

Teachers' Attitudes and Practices Towards Formative Assessment in Primary Schools

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Abstract

The continual and swift reforms the education system in Kosovo has endured in the recent decade have continuously challenged the teaching staff. The aim of this study is to ascertain whether there is a connection between the teachers' attitudes towards formative assessment and the application of this assessment method. The alternative hypothesis is that there is a statistically significant correlation between the teachers' attitudes and actions towards formative assessment. Results indicate that a connection between the teachers' attitudes and practices towards formative assessment, $r=0.620$, is noticeable. Tellingly, t-test results indicate that there are differences between attitudes towards formative assessment and its implementation in practice. The average of the teachers' attitudes towards formative assessment is higher than the average of teachers who apply formative assessment.

Keywords: *primary education, teachers, practice, attitudes, formative assessment.*

Introduction

Formative assessment is a strategy through which teachers and students are introduced to the results achieved during the teaching/learning process. Formative assessment is applied with the purpose of identifying the level of the students' knowledge, and it is thought to instigate the students' learning. This kind of assessment helps the teachers to get information about their students' level of knowledge in relevant subjects. It also guides them to the steps that have to be undertaken to improve their knowledge. Through the received feedback from teachers, students can also become aware of their strengths as well as their weaknesses in certain subjects. Based on the aforementioned feedback, they will engage more or less in the relevant subjects. Both parties,

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teachers and students, benefit from formative assessment. Teachers may use it to keep the class in control, whereas students use it to keep their personal results in control.

Regardless of its advantages, formative assessment has started to be introduced too late in Kosovo. Kosovo's education system went through immense and continues reforms for the past two decades. Teachers were tasked with a lot of training and other forms of professional development which also included advancing skills in using formative assessment (Osmani, 2011). Despite the efforts for changing traditional education practices with contemporary ones, it appears the changes have happened at a slow rate. We will take the example of formative assessment which still can not find sufficient implementation by teachers. In most cases, teachers were trained and have positive attitudes, and not only towards formative assessment but also towards other innovations, however, when it comes to their application in practice, they show hesitation. There could be many reasons that make the teachers have certain attitudes towards the innovations, and different actions when it comes to their implementation in practice. Perhaps they are simply accustomed to their daily work routine and do not want to change their long-time practices, or perhaps their long work experience within a certain system, without innovations, has influenced this resistance towards implementing the innovations.

A research study that will document their attitudes and actual practice would be valuable for knowing what exactly is going on in the field. Results from such a study and its further recommendations would be very important for the education policies in Kosovo.

We hope that formative assessment, as an immensely important strategy for the improvement of quality in education, finds the appropriate space in Kosovar schools. We also hope that teachers apply it in practice as a common teaching strategy, and not as a "recipe" to be used when they have problems.

Questions and hypotheses

Question: Are there differences between the attitudes and implementation of formative assessment in practice by Kosovar teachers?

Hypothesis: There are significant differences between the attitudes towards formative assessment and its implementation in practice by Kosovar teachers.

Formative assessment practices in the classroom

Formative assessment is supported by active chain reactions that help the students' learning (Iowa Core, 2010). One of the strongest assumptions concerning the connection between formative assessment and the student in the teaching/learning process has been made by John Hattie. The significance of teachers who receive feedback from their students is known to be an important topic in Hattie's book (Hattie, 2008), and he uses the term "formative assessment" to describe this special process of the teachers who continually assess their effects on teaching, especially in regard to their students' learning advancement.

Furthermore, according to Brookhart (Brookhart, 2011), formative assessment has dominated the educational discourse during recent decades, thus placing the attention towards the assessment practices that help the learning, and it is believed to be very productive when applying the teaching practices that support the students' learning (Yan & Cheng, 2015). Likewise, research conducted by Lyon and Leusner (2008), confirms that when teachers offer their students reactions to foster their thinking, to identify the specific fields that need improvement, and to take time for the said improvement, students act based on those reactions to improve their work.

Formative assessment is not a simple strategy of the teachers' work that swiftly regulates the assessment process, it rather requires time and a step by step change of the teaching/learning quality (Black & William, 1998; Kenna, J., & Russell, 2018). In a philosophical aspect, formative assessment originates from the constructivist theory since this kind of assessment targets the stimulation of learning. The increasing focus on the development of conceptual learning, the ability to apply the skills gained on scientific/learning bases and the way it is enabled by formative assessment, is closely related to the theory of constructivism. Implications of this philosophical/theoretical approach in the process of teaching/learning, as well as assessment, are well-known, and some scholars have even considered them as both sides of the same coin (Badders, 2000). In this way, constructivists believe that a meaningful assessment should include the examination of the students' whole conceptual net (cognitive concepts previously formed), and not only focus on facts and mechanic principles. Therefore, it can be rightfully concluded that these beliefs or approaches have preceded the formative assessment idea.

Both the theory and research suggest the critical role that formative assessment can play in the students' learning. Through evaluation of the students' needs and the monitoring of their

progress, the teaching/learning sequences can be designed appropriately with instructions to regulate the teaching/learning course and refined programs, so that the focus of the students' learning aims are more effective. Studies regarding the teachers' perceptions on assessment indicate that teachers have opinions that favor the formative assessment (Sach, 2012).

Black and William's research concerning the teachers' autonomy indicates that "each teacher should find his/her own ways of incorporating assessment in his/her model of work in the classroom and the norms and cultural expectations of a special school community" (Black & William, 1998, p.143). Hence, teachers should create structures in their classrooms that offer students the opportunity to practically engage during the learning process. The change of methodology requires, in the first place, the change of what teachers believe to be their students' ways of learning, and in the second place, what teachers qualify as effective teaching strategies (Webb, Nemer, & Ing, 2006).

The main principles of formative assessment enable the identification of the weaknesses and strengths by increasing the students' motivation and metacognition, and by ensuring the teaching/learning reactions inform them about their capacities for improving the learning (William, Lee, Harrison, & Black, 2004). Both teachers and students can benefit from formative assessment, from receiving the teaching/learning data that may be used to support the personalized teaching/learning. According to Marzano and Pickering (1997), it is a common responsibility of both teachers and students to work and to maintain positive attitudes and perceptions, or when possible, to change the negative attitudes and perceptions.

There is confusion among teachers regarding the meaning of formative assessment, this as a result of different viewpoints, definitions, and approaches in applying formative assessment at school (Chappius & Chappius, 2007/2008).

Attitudes are the learned predispositions that lead us actively towards specific behavior and are manifested through evaluation of a certain subject with a degree of likeness or dissimilarity. Individuals usually have attitudes that concentrate on objects, people or institutions and they also concern the mental category (MEST, 2016).

Attitudes are defined as the state of mind, behavior, or action concerning several issues expressed as an opinion or purpose. Thus, teachers' attitudes and perceptions influence their teaching style, their choice of sources, and the creation of a certain climate in the classroom. Many researchers

consider attitudes, perceptions, and beliefs to be subgroups of a group of constructs that designate, define and describe the structure and content of the mental state which is thought to instigate a person's actions. It is very important to emphasize that "the teacher's attitudes" are often transferred to his/her students through teaching (Barnyak & Paquette, 2010). Therefore, the teachers' attitudes can impact not only the students' motivation to learn, but also affect the entire teaching/learning environment (OECD, 2009). Researchers have conducted numerous studies about the attitudes and practices regarding the assessment. However, most of the studies have focused only on one assessment aspect (Dixon & Haigh, 2009).

Attitudes are formed from people's direct experience, and information and data they have about a certain issue. Fazio and Olson (2003) define attitudes as formed convictions when an individual believes that an object or person owns desirable or undesirable features that will bring desirable or undesirable results. The perception, on the other hand, according to Musai (1999), is defined as "the ability to know the usual, the ones we know, and to understand what you do not know." (p129). According to Ballantine and Spade (2006), understanding the teacher's role is the key to understanding the education system, since the teachers' attitudes are very important for understanding and improving the teaching/learning process. Researchers have studied the teachers' attitudes and practices regarding assessment, but they have not managed to detect the connection between these variables under a theoretical frame (Buyukkarci, 2014). They are formed through the stipulation, on the basis of experience with the parents, schools, peers and the means of information. As attitudes are related to a group of individual values, there are several factors that affect their formation or their change.

There is a considerable similarity between the terms of knowledge and beliefs in the concept of teachers' personal knowledge. Practical knowledge, researched for the first time in the teaching practice by Elbaz (2018), and further developed by Connelly and Connelly (1998), is an explanation of the way a teacher knows or understands the situation in the classroom. Attitudes are important concepts in the teaching process, actions in the classroom and the acceptance of the change. Attitudes and actions in the classroom affect the teachers changing process, hence they are considered very important in understanding the classroom practices and helping the teachers develop the critical thinking as well as aiming the change of practices within the process (Connelly & Clandinin, 1998). Considering the teachers' attitudes is very important for the teaching/learning process, different authors have focused on studying the teachers' attitudes (Darling-Hammond,

2000) as the biggest polemic in the literature about the teachers' change is related to the difficulty of changing the attitudes and practices. Several researchers argue that the change is very difficult, if not impossible. This obvious difficulty is often used as an explanation that teachers are unchangeable in their attitudes. However, some other researchers and teachers are optimistic that teachers and students can change, in fact, their attitudes and practices often change, and that programs can help them do this in an important and valuable way.

Comparing the use of formative assessment and other basic teaching practices may be quite challenging, and this can serve as an explanation why most studies about formative assessment conducted until today are based more on theoretical discussions rather than empirical research. If formative assessment really supports the students' learning, it is important to empirically demonstrate that it does precisely that, in order to avoid its disappearance. To do this, we should develop a method to measure its use in the classroom.

Method

The study aim

The aim of this study, among other things, is to ascertain if there is a positive or negative correlation between the attitudes and implementation of formative assessment in practice by Kosovar teachers.

Research Design

In this research, we have used a quantitative approach. "The quantitative approach originates from philosophy of rationalism, and it follows a range of exploring procedures that are inflexible and prior structured and defined, that aim the determination of the quantity of change in a phenomenon; it focuses on measuring the variables and process objectivity; it trusts the support of the truth on the basis of the sample size; it gives validity and credence to findings and it imparts the findings in the analytic and synthetic form, drawing conclusions and meanings that can be generalized." (Kumar, 2017, p.15).

Our study is an observational analytic one. It gathers data to document and analyze a certain phenomenon within a certain population. This implies the use of the teachers' questionnaires that measure the implementation of formative assessment, the correlation of attitudes and actions

towards the implementation of formative assessment. The derived values have been used to express the frequency, differences, correlation, etc.

The study population and groups

The study targeted primary school teachers in Kosovo who are engaged in teaching grades 1-5. The research included 47 primary school teachers, 43 female teachers, and 4 male teachers. These teachers were randomly selected from 10 different Kosovo schools.

Research instrument

The main instrument of this research was the structured questionnaire for teachers, used to highlight the actual situation of the formative assessment application in primary education and effects of this methodological approach in the teaching/learning process in completing the curriculum requests. The instrument used for the teachers was the questionnaire for formative assessment designed by the Qualifications and Curriculum Authority (QCA) from the United Kingdom.

Through the teachers' instrument for formative assessment, the state of formative assessment, and the teachers' attitudes and actions in applying formative assessment have been analyzed.

The research instrument for formative assessment was a Likert-scale questionnaire which consists of 30 questions/articles and is divided into two parts. The first part includes variables for demographic characteristics (age, sex, teaching experience), whereas the second part includes variables that consist of four scales:

- **Students' inclusion in the teaching/learning process** - it consists of 6 items;
- **Quality modeling** - it consists of 8 items;
- **Giving feedback** - it consists of 10 items;
- **Self-assessment** - it consists of 6 items.

The teachers' attitudes towards formative assessment as well as their actions in implementing formative assessment have been evaluated through the instrument for formative assessment. For the teachers' attitudes evaluation, these five following alternatives have been used: A= very valuable, B= valuable, C= I don't have a strong viewpoint, D= little valuable, E= not at all valuable. Regarding the alternatives about the teachers' actions in relation to the frequency of

using the strategies in the classroom, there are also five alternatives: 5= in most classes, 4= in most days, 3= every week, 2= every term, 1= never.

Reliability of the measuring instrument for teaching according to Cronbach's Alfa model

In order to test the internal reliability of the instrument, Cronbach's alpha and Guttman models have been used, taking the value of over 0.7 as a value that proves whether the questionnaire has internal reliability or not. For results evaluation of all statistical tests, it has been appointed the level of statistical significance 0.05.

In order to measure the differences between the teachers' attitudes and actions, the t-test has been applied. Thus, the use of this statistical test has served to test the zero hypotheses (H0). The Pearson correlation coefficient has been used to measure the correlation between the variables, by calculating the values as follows:

- 0.00-0.25- very weak correlation;
 - 0.26-0.49- weak correlation;
 - 0.50-0.69- average correlation;
 - 0.70-0.89- high correlation;
 - 0.90-1.00- very high correlation.
- ***Cronbach's Alfa Model***

From results presented in the table, we can see that the measuring instrument that measures formative assessment completely satisfies the most important condition for the application of the measuring instrument, respectively the reliability values of the Cronbach's Alfa model. It has a high-reliability scale, so reliability is excellent, as $\alpha=0.927$.

Table 1

Reliability of the measuring instrument of formative assessment for teachers according to Cronbach's Alfa model

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.927	0.907	57

- ***Guttman Model***

According to the Guttman model, the instrument for measuring formative assessment satisfies the most important condition for application. In table 2, it can be seen that out of 6 calculated coefficients, the lowest value is 0.859 lambda, whereas the highest value is 0.949 lambda. Based on these results, it can be ascertained that the measuring instrument is very reliable.

Table 2

Reliability coefficients for the instrument of formative assessment for teachers according to the Guttman model

Reliability Statistics		
Lambda	1	0.949
	2	0.933
	3	0.949
	4	0.890
	5	0.859
	6	0.943
N of Items		57

Based on results presented in the tables above concerning the reliability of the measuring instrument *formative assessment* through Cronbach and Guttman models, it can be ascertained that the instrument is very reliable.

Data collection procedure and data analysis

Data collection procedure in the field started with delivering the questionnaires to the participating teachers in the appropriate time, without hampering the teaching/learning process. A teacher needed about 25-30 minutes to complete the questionnaire.

After data collection, the database in the SPSS program has initially been created for the teachers' questionnaires. After inserting all the data, they have been analyzed, and the statistical data of results have been obtained.

Results and Discussion

The results show that the study hypothesis is accepted. There is a correlation between attitudes toward formative assessment and its implementation in practice by Kosovar teachers. Interestingly this correlation when compared with t-test results, seems as if it would have been negative. T-test results indicate that teachers show positive attitudes towards formative assessment but they do not practice it enough in their daily work. So there are differences between attitudes towards formative assessment and its implementation in practice.

Frequencies

Results indicated that 63.5 % of the teachers have a completely positive attitude towards formative assessment, whereas 40 % of these teachers have a completely positive action; 25.1 % have a partially positive attitude, whereas 35.2 % have a partially positive action; 5.1 % have a neutral attitude, whereas 15.2 % have a neutral action; 4.6 % have a partially negative attitude, whereas 3.7 % have a partially negative action; 1.7 % have a completely negative attitude, whereas 5.9 % of the teachers have a completely negative action regarding formative assessment.

Table 3

Results of the attitudes and actions towards formative assessment

Total	Completely negative	Partially negative	Neutral	Partially positive	Completely positive
Attitudes - formative assessment	1.7%	4.6%	5.1%	25.1%	63.5%
Actions - formative assessment	5.9%	3.7%	15.2%	35.2%	40%

Correlation and T-test results

Based on the results (see table 4), it can be noticed that the average of the teachers' attitudes towards formative assessment is 4.3808, and the standard deviation is 0.61745, whereas the average of actions is 3.9199, and the standard deviation is 0.74296 ($t=5.178$, $p=0.000$). Results indicate that there are statistically important differences between the teachers' attitudes and actions regarding formative assessment. Based on this data, it can be ascertained that the teachers' attitudes are at a higher level than their actions. Generally, teachers have a fairly positive attitude towards formative assessment, but they do not apply it in practice accordingly.

Table 4*Teachers' attitudes and actions*

Paired Samples Statistics						
	Mean	N	Std. Deviation	Std. Error Mean		
Total of attitudes	4.3808	146	.61745	.09104		
Total of actions/behavior	3.9199	146	.74296	.10954		

Paired Samples Test							
	Paired Differences					t	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower	Upper		
Differences between attitudes and actions regarding formative assessment	46094	.60374	.08902	.28165	.64023	5.178	.000

Based on the results, it can be noticed that there is a correlation of an average level, that is statistically important between the teachers' attitudes and actions/ behavior in practice regarding the implementation of formative assessment, $r=0.620$, whereas $p=0.000 < 0.05$. So, the teachers' attitudes regarding the formative assessment influence on the average its application in their teaching practice. Based on this result, teachers with a positive attitude towards formative assessment do not necessarily apply it in their teaching practice and vice versa.

Table 5*Correlation between the teachers' attitudes and actions*

Paired Samples Correlations			
	N	Correlation	Sig.
Total of attitudes & Total of actions/behaviour	146	.620	.000

This study also provided a correlational analysis for the teachers. Based on the teachers' results, there is a correlation of an average level, positive and important between the teachers' attitudes and actions. The correlation coefficient is $r=0.620$, and it is statistically important $p=0.000$. The t-test results indicate that there are notable differences between the teachers' attitudes and their actions in implementing the formative assessment. Results derived from the correlation and testing through the t-test indicate that there are differences between the teachers' attitudes and actions regarding the implementation of formative assessment. Thus, teachers have different attitudes and

different actions towards formative assessment. It is not enough that they have a positive attitude towards formative assessment if they do not undertake concrete actions to implement it.

While formative assessment may have an important effect on the students' attitudes and their achievements, the research results indicate that attitudes and actions in the classroom influence the teachers' changing process, and are thus considered very important in understanding the classroom practices that help the teachers develop the critical thinking and aim at changing the practices within the process. According to (Schoenfield, 1992), attitudes do not only affect the teachers' way of teaching, but also the content they teach. Teachers' attitudes towards formative assessment are positive, but in many cases, they do not apply formative assessment or do not apply it in the right way and to the right degree (Schoenfield, 1992).

Hence, there are differences between the teachers' attitudes and actions in implementing formative assessment in practice. It takes time for an individual to form an attitude and implement it in practice. Since formative assessment may be considered an innovation in Kosovar schools, its lack of implementation or its inappropriate implementation may be justified. As time goes by, with a more frequent implementation of formative assessment, Kosovar teachers will see the positive results it provides in increasing the teaching/learning quality and will be encouraged to apply formative assessment with the purpose of identifying the problems and achievements of the learning results. Actions are defined as activities undertaken by people in regard to a certain issue that is related to their attitudes towards that very issue. The connection between the individual's attitudes and actions is not always direct, and it is not necessarily powerful. There are cases when a person might have a certain attitude towards an issue, but not implement his/her attitude in practice (Morris & Albert, 2008). Some people consistently harmonize their actions and their attitudes, whereas others are more reserved and their actions mostly do not coincide with their attitudes (Morris & Albert, 2008). Hence, it is not sufficient for the teachers to only have a positive attitude towards formative assessment, it is rather necessary to also see the results derived from formative assessment. This helps to analyze the constructive actions to be undertaken instead of a rapid adjustment (Boody, 2008). The challenge is to make the student demonstrate what he/she learned in the classroom. Many teachers do not achieve the connection between their teaching process and what they are really practicing and vice versa (Rudd, 2007).

Conclusion

It can be ascertained that the teachers' attitudes are not in harmony with their actions in regard to the implementation of formative assessment. Therefore, it is important for the state institutions to measure the success of these practices in order to approve them for replication. This conclusion derives from descriptive results, where differences between the average of the teachers' results concerning their attitudes towards formative assessment and the results of its implementation in practice are more than noticeable. In most cases, teachers theoretically agree with the application of innovations in teaching, but they hesitate to practice these innovations. Based on the results, it can also be ascertained that there are differences between the teachers' attitudes and their practical actions in implementing the formative assessment. So, Kosovar teachers, regardless of their positive attitudes towards formative assessment, may or may not implement it in practice, whereas teachers who do not have a positive attitude towards formative assessment may implement it.

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