

Measuring Teachers' Readiness for Formative Assessment at Secondary Education Level: A Study in Bangladesh

Md. Nurul Alam¹, Diponkar Chandra Roy^{2*}, Rumana Pervin³

1. Department of Social Work, Ministry of Education, Directorate of Secondary and Higher Education, Government of the People's Republic of Bangladesh, Bangladesh
2. Department of Psychology, Ministry of Education, Directorate of Secondary and Higher Education, Government of the People's Republic of Bangladesh, Bangladesh & Assistant Educational Psychologist (Research & Training), National Academy for Autism & Neuro-Developmental Disabilities (NAAND)
3. Department of Economics, Ministry of Education, Directorate of Secondary and Higher Education, Government of the People's Republic of Bangladesh, Bangladesh

* E-mail of the corresponding author: dippsy2013@gmail.com

Abstract

Effectively assessed and skilled students are potentially the most outstanding agents of change for ensuring the achievement of Sustainable Development Goals (SDGs), meeting the challenges of the 4th Industrial Revolution, and fulfilling the national demand for achieving national development plans (Vision 2041/Smart Bangladesh) by generating a skilled workforce. Formative Assessment (FA) can be crucial in promoting such change by enabling students to use it effectively if it is implemented smoothly in Bangladesh, especially in secondary education. Hence, this study measured teachers' Knowledge, attitudes, and practices to determine their readiness for Formative Assessment at the secondary level of education in Bangladesh. The survey was conducted among 100 respondents, who are teachers at secondary schools in Rangamati and Cox's Bazar districts in Bangladesh. The result revealed a moderate level of Knowledge and a positive attitude towards the FA among the teachers. The relationship between their readiness (Knowledge, attitudes, and practices) and training towards the FA was positive and strong, with a 5% significance level. Also, it was observed that the relationship between their practices and training about FA is more substantial, with a 1% significance level. Therefore, it was concluded that FA-literate teachers, especially in secondary education, are utilizing FA tools and strategies to ensure better student Assessments. Thus, the research recommends that more FA training is needed to promote and encourage teachers at all levels of education in the country, especially in secondary education, for the government and its agencies to ensure the effective implementation of FA. Researchers believe it will meet the national demand for the skilled next generation to build a smart Bangladesh by providing quality education on sustainable development goals (SDGs -4).

Key Words: Formative Assessment (FA), Knowledge, Attitudes, Practice, Teachers, Readiness

DOI: 10.7176/JEP/16-8-02

Publication date: July 31st 2025

1. Introduction

Education is a major driving force of development in any society. Every aspect of the education system, from curriculum to teaching and learning environment, instructional methods, and assessment systems, must be appropriately aligned to produce skilled and humane individuals who can meet the demands of the current world. The traditional education system is struggling to make such citizens. For this reason, we now require a creative and innovative education system that can meet the demands of society in the age of the Fourth Industrial Revolution. As part of our modernization of the education system, we will implement a new curriculum. A formative assessment system is a significant aspect of this new curriculum. Formative Assessment involves continuous checks and balances in the teaching and learning processes.

The method enables teachers to frequently assess their learners' progress and the effectiveness of their practice, thereby facilitating self-assessment by the students (Hannah, 2019). The formative Assessment aims to monitor student learning and provide ongoing feedback to help students identify their strengths and weaknesses and target areas needing work. It also helps faculty recognize where students are struggling and address problems immediately (Crooks, 2001). It typically involves qualitative feedback (rather than scores) for both students and teachers, focusing on the details of content and performance (Huhta, 2010). According to the National Curriculum Framework of Bangladesh, at the secondary level (grades 6 to 10), 50% of the total Assessment will

be done using the summative method and 50% using the formative method. This chapter focuses on the study of Knowledge, attitudes towards, and teachers' practices of formative Assessment at the Secondary Education Level in Bangladesh.

According to the National Curriculum Framework in Bangladesh, "The degree of success in achieving the objectives of the curriculum mostly depends on what kind of assessment techniques are being used to measure learning progress, and how the data from the assessments are being used to make decisions at various levels." A practical assessment system is the key to success in achieving the goals and objectives of the curriculum through a proper teaching-learning process. "Assessment plays a vital role in any teaching-learning process" (Black & William, 2009).

We primarily use the traditional summative assessment system at the secondary education level in Bangladesh. In the conventional summative assessment system, "The giving of marks and the function of grading were overemphasized, whereas the giving of feedback and the function of learning were underemphasized (Alam, 2018; Amin, 2017). Formative Assessment can ensure better learning outcomes for students. Research reveals that, "Reviews on the studies of assessment confirm that formative assessment can improve the academic achievement of students markedly" (Black & William, 1998). So, to achieve the desirable goal of education, our teachers must have expertise in formative Assessment. The teachers must acquire in-depth Knowledge and a positive attitude toward formative Assessment and practice in the classroom. Therefore, this study measured teachers' readiness for formative assessment systems at the secondary education level.

1.1 Rationale of the Study

This research aimed to measure teachers' readiness for an effective formative assessment system at the secondary education level in Bangladesh. Knowing if our teachers have the Knowledge to implement formative Assessment is necessary. The teachers' thoughts and feelings about formative Assessment are also essential. A perfect assessment is also needed to fulfill the goals of a developed country's government by 2041, requiring an enlightened and skilled workforce that will contribute to achieving and sustaining these goals. Students' perfect development is crucial for preparing for the fourth industrial revolution.

The National Education Policy 2010 and Goal 4 of the SDGs are committed to producing human and social capital for the nation. The findings will also help inform the development of appropriate policies for teachers' continuous professional development (CPD). The study aimed to identify the teachers' readiness to implement formative Assessment at the secondary school. The creative question and assessment system has not achieved the expected result. This study aimed to assess teachers' readiness through their knowledge, attitudes, and classroom practices, and to identify obstacles that could hinder the achievement of expected results through the implementation of formative Assessment. This research was conducted to understand these issues in the context of Bangladesh's secondary education.

1.2 Hypothesis

- 1. There is no significant relation between Teachers' readiness for FA and their Training.
- 2. There is no significant relationship between teachers' readiness for FA and their school management system (government and non-government).
- 3. There is no significant relation between Teachers' FA readiness and gender.
- 4. There is no significant impact on teachers' FA practices regarding their training.

2. Review of Literature

Different articles on education, the traditional education system, the assessment system, the problem of summative Assessment, concepts of formative Assessment, ways of formative Assessment, advantages of formative Assessment, challenges in formative Assessment, and teachers' readiness for formative Assessment have been reviewed to get insights and direction for this study. Formative Assessment can be defined from

various perspectives. It is often referred to as 'assessment for learning' by many. According to Daskin and Hatipoglu (2019), formative Assessment is a teacher-based, classroom-based, dynamic, and learning- and learner-friendly Assessment carried out in classrooms to accelerate students' learning. Informal approaches are often used to track and monitor students' progress and provide them with the necessary feedback. Several studies have been conducted to assess the significance and effectiveness of the formative Assessment. Black and William (1998a) conducted an extensive research review of 250 journal articles and book chapters winnowed from a much larger pool to determine whether formative Assessment raises academic standards in the classroom. At the knowledge level, they concluded that efforts to strengthen formative Assessment produce significant learning gains as measured by comparing the average improvements in the test scores of the students involved in the innovation with the range of scores found for typical groups of students on the same tests.

Effect sizes ranged between 0.4 and 0.7, with formative Assessment helping low-achieving students, including those with learning disabilities, even more than it helped other students (Black & William, 1998b). There are many strategies for conducting formative Assessment. Black and William (1998b) encourage teachers to use questioning and classroom discussion to increase their students' Knowledge and improve understanding. They caution, however, that teachers must ask thoughtful, reflective questions rather than simple, factual ones and then give students adequate time to respond. Attitudes are the educated inclinations that lead us effectively towards a specific way of behaving and are assessed through the Evaluation of a particular subject, revealing a level of similarity or difference. Individuals usually have attitudes that concentrate on objects, people, or institutions and are also concerned with the mental category (MEST, 2016). The main principles of formative Assessment enable the identification of weaknesses and strengths by increasing students' motivation and metacognition, and by ensuring that teaching and learning reactions inform them about their capacities for improving learning (William, Lee, Harrison, & Black, 2004).

Both teachers and students can benefit from formative Assessment by receiving the teaching and learning data that may be used to support personalized teaching and learning. According to Marzano and Pickering (1997), it is a shared responsibility of teachers and students to work together and maintain positive attitudes and perceptions, or, when possible, to change negative ones. According to Schoenfeld (1992), attitudes affect not only the teachers' approach to teaching but also the content they teach. Teachers' attitudes towards formative Assessment are positive. Still, in many cases, they do not apply formative Assessment or apply it in the wrong way and to the wrong degree (Schoenfeld, 1992). Ahmedi (2019) found that 63.5% of the teachers have an overall positive attitude towards formative Assessment. Black and William (2009) include several conceptualizations of formative assessment practice; practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited. Formative assessment practices may likewise address different central standards. For example, some scholars, like Marshall and Drummond (2006), have described the foundational principle of formative Assessment as promoting student autonomy. A few examinations have found that numerous educators center around educator-focused rehearses in which the educator is the proactive specialist in the developmental evaluation processes, to the detriment of advancing understudy independence, even though such a center was not by the conceptualization of the developmental evaluation intended to be carried out (Jonsson et al., 2015; Wylie & Lyon, 2015). There are many challenges in implementing a formative assessment system. "Many scholars agree on the impact of cultural beliefs and practices as a crucial determinant that influences teachers' perception towards formative assessment" (Al-Wassia et al., 2015).

The present instructional practice and teaching method can also threaten the implementation of formative Assessment in any country. "Literature proves that in non-western countries where there is the dominance of teacher-centric practices and high-stakes public examinations, implementation of formative assessment faced challenges" (Quyen et al., 2016). As formative Assessment is a relatively new concept in Bangladesh, especially at the secondary level, several challenges are associated with its practical implementation here. Abu Musa and Islam (2020) focused on teachers' challenges when applying formative Assessment in Bangladesh. The findings revealed that implementing formative Assessment in Bangladesh classrooms is problematic, mainly due to the limited knowledge and understanding of teachers. Consequently, Abu Musa and Islam (2020) noted that teachers focus on knowledge content and student memorization, as the expected learning is not adequately achieved. Importantly, Abu Musa and Islam (2020) noted how a lack of training on formative Assessment contributes to a negative perception of teachers towards such methods of evaluating their learners. As we will implement formative Assessment as prescribed by the National Curriculum Framework, we need to assess our teachers' Knowledge, attitudes, and practices for implementing formative Assessment. This research aims to measure teachers' readiness for formative Assessment at the secondary education level.

3. Research Methodology

3.1 Methodology of the Study

The study employed a quantitative approach. Creswell (2018) notes, "In quantitative research, the investigator identifies a research problem based on trends in the field or the need to explain why something occurs. Describing a trend means that the research problem can be answered best by a study in which the researcher seeks to establish the overall tendency of responses from individuals and to note how this tendency varies among people." (p.13)

3.2 Sampling Method & Sample Size

Sampling refers to the process of selecting a subset of elements from a given population to represent the population. The population for this study is unknown, as the total number of teachers working in schools conducting secondary education courses in Bangladesh is unknown. There are 100 teachers from 10 government schools. Moreover, private schools of 2 (two) districts (Rangamati and Cox's Bazar) were sampled for this study. At first, the respondents for the study were selected based on two districts, and from each district, 2 (two) govt. Moreover, 3 (three) Private schools have been selected purposively. From each of those schools, respondents were chosen randomly, with consideration given to a 3:1 ratio of the total teachers. In this way, 100 respondents were selected from 10 secondary schools in Rangamati and Cox's Bazar districts. The sample unit for the study was selected using a simple random sampling technique.

Table 1. Population and Sample Size in Study Area

Population and Sample					
Distri ct	Managem ent System	Categor y	School Name	Total no. of Teachers	Sample Size
Rang a- mati	Governme nt	Boys	Rangamati Govt. High School	29	10
		Girls'	Rangamati Govt. Girls' High School	38	15
	Non- Governme nt	Combin ed	Lakers Public School & College	53	20
		Girls'	Shaheed Shamsuddin Girls' High School	12	5
		Combin ed	St. Teresa's School	22	8
Cox's	Governme	Boys	Cox's Bazar Govt. High School	38	15

Bazar	nt	Girls'	Cox's Bazar Govt. Girls' High School	36	13
	Non-Governme nt	Combin ed	Baharchora High School	10	3
		Girls'	Amena Khatun Girls' High School	17	6
		Combin ed	A. K. M. Mojammel Haque Memorial High School	13	5
			Total	268	100

3.3 Source and Methods of Data Collection

Data was collected from primary sources. The data source for this study was teachers working in schools that offer secondary education courses in Bangladesh. The study employed a survey design. Creswell (2018) notes, "In a cross-sectional survey design, the researcher collects data at one point. A cross-sectional study can examine current attitudes, beliefs, opinions, or practices. Attitudes, beliefs, and opinions are ways individuals think about issues, whereas practices are their actual behaviors." (p. 380). In this study, data were collected at one point to assess or evaluate the teachers' Knowledge, attitudes, and practices regarding the formative Assessment. A survey design was employed in this study to collect data. Among the various methods of collecting primary data, we gathered information from respondents using a questionnaire survey with a five-point and two-point Likert scale. The collected data was analyzed using both descriptive and inferential statistics. The data were evaluated and analyzed using the Statistical Package for the Social Sciences (SPSS). We presented the findings of this study from an objective position. Data were analyzed using statistical tools, including descriptive statistics (Mean, standard deviation, variance, frequencies, and independent sample t-test).

3.4 Teachers' Readiness and Training:

Hypothesis 1: There is no significant relation between Teachers' readiness for formative Assessment and training.

Table 2. Teachers' Readiness and Training 1

Group Statistics					Std. Error Mean
Per- Readings	Sex	N	Mean	Std. Deviation	
	Male	68	73.56	7.11	0.86
	Female	32	70.32	6.88	1.21

Table 3. Teachers' Readiness and Training 2

Independent Sample Test								
Per-Readings	Levene's test			Test for Equality of Means				
	Equal variance assumes	F	Sig	T	df	Sig(2-tailed)	Mean df.	Std. error
	Equal variance does not assume	0.019	0.890	2.174	98	0.034	3.24213	1.50965
				2.174	6.2708	0.033	3.24213	1.49132

Here, the P value is <0.05 , indicating a significant difference between teachers' readiness for formative Assessment and training. Here, the null hypothesis is rejected, indicating that the variation is statistically significant.

3.5 Teachers' Readiness and School Management System:

Hypothesis 2: There is no significant relationship between teachers' readiness for FA and their school management system (Govt. & Non-govt.)

Table 4. Teachers' Readiness and School Management System 1

Group Statistics					
Ins type		N	Mean	Std. Deviation	Std. Error Mean
Per Readiness	Government	54	72.3861	7.61341	1.03605
	Government	46	72.7010	6.69030	0.98643

Table 5. Teachers' Readiness and School Management System 2

Independent Samples Test								
Per-Readings	Levene's test							
	Variance	F	Sig	T	df	Sig(2-tailed)	Mean df.	Std. error
	Equal variance assumes	1.026	0.314	-0.218	98	0.828	-0.314	1.44
	Equal variance does not assume			-0.22	97.895	0.826	-0.314	1.43

Teachers' Readiness and School Management System: 1P value > 0.05 indicates no significant difference between teachers' readiness for formative Assessment and the school management system. Here, the null hypothesis is accepted and not significantly varied.

3.6 Teachers' Readiness and Their Gender

Hypothesis 3. There is no significant relationship between teachers' FA readiness and gender.

Table 6. Teachers' readiness and their gender 1

Group Statistics				
Sex:		N	Mean	Std. Deviation
Per- Readings	Male	67	72.4475	7.43908
	Female	33	72.7005	6.69635

Table 7. Teachers' Readiness and Their Gender 2

Independent Samples Test								
Per-Readings	Levene's test							
		F	Sig	T	df	Sig(2-tailed)	Mean df.	Std. error
	Equal variance assumes	0.071	0.791	-0.165	98	0.869	-0.252	1.53
	Equal variance does not assume			-0.71	70.158	0.865	-0.252	1.47

Here, the P value is >0.05 , indicating no significant difference between teachers' readiness for formative Assessment and their gender. So, the null hypothesis is accepted and not significantly varied.

3.7 Teachers' Practice and Training:

Hypothesis 4. There is no significant relationship between teachers' practice for FA and their training.

Table 8. Teachers' Practice and Training 1

Group Statistics					
Training		N	Mean	Std. Deviation	Std. Error Mean
Level of practice	Yes	68	3.1324	0.59612	0.07229
	No	32	2.5625	0.50402	0.08910

Table 9. Teachers' Practice and Training

Independent Samples Test								
Per-Readings	Levene's test							
		F	Sig	T	df	Sig(2-tailed)	Mean df.	Std. error
	Equal variance assumes	1.191	0.278	4.675	98	0.000	-0.569	0.121
	Equal variance does not assume			4.967	71.010	0.000	0.569	0.114

Here, the P value is <0.05 , indicating a significant difference between teachers' formative Assessment and training practices. Here, the null hypothesis is rejected, indicating that the variation is statistically significant.

4. Validity and Reliability

Reliability is concerned with 'measurement error' (McDowell & Newell, 1996), i.e., how consistently or dependably a measurement scale measures what it is supposed to be measuring (Polit & Hungler, 1995). The premise for conducting reliability tests is that there will always be a random error when administering measurement scales. Validity necessitates demonstrating that the propositions generated, refined, or tested match the causal conditions obtained in human life. Two questions match scientific explanations of the world with actual conditions. In this study, we employed the Cronbach's Alpha model to ensure the reliability of the research. The value of Cronbach's Alpha is 0.706, which means the reliability of this study is promising. Additionally, this study piloted the data collection tool (questionnaire) on 10 respondents from the sample before collecting the data.

Reliability Statistics	
Cronbach's Alpha	No of Items
0.706	45

5. Results and Discussion

The result in the above discussion (chart no. 4) shows that 39% of secondary teachers believe they have moderate knowledge of formative Assessment. However, this segment of teachers can be turned into high-level Knowledge of formative Assessment through proper intervention. Chart 5 reveals that only 21% of teachers hold highly positive attitudes toward formative Assessment, which is significantly lower compared to the study by Ahmedi (2019). After that, Chart 6 indicates that only 16% of secondary-level teachers highly practice formative assessment in evaluating students' performance. Sixty-four percent of the teachers hold positive attitudes, but do not apply them in appraising students' performance, which is also supported by Schoenfield (1992). Chart 7

shows that every teacher is executing formative Assessment. However, the number of teachers who practice this strategy is only 10%, and 85% of the teachers' practice level is moderate. In Hypothesis 1, the P-value is <0.05 , indicating a significant difference between teachers' readiness for formative Assessment and training. Here, the null hypothesis is rejected, indicating that the variation is statistically significant. According to the hypothesis, a P-value > 0.05 indicates no significant difference between teachers' readiness for formative Assessment and the school management system. Here, the null hypothesis is accepted and not significantly varied. In Hypothesis 3, the P-value is greater than 0.05, indicating no significant difference between teachers' readiness for formative Assessment and their gender. So here, the null hypothesis is accepted and not significantly varied. In Hypothesis 4, the P-value is <0.05 , indicating a significant difference between teachers' practices of formative Assessment and training. Here, the null hypothesis is rejected, indicating that the variation is statistically significant.

6. Recommendations

Provide teachers with comprehensive and ongoing professional development opportunities to enhance their understanding of formative assessment techniques, strategies, and best practices. Here are some recommendations for improving teachers' readiness to assess students' performance in a formative way.

- 1) Teachers must be trained to implement formative assessment as part of their professional development.
- 2) Both guardians and students must be involved so that they can understand the benefits and necessity of formative Assessment.
- 3) Administrative support should be ensured to promote formative Assessment and provide necessary resources for teachers.
- 4) Clear guidance and comprehensive professional development opportunities must be provided for teachers to enhance their understanding of formative assessment techniques, strategies, and best practices.
- 5) Formative Assessment should be implemented step by step, allowing students and teachers to adjust to the new curriculum.
- 6) Continuous evaluation and regular constructive feedback are badly needed for implementing formative Assessment.
- 7) Establish mentoring programs or peer learning communities where experienced teachers can support and mentor their colleagues in effectively implementing formative Assessment.
- 8) Provide access to various assessment tools and resources that align with the curriculum, allowing teachers to choose the most suitable ones for their students.
- 9) Develop online training tools, modules, or courses specifically focused on formative Assessment that teachers can access at their convenience.
- 10) Promote a culture of research and sharing of best practices among teachers, where successful formative assessment strategies are shared and adopted.

7. Conclusion

Formative assessment, a relatively new process, has emerged in Bangladesh's education system and paradigms to assess students more effectively, particularly in secondary and higher secondary education. However, the sustainability of FA depends on the practical implementation of this innovative process, with due interventions and teachers' readiness. This study revealed that teachers in secondary education have a moderate level of Knowledge and positive attitudes towards the FA, and most practice the FA to assess their students effectively. Thus, these positive attitudes and expected level of expertise indicate that teachers in secondary schools practice FA enthusiastically, which significantly impacts both the teachers and students, as well as the teaching-learning process. Meanwhile, a strong and positive relationship exists between their readiness (in Terms of Knowledge, attitudes, and practices) and training towards the FA, with a 5% significance level. Also, it was observed that the relationship between their practices and training about FA is more substantial, with a 1% significance level.

Hence, this study reveals that formative assessment-literate teachers are making their best efforts to implement this assessment system in secondary education throughout the country. However, more interventions are needed to encourage teachers and promote the smooth implementation of Formative Assessment.

References

- Abu Musa, M., & Islam, M. R. (2020). The problems that teachers face in applying formative Assessment in the classroom. *International Journal of Scientific and Technology Research*, 9(1), 2466–2468.
- Ahmedi, V. (2019). Teachers' Attitudes and Practices Towards Formative Assessment in Primary Schools. *Journal of Social Studies Education Research*, 10(3), 161–175.
- Amin, M. Al. (2017). Charting the river: A case study of English language teaching in Bangladesh [The University of Canterbury]. <https://ir.canterbury.ac.nz/handle/10092/14381>.
- Alam, F. (2018). Revisioning English studies in Bangladesh in the age of globalization and ELT. *Education in the Asia-Pacific Region*, 44, 241–261. https://doi.org/https://doi.org/10.1007/978-981-13-0708-9_13.
- Al-Wassia, R., Hamed, O., Al-Wassia, H., Alafari, R., & Jamjoom, R. (2015). Cultural challenges to implementing formative Assessment in Saudi Arabia: An exploratory study. *Medical teacher*, 37(sup1), S9-S19. <https://doi.org/10.3109/0142159X.2015.1006601>.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. In *International Journal of Phytoremediation* (Vol. 21, Issue 1). <https://doi.org/https://doi.org/10.1080/0969595980050102>, 5, 1, 7, 74.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative Assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31. <https://doi.org/https://doi.org/10.1007/s11092-008-9068-5>.
- Creswell, J. (2015). *Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, Pearson Education Inc.
- Crooks, T. (2001). "The Validity of Formative Assessment". British Educational Research Association Annual Conference, University of Leeds, 13-15 September 2001.
- Daskin, N., & Hatipoğlu, Ç. (2019). Reference to a past learning event as a practice of informal formative Assessment in L2 classroom interaction. *Language Testing*, 36(4), 527–551.
- Hannah, K.; George, Bethell; Elizabeth, Fordham; Kirsteen, Henderson; Ruochen, Li Richard (2019). *OECD Reviews of Evaluation and Assessment in Education: Student Assessment in Turkey*. Paris: OECD Publishing. P. 25 ISBN 978-92-64-94298-1.
- Huhta, A. (2010). "Diagnostic and Formative Assessment." In Spolsky, Bernard; Hult, Francis M. (eds.). *The Handbook of Educational Linguistics*. Oxford, UK: Blackwell. pp. 469–482.
- Jönsson, A., Lundahl, C., and Holmgren, A. (2015). Evaluating a large-scale implementation of Assessment for learning in Sweden. *Assess. Educ. Princ. Policy Pract.* 22, 104–121. doi: 10.1080/0969594X.2014.970612.
- Marshall, B., & Drummond, M. J. (2006). How Teachers Engage with Assessment for Learning: Lessons from the Classroom. *Res. Pap. Educ.* 21, 133–149. doi: 10.1080/02671520600615638
- Marzano, R. J., & Pickering, D. J. (1997). Dimensions of learning: Teacher's manual, 2nd edition: Association for Supervision and Curriculum Development. Alexandria, VA: ASCD.
- McDowell, I. & Newell, C. (1996). *Measuring Health: A Guide to Rating Scales and Questionnaires*, 2nd ed. Oxford University Press Inc., New York.
- MEST. (2016). Curriculum Framework on Pre-University Education of the Republic of Kosovo. Prishtina: BLENDI.

Polit DF & Hungler BP (1995). *Nursing Research Principles and Methods*, 5th ed. JB Lippincott Company, Philadelphia.

Quyen, N. T. Do, & Khairani, A. Z. (2016). Reviewing the challenges of implementing formative Assessment in Asia: The need for a professional development program. *Journal of Social Science Studies*, 4(1), 160. <https://doi.org/https://doi.org/10.5296/jsss.v4i1.972>.

Shepard, L. A. (2005). "Formative assessment: caveat emptor". ETS Invitational Conference: *The Future of Assessment: Shaping Teaching and Learning*, New York, October 10-11, 2005. Archived from the original on 7 October 2011. Retrieved 25 August 2011.

Schoenfield, A. H. (1992). Learning to think mathematically: Problem-solving, metacognition, and sense-making in mathematics. *Handbook of research on mathematics teaching and learning*. New York: Macmillan.

William, D., & Thompson, M. (2008). "Integrating assessment with learning: what will it take to make it work?" in *The Future of Assessment: Shaping Teaching and Learning*. Ed. C. A. Dwyer (Mahwah, NJ: Lawrence Erlbaum Associates), 53–82.

William, D., Lee, C., Harrison, C., & Black, P. (2004). Teachers Developing Assessment for Learning: Impact on Student Achievement. *Assessment in Education: Principles, Policy & Practice*, 11(1), 49–65.

William, D., & Thompson, M. (2008). "Integrating assessment with learning: what will it take to make it work?" in *The Future of Assessment: Shaping Teaching and Learning*. Ed. C. A. Dwyer (Mahwah, NJ: Lawrence Erlbaum Associates), 53–82.

William, D., Lee, C., Harrison, C., & Black, P. (2004). Teachers Developing Assessment for Learning: Impact on Student Achievement. *Assessment in Education: Principles, Policy & Practice*, 11(1), 49–65.