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ROLE OF FORMATIVE ASSESSMENT IN ENHANCING ACADEMIC EXCELLENCE AT ELEMENTARY LEVEL: A DESCRIPTIVE STUDY

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ABSTRACT

The aim of this study was to examine the role of formative assessment in the academic excellence of students at elementary level. Objectives of this study were to identify need of formative assessment at elementary level and learning difficulties of learners through formative assessment. It was a descriptive study design. Questionnaire was designed for data collection. 350 teachers from both private and public sector were selected for data collection and sample was selected with simple sampling technique. Chi square was applied for the analysis of data. Results of this study showed that formative assessment plays a significant role in the performance level of students as it provides feedback to both teacher and learner about their learning and progress. Low achieving students tends to get maximum benefit from this assessment. it is recommended that teacher may use formative assessment for academic excellence of elementary students

Key words: Formative Assessment, Academic Excellence, Descriptive study

Introduction

Test, assessment and evaluation play a vital role in any education system. Without testing and evaluation education is nothing. Test provides feedback to the teacher and students. Students' gets information about what they learnt and teacher get information how effective his or her teaching method was. Basically it is the outcome of classroom instruction.

Black and Wiliam (1998) discuss formative assessment as actions worn by facilitator or by their learners which give comment to adapt instruction and learning tasks wherein they are engaged. Assessment during session or during classroom activities is called formative assessment. Instructor and learner use this review to better their teaching. Self-assessment, discussion and marking are techniques of formative assessment. Such measurements are worn to check either the learners are learning or not. This assessment is supportive for summative assessment or evaluation. Students get much benefit from this. It can also be used to diagnose learning difficulties of the students. For the academic excellence of any institution both formative and summative assessment plays an effective role.

Teaching will be more effective by using formative assessment (OECD, 2005) as it directs learners to meet learning targets, set students learning needs and adjust the learning process accordingly, and increase the teachers knowledge about effectual teaching methods (Lee & Wiliam, 2005). Formative assessment is assessment for learning because it is in the classroom perspective and it could be regarded as one of the facilitating pedagogies with the mean of developing learning, meaning it is based on learning goals. This assessment is used to identify the space and make improvements if there is a need. Formative assessment generates feedback on performance to improve and increase learning.

Formative assessment strategies and tools are used to authorize students through feedback and become self-regulated learners. Formative assessment provides opinion which is worn by learners to enhance learning as well as success. Different SLOs can be achieved through different strategies and tools of formative assessment. These assessments helps learners to get prepare for summative assessment or examination.

There are different ways of formative assessment e.g.

1. Test (written or oral)
2. Observations
3. Interviews
4. Homework

Test consists of series or set of questions which examinee has to answer in written or orally. Test is a tool for assessment. Test may be written or oral. Teacher can take assessments of students through tests. Observation is also a tool used for assessment. Students can also be assessed through observations and interviews. Questioning is a good tool for investigating. For assessing or checking handwriting and managing skills homework is used as an assessment tool.

Academic excellence is demonstrative skill to perform, attain and do extremely well in academic tasks. Academic excellence is concerned with high grades and better presentation. It is greatest development of mental abilities and skills to serve humanity. Assessment plays important role for identifying that institution is moving towards academic excellence. Academic excellence is measured through students' assessment, assessment of curriculum, teachers and other staff. Academic excellence is also when the local community and society is satisfied with the institution. Formative assessment is best process for academic excellence.

Assessment should not be pass or fail but it should be a tool to help teachers understand how to teach students and to promote it as a learning technique. It is important to be balanced assessment. In elementary schools both teachers and students assess teaching learning process and indicate areas of improvement for the teacher and the learner as well.

Providing feedback to students is very effective technique and written feedback is most effective for students as assessment become accurate when written feedback is provided to students. Teacher uses feedback to make decisions about readiness, diagnosis and remedies.

Rubric is a means for checking routine task .It identifies the criteria that describe performance at different levels of achievement. Teachers usually show and talk about the rubric before a performance task, so students are aware of what they need to do to be successful. Learners also get advantage from rubrics. Students have clear goals for their work, if they know the criteria of assessment in advance of their performance.

Self-assessment is vital for learning as learners can only reach

learning target when they know about their target and can assess the ways to meet those targets. So the criteria for assessing any activity must be clear to learners to make them able to have a clear outline both of the target and the ways to reach those targets successfully. If they do so they will be able to develop an overview of their task not only to manage their work but also organize it. Simply, their thinking ability will be developed.

Teaching can be more effective by using formative assessment by means of motivating learners to meet targets, identifying learning desires and adjusting teaching consequently, furthermore enhance facilitator knowledge of efficient teaching methods. Formative assessment is the most used practice and the major focus is to improve excellence. Formative assessments grant a chance to passive learners to better their learning.

Statement of the Problem

For effective school system students are not only tested by reason of simple paper and pencil tests. In the present day institutions have started using variety of methods for checking learner knowledge, instructor performance, efficiency of institutions and judgment of school system as a whole. So researcher intends to identify role of formative assessment in academic excellence of students at elementary level

Research Objectives

1. To identify need of formative assessment at elementary level.
2. To find out learning difficulties of learners through formative assessment

Literature Review

Generally speaking an ongoing assessment is called formative assessment. Formative assessment is stated as procedure used by trainers and learners to identify and answer learner learning so as to improve that learning. When sequence is worn to decide coaching and learning to assemble learner requirements, then assessment become formative. Teachers uses this assessment to formulate necessary modifications in their teaching learning process, when he knows students how trainees are making progress and where they are having difficulty. This results in improving student achievements (Sawyer, Graham, & Harris, 1992). Formative assessment is very common and interactive type of assessment for learners' advancement and is used to know learning desires and set teaching accordingly" (Looney, 2005).

Formative assessment is means which an instructor used to check learner grapple of particular skills and topics they are coaching. It's an important device to find out particular learner mistakes and misconceptions while theme is being taught" (Kahl, 2005). Formative assessment if effectively used not just help in gaining maximum achievement of students but for teacher professional development it is reasonable technique (William & Thompson, 2007). Formative assessment is an important tool to upgrade standard of student performance. Very few people have

been initiatives in education which support these assessments to upgrade level and standards of learner (Black & Wiliam1998).

Assessment for learning is of most influential assessment technique for enhancing learner learning that we know of. For continuing improvement educators collectively at the district and school levels become more focused and skilled at checking and using learner attainment (Fullan, 2005). Studies have demonstrated that low achieving students get maximum help from Studies assessment for learning (Stiggins, 2004,) .This assessment is of most influential weapons in teacher's arsenal. To considerably enhance learner success during K-12 system, an efficient standards-based, formative assessment program is very helpful (Marzano, 2006).

Formative assessment can benefit both educators and their students, if clearly understood and adroitly employed. Formative assessment constitutes the key source of clearheaded instructional thinking. Formative assessment shows evidence-based instructional decision-making. Formative assessment may help a lot if you want your students to achieve more and you want to become more instructionally effective (Popham, 2008). To become conscious of any shortcomings that exist between their desired objective and their present understanding, skills and or skill and guides them through actions needed to obtain goal, feedback given as part of formative assessment is very advantageous for learners (Sadler, 2005).

The effective response on tests and homework gives precise comments about errors and precise suggestions for improvement and encourages seekers to inside their concentration thoughtfully on assignment rather than on simply getting correct reply (Arbaugh et al., 2008). Lower achieving students get maximum benefit from this type of feedback because it lays stress that seekers can advance as a result of struggle rather than be fated to low attainment due to some supposed lack of inborn ability. Formative assessment supports that all learners can learn up to maximum and get good grades rather become depressed and reluctant for further learning (Vispoesl & Austin, 1995). Feedback is usually provided by teacher but learners can also plays vital role through self-assessment. It is evident from two experimental research studies that learners who understand assessment criteria (rubrics) and learning outcomes and have opportunities to think on their work show better improvement than those who do not (Fontana & Fernandes, 1994).

There are different reasons for assessments in schools. Formative assessment issued to improve learning and summative assessment is used at end of session for grading purpose. Summative assessment is supported for formative. The results from assessment are used for decision for future. Both formative and summative plays an important role in academic excellence of schools and overall department. To ensure academic excellence of

any institution these assessments are used side by side (Dixon and Ecclestone, 2003).

Managerial role of instructor in summative testing or assessments is on assigning numbers despite of as a guide for learning. As a result students did not focus more mastery of subject or lesson but only focus on competition. When the objective or target in classroom is a position or marks, learners put more effort to obtain best inscription and less attention in civilizing their learning (Black & William, 1998). As a whole, summative assessments offer minimum opportunity for students to improve their learning. Students who are passive students think that they cannot learn. This leads to their failure (Vispoel & Austin, 1995).

When results gained is used to change instructions to advance learning, than it become formative assessment. Feedback should used in such a way as it provides information to students about the ways to improve their learning. It should not give confidence to students to compare themselves.

Educational policymakers, researchers, and teachers are more and more concerned in formative assessment as it shows and chains seeker learning (William, 2011). 25 schools in U.S use formative assessment as authorized policy (Altman et al., 2010). Formative assessment is viewed as an vital strategy for realization the targets and goals set in many Organizations for Economic Co-operation and Development (OECD) countries and for acquiring qualifications in education. In many countries, for the systematic implementation and application of formative assessment guidance books have been developed and teachers get maximum help from those books. Formative assessment program was started in England for primary schools and pre-primary levels in 2000. Similarly teachers are confident to apply formative assessment in their learning-teaching processes in Scotland. New Zealand has also based its National Assessment Strategy, implemented in 1999, on formative assessment. In many cities of Canada formative assessment is seemed as most serious assessment strategy. Countries such as Sweden, Finland, Spain and Germany also highlights that continuous assessment is very necessary for each and every student and these assessments should be taken by using variety of techniques such as portfolio assessment, interviews and verbal advice.

Formative assessment contributes to teacher's professional development by transferring professional development practices to lesson plans in Singapore (Koh, Lim, & Habib, 2010). To achieve complete insight into how much learners learn, teachers use variety of assessment activities and strategies in classroom. In addition to provide response to students, teachers examine information, comment on it, and use it to check and manage teaching. Information is actively provided by learners. They use assessment information to recognize their targets, develop an understanding of

how qualified a work will be and make decisions about their targets despite of only participating learning and teaching activities (Berry, 2008).

For assessment of students, teachers and learning processes formative assessment is said to be a very vital element at all the levels of education in Turkey and other parts of the world. In this respect, research conducted in Turkey on usually encountered examples of formative assessment practices in world can add to humanizing teaching learning process in terms of quality and development. Giving particular importance to individual is important to thoughtful how formative assessment highlighted with a constructivist learning approach constitutes foundation of education program put into practice in Turkey in 2005. Through the use of active feedback formative assessment betters teaching process by eliminating learning deficits. According to the related literature, on students' behaviors, especially with respect to learning formative assessment has a positive impact. Formative assessment is ranked at top of list in literature as it studies comparing many teaching methods, strategies, and techniques in terms of degree of effect on learners' academic achievement. Relevant meta-analysis studies have also shown that in terms of students' success formative assessment has a high impact. On the other hand, critical studies of formative assessment in recent years have also showed that selected studies for meta-analysis are problematic in terms of principles of methodological and constructive assessment, and that qualitative and empirical work on formative assessment is required (Bennett, 2011; Briggs et al., 2012 Filsecker & Kerres, 2012; McMillan et al., 2013).

Self-assessment is an important part of formative assessment (Black & Wiliam, 1998). By using portfolio self-assessment can be achieved. The term portfolio refers to determined collection of work. In education, Portfolio contains all the documents of an individual's attainment over a period of time. Its nature is collective. In portfolio there is not merely a compilation of assignments, but it contains a mixture of artifacts, achievement documentation, self-evaluation, and analysis of learning experiences (Klenowski, 2000). Students take instance to reproduce their own performance by critically judging inside of their portfolio. For the completion of portfolio a student must clearly understand the elements and signs of quality work. To ensure that students understand achievement goals teachers must take the time. Research done by Frederikson and White (1997) cleared that learners who understand learning objectives and have thinking ability and feedback on their task show better improvements in learning than those who do not. Students become committed learners when goals and objectives are understood (Black & Wiliam, 1998).

A research by Instruction and Curriculum Department of Hong Kong Institute of Education showed the use of portfolio in

formative assessment (Klenowski, 2000). This study showed that in teacher education program portfolios were used. Interviews held with pre-service teachers showed that for developing reflective skills portfolios were useful. These teachers also reported that they developed autonomy in their learning. One pre-service teacher was quoted as saying "I cultured extra from the portfolio than from the instruction. Completing this assignment was hard work, but it actually helped me to put in order my learning and thinking."

Research Methodology

This part is concerned with overall research methodology which includes research design, population, sample, and research instrument and data collection. A descriptive, analysis design was selected for this study to check role of formative assessment in academic excellence of students at elementary level. All 3674 teachers 2000 from Private sector and 1674 from Public sector were from elementary schools of district Bagh comprised population of this study. Sample is collection of small group or subsection of population so that information is demonstrative of whole population under study. Simple random sampling technique was used to select the sample carefully. Elementary teachers were equally selected from rural and urban, and female and male sections. So, the total sample is 350, from which, 175 are public and 175 are private teachers. In order to conduct the study, a self-constructed form was used to collect information and data relevant to present study. Researchers generally consider how teachers' personally feel when they are interviewed or to fill out distributing questionnaires. Present study compiled data on the role of formative assessment in academic excellence of students at elementary level through the use of questionnaire. The questionnaire, which consists of 10 statements, was designed to evaluate the factor effecting formative assessment in academic excellence of students. The questionnaires uses a 5-point Likert Scale (1) strongly disagree, (2) disagree, (3) Undecided (4) Agree (5) strongly agree. The reliability of instrument was calculated by Cronbach's Alpha and 0.870. Data was personally collected through questionnaire from sampled respondents; for data collection both rural and urban areas were visited. Similarly, both female and male teachers were selected equally.

Data Analysis

The data collected from the sampled respondents of the present study, through questionnaire was analyzed and interpreted using Chi Square test. The analysis is presented in the following tables:

Table 1: Formative Assessment as An Interactive Assessment

Levels	Observed N	Expected N	Residual	Chi square	Sig
Strongly disagree	4	70.0	-66.0	451.286	0.000
Disagree	6	70.0	-64.0		
Undecided	7	70.0	-63.0		

Agree	183	70.0	113.0
Strongly Agree	150	70.0	80.0
Total	350		

The above table shows that 333 respondents were agreed and 10 were disagreed with the statement "Formative assessment is an interactive assessment used to identify students' learning needs." The chi square value 451.286 is significant as $P < .05$. There is an association between agreement & disagreement of respondents.

Table 2: Formative assessment as tool for collection of quantitative data

Levels	Observed NN	Expected	Chi Residual square	Sig
Strongly Disagree	1	70.0	-69.0	445.299 0.000
Disagree	6	70.0	-64.0	
Undecided	10	70.0	-60.0	
Agree	173	70.0	103.0	
Strongly Agree	160	70.0	90.0	
Total	350			

The above table shows that 333 respondents were agreed and 7 were disagreed with the statement "Formative assessment is an important tool for teachers to collect quantitative data." The chi square value is 445.299 significant as $P < .05$. There is an association between agreement & disagreement of respondents.

Table 3: Formative Assessment For Instructional Decision Making

Levels	Observed N	Expected N	Residual	Chi square	Sig
Disagree	3	87.5	-84.5	276.811 .000	
Undecided	17	87.5	-70.5		
Agree	172	87.5	84.5		
Strongly Agree	158	87.5	70.5		
Total	350				

The above table shows that 330 respondents were agreed and 3 were disagreed with the statement "Formative assessment shows evidence based instructional decision making." The chi square value 276.811 is significant as $P < .05$. There is an association between agreement & disagreement of respondents

Table 4: Formative Assessment for Self-assessment. of Learners

Levels	Observed N	Expected N	Residual	Chi square	Sig
Undecided	4	116.7	-112.7	165.674 .000	
Agree	161	116.7	44.3		
Strongly Agree	185	116.7	68.3		
Total	350				

The above table shows that 346 respondents were agreed and 0 were disagreed with the statement "Learners can also play an important role in Formative assessment through self-assessment." The chi square value 165.674 is significant as $P < .05$

Table 5: Formative Assessment Beneficial for Low Achievers

Levels	Observed N	Expected N	Residual	Chi square	Sig
Disagree	1	87.5	-86.5	313.246	.000
Undecided	12	87.5	-75.5		
Agree	192	87.5	104.5		
Strongly Agree	145	87.5	57.5		
Total	350				

The above table shows that 337 respondents were agreed and 1 were disagreed with the statement "Lower achieving learners appear to advantage the most from formative assessment." The chi square value 313.246 is significant as $P < .05$ there is an association between agreement & disagreement of respondents

Table 6: Formative Assessment used Teacher to Decide to move forward or re-teach

Levels	Observed N	Expected N	Residual	Chi square	Sig
Undecided	10	116.7	-106.7	147.383	.000
Agree	162	116.7	45.3		
Strongly Agree	178	116.7	61.3		
Total	350				

The above table shows that 340 respondents were agreed and 0 were disagreed with the statement "Teacher used formative assessment to decide whether to move forward or re-teach." The chi square value 147.383 is significant as $P < .05$ there is an association between agreement & disagreement of respondents

Table 7: Formative Assessment is used for identifying reading difficulties

Levels	Observed N	Expected N	Residual	Chi square	Sig
Strongly Disagree	2	70.0	-68.0	439.914	.000
Disagree	3	70.0	-67.0		
Undecided	13	70.0	-57.0		
Agree	166	70.0	96.0		
Strongly Agree	166	70.0	96.0		
Total	350				

The above table shows that 332 respondents were agreed and 5 were disagreed with the statement "Formative assessment is used for identifying reading difficulties of students at elementary level." The chi square value 439.914 is significant as $P < .05$ There is an association between agreement & disagreement of respondents

Table 8: Formative assessment is diagnostic in nature.

Levels	Observed N	Expected N	Residual	Chi square	Sig
Strongly Disagree	1	69.8	-68.8		

Disagree	2	69.8	-67.8	485.513	.000
Undecided	8	69.8	-61.8		
Agree	193	69.8	122.2		
Strongly Agree	146	69.8	76.2		
Total	350				

The above table shows that 339 respondents were agreed and 3 were disagreed with the statement "Formative assessment is diagnostic in nature." The chi square value 485.513 is significant as $P < .05$ There is an association between agreement & disagreement of respondents.

Table 9: Students speaking ability is assessed through presentations

Levels	Observed N	Expected N	Residual	Chi square	Sig
Disagree	2	87.5	-85.5	313.200	.000
Undecided	8	87.5	-79.5		
Agree	161	87.5	73.5		
Strongly Agree	179	87.5	91.5		
Total	350				

The above table shows that 340 respondents were agreed and 2 were disagreed with the statement "Students speaking ability is assessed or checked through presentations." The chi square value 313.200 is significant as $P < .05$ There is an association between agreement & disagreement of respondents

Table 10: Teacher provides specific and honest feedback for learning purpose

Levels	Observed N	Expected N	Residual	Chi square	Sig
Undecided	13	116.7	-103.7	138.383	.000
Agree	172	116.7	55.3		
Strongly Agree	165	116.7	48.3		
Total	350				

The above table shows that 337 respondents were agreed and 0 were disagreed with the statement "Teacher provides specific and honest feedback for learning purpose." The chi square value 138.383 is significant as $P < .05$. There is an association between agreement & disagreement of respondents.

Discussion

The first objective of present study was to recognize need of formative assessment at elementary level. It was found that this is an interactive assessment which is used to gather both qualitative and quantitative data. Learners can also assess themselves especially lower achieving students get the maximum benefit from this type of assessment It is also very helpful for the teacher to decide whether to move forward or re-teach.

The second objective was to realize learning difficulties of learners through formative assessment. It was found that for the

identification of reading, writing and speaking difficulties of the students, formative assessment is used. This assessment is diagnostic in nature and provides clear learning targets. Moreover students learning capacity is increased due to consistent use of Formative assessment.

Conclusion

Formative assessment helps teachers to adopt teaching to meet learning needs and it also helps teachers to decide whether to move forward or re-teach. Formative assessment helps in the representation of evidence based instructional decision making. Moreover, it has a constructive impact on many students' behaviors.

Learners can also assess themselves through self-assessment. For the improvement of students, this type of assessment is used and a learner learning is enhanced by consistent use of this assessment.

Teacher uses simple and easy language while providing feedback to students so they can understand it and improve learning. Students will feel easy if feedback start with positive comments and ends with encouraging comments.

On the whole, respondents were agreed that Formative assessment is very vital for the academic excellence of students. Teachers should use variety of assessment for the overall development of students. Teachers can better motivate their students by using variety of assessment.

Recommendations

On the basis of the findings of the study following recommendations are made by the researcher:

1. Formative assessment should be the tool for the teacher to collect quantitative data. Tests could be the best technique to collect quantitative data.
2. Formative assessment should also be used in such a way as it represents evidence based decision making.
3. Teacher should also provide an opportunity to students for their self-assessment. Through this students can actually find that at which level of learning they fall.
4. Teacher should design different activities for students to enhance students learning.
5. Teacher should also involve their student presentations in their day to day activities for improving speaking ability. Students confidence and presentation skill can be improved by using this type of assessment.

References

1. Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample. *The internet and higher education*, 11(3-4), 133-136.
2. Altman, J. R., Lazarus, S. S., Quenemoen, R. F., Kearns, J., Quenemoen, M., & Thurlow, M. L. (2010). 2009 survey of states:

- Accomplishments and new issues at the end of a decade of change. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes
3. Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, 5(1), 7-74.
 4. Bennett, R. E. (2011). Formative assessment: A critical review. *Assessment in education: principles, policy & practice*, 18(1), 5-25.
 5. Briggs, A., Morrison, M., & Coleman, M. (2012). Research methods in educational leadership and management.
 6. Dixon, H., & Ecclestone, K. (2003). Potential benefits of formative assessment in general practice education. *Education for Primary Care*, 14(2).
 7. Filsecker, M., & Kerres, M. (2012). Repositioning Formative Assessment from an Educational Assessment Perspective: A Response to Dunn & Mulvenon (2009). *Practical Assessment, Research & Evaluation*, 17(16), n16.
 8. Frederiksen, J. R., & White, B. Y. (2004). Designing assessments for instruction and accountability: An application of validity theory to assessing scientific inquiry. *Teachers College Record*, 106(14), 74-104.
 9. Fullan, M. (2005, June). Turnaround leadership. In *The educational forum* (Vol. 69, No. 2, pp. 174-181). Taylor & Francis Group.
 10. Fontana, D., & Fernandes, M. (1994). Improvements in mathematics performance as a consequence of self-assessment in Portuguese primary school pupils. *British journal of educational psychology*, 64(3), 407-417.
 11. Klenowski, V. (2000). Portfolios: promoting teaching. *Assessment in education: Principles, policy & practice*, 7(2), 215-236.
 12. Koh, K., Lim, L., & Habib, M. (2010, August). Building teachers' capacity in classroom-based formative assessment. Paper presented at the meeting of the 36th International Association for Educational Assessment Conference, Bangkok, Thailand.
 13. Lee, C., & Wiliam, D. (2005). Studying changes in the practice of two teachers developing assessment for learning. *Teacher Development*, 9, 265-283.
<http://dx.doi.org/10.1080/13664530500200244>
 14. Looney, R. E. (2005). Iraq's Shadow Economy.
 15. McMillan, James H., Venable, Jessica C. and Varier, Divya. (2013). Studies of the effect of formative assessment on student achievement: So much more is needed. *Practical Assessment, Research & Evaluation* 18 (2). Retrieved from: <http://pareonline.net/getvn.asp?v=18&n=2>.
 16. Organisation for economic co-operation and development [OECD]. (2005). Formative assessment: improving learning in secondary classrooms. Paris: OECD.

17. Popham, W. J. 2008. Transformative assessment. Alexandria, VA: Association of Supervision and Curriculum Development.
18. Sadler*, D. R. (2005). Interpretations of criteria-based assessment and grading in higher education. *Assessment & evaluation in higher education*, 30(2), 175-194.
19. Sawyer, R. J., Graham, S., & Harris, K. R. (1992). Direct teaching, strategy instruction, and strategy instruction with explicit self-regulation: Effects on the composition skills and self-efficacy of students with learning disabilities. *Journal of educational psychology*, 84(3), 340.
20. Vispoel, W. P., & Austin, J. R. (1995). Success and failure in junior high school: A critical incident approach to understanding students' attributional beliefs. *American Educational Research Journal*, 32(2), 377-412.
21. Wiliam, D. (2011). Embedded formative assessment. Bloomington, IN: Solution Tree Press.
22. Thompson, M., & Wiliam, D. (2007, April). Tight but loose: A conceptual framework for scaling up school reforms. In *annual meeting of the American Educational Research Association*. Chicago, IL.