be used by students as a source of knowledge on a natural symptom. The percentage of the suitability rate of daily test questions with MCA for reading literacy at basic competence 3.4 is in the high category of 70.836%.

The information text presented is in the form of a reading text related to the condition of the body after exercise in a scientific context. Based on the text, students are asked to find information to answer questions in question number 1 to question number 3. Meanwhile, question number 4 does not include minimum competency assessment-based questions because the questions asked are not following the text of the information provided. The percentage of the suitability rate of daily test questions with MCA is categorized as enough. It is proven from the results of the comparison of the frequency of availability of MCA components with the total frequency of MCA components, which is 50%.

Reading literacy competency questions are made with the aim of students being able to obtain information that can be used in everyday life (Harsiati & Priyatni, 2017). The contents of the quotations in the reading questions were selected with the aim of improving life skills in accessing and utilizing information in the form of discourse to live life in society and maintain personal safety/security (Harsiati, Karakteristik Soal Literasi Membaca pada Program PISA, 2018). As stated in Figure 1. the corresponding percentage is smaller than the non-conforming percentage.
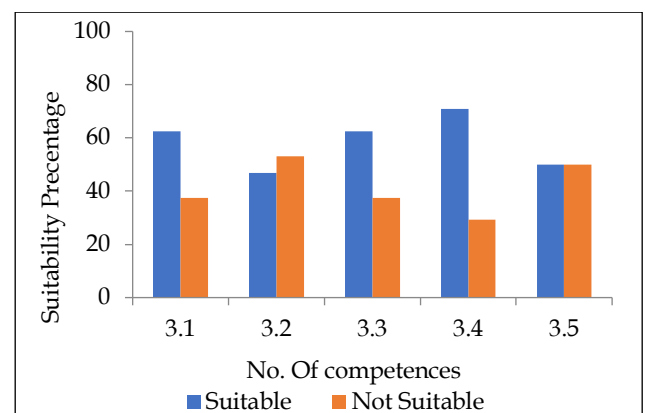
Figure 1. Percentage of Conformity of the Minimum Competency Assessment (MCA) Components for Reading Literacy

The ability to read that understand is not obtained easily. need an ongoing process to develop

understanding (Prijowuntato, Widharyanto, & Julie, 2022).

Analysis of the Level of Conformity of the Details with the Components of the Minimum Competency Assessment (MCA) for Numeracy Literacy

Analysis of the level of conformity of daily test questions with MCA for numeracy literacy in terms of content, cognitive processes, and context. The content in the MCA question for numeracy literacy is numbers, geometry, measurements, algebra, as well as data and uncertainty. The cognitive processes of knowledge, understanding, and, reasoning in each of them have aspects to be aversed as sources of reference. Furthermore, the context of the questions created can be made based on personal, socio-cultural, and scientific contexts.

The analysis of the level of suitability of daily test questions with MCA for numeracy literacy reported that the questions made by teachers in each basic competency have applied the numeracy literacy component but are not fully following numeracy literacy. Daily test questions basic competencies 3.1 the form of essay questions as many as 4 items contain measurements and geometry on the content, cognitive processes at the application level, and scientific context. The percentage of conformity of daily test questions with MCA for numeracy literacy on the basic competence of the balance of rigid objects is 70% with a high conformity level category.

The percentage of numeracy literacy suitability in the daily test questions of basic competencies 3.2 is 52.5% in the category of sufficient conformity levels with the form of essay questions of as many as 4 pieces. In question number 1, the teacher only asks the principle of elasticity as a question to know the concept of elasticity that students know. This question cannot be said to be content and cannot be said to be a question by studying students' numeracy literacy skills.

Questions number 2 and 3 satisfy data content and uncertainty with cognitive processes at the level of application and scientific context. Question number 4 satisfies the content of numbers with cognitive processes at the level of reasoning, with a scientific context. Based on the results of the analysis carried out, the level of suitability of the daily test questions with MCA for numeracy literacy can be calculated by dividing the components contained in the questions by the total components of the MCA as a whole.

Basic competence 3.3 consists of 6 essay items with question number 1 containing data content and uncertainty, cognitive processes at the application level because they contain aspects of the application. The context used is the scientific context. The percentage of conformity of daily test questions with

MCA for numeracy literacy was 70.00% with a high suitability level category.

Overall using scientific context, but basic competencies 3.4, teachers apply scientific and socio-cultural contexts. The teacher creates a reading resource based on the surrounding environment of the students, namely the attraction of Tarusan Kamang. This attraction is familiar to students, and students can imagine the discourse created. The level of conformity of daily test questions with MCA for numeracy literacy in dynamic fluid materials is 73.33% with a high level of conformity category.

Basic competence 3.5 consists of 4 essay questions. Questions number 1, 2, and 3 meet the measurement and geometry content because students are asked to understand measuring length, weight, time, volume and discharge, and units of the area using standard and non-standard units with students asked to solve problems related to volume and temperature. Point 4 is not a question with the criteria for MCA for numeracy literacy because it does not meet the numeracy literacy content. The percentage of numeracy literacy suitability rate of basic competencies 3.5 is 52.5% with a sufficient conformity level category.

Figure 2. states the percentage of conformity level and the ratio of percentages according to the non-conforming of the question item with the MCA component for numeracy literacy.
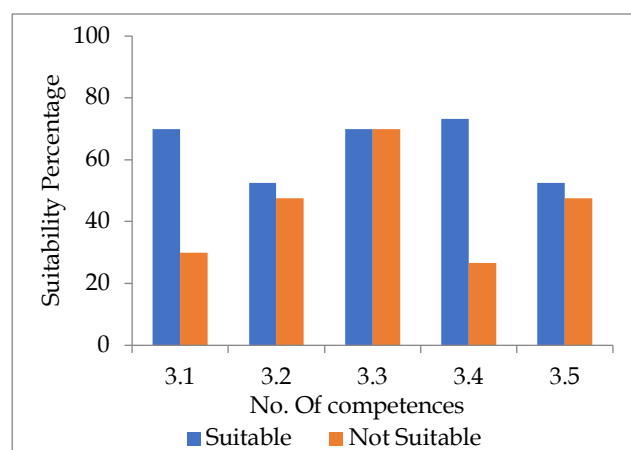
Figure 2. Percentage of the Degree of Conformity of the Minimum Competency Assessment (MCA) Components for Numeracy Literacy

Not only the level of suitability of daily test questions with MCA for reading literacy and numeracy literacy but also shortcomings were found from other aspects. The form of questions that correspond to the MCA questions should consist of various forms of questions, namely in the form of multiple choices, complex multiple choices, matchmaking, short fills, and essays. In the daily test questions were found in the dominant of essay

questions and one complex multiple-choice question on dynamic fluid material.

Based on this fact, causes students to be less able to practice reading and numeracy literacy skills because they are only used to answering questions in the form of essays (Siahahan, Hijriani, & Toni, 2022) (Yusuf & Ratnaningsih, 2022). A form of preparation that can be done by schools by doing *tryouts* so that students are used to solving minimum competency assessment-based questions. This statement is also in the ups and downs (Rokhim, et al., 2021).

The different forms of questions aim to train students' reading literacy and numeracy literacy skills. This statement is following the results of the study (Kumalasani. et al, 2022) which states that the different types of texts and the form of questions that have the MCA component aim to train students' reading and numeracy literacy skills, and improve critical thinking skills. MCA questions that are integrated with physics learning play an important role in supporting innovative and creative learning (Adelia & Deta, 2022).

Overall, teachers make daily test questions by combining reading literacy and numeracy literacy indicators or not distinguishing grids for reading literacy and numeracy literacy. The inclusion of indicators on the same question is not visible from the grid of questions, but this is stated by the teacher concerned with making the question. The MCA question grid has its format compared to the usual question grid used.

Questions based on the MCA should be further developed. The results of this study have become a good starting point for improving the quality of questions based on minimum competency assessment. In making questions the teacher plays an important role not only in making questions but also in the learning process (Sinyanyuri, Utomo, Sumantri, & Iasha, 2022).

Teachers' beliefs and attitudes must be taken into account when implementing learning models or applying the best strategy to avoid failing education reform efforts. Making MCA questions needs to be developed, trained so that they are used to and are able to make questions that can develop students' literacy and numeracy competencies (Familiyana, Harjono, & Suryani, 2022)

The Ministry of Education and Culture provides examples of MCA grid formats for reading literacy and numeracy literacy that (Pusat Asesmen dan Pembelajaran, 2021) meet the components of text type, level, context, competence, cognitive level, question form, and indicators for reading literacy grids as well as domains, sub-domains, classes, contexts, competencies, cognitive levels, question forms, and indicators on the numeracy literacy grids.

Conclusion

Based on the results of the analysis of the level of conformity of daily test questions with MCA for reading literacy and numeracy literacy, it can be concluded that the questions made by SMA Negeri 1 Kamang Magek teachers for reading literacy are categorized as very low with an average percentage of conformity of 19.79%. The suitability rate of daily test questions made by teachers for numeracy literacy is categorized as low with an average percentage of conformity of 31.16%.

Acknowledgments

References

Adelia, B.D., & Deta, U.A. (2022). Analisis Perspektif Peserta Didik, Guru Dan Calon Guru Fisika Tentang Asesmen Kompetensi Minimum (AKM). I*PF: Inovasi Pendidikan Fisika*. 11(1):1–10. https://doi.org/10.26740/ipf.v11n1.p1-10

Familiyana, L., Harjono, H. S., & Suryani, I. (2022). Persepsi Guru terhadap Soal Asesmen Kompetensi Minimum (AKM) literasi membaca di SMP. *Silampari Bisa: Jurnal Penelitian Pendidikan Bahasa Indonesia, Daerah, dan Asing, 5*(1), 74-85. doi:https://doi.org/10.31540/silamparibisa.v5i1

Febriana, Rina. 2019. *Evaluasi Pembelajaran*. Jakarta Timur: Bumi Aksara.

Harsiati, T. (2018). Karakteristik Soal Literasi Membaca pada Program PISA. *LITERA, 17*(1), 90-106.
doi:https://doi.org/10.21831/ltr.v17i1.19048

Harsiati, T., & Priyatni, E. T. (2017). Karakteristik Tes Literasi Membaca pada Programme For International Student Assessment (PISA). *BIBLIOTIKA: Jurnal Kajian Perpustakaan dan Informasi, 1*(2), 1-11. doi:https://doi.org/10.17977/um008v1i22017p001

Kemendikbud. 2020. *AKM Dan Implikasinya Pada Pembelajaran*. Jakarta: Kementerian Pendidikan dan Kebudayaan.

Kemendikbud. (2017). *Materi Pendukung Literasi Numerasi.* Jakarta Timur: TIM GLN Kemendikbud.

Krissandi, Apri Damai Sagita, Anang Sudigdo, and Adhi Surya Nugraha. 2022. *Model Pembelajaran*

Inovatif dan Soal Berbasis AKM Jenjang SMA (Disertai Kompetensi Dasar dan Pembahasan Soal AKM Literasi-Numerasi SMA). Daerah Istimewa Yogyakarta: Kanisius.

Kumalasani, M. P., Aini, D. F., & Kusumaningtyas, D. I. (2022). Komponen Instrumen AKM Pada Proses Kognitif Soal AKM Literasi Membaca. *JIKAP PGSD: Jurnal Ilmiah ilmu Kependidikan, 6*(2), 289-293.
doi:https://doi.org/10.26858/jkp.v6i2.33310

Kurniawan, I., & Rahadyan, A. (2021, Oktober 15). Analisis Kemampuan Numerasi Siswa Kelas XI dalam Penyelesaian Soal Tipe AKM pada Pokok Bahasan Sistem Persamaan Linear Tiga Variabel. *Jurnal Didactical Mathematics, 3*(2), 84 - 91. doi:https://doi.org/10.31949/dm.v3i2.1810

MacInnes, John. "The Numbers We Need: Review of Shifting Contexts, Stable Core: Advancing Quantitative Literacy in Higher Education, edited by Luke Tunstall, Gizem Karaali, and Victor Piercey (2019)." Numeracy 12, Iss. 2 (2019): Article 15. DOI: https://doi.org/10.5038/1936-4660.12.2.15

Megawati, L. A., & Sutarto, H. (2021). Analysis numeracy literacy skills in terms of standardized math problem on a minimum competency assessment. *Unnes Journal of Mathematics Education, 10*(2), 155-165. doi:https://doi.org/10.15294/ujme.v10i2.49540

Rokhim, Deni Ainur, Binti Nuriyati Rahayu, Laila Nur Alfiah, Ristiwi Peni, Bambang Wahyudi, Asnan Wahyudi, Hayuni Retno Widarti, and Universitas Negeri Malang. 2021. "Analisis Kesiapan Peserta Didik dan Guru Pada Asesmen Nasional (Asesmen Kompetensi Minimum, Survey Karakter, dan Survey Lingkungan Belajar)." 4:61–71.

Sugiyono. 2017. *Metode Penelitian Kuantitatif, Kualitatif, Dan Kombinasi (Mix Method)*. Bandung: Alfabeta.

Siahahan, M. M., Hijriani, L., & Toni, A. (2022, 9 28). Identifikasi Kemampuan Literasi Numerasi Melalui Instrumen Asesmen Kompetensi Minimum pada Siswa SMA Kelas XI SAMS Warta Bakti Kefamenanu. *Jorunal of Holistic Mathematics Education (JOHME), 6*(2), 178-190. doi:https://dx.doi.org/10.19166/johme.v6i2.5751

Perdana, N. S. (2021). Analysis of Student Readiness in Facing Minimum Competency Assesment. *Jurnal Pendidikan, Sejarah, dan Ilmu-Ilmu Sosial, 5*(1), 15-20. doi:https://doi.org/10.30743/mkd.v5i1.3406

Prijowuntato, e. W., Widharyanto, B., & Julie, H. (2022). The Influence of Literacy and Numeracy Skills on The Success of College Students In The Faculty of Teacher Training and Education.

Jurnal Pendidikan Ilmu Sosial, 32(2), 173-188. doi:https://doi.org/10.23917/jpis.v32i2.20338

Purwana, U., Rusdiana, D., & Liliawati, W. (2022). Pengujian Kemampuan Menginterpretasikan Grafik Kinematika Calon Guru Fisika: The Polytomous Rash Analysis. *ORBITA: Jurnal Kajian Inovasi dan Aplikasi Pendididkan Fisika, 6*(2), 259-266.
doi:https://doi.org/10.31764/orbita.v6i2.3264

Pusat Asesmen dan Pembelajaran. (2021). *Framework AKM*. Jakarta : Kemendikbud.

Rakhmawati, Y., & Mustadi, A. (2022). The circumstances of literacy numeracy skill: Between notion and fact from elementary school students. *Jurnal Prima Edukasia, 10*(1), 9-18. doi:http://dx.doi.org/10.21831/jpe.v10i1.36427

Rokhim, D. A., Rahayu, B. N., Alfiah, L. N., Peni, R., Wahyudi, B., Wahyudi, A., . . . Widarti, H. R. (2021). Analsisi Kesiapan Peserta Didik dan Guru Pada Asesmen Nasional (Asesmen Kompetensi Minimum, Survey Karakter, dan Survey Lingkungan Belajar). *Jurnal Administrasi dan Manajemen Pendidikan*,4(1),61-71. http://dx.doi.org/10.17977/um027v4i12021p61

Sani, R. A. (2021). *Pembelajaran Berorientasi AKM*. Jakarta Timur: Bumi Aksara.

Sinyanyuri, S., Utomo, E., Sumantri, M. S., & Iasha, V. (2022). Literasi Sains dan Asesmen Kompetensi Minimum (AKM): Integrasi Bahasa dalam Pendidikan Sains. *Jurnal Basicedu, 6*(1), 1331-1340. doi:https://doi.org/10.31004/basicedu.v6i1.2286

Wijaya, A., & Dewayani, S. (2021). *Framework Asesmen Kompetensi Minimum (AKM).* Jakarta: Kementerian Pendidikan dan Kebudayaan.

Winata, A., Widiyanti, I. S., & Cacik, S. (2021). Analisis Kemampuan Numerasi dalam Pengembangan Soal Asesmen Kemampuan Minimal pada Siswa Kelas XI SMA untuk Menyelesaikan Permasalahan Science. *Jurnal Educatio, 7*(2), 498 - 508.
doi:https://doi.org/10.31949/educatio.v7i2.1090

Yusuf, R. M., & Ratnaningsih, N. (2022). Analisis Kesalahan Numerasi Peserta Didik dalam Menyelesaikan Soal Assesmen Kompetensi Minimum. *Jurnal Paedagogy, 9*(1), 24-33. doi:https://doi.org/10.33394/jp.v9i1.4507