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# Impact of Socio-Demographic Variables of Basic Level Teachers' School-Based Assessment Practices in Jasikan Municipality, Ghana

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**Abstract**: This study investigated whether socioeconomic variables influence teachers' practices in the School-Based Assessment (SBA) and their associated challenges. A quantitative research approach using the descriptive and cross-sectional design was employed and 273 teachers were sampled using the stratified random sampling in the Jasikan Municipality of the Oti Region of Ghana. Data was collected through a questionnaire and analyzed through the independent sample t-test and One-way ANOVA. The results showed no significant difference in SBA practices, roles and challenges among teachers based on gender, age, educational qualification, years of teaching experience and class level. Based on these findings, it is recommended that the Ghana Education Service should provide the necessary logistics, such as SBA record books to support teachers' implementation of the policy. Additionally, teachers should be motivated through incentives, promotions and praises to continue playing their key roles effectively as facilitators of the SBA.

Keywords: School-based assessment; challenges; implementation; teachers' practices.

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# Introduction

School-Based Assessment (SBA), which refers to the process of evaluating students' learning progress and achievements within the school environment, often using a combination of methods beyond traditional exams, has increasingly become an important means for teachers to assess students, particularly in developing countries (Mkpae & Obowu-Adutchay, 2017; Awoniyi, 2016; Elmelegy, 2015). School-Based Assessment serves multiple purposes such as providing summative information and improving learning (Levy-Vered et al., 2022). It also provides teachers with a formative view of the student's progress and it helps them to adjust their instructional approaches to suit specific needs of the learners (Asare, 2020; Black & Wiliam, 2018). It helps to identify students' depth and breadth of understanding, thus improving the learning process (Jansen & Möller, 2022; Gyamfi & Wren, 2022). Despite the benefits of the SBA approach in the educational sector, teachers face challenges in the implementation of the SBA. Such challenges include lack of knowledge in the implementation of the SBA (Maja, 2023; Lee et al., 2018).

Assessment is an old concept that is used by all sectors such as education, health and financial institutions to obtain information that is used to make decisions about individuals such as students and teachers in the educational sector and clients and staffs in other sectors (Nsabayezu, 2023; Marty et al., 2023; Langee et al., 2022; Rieckmann, 2022; Ampaw et al., 2020; Raza et al., 2020).

Assessment forms an integral part of the teaching and learning process because teachers use it as an evaluation procedure to collect information about learners and make informed decisions (Deygers, 2023; Yan et al., 2023; Tubulingane & Angombe, 2022; Ahenkora, 2019; López-Pastor & Sicilia-2017). Decisions made concerning Camacho, students due to their assessment include appropriate management of instruction, placement of students into different types of educational programs, assigning students to appropriate categories, guiding and counseling students and selecting students for educational opportunities (Nafisa, 2023; Erzoah et al., 2022).

In this regard, alternative assessment procedures that aim at improving the learning process are required (Fletcher, 2023; Baas et al., 2020; Reyes et al., 2020; Gyamfi & Yeboah, 2022). School-Based Assessment is one of assessment procedures that

teachers can use to improve learning (Lee et al., 2018). School-Based Assessment is a formative assessment procedure that is embedded in the and learning process teaching to provide standardization to the practice of internal schoolbased assessment in all schools and to provide a reduced assessment task for each of the primary school subjects and other assessment tasks (Williams-McBean, 2022). This is to establish consistent and uniform procedures, criteria and measures to ensure that assessments are fair, reliable and comparable across different contexts, settings and individuals.

School-Based Assessment is designed and used by teachers in schools (Lee et al., 2018). The key to the successful implementation of the SBA depends on whether it delivers what it claims (Whittle et al., 2017). SBA is an assessment of a holistic evaluation of the National Education policy. SBA is exercised in schools aimed at strengthening the quality system of assessment and evaluation (Ahenkora, 2019; Armstrong, 2021).

Since its introduction in 2008 in Ghana, SBA has received much attention and thus guite a number of studies have been conducted to ascertain how teachers practice the approach and challenges faced. For instance, Rasid et al. (2015) found that mathematics teachers in Malaysia are ready and confident about the implementation of the SBA. In the same country, Abdullah et al. (2015) found that teachers do make careful planning before carrying out the assessment. Regarding challenges, Nam (2021) identified lack of external monitoring, inadequate guidelines and poor knowledge. Rahman et al. (2021) declared that teachers find it very difficult to implement the SBA because of some changes to the previous assessment where individual assessors or teachers formulated their own items and administered them. According to Yan and Brown (2021), most teachers lack the required skills to accomplish the goals of the SBA as confirmed by other researchers like Ahenkora (2019, Armstrong (2021), Nsabayezu et al. (2023) and Marty et al. (2023). This study sought to establish the effect of socio-demographic variables on SBA practices among basic school-level teachers

# **Literature Review**

This section presents the literature related to the topic under investigation.

#### **Definition of Assessment**

The word "assess" comes from the Latin verb "Assidere" meaning "to sit with." In assessment, one is supposed to sit with the learner. This implies that it is something we do with the learners but not for learners (Gyamfi, 2022; Williamson, 2017). Pounder and Greaves (2020) pointed out that assessment is a generic term that involves the whole process of gathering, synthesizing and interpreting information. Therefore, assessment in education may be defined as a process of collecting information about an individual or a group of individuals to make particular decisions.

Assessment deals with obtaining data about students, teachers or schools by well-constructed measures, interpreting the meaning of scores for such outcomes as student progress or instructional effectiveness, and using the interpreted scores to make decisions regarding the best ways to facilitate students' learning (Gyamfi et al., 2022; Narh-Kert, 2021; Labarrete, 2021; Smaill, 2020). This provides a systematic process of gathering information, evidence or data about an individual's performance, skills, knowledge, abilities or characteristics. It involves evaluating and making judgments about a person's progress, achievements or potentials in various contexts, such as the SBA in education.

#### Forms of Assessment

#### Formative Assessment

The assessment could be either formative or Summative in form. Formative Assessment refers to frequent and interactive assessments of students' progress so as to establish learning needs and adjust teaching appropriately (Yeboah et al., 2019). Teachers that use formative assessment are better prepared to meet diverse students' needs through differentiation and adaptation of teaching to raise levels of students' achievement and to achieve greater equity of student's outcomes (Annan et al., 2019). Brandmo et al. (2020) pointed out that formative assessment often means no more than that the assessment is carried out frequently and is planned at the same time at which teaching is done.

According to Fletcher (2023), formative assessment provides feedback that leads to students recognizing learning gaps and addressing such gaps. Formative assessment includes both feedback from assessors and self-monitoring from both learners and teachers (Etsey & Gyamfi, 2017). According to Ramollo and Kanjee (2023), formative assessment is used essentially to provide feedback into the teaching and learning process.

#### Summative Assessment

Summative assessments are used to measure what students have learned at the end of a unit so as to ensure they have met required outcomes so as to promote them to the next level. Ministries or departments of education may use summative assessment and evaluation as a way to hold publicly funded schools accountable for providing quality education.

Brandmo et al. (2020) made the point that summative assessment had increasingly been used to sum up learning outcomes. According to Fletcher (2023), summative assessment looks at past achievements, adds procedures or tests to existing work and workers only mark and provide feedback grades to students. It is separated from teaching and is carried out at intervals when achievement has to be summarized and reported.

#### School-Based Assessment

School-Based Assessment is defined as a project or assignment which is done by an examination candidate as a contribution to his or her final exit grade. If approached in the right spirit by the candidates, it demonstrates a good understanding of the subject matter content and a proficient application of useful skills and competencies developed and refined during the study of the subject, projects and assignments. The assessment may comprise research papers on quantitative and qualitative studies as well as reports after actual events. It also comprises of reports after stimulated events, reports after interviews of the appropriate persons, a report from observations and demonstrations of skills. Furthermore, it includes performances and pieces to be done in school and out of school, setting, visual arts pieces, reports after laboratory experiments, portfolio, teachermade test and oral examinations are used. Examination councils requires that candidates complete the SBA and they still continue to devise ways and means of more effectively assessing candidates via SBAs (Williams-McBean, 2022).

School-based assessment is a form of formative assessment involving feedback and appraisal of students based on their school-based projects. It enables students to identify and improve on their areas of weakness and teachers to adjust their teaching strategies (Organization for Economic Cooperation and Development, 2015). Mathura (2019) stated that SBA is a set of assessment tasks/assignments/projects conducted in the school, carried out by students following guidelines provided by the school or the ministry and assessed by the teacher using the criteria provided which contributes to the candidate's overall examination grade.

#### **The Roles of Teachers**

School-Based Assessment is a policy-supported practice that has increased in several education systems around the world including those of Australia, Bangladesh, New Zealand, Canada, the United Kingdom, Finland, Africa, Northern Ireland and Hong Kong (Pourdana & Tavassoli, 2022). In Bangladesh, for example, teachers have freedom to choose the topic from the syllabus and design class tests, classwork, practical works, assignments, homework or oral presentations. It is also the teacher who is responsible for assigning the final grade so students (Mansora et al., 2019).

It is important to note that the teacher's roles are central in assessing students' achievement for several reasons (Mathura, 2019):

- Test prepared by the teacher responsible for a subject provides the most appropriate measure of the student's achievement.
- 2. The relevance of teacher's assessment is high since the teacher is the best judge of what has been done with the students.
- Teacher's assessment allows observation to be made on a wide sample of students' behaviour in a more natural setting than would occur in a single externally assessed paper.
- 4. In subjects with highly practical elements, the teacher is in the best position to observe not only student's manipulative skills but also their general work habit.
- 5. Teaching and testing go hand in hand. Teachers measure the effectiveness of their instruction on the assessment of students' grasp of the intended objective. Feedback from testing allows teachers to refine their objectives, revise their teaching strategies, select the most appropriate instructional materials and plan their next unit of work.
- 6. Tasks selected by teachers provide opportunities for self-directed learning in which the student can assume responsibility for work on the aspect of the subject area.

For impacts to be felt, challenges must be acknowledged and resolved in every adventure. As indicated by a report published by the Hong Kong Professional Teachers Union (HPTU) in 2013, the workload brought upon by SBA is overwhelming for both teachers and students. For students, the demand for SBA is high in terms of its quality and quantity, sometimes exceeding that of a student's ability (may even include tertiary education level content). Also, the heavy workload derived from SBA often incurs extra lesson time, therefore limiting students from partaking in extracurricular activities. On the other hand, teachers are similarly affected by hosting extra lessons and making a vast amount of students' SBA work. Further, the PTU report suggested that the inadequate proportion of SBA that makes up the final mark will ultimately be "unfairly" adjusted by the public paper examination, regardless of how well the student did the former. A study by Mansora et al. (2019) found that SBA implementation challenges include administrative support, teacher readiness, teacher workload, technical provision, and professional support from the state education department which are the roles of the teacher. Ahmad and Mahamod (2016) felt that teachers have a task of overseeing the whole process of the SBA but thought that it has caused students to take learning very lightly due to the nonexam culture, decreased emphasis on writing skills and increased teacher workload, including more time-consuming class preparation.

To ensure a successful implementation of the SBA, Mansora et al. (2019) stated that many teachers group students according to capability and then, apply different approaches to explain the task to be performed either in class or during the assessment. According to them, this explains reasons to opt for formative assessments to evaluate students' performance compared to summative examination that only shows final scores. Teachers are able to assess their student's capability, capacity and skills gradually (in accordance with the student's learning phase) in order to achieve the final learning goals without rushing through the syllabus or examination dates (Alvi, 2020). This also promotes a fun-learning and stress-free learning environment. Mansora et al. (2019) further stated that teachers should create various types of classroom activities to assess students' physical, emotional, cognitive, affective and social performance.

# Methodology

## **Research Design**

This study used an analytical cross-sectional research design where a cross-section of the populace who are supposed to use the SBA and had a profound understanding of the concept were targeted. A cross-sectional study was used to examine the SBA implementation policy, challenges faced by teachers in the implementation of the SBA policy, the roles of the teachers in the implementation of the SBA policy and strategies to ensure successful implementation of the SBA policy in the basic schools in Jasikan Municipality of Ghana.

# **Population and Sampling**

The target population was 651 teachers in basic schools in the Jasikan Municipality of the Oti Region of Ghana. The teachers were targeted because they are engaged in the implementation of the SBA policy and therefore possessed the unique characteristics required to serve as respondents to the study. The study used the stratified random sampling technique to select teachers for each of seven circuits in the Jasikan Municipality. The total sample size of the teachers was computed using the Yamane (1967) formula for sample size determination;

$$n = \frac{N}{1 + N(e)^2}$$

Where *n* is the sample size, *N* is the total population and *e* is the sampling error. The sample size for the 651 teachers with a 95 percent confidence level and 5% sampling error was computed as;

$$n = \frac{651}{1 + 651(0.05)^2}$$

n = 248

Accounting for a 10% non-response rate, the total required sample size for the selected circuit is  $248 + (0.10 \times 248) = 273$  teachers.

#### Instruments

Data was collected using a closed-ended questionnaire to permit subjects to respond at their convenient time and to allow them to answer personal questions that would have been difficult to be expressed through face-to-face interviews.

# **Statistical Treatment of Data**

The primary quantitative data collected using the questionnaire was coded and entered into the Microsoft Excel 2015 spreadsheet and STATA 2015 for analysis. Data was analyzed through the independent sample t-test and One-way ANOVA. Data involving socio-demographic variables with two sub-levels such as gender were analyzed with an independent t-test whilst those with more than two sub-levels such as teaching experience were analyzed with One-way ANOVA.

Characteristics	Mean	Stand Deviation	Test Statistic	P-value
Gender				
Male	32.74	2.50		
Female	32.77	2.81	-0.08ª	0.9346
Age				
20-29 years	32.85	2.66		
30-39 years	32.66	2.56		
40-49 years	32.68	2.57	0.23 <sup>b</sup>	0.8721
50-59 years	33.07	2.79		
Educational Qualification				
Diploma	32.46	2.79		
Undergraduate	32.89	2.61		
Masters	32.78	2.34	0.48 <sup>b</sup>	0.6963
Postgraduate	32.43	2.34		
Teaching experience				
< 5 years	32.3	2.70		
5-9 years	32.8	2.53		
10-14 years	32.7	2.70	0.60 <sup>b</sup>	0.6164
15 years and above	33.0	2.54		
Class Level				
Primary	32.60	2.54		
JHS	32.84	2.64	-0.74ª	0.4571

Table 1: Differences in the SBA by	v Socio-Demogra	phic Characteristics of Particip	ants

**a**=Independent Student t-test, **b**= One-way ANOVA.

# **Results and Discussion**

Findings are presented in tables guided by specific research questions as follows.

**Research Question 1:** Is there a significant difference in the implementation of the SBS by teachers categorized according to their social-demographic factors?

This research question sought to establish differences in the implementation of the SBS by teachers categorized according to their social-demographic factors. The research question yielded the following null hypothesis which was analyzed through t-test and ANOVA: there IS NO significant difference in the implementation of the SBS by teachers categorized according to their social-demographic factors.

As seen in table 1, the p-value in all cases was greater than the critical value (.05). Therefore, the null hypothesis was accepted. This suggests that the implementation of the SBA by teachers categorized according to their social-demographic factors, namely gender, age, educational qualification, teaching experience and class level does not vary. Thus, the level of teachers' implementation of the SBA was similar regardless of their social-demographic differences as noted by (Williamson (2017), DeLuca (2021), Abdullah et al., (2015), Malik et al., (2021) and Perkins (2022).

**Research Question 2:** Is there a significant difference in the role of teachers in the implementation of the SBS by teachers categorized according to their social-demographic factors?

This research question sought to establish differences in the role of teachers in the implementation of the SBS by teachers categorized according to their social-demographic factors. The research question yielded the following null hypothesis which was analyzed through t-test and ANOVA: there is no significant difference in the role of teachers in the implementation of the SBS by teachers categorized according to their social-demographic factors.

Characteristics	Mean	Stand Deviation	Test Statistic	P-value
Gender				
Male	44.54	2.59		
Female	44.58	2.48	-0.12 ª	0.9066
Age				
20-29 years	44.69	2.69		
30-39 years	44.30	2.55		
40-49 years	44.88	2.50	0.81 <sup>b</sup>	0.4867
50-59 years	44.53	2.39		
Educational Qualification				
Diploma	44.49	2.46	0.15 <sup>b</sup>	0.9272
Undergraduate	44.62	2.54		
Masters	44.33	2.50		
Postgraduate	44.71	3.29		
Teaching Experience				
< 5 years	44.19	2.94	1.75 <sup>b</sup>	0.1576
5-9 years	44.81	2.45		
10-14 years	44.10	2.41		
15 years and above	44.90	2.52		
Class Level				
Primary	44.34	2.60	-1.12ª	0.2626
JHS	44.69	2.51		

a=Independent Student t-test, b= One-way ANOVA

As seen in Table 2, the p-value in all cases was greater than the critical value (.05). Therefore, the null hypothesis was accepted. This suggests that the role of teachers in the implementation of the SBA according to their social-demographic factors, namely gender, age, educational qualification, teaching experience, and class level did not vary. Thus, the level of teachers' role in the implementation of the SBA was similar regardless of their social-demographic differences. This implies that the teacher's role as an implementer of the SBA is crucial as far as the teacher does his or her job without necessarily considering the social demographic differences.

Research Question 2: Is there a significant difference in challenges faced in the implementation of the SBS by teachers categorized according to their social-demographic factors? This research question sought to establish difference challenges faced in the in

implementation of the SBS by teachers categorized according to their social-demographic factors. The research question yielded the following null hypothesis which was analyzed through t-test and ANOVA: there is no significant difference in challenges faced in the implementation of the SBS by teachers categorized according to their socialdemographic factors.

Table 3: Differences in Challenges Faced by Teachers in the Implementation of the SBA
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Characteristics	Mean	Stand Deviation	Test Statistic	P-value
Gender				
Male	20.36	3.42		
Female	20.79	2.99	-1.02 ª	0.3099
Age				
20-29 years	20.80	3.14	0.38 <sup>b</sup>	0.7710
30-39 years	20.35	3.42		
40-49 years	20.37	3.37		
50-59 years	20.83	2.88		
Educational Qualification				
Diploma	20.21	3.27	0.39 <sup>b</sup>	0.7600
Undergraduate	20.51	3.21		
Masters	20.86	3.31		
Postgraduate	20.93	4.24		
Number of years of teaching				
experience				
< 5 years	20.83	3.72	1.44 <sup>b</sup>	0.2316
5-9 years	20.18	3.26		
10-14 years	20.17	3.37		
15 years and above	21.10	2.87		
Class Level				
Primary	20.52	3.43	0.05 <sup>a</sup>	0.9573
JHS	20.50	3.19		

**a**=Independent Student t-test, **b**= One-way ANOVA.

As seen in table 3, the p-value in all cases was greater than the critical value (.05). Therefore, the null hypothesis was accepted. This suggests that challenges experienced by teachers in the implementation of the SBA according to their socialdemographic factors, namely gender, age, educational qualification, teaching experience, and class level did not vary, implying that the challenges faced by teachers were similar regardless of their social-demographic differences. Similarly, Asamoah et al.(2019) found that there is no significant gender difference in teachers' knowledge of formative assessment. Similar to this study, Jaoua et al. (2022) found that teachers' practice of assessment is statistically the same irrespective of their gender and experience. Contrarily, studies of Jimola and Ofodu (2019), Beck and Nunnaley (2021), Gordon et al. (2022) and Rojabi (2021) revealed that demographics may influence teacher assessment practices. The studies revealed female teachers tending to practice classrooms better than male teachers.

#### **Conclusion and Recommendations**

The findings showed no significant difference in teachers' practices, roles and challenges associated with the SBA implementation based on demographic variables. Generally, this study provides valuable insights into the implementation of the SBA in basic schools in Ghana and contributes to the existing literature on assessment practices. Therefore, there is a need for further research to explore factors that may influence teachers' practices, roles and challenges associated with the SBA implementation to inform policies and interventions aimed at improving the quality of assessment in schools.

The study further recommends that the Ghana Education Service should enforce the SBA policy in all basic schools in the Jasikan Municipality and provide the necessary logistics, such as SBA record books to support teachers' implementation of the policy. Additionally, teachers should be motivated through incentives, promotions and praises to continue playing their key role as facilitators of the SBA.

# References

- Abdullah, N., Idris, N., Hamzah, M. S. G., & Sembak, S. (2015). Planning and implementation of school-based assessment (SBA) among teachers. Procedia-Social and Behavioral Sciences, 211, 247-254.
- Ahenkora, A. (2019). The implementation of schoolbased assessment in keea Municipality in central region of Ghana (Doctoral dissertation, University of Cape coast).
- Ahmad, A., & Mahamod, Z. (2016). The Level of Malay Language Teachers in Secondary Schools in Implementing School Based Assessments Based on Gender, Options and Teaching Places. Journal Malay Language Education, 5, 18-29.
- Alvi, S. (2020). T., Khanam, A., & Kalsoom, T.(2020). Document Analysis of Secondary School Curriculum Regarding Ethical and Moral Education in Punjab. Global Regional Review, 1, 191-206.
- Ampaw, E. M., Chai, J., Liang, B., Tsai, S. B., & Frempong, J. (2020). Assessment on health care service quality and patients' satisfaction in Ghana. Kybernetes, 49 (12), 3047-3068.
- Annan, S. T., Adarkwah, F., Abaka-Yawson, A., Sarpong, P. A., & Santiago, P. K. (2019).
  Assessment of the inquiry teaching method on academic achievements of students in Biology education at Mawuko Girls School, Ho, Ghana. American Journal of Educational Research, 7(3), 219-223.
- Armstrong, D. (2021). Can school psychologists be inclusive when delivering evidence-based behavioural interventions in special schools, behaviour units or clinics? A systematic mapping literature review. Review of Education, 9(3), e3271.

- Asamoah, D., Songnalle, S., Sundeme, B., & Derkyer, C. (2019). Gender Difference in Formative Assessment Knowledge of Senior High School Teachers in the Upper West Region of Ghana. (2019). Journal of Education and Practice, 10(6), 54-58. https://doi.org/10.7176/JEP/10-6-08
- Asare, E. (2020). Basic Teachers' Perception and Practices of Formative Assessment in the Cape Coast Metropolis of Ghana: Basic Teachers' Perception and Practices of Formative Assessment in the Cape Coast Metropolis of Ghana. Journal of Applied Educational and Policy Research, 5(1), 1-11.
- Awoniyi, F. C. (2016). The understanding of senior high school mathematics teachers of schoolbased assessment and its challenges in the Cape Coast Metropolis. British Journal of Education, 4(10), 22-38.
- Baas, D., Vermeulen, M., Castelijns, J., Martens, R., & Segers, M. (2020). Portfolios as a tool for AfL and student motivation: are they related?. Assessment in Education: Principles, Policy & Practice, 27(4), 444-462.
- Beck, J. S., & Nunnaley, D. (2021). A continuum of data literacy for teaching. Studies in Educational Evaluation, 69, 100871.
- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. Assessment in Education: Principles, Policy & Practice, 25(6), 551-575. https://doi.org/10.1080/096 9594X.2018.1441807.
- Brandmo, C., Panadero, E., & Hopfenbeck, T. N. (2020). Bridging classroom assessment and self-regulated learning. Assessment in education: principles, policy & practice, 27(4), 319-331.
- DeLuca, C., Rickey, N., & Coombs, A. (2021). Exploring assessment across cultures: Teachers' approaches to assessment in the US, China, and Canada. Cogent Education, 8(1), 1921903.
- Deygers, B. (2023). The sociology of assessment: Comparative and policy perspectives: The selected works of Patricia Broadfoot. https://doi.org/10.4324/9780429262609.
- Elmelegy, R. I. (2015). School-based management: An approach to decision-making quality in

Egyptian general secondary schools. School Leadership and Management, 35(1), 79-96.

- Erzoah, K. K., Gyamfi, A., Yeboah, A., & Langee, P. (2022). Teachers' knowledge and practices of classroom assessment in the Ellembelle Municipality of Ghana. Advances in Research, 23 (4), 1-10.
- Etsey, Y. K. A.& Gyamfi, A (2017). Improving assessment of learning in mathematics through assessment as learning. Journal of educational assessment in Africa, 12(1), 11-20
- Fletcher, A. (2023). Children's Self-assessment Plans to Inform Teaching and Provide Summative Data. In Assessment and Data Systems in Early Childhood Settings: Theory and Practice (pp. 223-242). Singapore: Springer Nature Singapore.
- Gordon, D., Blundell, C., Mills, R., & Bourke, T. (2022). Teacher self-efficacy and reform: a systematic literature review. The Australian Educational Researcher, 1-21.
- Gyamfi, A. & Wren, D. (2022). Determining the difficulty and discrimination parameters of a Mathematics Performance-Based Assessment. Creative Education, 13(11), 3483-3489.
- Gyamfi, A. & Yeboah, A. (2022). Concurrent validity of proficiency in English language on mathematics performance among Senior High School Students in Shama Senior High School. Journal of Education, Society and Behavioural Science, 35(4), 38-45
- Gyamfi, A. (2022). Controlling examination malpractice in Senior High Schools in Ghana through performance-based assessment. Journal of Advances in Education and Philosophy, 6(3), 203-211.
- Gyamfi, A., Yeboah, A., Erzoah, K. K., & Lange, P. (2022). Impact of Assessment as Learning on Attitudes towards Mathematics of Senior High School Students in Ahanta West and Mpohor Districts. *Asian Journal of Education and Social Studies, 27*(1), 1-11.
- Jansen, T., & Möller, J. (2022). Teacher judgments in school exams: Influences of students' lowerorder-thinking skills on the assessment of students' higher-order-thinking skills.

Teaching and teacher education, 111, 103616.

- Jaoua, F., Almurad, H. M., Elshaer, I. A., & Mohamed, E. S. (2022). E-learning success model in the context of COVID-19 pandemic in higher educational institutions. International Journal of Environmental Research and Public Health, 19(5), 2865.
- Jimola, F. E., & Ofodu, G. O. (2019). ESL teachers and diagnostic assessment: Perceptions and practices. ELOPE: English Language Overseas Perspectives and Enquiries, 16(2), 33-48.
- Labarrete, R. A. (2021). Assessment for learning in the alternative learning system-education and skills training (ALS-EST). International Journal of Education Humanities and Social Science, 4(1).
- Langee, P., Gyamfi, A., Yeboah, A., Adu, I. A., & Erzoah, K. K. (2022). Performance assessment: Effective tool for closing academic achievement gap between high and low ability students. Canadian Journal of Educational and Social Studies, 2(6), 35-48.
- Lee, T., Cheng, Y. C., & Ko, J. (2018). Curriculum reform with a school-based approach: intellectual, structural and cultural challenges. School Leadership and Management, 38(3), 278-301.
- López-Pastor, V., & Sicilia-Camacho, A. (2017). Formative and shared assessment in higher education. Lessons learned and challenges for the future. Assessment & Evaluation in Higher Education, 42(1), 77-97.
- Levy-Vered, A., Reinders-Kafri, S., & Inbar-Lourie, O. (2022). From Murky Salty Water to Crystal-Clear Fresh River Flow: Pre-service Teachers' Assessment Perceptions. Journal of Education and Development, 6(5), 8.
- Maja, M. M. (2023). Teachers' Perceptions of Integrating Technology in Rural Primary Schools to Enhance the Teaching of English First Additional Language. Journal of Curriculum Studies Research, 5(1), 95-112.
- Malik, M. A. A., Madzuki, N. I., Hizam, N. S. S., Kamal, N. H. S., Yusof, N. S. H. C., Suhaimin, M. F., & Zulkifli, S. N. (2021). Teachers' Readiness and Practices in School-Based

Assessment Implementation: Primary Education in Malaysia. International Journal of Advanced Research in Future Ready Learning and Education, 23(1), 1-9.

- Mansora, A. N., Vikaramanb, S. S., & Medinac, N. I. (2019). Managing school-based assessment: Challenges and solutions for educational practice. International Journal of Innovation, Creativity and Change, 7(7), 63-84.
- Mathura, P. (2019). Teachers' Perspectives on a Curriculum Change: A Trinidad and Tobago Case Study. International Journal of Innovative Business Strategies, 5(1), 252-263.
- Marty, A. P., Linsenmeyer, M., George, B., Young, J. Q., Breckwoldt, J., & Ten Cate, O. (2023). Mobile technologies to support workplacebased assessment for entrustment decisions: guidelines for programs and educators: AMEE Guide No. 154. Medical Teacher, 1-11.
- Mkpae, S., & Obowu-Adutchay, V. (2017). Schoolbased assessment: Benefit and teachers' perception in Nigerian secondary schools. International Journal of Education and Evaluation, 3(2), 19-27.
- Nafisa, Y. (2023). The Metacognitive Role of Independent Learning Skills in the Development of Students' Competence. Web of Semantic: Universal Journal on Innovative Education, 2(3), 221-229.
- Nam, Y. (2021). Assessment Policy in Korean EFL Classrooms: An Ethnographic Exploration of Assessment Planning Practices. Journal of Asia TEFL, 18(3), 837.
- Narh-Kert, M. (2021). Pre-Service Teachers' Evaluation of Teaching and Learning of Core Courses in Regular and Distance Education Programmes in Ghanaian Colleges of Education. Open Journal of Social Sciences, 9(9), 499-509.
- Nsabayezu, E., Iyamuremye, A., Mbonyiryivuze, A., Niyonzima, F. N., & Mukiza, J. (2023). Digital-based formative assessment to support students' learning of organic chemistry in selected secondary schools of Nyarugenge Municipality in Rwanda. Education and Information Technologies, 1-31.

- Organization for Economic co-operation and Development, 2015). Assessment and Analytical Framework: Science, Reading, Mathematic, Financial Literacy and Collaborative Problem Solving. US: Author.
- Perkins, M. A. (2022). The Relationship Between Teacher Efficacy, Writing Apprehension, and Writing to Learn Using Structural Equation Modeling. The Journal of Writing Analytics, 6, 15-57.
- Pourdana, N., & Tavassoli, K. (2022). Differential impacts of e-portfolio assessment on language learners' engagement modes and genre-based writing improvement. Language Testing in Asia, 12(1), 1-19.
- Pounder, P., & Greaves, D. E. (2020). Impassioned leadership effectiveness: an assessment of leadership styles of top leaders in Caribbean healthcare systems. International Journal of Public Leadership, 16(2), 125-144.
- Rahman, K. A., Hasan, M. K., Namaziandost, E., & Ibna Seraj, P. M. (2021). Implementing a formative assessment model at the secondary schools: attitudes and challenges. Language Testing in Asia, 11, 1-18
- Ramollo, J. K., & Kanjee, A. (2023). Supporting teachers to develop formative assessment knowledge and skills in no-fee schools. South African Journal of Childhood Education, 13(1), 1247.
- Rasid, N. S., Nasir, N. A. M., & Singh, P. (2015). The initial concerns on the implementation school-based assessment among primary school mathematics teachers in Malaysia. Advanced Science Letters, 21(7), 2470-2474.
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, ecustomer satisfaction and loyalty: the modified e-SERVQUAL model. The TQM Journal, 56 (4), 563-588.
- Reyes, Rosalyn & Samson, Evelyn & Garcia, Julius. (2020). An Interactive Foreign Language Trainer Using Assessment and Feedback Modalities. 2. 9-17.
- Rieckmann, M. (2022). Developing and Assessing Sustainability Competences in the Context of Education for Sustainable Development.

In Education for Sustainable Development in Primary and Secondary Schools: Pedagogical and Practical Approaches for Teachers (pp. 191-203). Cham: Springer International Publishing.

- Rojabi, A. R. (2021). EFL learners' perceptions on Schoology use in the reading class. VELES: Voices of English Language Education Society, 5(1), 10-26.
- Smaill, E. (2020). Using involvement in moderation to strengthen teachers' assessment for learning capability. Assessment in Education: Principles, Policy & Practice, 27(5), 522-543.
- Tubulingane, B. S., & Angombe, S. T. (2022). Education Quality and Offerings Intersection Post Pandemic for Inclusive Development: A Case Study. In Handbook of Research on Global Institutional Roles for Inclusive Development (pp. 39-59). IGI Global.
- Whittle, R. J., Benson, A. C., & Telford, A. (2017). Enrolment, content and assessment: a review of examinable senior secondary (16– 19 year olds) physical education courses: an international perspective. The Curriculum Journal, 28(4), 598-625.

- Williams-McBean, C. T. (2022). Using school-based assessments to advance the integration of sustainable development competences by capitalising on the practice of teaching to the test. Environmental Education Research, 1-18.
- Williamson, C. (2017). Teachers' role in schoolbased assessment as part of public examinations. US-China Education Review, 7(6), 301-307.
- Yeboah, A.; Gyamfi, A. & Sam, N. I. (2019). Relevance of assessment course: A followup study of graduate teachers in Ghana. Academia Journal of Educational Research, 9(9), 302-310.
- Yamane, T. (1967). An introductory analysis of Statistics. New York: Harper and Row.
- Yan, Z., & Brown, G. T. (2021). Assessment for learning in the Hong Kong assessment reform: A case of policy borrowing. Studies in Educational Evaluation, 68, 100985.
- Yan, Z., Wang, X., Boud, D., & Lao, H. (2023). The effect of self-assessment on academic performance and the role of explicitness: a meta-analysis. Assessment & Evaluation in Higher Education, 48(1), 1-15.