



Primary School Teacher's Views on the Purpose and Forms of Student Performance Assessment

Giorgos Ar. Niaouostas^{1*} 

¹ Ministry of Education, Agrinio, Greece

ARTICLE INFO

Article history:

Received July 01, 2023

Accepted December 10, 2023

Available online February 25, 2024

Kata Kunci:

Penilaian, Guru Sekolah Dasar, Kinerja Siswa, Penilaian Formatif.

Keywords:

Assessment, Primary Teachers, Student Performance, Formative Assessment



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

ABSTRAK

Penilaian adalah proses yang kompleks dan dinamis serta merupakan bagian integral dari proses belajar mengajar. Ini adalah persoalan yang menjadi perhatian negara, pendidik dan ilmuwan, guru, orang tua, dan siswa. Penelitian ini bertujuan untuk menganalisis pandangan guru sekolah dasar. Kuesioner digunakan sebagai metode penelitian. Temuan penelitian mengungkapkan bahwa sebagian besar guru setuju dengan penilaian kinerja siswa, mengingat sebagian besar merupakan proses kualitas yang harus berjalan sesuai logika yang dijelaskan. Mereka umumnya menerapkan Penilaian Formatif sekaligus menerapkan Penilaian Diagnostik dan Penilaian Sumatif tergantung pada waktu proses pengajaran. Guru juga menyatakan bahwa penilaian terutama ditujukan untuk mengukur pencapaian tujuan pengajaran, umpan balik, identifikasi kesulitan belajar, dan penentuan kecenderungan/kemampuan khusus siswa. Mayoritas guru Aetoloakarnania yang mengikuti penelitian menyatakan sikap positif terhadap penilaian kinerja siswa. Guru percaya bahwa penilaian kinerja siswa dari sudut pandang pedagogi adalah proses kualitatif, di mana semua parameter yang mempengaruhinya harus dipertimbangkan. Mereka juga berpendapat bahwa hal ini harus ditujukan untuk mengendalikan kemajuan siswa sehubungan dengan kinerjanya sebelumnya, sekaligus merekomendasikan suatu proses untuk mengukur pencapaian tujuan pengajaran.

ABSTRACT

Assessment is a complex and dynamic process and an integral part of teaching and learning. It is an issue that concerns the state, educators and scientists, teachers, parents, and students. This study aims to analyze the views of primary school teachers. A questionnaire was used as the research method. The findings of the research revealed that most teachers agree with the assessment of student performance, considering it mostly a quality process that must move according to the described logic. They generally apply a Formative Assessment while applying a Diagnostic Assessment and Summative Assessment depending on the time of the teaching process. The teachers also state that the assessment is primarily aimed at measuring the achievement of the teaching objectives, feedback, identification of the learning difficulties, and determination of the special inclinations/abilities of the students. The majority of the teachers of Aetoloakarnania who participated in the research, expressed a positive attitude toward the assessment of the student's performance. Teachers believe that the assessment of student performance from a pedagogical view-point is a qualitative process, during which all the parameters that influence it should be considered. They also argue that it should be aimed at controlling the student's progress in relation to his or her previous performance, while at the same time recommending a process to measure the achievement of the teaching objectives.

1. INTRODUCTION

Assessment is a complex and dynamic process and an integral part of teaching and learning. It is an issue that concerns the state, educators and scientists, teachers, parents, and students. Evaluation, in the broadest sense, is the process by which a value, a meaning, or a property is attributed to a person, an object, or a situation, based on specific, clear, and predetermined criteria (Hesti et al., 2022; Mahendra et al., 2019). A review of the international literature shows that the term "evaluation" is found as "assessment" or "evaluation." In particular, the Educational Assessment is described under the terms "Educational assessment," "Educational evaluation," and "Classroom assessment." (Saptono et al., 2021; Widana, 2017). More specifically, most researchers use the term assessment to refer to the degree of student progress and to describe teaching-learning processes. The term evaluation is mainly used by educators who attempt to identify educational evaluation in the broader context of an information gathering process in the direction of decision-making that serves a specific purpose (e.g., modifying an educational program) or as a set of criteria to evaluate the education system as a whole (Güneri & Devenci, 2023; Seyihoglu & Kartal, 2010). Based on modern scientific and research data, the main objective of a student performance evaluation is to

*Corresponding author.

E-mail addresses: gnaouostas1970@gmail.com (Giorgos Ar. Niaouostas)

identify students' abilities, weaknesses, and shortcomings to modify the course of teaching and take appropriate pedagogical measures that will contribute to their improvement (Febrista & Efrizon, 2021; Wijanarka et al., 2019).

According to the prevailing view in educational research, this central pedagogical goal is carried out mainly by implementing a Formative Assessment, which includes the design and implementation of actions seeking to improve students' learning, and not in their ranking and grading. It is also observed in the international literature under the term assessment for learning, which contrasts with the final assessment (Arnold & Reed, 2016; Irhandayaningsih, 2020; Srirahayu & Arty, 2018). Final assessment is conducted mainly for reasons of selection, promotion, and classification of students (Maryani & Martaningsih, 2017; Sipatu & Silitonga, 2022). For this purpose, students are awarded points based on the overall assessment of the level of achievement of the learning objectives. Precisely because the Final assessment focuses on the outcome of the evaluation process, it is also found in the international literature under the term "Assessment of Learning" (Hendrizal & Chandra, 2018).

Education researchers also recognize that the practices that teachers use to assess student performance are significantly influenced by their perceptions of what constitutes an appropriate assessment in the classroom. Therefore, any attempt to change the procedures to assess student performance should be based on an attempt to understand the belief system inherent to how teachers assess their pupils' learning. Based on the above reasoning and considering the debate on the development of a new framework to evaluate student performance in Greece (introduction of descriptive evaluation), it is necessary to update teachers' perceptions to assess the performance of the student. This research aims to analyze the views of primary school teachers of the Prefecture of Aetoloakarnania on the evaluation of student performance.

This research aims to analyze the perspectives of primary school teachers in Aetoloakarnania on the purpose and forms of assessment of student performance. It emerges that most teachers who serve in Primary Education believe that the assessment process should be mainly pedagogical in nature. The modern Greek school, however, does not function with this orientation. Instead of a student-centered structure, the schools have assumed an examination-centric organizational and operational approach with the goal of preparing students for admission to Higher Education Institutions. This is particularly evident in secondary education, which has essentially morphed into an examination body, where the emphasis is mostly on achieving high performance as reflected in good grades rather than serving the pedagogical purposes of schooling and education in a broader sense. Adopting this perspective, we believe that a similar study concerning secondary school teachers would positively contribute to the discussion on student performance assessment.

2. METHOD

The main purpose of the survey was to investigate the views of primary school teachers on the concept and purpose of assessing student performance. A questionnaire including four closed-ended multiple-choice questions was used as the main research tool (Nemoto & Beglar, 2014). Three hundred questionnaires were sent electronically to public schools in Aetoloakarnania. A total of 225 (75%) questionnaires were answered, which is a highly reliable sample. At the time of data collection, a total of 1770 teachers were serving in Aetoloakarnania. The survey data (frequency-relevant frequency tables) were processed using Microsoft Excel 2007 software. A total of 74.6% of the participant educators were female, and 27.7% were male. Most participants were teachers (78.9%), being 7.5% foreign language teachers, 6.1% computer teachers, 5.2% teachers of aesthetic education, and 2.3% were physical education teachers. About half (46.5%) of the participants stated that they had 11 to 20 years of service experience, 30.5% had worked for 1 to 10 years, 11.7% for 21 to 30 years, and 11.3% had completed more than 30 years in education. A total of 45.1% of the teachers held a bachelor's degree as the highest academic degree, followed by 44.6% who held a master's degree. In addition, 7.9% of the teachers were graduates of Pedagogical Academies, while only four (1.9%) of them had a Ph.D. degree.

3. RESULT AND DISCUSSION

Result

The first question (Question B1) of Section B of the questionnaire asked teachers if they agreed with the assessment of the student's performance. Most teachers who responded to this question agreed with the assessment. More specifically, 95.1% of the teachers answered YES to this specific question, and 4.9% answered NO, disagreeing with the evaluation of the student's performance. In the second question (Question B2) of Section B of the questionnaire, the teachers were asked to express their views through five

specific statements regarding the assessment of the student's performance. More specifically, they were asked what the assessment of a student's performance means to them from a pedagogical perspective. Table 1 presents the frequencies of teachers' responses to each perspective proposed.

Table 1. Frequency Distribution of Teachers' Answers Responses to Each Perspective Proposed

Question: Pedagogical Perspective of Student Assessment.	1=Strongly Disagree		2=disagree		3=Agree		4=Strongly Agree		Total	Cumulative percentage
	N	%	N	%	N	%	N	%		
1. Achievement Of Teaching Objectives	4	1.8	19	8.4	153	68.0	49	21.8	225	100
2. Achievement of curriculum objectives	9	4.0	75	33.3	119	52.9	22	9.8	225	100
3. Factors influencing student performance (preexisting cognitive level, family environment, individual learning rate)	3	1.3	34	15.1	101	44.9	87	38.7	225	100
4. Students' progress in relation previous performance	6	2.7	28	12.4	104	46.2	87	38.7	225	100
5. Student participation in class	4	1.8	45	20.0	125	55.5	51	22.7	225	100

Base on Table 1, most teachers agreed either strongly or very strongly with three of the perspectives proposed, namely the perspective (i) "Determining the degree of achievement of the teaching objectives of the course" with the most positive answers (89.8%), (ii) "Assessment of the student's progress concerning his/her past performance" (84.9% positive answers), and (iii) "Qualitative judgment of the student's performance considering family environment influence parameters, preexisting cognitive level, individual learning rate, and classroom level" (83.6% positive answers). The perspectives proposed that gather lower but still significant percentages are "Determination of the degree of student participation in the lesson," (78.7%), and "Determination of the degree of achievement of the aims and objectives of the curriculum" (62.7%). In the third question of Section B (Question B3), the teachers were asked to express their opinion through nine proposed perspectives on the purpose of the students' assessment from a practical viewpoint. The proposed perspective "to determine the level of achievement of the teaching objectives" had the highest agreement (82.7%), where 22.7% of the educators stated that they strongly agreed, and 60% agreed very strongly. A total of 82.3% of the teachers agreed with the proposed perspective "as a feedback of teaching" where 27.6% of the educators very strongly agreed with this view and 54.7% agreed strongly. The second highest rate was recorded for the perspective "in identifying learning difficulties" (79.1%), where 28.9% of the educators agreed very strongly, and 50.2% agreed strongly. The proposed perspective "to control the effectiveness of the teaching method" follows with 76.4% agreement, where 21.3% agreed very strongly and 55.1% agreed strongly. A total of 75.5% of the teachers agreed with the proposal "in informing the student about the level of learning achieved" (57.3% strongly and 18.2% very strongly). The proposal "in informing the parents" attracted 75.1% of the responses, with which a considerable percentage of educators agreed (20% very strongly and 55.1% strongly). Frequency distribution of teachers' answers on the evaluation of student performance Table 2.

Table 2. Frequency Distribution of Teachers' Answers on the Evaluation of Student Performance

Question: Practical Perspective Of Student Assessment.	1=Strongly Disagree		2=Disagree		3=Agree		4=Strongly Agree		Total	Cumulative Percentage
	N	%	N	%	N	%	N	%		
1. Teaching Objectives	4	1.8	35	15.6	135	60	51	22.7	225	100
2. Identification of Learning Difficulties	7	3.1	40	17.8	113	50.2	65	28.9	225	100
3. Identifying Students' Abilities	15	6.7	63	28	92	40.9	55	24.4	225	100
4. Developing Learning Motivation	10	4.4	68	30.2	104	46.2	43	19.1	225	100
5. Informing The Student About Learning Level	9	4	46	20.4	129	57.3	41	18.2	225	100
6. Teaching Feedback	4	1.8	36	16	123	54.7	62	27.6	225	100
7. Informing Parents	8	3.6	48	21.3	124	55.1	45	20	225	100
8. Effectiveness of the Teaching Method	8	3.6	45	20	124	55.1	48	21.3	225	100
9. Identifying Weaknesses in Textbooks and Curriculum	19	8.4	84	37.3	101	44.9	21	9.3	225	100

Base on Table 2, the proposed perspective “to identify special inclinations and abilities of students” was evaluated by the teachers with a lower agreement. According to the frequency distribution a cumulatively high percentage (65.3%) approved this statement either very strongly or strongly. A total of 24.4% of educators stated that they agree very strongly, and 40.9% that they agree strongly. The proposal “in the development of learning motivation” was agreed upon by 65.3% of the teachers, where 19.1% agreed very strongly and 46.2% agreed strongly with this proposal. The smallest agreement proportion (54.2%) was recorded for the proposal “to identify possible weaknesses of textbooks and the curriculum” (very strongly 9.3%, strongly 44.9%). The first question of Section C asked teachers for information on whether they used the Diagnostic assessment, the Formative assessment, or the Summative assessment to assess their pupils' performance. The respondents were allowed to provide more than one from a set of possible answers. Distribution of teachers' answers according to the forms of assessment the performance of their students is show in Table 3.

Table 3. Distribution of Teachers' Answers According to the Forms of Assessment the Performance of Their Students

Forms of Student Assessment	Answers		Percentage Of Cases
	Frequency	Rate	
a. Diagnostic assessment	108	23.9%	48.0%
b. Formative assessment	185	40.9%	82.2%
c. Summative assessment	156	34.5%	69.3%
d. All forms of assessment	3	0.7%	1.3%
Total	452	100.0%	200.8%

The first column of Table 3 concerns the frequency of responses, the second the percentages of the relevant frequencies on the responses given, and the third the percentages of the relevant frequencies on

the participants in this survey. The percentage in the third column is greater than 100 because each teacher chose each answer more than once (i.e., the Diagnostic, Formative and Summative assessment). A total of 82.2% of the teachers apply the Formative assessment more often to their pupils' assessment, 69.3% apply the Summative assessment, and 48.0% the Diagnostic assessment. A very small percentage (1.3%) stated that they apply all three forms of student performance assessment. Distribution of teachers' answers according to each course is show in Table 4.

Table 4. Distribution of Teachers' Answers According to Each Course

Each course	Answers		Percentage of Cases
	Frequency	Rate	
Diagnostic assessment	51	24.1%	22.7%
Formative assessment	85	40.1%	37.7%
Summative assessment	76	35.8%	33.7%
Total	212	100.0%	94.1%

Base on Table 4, teachers were then asked at what point in the teaching process they apply the three aforementioned forms of assessment of the student's performance. The following three tables present the teachers' responses. According to A total of 37.7% of teachers apply the Formative assessment, 33.7% of teachers apply the Summative, and 22.7% of teachers apply the Diagnostic assessment. Distribution of teachers' answers according to performance of their students in each unit is show in Table 5.

Table 5. Distribution of Teachers' Answers According to Performance of Their Students in Each Unit

Each unit	Answer		Percentage of Cases
	Frequency	Rate	
Diagnostic assessment	49	23.8%	21.8%
Formative assessment	86	41.7%	38.2%
Summative assessment	71	34.5%	31.6%
Total	206	100.0%	91.6%

Base on Table 5, in each unit, 38.2% of teachers apply the Formative assessment, 31.6% apply the Summative assessment, and 21.8% of teachers apply the Diagnostic assessment. Distribution of teachers' answers according to performance of their students in each trimester is show in Table 6.

Table 6. Distribution of Teachers' Answers According to Performance of Their Students in Each Trimester

Each trimester	Answers		Percentage of Cases
	Frequency	Rate	
Diagnostic assessment	27	21.3%	12.0%
Formative assessment	58	45.6%	25.7%
Summative assessment	42	33.1%	18.7%
Total	127	100.0%	56.4%

Base on Table 6, The same order of assessment forms is observed in Table 6 in terms of their use in each trimester. More specifically, 25.7% of teachers apply the Formative assessment, 18.7% of teachers apply the Summative, and 12% of teachers apply the Diagnostic assessment in each trimester.

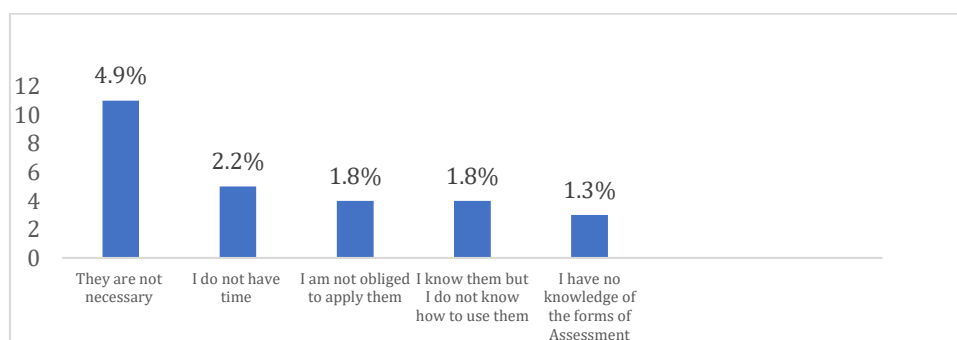


Figure 1. The Results of The Analysis of Their Responses

The teachers who did not use the Diagnostic, Formative and Summative assessment were asked to state the reasons for not using them. The results of the analysis of their responses are presented in Figure 1. A total of 4.9% of teachers do not use the three specific forms of assessment because they "do not think they are necessary" and 2.2% of them because they "do not have the time." In addition, 1.8% do not use these forms of assessment because they "are not obliged to apply them," 1.8% because they "do not know how to use them" despite stating to know the forms of assessment, and 1.3% of teachers do not apply the Diagnostic, Formative and Summative assessments because they "have no knowledge of the forms of assessment."

Discussion

The assessment of the student's performance was studied in the first research question and is an issue for which a rich bibliography has been developed in Greece and internationally. Studying modern pedagogical bibliography, we observe that educators who favor assessing student performance are the vast majority. In fact, assessment is considered a very important aspect of the learning process, which aims to facilitate students' learning and smoothen their integration into the social system (Okoye, 2014; Szopiński & Bachnik, 2022). This position is also confirmed by the findings of this study, according to which most teachers (95.1%) favor assessing student performance.

Most teachers express a positive attitude toward the assessment of the student's performance, considering it a key part of the learning processes in schools as supported by these findings (De Schepper et al., 2021; Suryanti et al., 2018). Moreover, concerning the second question, most teachers consider that the assessment of a student from a pedagogical perspective means measuring the achievement of the teaching objectives of the course (89.8%), as well as checking the student's progress in relation to previous performance (84.9%). At a significantly higher rate (83.6%), the teachers also argued that all factors that influence student performance should be considered upon an assessment (family environment, preexisting cognitive level, individual learning rate, school level), this being an essentially qualitative process (Gilmanova, 2018; Karim, 2015).

The findings presented in this paper are in line with the views of modern researchers in educational evaluation (Al Mamun et al., 2022; Aristin & Purnomo, 2022). Similarly, previous study argue that the assessment of the student's performance from a pedagogical perspective should aim at taking appropriate pedagogical measures, which will contribute to reaching pedagogical and didactic goals, encourage and strengthen the student, and upgrade the overall learning processes (Amri & Alasmari, 2021; Nelson et al., 2021). In this type of assessment, the central point of reference is the learning pace of the student as an individual and the control of his progress in relation to his previous performance. In addition, most teachers (62.7%) perceived assessment as a process of controlling the degree of achievement of the curriculum objectives on the one hand and the student's participation in the class on the other (78.7%).

Importantly, teachers also favor the perspective that the assessment aims to determine students' particular inclinations and abilities (65.3%) and develop learning motivation (65.3%). These positions are compatible with the views of modern researchers of Educational Evaluation and with the findings of similar research, according to which most teachers consider that the objectives of an assessment are feedback, the promotion of learning, identification of learning difficulties, determination of the degree of achievement of teaching objectives, informing the teacher about the effectiveness of the teaching methods used, and informing the parents (Bhattacharjee & Deb, 2016; Hau et al., 2020). In contrast, teachers diverge on the idea that the assessment process helps identify potential weaknesses in school textbooks and curriculum (54.2% agree and 45.7% disagree). Finally, in relation to the fourth research question, 1.3% of teachers state that they apply all three forms of student performance assessment (Diagnostic, Formative, Final), while most (82.2%) apply only the Formative assessment. Preference in implementing the Diagnostic and the Summative assessments follow with the still considerable percentages of 48.0% and 69.3%, respectively. Therefore, it can be concluded that most teachers generally express a positive attitude toward the use of Formative assessment (Arnold & Reed, 2016; Uhl et al., 2021).

Formative assessment is mostly applied by teachers when assessing their students in each subject (37.7%). The preference for applying the Summative assessment is relatively higher (33.7%), than the Diagnostic assessment (22.7%). At the end of each quarter, most teachers apply the Formative assessment (25.7%) to assess the performance of their students. The Summative and Diagnostic assessments show lower rates in this case (18.7% and 12%, respectively). The Formative assessment is also preferred by teachers when assessing their students in each unit (38.2%), followed by the Summative (31.6%) and Diagnostic assessment (21.8%). These findings are in line with the prevailing view in educational research that Formative assessment serves in the best possible way one of the main goals of modern pedagogy, which is to improve students and not their hierarchical ranking based on performance (Baran-Łucarz, 2019; Madadzadeh, 2022). In fact, according to previous study formative assessment provides ongoing feedback

to teachers and students, and has a significant and positive effect on student learning (Granberg et al., 2021).

A total of 15 answers to the last and open-ended question was received. Most teachers (40%) argue that the assessment process should be primarily qualitative, adopting a descriptive assessment to capture the outcome of student performance assessment. At a rate of 20%, they believed that the main function of assessment should be the feedback to teaching and the identification of possible weaknesses and shortcomings of the students for improvement. According previous study have reported that most teachers consider that a descriptive assessment is necessary in primary school (Anikarnisia & Wilujeng, 2020; Nuraeni et al., 2020). In fact, according to previous study descriptive assessment is the most appropriate method for assessing student performance, precisely because it is closer to the pedagogical content of assessment that includes both the student's work and social behavior (Abdurrahmansyah et al., 2022; Hartman et al., 2019).

4. CONCLUSION

The majority of the teachers of Aetoloakarnania who participated in the research, expressed a positive attitude toward the assessment of the student's performance. Teachers believe that the assessment of student performance from a pedagogical view-point is a qualitative process, during which all the parameters that influence it should be considered. They also argue that it should be aimed at controlling the student's progress in relation to his or her previous performance, while at the same time recommending a process to measure the achievement of the teaching objectives. Most teachers in the sample stated that the assessment of student performance from a practical perspective is mainly aimed at informing the teacher about the degree of achievement of the teaching objectives, the feedback of the teaching, and the identification of learning difficulties. At the same time, they believe that a key function of the assessment process is to inform them about the effectiveness of teaching methods.

5. REFERENCES

- Abdurrahmansyah, A., Sugilar, H., Ismail, I., & Warna, D. (2022). Online Learning Phenomenon: From the Perspective of Learning Facilities, Curriculum, and Character of Elementary School Students. *Education Sciences*, 12(8). <https://doi.org/10.3390/educsci12080508>.
- Al Mamun, M. A., Lawrie, G., & Wright, T. (2022). Exploration of learner-content interactions and learning approaches: The role of guided inquiry in the self-directed online environments. *Computers & Education*, 178, 104398. <https://doi.org/10.1016/j.compedu.2021.104398>.
- Amri, Z., & Alasmari, N. (2021). Self-efficacy of Saudi English Majors after the Emergent Transition to Online Learning and Online Assessment during the COVID-19 Pandemic. *International Journal of Higher Education*, 10(3), 127. <https://doi.org/10.5430/ijhe.v10n3p127>.
- Anikarnisia, N. M., & Wilujeng, I. (2020). Need assessment of STEM education based based on local wisdom in junior high school. *Journal of Physics: Conference Series*, 1440(1). <https://doi.org/10.1088/1742-6596/1440/1/012092>.
- Aristin, N. F., & Purnomo, A. (2022). Improving Critical Thinking Skill Through Team-based Projects , is it Effective ? *Journal of Educational Research and Evaluation*, 6(3), 586-594. <https://doi.org/https://doi.org/10.23887/jere.v6i4.48090>.
- Arnold, S., & Reed, P. (2016). Reading assessments for students with ASD: a survey of summative reading assessments used in special educational schools in the UK. *British Journal of Special Education*. <https://doi.org/10.1111/1467-8578.12127>.
- Baran-Łuczarska, M. (2019). Formative assessment in the English as a foreign language classroom in secondary schools in Poland. Report on a mixed-method study. *Journal of Education Culture and Society*, 10(2), 309-327. <https://doi.org/10.15503/jecs20192.309.327>.
- Bhattacharjee, B., & Deb, K. (2016). Role of ICT in 21 st Century's Teacher Education. *International Journal of Education and Information Studies*, 6(1), 1-6. http://library.oum.edu.my/oumlib/sites/default/files/file_attachments/odl-resources/4353/convergence-ict.pdf.
- De Schepper, S., Geuens, N., Roes, L., Hilderson, D., & Franck, E. (2021). Generic Crew Resource Management Training to Improve Non-technical Skills in Acute Care—Phase 1: An Interdisciplinary Needs Assessment Survey. *Clinical Simulation in Nursing*, 54, 1-9. <https://doi.org/10.1016/j.ecns.2020.12.009>.
- Febriasta, D., & Efrizon, E. (2021). Pengembangan e-Modul Interaktif Berbasis Android pada Mata Pelajaran Penerapan Rangkaian Elektronika Kelas XI Teknik Audio Vidio. *Voteteknika (Vocational Teknik*

- Elektronika Dan Informatika*), 9(3), 102. <https://doi.org/10.24036/voteteknika.v9i3.113750>.
- Gilmanova, A. A. (2018). Digital age and reading fiction: realities and perspectives. *Kazan Linguistic Journal*, 1(1), 90–95. <https://cyberleninka.ru/article/n/tsifrovaya-epoha-i-chtenie-hudozhestvennoy-literaturny-realii-i-perspektivy>.
- Granberg, C., Palm, T., & Palmberg, B. (2021). A case study of a formative assessment practice and the effects on students' self-regulated learning. *Studies in Educational Evaluation*, 68(August 2020), 1-10. <https://doi.org/10.1016/j.stueduc.2020.100955>.
- Güneri, B., & Deveci, M. (2023). Evaluation of supplier selection in the defense industry using q-rung orthopair fuzzy set based EDAS approach. *Expert Systems With Applications*, 222(February), 119846.1-14. <https://doi.org/10.1016/j.eswa.2023.119846>.
- Hartman, R. J., Townsend, M. B., & Jackson, M. (2019). Educators' perceptions of technology integration into the classroom: a descriptive case study. *Journal of Research in Innovative Teaching and Learning*, 12(3). <https://doi.org/10.1108/JRIT-03-2019-0044>.
- Hau, N. H., Cuong, T. V., & Tinh, T. T. (2020). Students and Teachers' Perspective Of The Importance Of Arts In STEAM Education In Vietnam. *Journal of Critical Reviews*, 7(11), 666–671. <https://doi.org/10.31838/jcr.07.11.121>.
- Hendrizal, & Chandra. (2018). Preliminary Research Description In Developing Tematics Learning Materials by Using Character Building and Discovery Learning to Establish Children aged 6-9 Years. *International Conference of Early Childhood Education*, 169, 95–101. <https://doi.org/10.2991/icece-17.2018.23>.
- Hesti, J., Purwasih, G., & Wahananto, J. (2022). Knowing the Minimum Competency Assessment: Teacher Training of the Fathul Hidayah Boarding School Lamongan Foundation. *Jurnal Praksis Dan Dedikasi (JPDS)*, 5(1), 1–7. <https://pdfs.semanticscholar.org/12b8/65ee77310c8f8fe479f94bf860b329cd43d3.pdf>.
- Irhandayaningsih, A. (2020). Pengukuran Literasi Digital Pada Peserta Pembelajaran Daring Di Masa Pandemi Covid-19. *Anuva*, 4(2), 231–240. <https://demo.dspacedirect.org/bitstream/handle/10673/1975/8073-25123-1-SM.pdf?sequence=1&isAllowed=y>.
- Karim, N. (2015). Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Matematika dengan Menggunakan Model Jucama di Sekolah Menengah Pertama. *Jurnal Pendidikan Matematika*, 3(1), 92–104. <https://doi.org/10.20527/edumat.v3i1.634>.
- Madadzadeh, F. (2022). A tutorial on Quasi-experimental designs. *Journal of Community Health Research*, 11(1), 3–4. <https://doi.org/10.18502/jchr.v11i1.9089>.
- Mahendra, I., Parmithi, N. N., Suana, I. W., & Sumandya, I. W. (2019). Developing Hots Through Performance. *International Journal of Scientific & Technology Research*, 8(11), 3004–3007. <http://www.ijstr.org/final-print/dec2019/-Developing-Hots-Through-Performance-Assessment-.pdf>.
- Maryani, I., & Martaningsih, S. T. (2017). Persepsi Guru Sekolah Dasar Terhadap Sistem Penilaian Pada Kurikulum 2013. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 7(2), 153–164. <https://doi.org/10.24246/j.scholaria.2017.v7.i2.p153-164>.
- Nelson, P. M., Klingbeil, D. A., & Parker, D. C. (2021). An evaluation of the incremental impact of math intervention on early literacy performance. *Psychology in the Schools*, 58(3), 431–442. <https://doi.org/10.1002/pits.22455>.
- Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. In *JALT 2013 Conference Proceedings*, 1–8. https://jalt-publications.org/sites/default/files/pdf-article/jalt2013_001.pdf.
- Nuraeni, Y., MS, Z., & Boeriswati, E. (2020). A Case Study of Curriculum Implementation and K-13 Challenges in Indonesia. *International Journal for Educational and Vocational Studies*, 1(8), 14. <https://doi.org/10.29103/ijevs.v2i1.2263>.
- Okoye, M. D. (2014). Authentic Assessment and Evaluation: Paramount Means for the Maximization of Teaching and Learning. *Journal of Educational and Social Research*, 4(7), 31–40. <https://doi.org/10.5901/jesr.2014.v4n7p31>.
- Saptono, B., Herwin, H., & Firmansyah, F. (2021). Web-based evaluation for teacher professional program: Design and development studies. *World Journal on Educational Technology: Current Issues*, 13(4), 672–683. <https://doi.org/10.18844/wjet.v13i4.6253>.
- Seyihoglu, A., & Kartal, A. (2010). The Views of the Teachers about the mind mapping technique in the Elementary Life Science and Social Studies lessons Based on the Constructivist Method. *Educational Sciences: Theory & Practice*, 10(3), 1637–1656. <https://eric.ed.gov/?id=EJ919863>.
- Sipatu, Y. T., & Silitonga, B. N. (2022). Implementasi Metode Tanya Jawab Untuk Meningkatkan Keaktifan Siswa Sd Pada Pembelajaran Daring. *JIPD) Jurnal Inovasi Pendidikan Dasar*, 6(2), 89–96.

- <https://doi.org/10.36928/jipd.v6i2.1321>.
- Srirahayu, R. R. Y., & Arty, I. S. (2018). Pengembangan Instrumen Experiment Performance Assessment untuk Menilai Keterampilan Proses Sains dan Kerja Sama. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 22(2), 168–181. <https://doi.org/10.21831/pep.v22i2.20270>.
- Suryanti, Ibrahim, M., & Lede, N. S. (2018). Process skills approach to develop primary students' scientific literacy: A case study with low achieving students on water cycle. *IOP Conference Series: Materials Science and Engineering*, 296(1). <https://doi.org/10.1088/1757-899X/296/1/012030>.
- Szopiński, T., & Bachnik, K. (2022). Student evaluation of online learning during the COVID-19 pandemic. *Technological Forecasting and Social Change*, 174(September 2021), 1-8. <https://doi.org/10.1016/j.techfore.2021.121203>.
- Uhl, J. D., Sripathi, K. N., Meir, E., Merrill, J., Urban-Lurain, M., & Haudek, K. C. (2021). Automated writing assessments measure undergraduate learning after completion of a computer-based cellular respiration tutorial. *CBE—Life Sciences Education*, 20(3), 1–13. <https://doi.org/10.1187/cbe.20-06-0122>.
- Widana, I. W. (2017). Higher Order Thinking Skills Assessment (HOTS). *JISAE (Journal of Indonesian Student Assessment and Evaluation)*, 3(1), 32–44. <https://doi.org/10.21009/JISAE.031.04>.
- Wijanarka, B., Sukardi, T., Rahdiyanta, D., & Ngadiyono, Y. (2019). Evaluation of implementation of health and safety in industry and vocational school in Yogyakarta Special Region. *Journal of Physics: Conference Series*, 1273(1), 012063. <https://doi.org/10.1088/1742-6596/1273/1/012063>.