

SPECIAL EDUCATION TEACHERS' ABILITY IN LITERACY AND NUMERACY ASSESSMENTS BASED ON LOCAL WISDOM

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Abstract

This pioneering research endeavors to delve into the competencies of special education teachers in Indonesia concerning the development of literacy and numeracy assessments rooted in local wisdom, while simultaneously exploring the fundamental concepts of evaluation and teacher responsibilities. Employing a mixed-method explanatory design, the study represents a novel approach to understanding the intricate interplay between pedagogical practices and cultural contexts. Drawing upon a diverse research population comprising special education teachers across Indonesia, the quantitative component of the study employs a rigorous proportional random sampling method, culminating in a robust sample size of 457 participants. Meanwhile, the qualitative inquiry adopts purposive and snowball sampling techniques to ensure a comprehensive exploration of teachers' perspectives and experiences. Research data, spanning questionnaires, interviews, observations, and document analyses, are meticulously collected and analyzed using innovative methodological frameworks such as Confirmatory Factor Analysis (CFA) and variance-based Structural Equation Modeling (SEM) for quantitative data, and data reduction, display, and conclusion for qualitative data. Findings underscore the nuanced variations in teachers' competencies across different regions, with Bali emphasizing the basic concept of evaluation, NTB Province prioritizing teacher responsibility, and NTT Province echoing similar sentiments. This research not only sheds light on the unique challenges and opportunities encountered by special education teachers but also offers invaluable insights into the integration of local wisdom in assessment development, paving the way for more culturally responsive and effective educational practices in Indonesia and beyond.

Keywords: Assessment, Literacy, Local Wisdom, Numeracy, Special Education Teachers



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INTRODUCTION

Pancasila student profile development is the primary goal of education in Indonesia. Each level of education must develop a Pancasila student profile through extracurricular, co-curricular, and extracurricular activities. There are two main elements in the Pancasila student profile, namely the competence element and character (Widana, Sumandya, & Citrawan, 2023). Competency elements relate to cognitive abilities that must be possessed by students. Meanwhile, character elements relate to attitudes, ethics, morals, and values regarding how to think and act to overcome various problems and challenges in society based on Pancasila. These two elements form an inseparable whole known as the Pancasila student profile (Walukow et al., 2023).

The new paradigm of world society is marked by rapid technological developments, changes, the availability of various information in various aspects of life, and the inevitable flow of globalization (Williams, 2019). To increase competency in this modern era, schools need to equip students with the ability to (a) think critically in problem-solving, (b) be creative and innovative to face challenges, (c) be skilled at communicating, and (d) collaborate effectively. These abilities can be developed through learning and assessment. Student-centered learning can provide space for creative ideas development to foster creative and innovative abilities (Lee et al., 2019). Likewise, the ability to communicate and collaborate will grow through discussion and other learning activities (Belyaeva et al., 2019).

Professional special education teachers can contribute to educational goals in special needs schools. The professionalism of special education teachers is shown by their knowledge and skills in carrying out learning and developing assessments according to the characteristics of students with special needs (Brownell et al., 2020). The development of special needs student competency to think critically and creatively, as well as communicate and collaborate, can be carried out for special needs students who are blind (visually impaired), deaf (hearing-impaired), and quadriplegic (limited to physical activity). Cognitively, blind, deaf, and quadriplegic special needs students do not experience obstacles, so they have almost the same intellectual abilities as regular students (Pugach et al., 2020). Thus, there is no problem with the literacy and numeracy assessment development for special needs students with these disabilities.

Assessment is an integral part of learning. Therefore, teachers should design assessments to measure what is taught in learning (Paseka & Schwab, 2020). Competence developed to be assessed with appropriate assessments. Appropriate assessment can describe the achievement of learning outcomes. The assessment results can be used as an assessment of learning, assessment as learning, and assessment for learning (Kyttälä et al., 2022). The assessment developed uses operational verbs that are by the competencies being taught. To describe students' abilities more comprehensively, it is better if the assessment instrument consists of various instruments that mutually support and complement the information collected to describe student competencies. The assessment was developed with the principles of being objective, transparent, comprehensive, and fulfilling a sense of justice (Ojetunde et al., 2021).

The four abilities above need to be developed since elementary school through literacy activities. Literacy is a way of accessing, understanding, and using information around it to overcome various problems in life (Widana, 2020). Strengthening literacy skills in schools can be done in various ways, including (a) developing a text-rich environment in schools, which is an environment where students interact with various forms of printed and digital reading materials, labeled learning corners, wall stories, labeled murals, bulletin boards, as well as graphs and charts, (b) the development of a positive emotional social environment; an affective social environment in which every member of the school is essential as part of the school community having equal collegiate relationships, and (c) strengthening the academic environment; the school ecosystem that supports improving the quality of the learning process, where the quality of learning is not only the responsibility of the teacher but also the responsibility of all school members, including the principal, education staff, parents and school committees also provides attention and support to create a student-centered learning process (Setiawan et al., 2019).

Numeration is the ability to think and act using mathematical concepts, procedures, facts, and tools to solve problems or challenges in various types of contexts that are relevant to daily life (Dewayani et al., 2021). Numeracy skills can be improved by teaching them in contexts in all subjects at school, not just mathematics. A cross-subject numeracy approach can increase the active role of subject teachers other than mathematics teachers to identify opportunities for numeracy in the subjects

they teach and stimulate discussion of numeracy. It does not mean that non-mathematics teachers change their function to become mathematics teachers, but rather that they develop numeracy in the subjects they teach without losing focus on the subjects (Ernawati & Rahmawati, 2022).

Numeration in mathematics involves the knowledge and capacity to take advantage of the mathematics interconnectedness of ideas, topics, and domains (Sah et al., 2023). The challenge is to pay special attention to how mathematics is used outside of the mathematics classroom, for example posing problems whose solutions depend on context and asking students to ensure that their solutions are correct, and the correct choice of math skills is used. Strengthening numeracy in mathematics can be done by involving other subjects as providers of meaningful contexts in which mathematical concepts can be introduced or developed (Mahmudah et al., 2022). Other subjects teachers can create various types of numeracy learning techniques in ways of (1) identifying the specific numeracy demands of the subjects being taught by analyzing subject matter according to the disciplines taught, (2) providing experiences and learning opportunities that support the application general mathematical knowledge and skills, and (3) being aware of the correct use of mathematical terminology in subjects that are taught using the appropriate language.

Local wisdom is one of the themes in developing the Pancasila student profile, which originates from tradition, religion, customs, and ethical norms. Local wisdom is believed by the local community to have noble values that grow and develop from generation to generation. It should continue to be preserved and developed by the times. The noble values of Pancasila, which originate from local wisdom, can inspire students to develop their region and maintain the norms and traditions that grow and develop in the local community. In preserving and developing local wisdom context, students should be equipped with sufficient knowledge about their ancestral heritage in the form of local wisdom. Thus, motivation and awareness will grow from within them to participate in the preservation of local wisdom (Widodo et al., 2020).

In terms of the characteristics of the people of Bali, NTB, and NTT, the three provinces have unique and different local wisdom as a complete portrait that describes the pluralism of the Indonesian nation. The majority of the Balinese people adhere to Hinduism, the majority of the NTB people are Muslims, while the NTT people are mostly Christians. The traditions of the people of the three provinces are also different because each region adheres to various beliefs. Likewise, the culture that develops is strongly influenced by the religious system adopted by the people in the three provinces. Special education teachers' understanding of local wisdom in their respective regions in each province also determines the teacher's ability to develop literacy and numeracy assessments based on local wisdom. This local wisdom will give color to the development of local wisdom-based literacy and numeracy assessments in each province.

In general, literacy and numeracy assessment development can be enriched with content based on local wisdom (Hidayati et al., 2020). The uniqueness of each region can motivate students to know more about the local wisdom of the surrounding community. An in-depth introduction to local wisdom aims to invite students to participate in efforts to preserve and develop the uniqueness of certain regions so that they do not become extinct in time. Presenting appropriate local wisdom content in problems in the preservation and development assessment of relevant local wisdom can motivate students to think critically and innovatively and participate in problem-solving (Jumriani et al., 2021). Creative ideas will emerge along with the critical and creative thinking skills assessments as alternative solutions to problem-solving.

In literacy and numeracy assessment development, local wisdom is content for questions presented in a stimulus form. The questions in the literacy and numeracy assessment were developed to refer to the problems outlined in the stimulus. Stimulus presentations can be in discourse, pictures, graphs, tables, infographics, or other forms. A good stimulus can contain content that consists of several forms, for example: (1) a combination of discourse and images, (2) discourse and graphics, (3) discourse and tables, (4) discourse, tables, and graphics, (5) discourse, pictures, tables, graphs, or any other combination. In general, the more combinations contained in a discourse indicate that the assessment has a higher level of difficulty because it requires higher-order thinking skills, such as the ability to analyze, link information, and draw conclusions. Therefore, the teacher's skills in developing literacy and numeracy assessments based on local wisdom are strongly influenced by the special education teacher's understanding of the basic concepts of developing assessments, local wisdom, and students' cognitive level (Widana, 2023).

RESEARCH METHOD

The research used a mixed-method design, a combination of quantitative and qualitative research methods. The research design used in this research is an explanatory design, where the qualitative data collected is to explain the quantitative data. The research object is literacy and numeracy assessment in special needs schools.

The research population was all teachers at special needs schools in Indonesia with a limited scope of types of disabilities (blind, deaf, and quadriplegic). The limitation considers that the three types of disabilities do not experience cognitive barriers, so they have almost the same intellectual abilities as regular students. Determination of the sample in the quantitative design used proportional random sampling totalling 457 people. Meanwhile, the qualitative design used purposive sampling and snowball sampling techniques.

The data were collected using observation guideline instruments, interviews, questionnaires, and document studies. Quantitative data were analysed using the Confirmatory Factor Analysis (CFA) method with the variance-based Structural Equation Model (SEM), and the qualitative data were analysed through data reduction, display, and conclusion.

RESULTS AND DISCUSSION

Data analysis of Bali province

The results of quantitative data analysis in Bali Province can be described in the form of a constellation between the variables of responsibility (X1), the basic concept of evaluation (X2), and the ability of special education teachers to develop literacy and numeracy assessments (Y) presented in Figure 1 below.

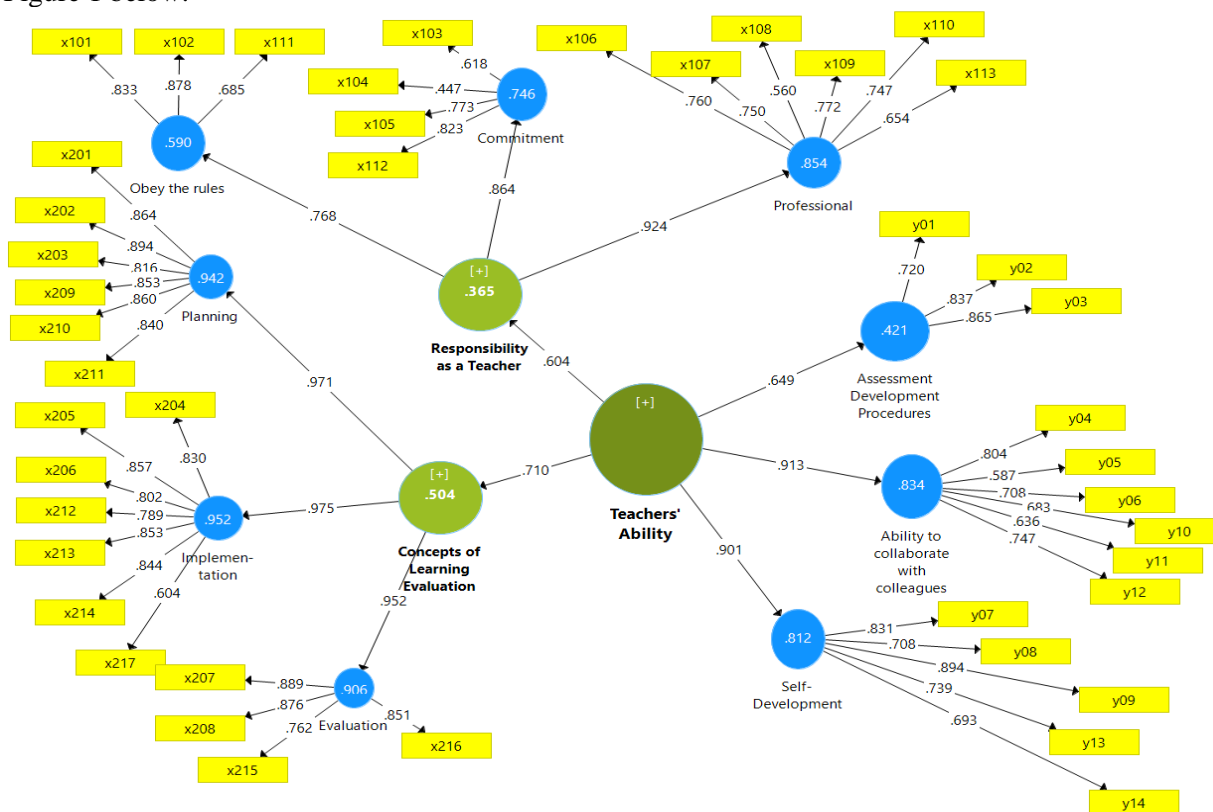


Figure 1. Loading Factor value of the constellation of variables on latent variables

Figure 1 above shows the loading factor of the main variables on the latent dimensions. In the figure, the value of the loading factor is greater than 0.5. It indicates that all items in each of the variable's concepts of learning evaluation and responsibility as a teacher are declared valid to be used to measure the teachers' ability variable.

Table 1. Loading factor, t-statistics, and p-value of main variables and their dimensions

Path Analysis of Variable Dimensions	Loading Factor	T-Statistics	P-Values
Concepts of learning evaluation → evaluation	0.952	79.613	0.000
Concepts of learning evaluation → implementation	0.975	186.996	0.000
Concepts of learning evaluation → planning	0.971	148.752	0.000
Responsibility as a teacher → commitment	0.864	32.082	0.000
Responsibility as a teacher → obey the rules	0.768	17.279	0.000
Responsibility as a teacher → professional	0.924	49.398	0.000
Teachers' ability → ability to collaborate with colleagues	0.913	36.068	0.000
Teachers' ability → assessment development procedures	0.649	6.645	0.000
Teachers' ability → concepts of learning evaluation	0.710	14.208	0.000
Teachers' ability → responsibility as a teacher	0.604	7.822	0.000
Teachers' ability → self-development	0.901	34.271	0.000

Table 1 above presents the loading factor values, the results of the t-statistical values, and the p-values for each of the main dimensions and indicators. All the p-values from the path analysis are below 0.05, which means the paths formed are significant (at an alpha significance level of 0.05). Teachers' ability can reflect the concepts of learning evaluation by 71.0% with a t-statistical value of 14.208. It means that 71.0% of teachers' abilities can be reflected in the learning evaluation concepts. Teachers' ability can reflect responsibility as a teacher by 60.4% with a t-statistic value of 7.822 which means that 60.4% of teachers' abilities can be reflected by the variable responsibility as a teacher. Thus, in Bali Province, the special education teachers' ability to develop local wisdom-based literacy and numeracy assessments is more dominantly reflected by the concepts of learning evaluation variable.

Furthermore, in each of the main dimensions, 97.5% of the concepts of learning evaluation variable reflects implementation with a t-statistic of 186.996 and a p-value of 0.000. It means that the concepts of the learning evaluation variable reflect more dominantly on the implementation indicator compared to other indicators. In the responsibility as a teacher variable, 92.4% reflect professionals with a t-statistic of 49.398, which means that the responsibility as a teacher variable dominantly reflects professional indicators compared to other indicators. Likewise, 90.1% of the teachers' ability variable reflects self-development with a t-statistic of 34.271, which means that the teachers' ability variable reflects more dominant self-development indicators than other indicators.

Qualitatively, the results of interviews with special education teacher respondents in Bali Province showed a tendency that the ability of special education teachers to develop literacy and numeracy assessments based on local wisdom was dominated by their understanding of the concept of learning evaluation. Teachers in special needs schools who often participate in education and training, workshops, or IHT regarding the development of learning evaluation have better abilities than teachers in special needs schools who have never had education and training. Understanding the concept of learning evaluation makes it easier for teachers in special needs schools to develop literacy and numeracy assessments because they already have a general description, for example of how the technique of developing stimulus questions, links the information presented in the stimulus into a unified whole, and the concept of cognitive level (Widana et al. al., 2019).

A document study was conducted on literacy and numeracy questions developed by teachers in special needs schools in Bali Province. The results of the document study show that teachers in special needs schools who understand the basic concepts of learning evaluation have better quality local wisdom-based literacy and numeracy questions compared to teachers who do not understand the basic concepts of learning evaluation. The quality of literacy and numeracy questions is seen from 3 components, which are stimulus, novelty, and contextual. Literacy and numeracy questions based on local wisdom can improve students' reasoning and critical thinking skills and develop student character according to the profile of Pancasila students (Sudiarta & Widana, 2019).

Data analysis results of NTB Province

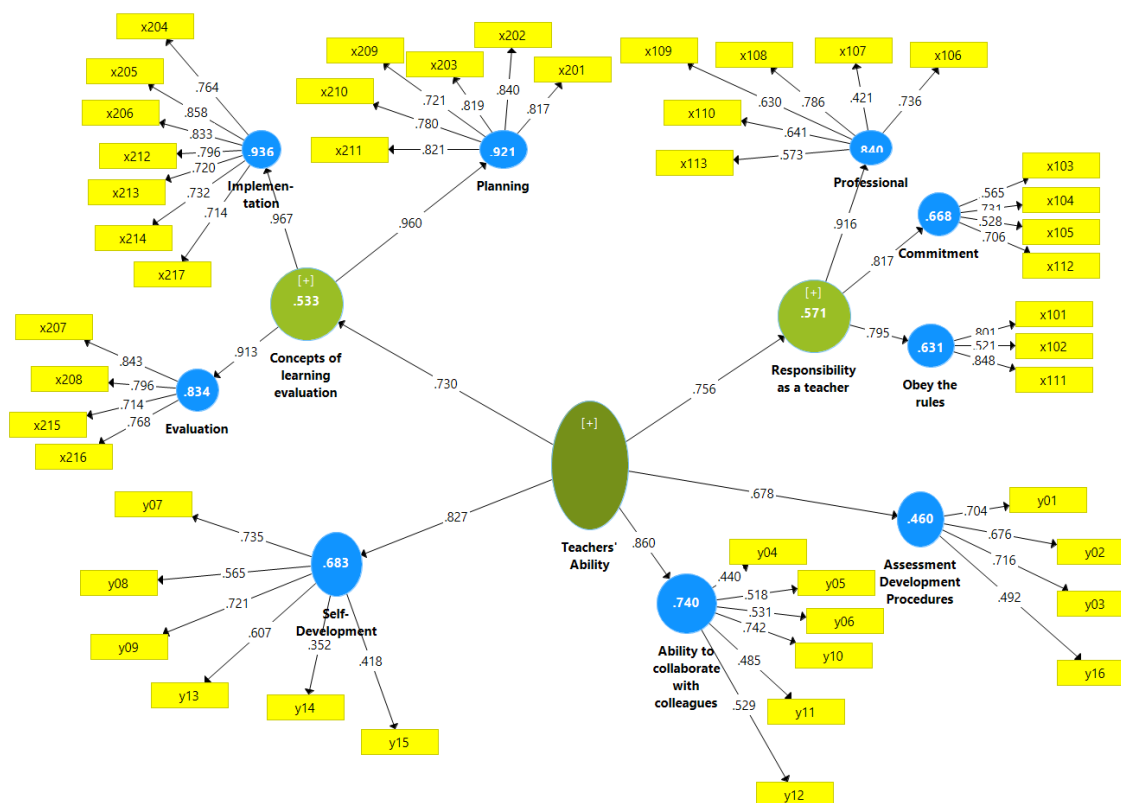


Figure 2. Loading factor value of variable constellation on latent variables

Figure 2 above shows the loading factor of the main variables on the latent dimensions. The value of the loading factor is greater than 0.5. It indicates that all items in each of the variables concepts of learning evaluation and responsibility as a teacher are declared valid to be used to measure the teachers' ability variable.

Table 2. Loading factor, t-statistics, and p-value of main variables and their dimensions

Path Analysis of Variable Dimension	Loading Factor	T-Statistics	P-Values
Concepts of learning evaluation → evaluation	0.913	59.890	0.000
Concepts of learning evaluation → implementation	0.967	200.243	0.000
Concepts of learning evaluation → planning	0.960	161.661	0.000
Responsibility as a teacher → commitment	0.817	30.436	0.000
Responsibility as a teacher → obey the rules	0.795	26.922	0.000
Responsibility as a teacher → professional	0.916	62.159	0.000
Teachers' ability → ability to collaborate with colleagues	0.860	29.917	0.000
Teachers' ability → assessment development procedures	0.678	9.279	0.000
Teachers' ability → concepts of learning evaluation	0.730	15.890	0.000
Teachers' ability → responsibility as a teacher	0.756	20.996	0.000
Teachers' ability → self-development	0.827	22.073	0.000

Table 2 above presents the loading factor values, the results of the t-statistical values, and the p-values of each of the main dimensions and indicators. All the p-values from the path analysis are below 0.051, which means that the paths formed are significant (at an alpha significance level of 0.05). Teachers' ability can reflect the concepts of learning evaluation by 73.0% with a t-statistical value of 15.890. It means that 73.0% of teachers' abilities can be reflected by the concepts of learning evaluation. Teachers' ability can reflect responsibility as a teacher by 75.6% with a t-statistic value of 20.996 which means that 75.6% of teachers' abilities can be reflected by the variable responsibility as a teacher. Thus,

in NTB Province, the special education teachers develop literacy and numeracy assessments based on local wisdom is more dominantly reflected by the variable responsibility as a teacher.

Furthermore, in each of the main dimensions, 96.7% of the concepts of learning evaluation variable reflects implementation with a t-statistic of 200.243 and a p-value of 0.000. It means that the concepts of the learning evaluation variable reflect more dominantly on the implementation indicator compared to other indicators. In the responsibility as a teacher variable, 91.6% reflect professionalism with a t-statistic of 62.159 which means that the responsibility as a teacher variable is dominantly reflecting professional indicators compared to other indicators. Likewise, 82.7% of the teachers' ability variable reflects self-development with a t-statistic of 22.073, which means that the teachers' ability variable reflects more dominant self-development indicators than other indicators.

In contrast to the condition of special education teachers in Bali Province, the special education teachers' ability in NTB Province to develop literacy and numeracy assessments based on local wisdom is more dominated by the responsibility as a teacher variable. Special education teachers who are responsible have a high work ethic, discipline, and resilience and can carry out their duties properly. Special education teachers who have a high commitment to their duties tend to be able to carry out their duties as teachers properly and professionally. They can learn independently to improve their competence. Currently, the Ministry of Education, Culture, Research, and Technology has provided self-development facilities for teachers throughout Indonesia, known as the Merdeka Teaching Platform (PMM). In PMM, various content is available that is needed by teachers in carrying out learning and assessment. Through this PMM, special education teachers with a high sense of responsibility, high commitment, and independence can gain knowledge of the basic concepts of learning evaluation.

Based on the results of interviews with school principals and special education teachers in NTB province, they claimed to have acquired knowledge of the basic concepts of evaluation through self-study at PMM, including the example of literacy and numeracy questions which can inspire teachers to develop literacy and numeracy assessments based on local wisdom. Besides that, at PMM, there is also a collaboration space, which is a vehicle for teachers throughout Indonesia to share. The features provided in PPM are very diverse, including student assessment, teaching tools, self-training, proof of work, community, inspirational videos, and others. A high sense of responsibility as a teacher can encourage SLB teachers to study independently through PMM (Widana et al., 2023).

The results of a document study of the literacy and numeracy assessments in the NTB Province show that the quality of the literacy and numeracy assessments varies greatly. The suitability of the literacy and numeracy assessment indicators with the indicators in the education report card is not completely compatible. Some teachers think that for special needs schools, the cognitive level does not need to be too high (level 3) as required in the education report card. The form of literacy and numeracy questions is more dominant in the form of ordinary multiple-choice, even though there is a tendency for the novelty element to be less. The special education teachers have used these questions many times, so they do not show sufficient novelty. The literacy and numeracy questions did not use a stimulus but only went straight to the subject matter. Though the stimulus is needed as a basis for making questions. Even though some have used the stimulus questions, some images in the stimulus do not work. It means that if the image is removed, the questions can still be answered. In stimulus content terms, only a small proportion have used local wisdom content based on contextual problems.

Data analysis results of NTT Province

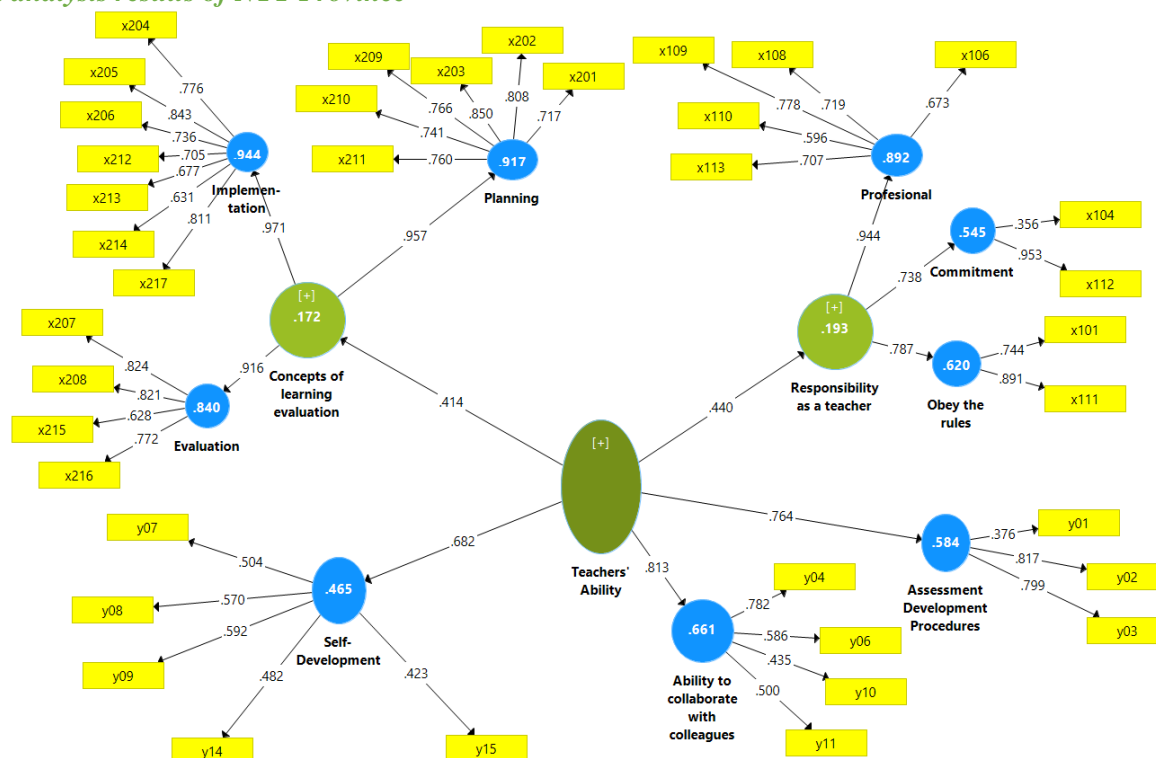


Figure 3. Loading factor value of the constellation of variables on latent variables

Figure 3 above shows the loading factor of the main variables on the latent dimensions. It shows the value of the loading factor is greater than 0.5. It indicates that all items in each of the variable's concepts of learning evaluation and responsibility as a teacher are declared valid to be used to measure the teachers' ability variable.

Table 3. Loading factor, t-statistics, and p-value of main variables and their dimensions

Path Analysis of Variable Dimension	Loading Factor	T-Statistics	P-Values
Concepts of learning evaluation → evaluation	0.916	76.945	0.000
Concepts of learning evaluation → implementation	0.971	242.675	0.000
Concepts of learning evaluation → planning	0.957	145.062	0.000
Responsibility as a teacher → commitment	0.738	21.041	0.000
Responsibility as a teacher → obey the rules	0.787	21.366	0.000
Responsibility as a teacher → professional	0.944	75.952	0.000
Teachers' ability → ability to collaborate with colleagues	0.813	25.222	0.000
Teachers' ability → assessment development procedures	0.764	13.175	0.000
Teachers' ability → concepts of learning evaluation	0.414	2.665	0.008
Teachers' ability → responsibility as a teacher	0.440	3.220	0.001
Teachers' ability → self-development	0.682	16.053	0.000

Table 3 above presents the loading factor values, the results of the t-statistical values, and the p-values for each of the main dimensions and indicators. In the table, all the p-values from the path analysis are below 0.05, which means that the paths formed are significant (at an alpha significance level of 0.05). Teachers' ability can reflect concepts of learning evaluation by 41.4% with a t-statistical value of 2.665. It means that 41.4% of teachers' abilities can be reflected by concepts of learning evaluation. Teachers' ability can reflect responsibility as a teacher by 44.0% with a t-statistical value of 3.220. It means that 44.0% of teachers' abilities can be reflected by the variable responsibility as a teacher. Thus, the conclusion is in the NTT Province, the special education teachers' ability to develop

literacy and numeracy assessments based on local wisdom is more dominantly reflected by the variable responsibility as a teacher.

Furthermore, in each of the main dimensions, 97.1% of the concepts of learning evaluation variable reflects implementation with a t-statistic of 242.675 and a p-value of 0.000. It means that the concepts of the learning evaluation variable reflect more dominantly on the implementation indicator compared to other indicators. In the responsibility as a teacher variable, 94.4% reflects professionals with a t-statistic of 75.952, which means that the responsibility as a teacher variable reflects the dominant professional indicator compared to other indicators. Likewise, in the teachers' ability variable, 81.3% reflects the ability to collaborate with colleagues variable with a t-statistic of 22.073, which means that the teachers' ability variable more dominantly reflects the ability to collaborate with colleagues indicator compared to other indicators.

The results of interviews with teachers in special needs schools in NTT Province illustrate that teachers prefer to improve their competency in literacy and numeracy assessment through collaboration with their colleagues. Subject Teacher Deliberation (MGMP) is a forum for the collaboration of similar subject teachers. One of the activity agendas in the MGMP forum is the development of teacher competence in the field of assessment. They work together to write literacy and numeracy assessments under the guidance of a resource person. The basic concept of learning evaluation was obtained through the MGMP forum, and skills to develop literacy and numeracy assessments were trained through the MGMP forum. Therefore, the empowerment of the MGMP forum is optimized to increase teacher competence in various aspects. Responsibility as a teacher makes teachers committed to improving their competence through collaborative activities with their colleagues.

The document study results show there are still many teachers of special needs who have not been able to formulate indicators of literacy and numeracy questions by the provisions in the education report cards. In fact, in some schools, special teachers immediately wrote literacy and numeracy questions without being preceded by writing a question grid. Likewise, from the stimulus aspect of the questions, it has not shown stimulus content based on local wisdom. It is because most of the teachers in special needs schools come from outside NTT, so they do not understand the basic concepts of local wisdom in their area. The questions used for literacy and numeracy assessment are mostly taken from certain books and are not up to date. The form of literacy and numeracy questions used in monotone is more dominant in ordinary multiple-choice, not showing any variations in the form of the questions according to the demands of the minimum competency assessment (AKM) framework.

An overview of the results of data analysis in the provinces of Bali, NTB, and NTT

Teachers in special needs schools should understand the competencies that are measured in literacy and numeracy. Teachers need to be able to prepare appropriate literacy and numeracy assessments to provide experience for students to become accustomed to and skilled at working on literacy and numeracy assessments. There are still many teachers in special needs schools in Bali, NTB, and NTT Province who do not know the content and competencies that are measured in literacy and numeracy. They tend to give sober assessments and are not by the indicators set out in the education report cards. Some teachers think that students in special needs schools do not need to be given exam questions at a high level because they are not the same as students in regular schools. This assumption must be given the correct understanding because blind, deaf, and intellectually disabled students do not experience abnormalities.

Based on the report cards for special needs schools at the elementary, junior high, and high school levels, the literacy skills measured include (1) the competency of students in understanding, using, reflecting, and evaluating informational (non-fiction) texts, (2) the competency of students in understanding, using, reflecting on, and evaluating fictional texts, (3) the competence of students in the ability to find, identify, and describe an idea or explicit information in informational texts (non-fiction) and literature (Level 1), (4) the competence of students in the ability to compare and contrast ideas or information within or between texts, draw conclusions, classify, and combine ideas and information in texts or between informational (non-fiction) and literary texts (Level 2), and (5) the competence of students in the ability to analyze, predict, and assess content, language, and elements in informational texts (non-fiction) and literature (Level 3) (Ministry of Education, Culture, Research, and Technology, MoECRaT, 2022).

Furthermore, numeracy abilities as measured on special needs school report cards at the elementary, junior high, and high school levels include (1) student competence in thinking using

concepts, procedures, facts, and math tools on number content to solve everyday problems, (2) students' competence in thinking using concepts, procedures, facts, and mathematical tools in algebraic content to solve everyday problems, (3) students' competence in thinking using concepts, procedures, facts, and mathematical tools in geometric content to solve everyday problems, (4) students' competence in thinking using concepts, procedures, facts, and mathematical tools on data content and uncertainty to solve everyday problems, (5) student competence in the ability to understand facts, processes, concepts, and procedures (Level 1), (6) student competence in the ability to apply knowledge and understanding of facts, relations, processes, concepts, procedures, and methods in number content with the context of real situations to solve problems or answer questions (Level 2), and (7) student competence in the ability to analyze data and information, make conclusions, and broaden understanding in new situations, including situations that were not known before or in more complex contexts (Level 3) (Ministry of Education, Culture, Research, and Technology, MoECRaT, 2022)..

The assessment quality was analyzed based on four main aspects, which are (1) the suitability of the indicators of the literacy and numeracy assessment with the indicators in the educational report card, (2) the suitability of the cognitive level of the assessment written by the teacher with the cognitive level of the literacy and numeracy assessment, (3) the variety of questions, and (4) brings novelty. The results of observations and interviews with respondents are as follows.

Table 4. Results of assessment quality analysis

Aspect	Analysis Results
Compatibility of literacy and numeracy assessment indicators with indicators in educational report cards	<p>Formulation of literacy and numeracy assessment indicators developed by the teacher:</p> <ol style="list-style-type: none"> not fully under the assessment indicators set out in the education report card. Most teachers have not been able to read education report cards properly. not yet complete including audience, behavior, condition, and degree (ABCD).
Correspondence of the cognitive level of the assessment written by the teacher with the cognitive level of the literacy and numeracy assessment	<p>Cognitive level in the operational verbs of the literacy and numeracy assessment written by the teacher:</p> <ol style="list-style-type: none"> Most of the cognitive levels are not by the questions written by the teacher, for example, the teacher states that the assessment written is level 2, but the questions being developed are still at level 1. In general, teachers use level 1. The teacher does not understand the characteristics of the cognitive level of the questions.
Diversity of question forms	<p>Form of assessment written by the teacher:</p> <ol style="list-style-type: none"> Most literacy and numeracy assessments written by teachers use the usual multiple-choice form (one correct answer). There are no teachers writing questions in the form of complex multiple-choice or matchmaking. The form of the question does not look varied
Brings novelty	<ol style="list-style-type: none"> Most of the questions developed by the teacher are old and have not shown novelty yet, even though most of them have been used in previous years. Focus more on the questions that have been already in the textbook. The element of novelty has not been seen in the literacy and numeracy assessments.

The content quality is analyzed based on three aspects: (1) contains stimuli that originate from local wisdom, (2) contains content for developing Pancasila student profiles, and (3) contextual.

Table 5. Results of assessment content analysis

Aspect	Analysis Results
Stimulus originating from local wisdom	<ul style="list-style-type: none"> a. Several assessment questions have used local wisdom-based stimulus but have not been optimal. Even some images present in the stimulus do not work. b. The local wisdom content used has not shown the development of critical, innovative, and creative thinking skills because teachers are not fully able to use local wisdom as material for developing questions.
Content for developing Pancasila student profiles	<ul style="list-style-type: none"> a. A small number of literacy and numeracy assessments developed by teachers have integrated Pancasila student profiles. b. The Pancasila students' profiles that are developed are mostly on the dimensions of faith, piety to God Almighty, and noble character.
Contextual	<ul style="list-style-type: none"> a. There is an assessment that has used contextual content, but it is less interesting because the content is monotonous. b. Contextual content has not contained trending topics yet. c. Presentation of contextual content has not contained informative images, tables, or graphics yet.

CONCLUSION

Based on the description above, the conclusions are (1) the special education teacher's ability in Bali Province to develop local wisdom-based literacy and numeracy assessments is predominantly reflected in the basic concept of evaluation. Teachers in special needs schools who often attend education and training, workshops, or IHT regarding the development of learning evaluation have better abilities than teachers in special needs schools who have never had education and training, (2) the special education teachers' ability in NTB Province to develop literacy and numeracy assessments based on local wisdom is predominantly reflected in their responsibility as a teacher. Teachers in special needs schools who have high responsibility for their duties tend to be able to carry out their duties as teachers properly and professionally, (3) the special education teachers' ability in NTT Province to develop literacy and numeracy assessments based on local wisdom is predominantly reflected in their responsibility as a teacher. Teachers in special needs schools prefer to improve their competence in the field of literacy and numeracy assessment in collaboration with their peers through the Subject Teacher Deliberation Forum (MGMP), which is a forum for collaboration of teachers of similar subjects at the school, district, and provincial levels.

Suggestions that can be conveyed include (1) increasing the competence of teachers in special needs schools to develop literacy and numeracy assessments based on local wisdom can be done by increasing teachers' understanding of the basic concepts of evaluation and awareness of their responsibilities as teachers, and (2) the independent teaching platform is one of the vehicles that can be used by teachers in special needs schools to carry out self-development independently in increasing competency to develop literacy and numeracy assessments based on local wisdom.

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AUTHOR CONTRIBUTIONS

Author 1-3 creates articles and creates instruments and is responsible for research, author 4-6 Analyzes research data that has been collected, author 7-8 assists in research data analysis and instrument validation, author 9 helps input research data.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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