Challenges of implementing formative assessment at Nazarbayev Intellectual School

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NUGSE RESEARCH APPROVAL DECISION LETTER

The NUGSE Research Committee reviewed the project entitled "Challenges of
Implementing Formative Assessment at one Nazarbayev Intellectual School" by Assel
Akhmedina and decided:

☐ To grant approval for this study
☑ To grant approval for this study subject to minor changes, to be signed off by supervisor
☐ To request additional information/clarification to determine approval
☐ To refer the application for IREC review

Approval subject to minor changes: The study is approved subject to minor changes.

Sincerely,

NUGSE Research Committee

November 16, 2016

Acknowledgement

I would like express my sincere gratitude to my supervisor Professor Dilrabo Jonbekova for support and guidance I received throughout the whole process of writing my research work.

I am also thankful to all professors at NU GSE whose courses I attended. It has been a great experience that contributed to my study.

Abstract

Formative assessment is world trend in educational assessment. There have been various studies aimed at exploring its impact and effectiveness in teaching and learning all around the globe. However, this assessment instrument is quite recent for Kazakhstani educational context. The purpose of this study was to discover NIS teachers' experiences and professional stories regarding formative assessment so as to identify key difficulties and challenges they face in implementing it. It was also focused on identifying teachers' attitudes towards formative assessment and ways of increasing its effectiveness in school. The study was conducted in one of Nazarbayev Intellectual Schools which has been using formative assessment as a main instrument for measuring students' achievements in learning. Qualitative research design was used to provide deep exploration of the phenomenon. The participants were experienced and non-experienced teachers of different subjects which allowed to look at classroom assessment from various perspectives.

The study revealed that teachers' main challenges are related to insufficient knowledge and experience in formative assessment. Moreover, students' attitudes and roles in assessment were found to be an important factor that may create obstacles for teachers. Consequently, professional development courses and teachers' collaborative work were suggested for improving the current situation.

Formative assessment was proved to be a powerful tool for increasing student achievement in learning. However, the study shows that its success is highly dependent on teachers' professionalism. Therefore, the findings of the research allow both policymakers and school administration to see the issues that have to be addressed in order to create favorable conditions for effective classroom assessment in Kazakhstani education.

Key words: classroom assessment, challenges, reform, assessment policy, teachers.

Аннотация

"Трудности применения формативного оценивания в одной из Назарбаев

Интеллектуальных школ"

Формативное оценивание является одним из мировых трендов в оценивании

учебных достижений учащихся. На сегодняшний день во всем мире проведено

большое количество исследований, направленных на изучение эффективности и

влияния данного инструмента оценивания на обучение и преподавание. Однако, для

Казахстанского среднего образования формативное оценивание является

относительно новым методом. Данное исследование направлено на изучение опыта

учителей Назарбаев интеллектуальной школы с целью выявления наиболее трудных

аспектов в реализации формативного оценивания на практике. Также целью

исследования было изучить мнения учителей относительно эффективности данного

метода оценивания и предложить пути его улучшения в контексте школы.

Исследование было проведено в одной из Назарбаев интеллектуальных школ, в

которой формативное оценивание является основным инструментом для измерения

достижений учащихся в обучении. Метод качественного исследования был

применен с целью более глубокого изучения профессионального опыта учителей.

Участниками исследования являлись учителя различных предметов с большим и

маленьким педагогическим стажем, что позволило взглянуть на проблему с разных

сторон.

Результаты исследования показали, что основные трудности в применении

формативного оценивания связаны с недостатком профессиональных знаний и

опыта. Более того отношение учеников и их роль в оценивании также является

важным фактором, влияющим на успешность применения формативного

оценивания. Следовательно, в качестве основных путей решения проблем и

трудностей, связанных с реализацией формативного оценивания было предложено проведение курсов профессионального развития и совместная работа учителей.

Формативное оценивание – мощный инструмент, способный значительно улучшить знания и умения учащихся. Данное исследование показало, что успешность применения формативного оценивания очень сильно зависит от профессионализма учителей. В связи с этим, для администрации школы как и для других лидеров национального образования очень важно знать с какими трудностями сталкиваются учителя для оказания профессиональной поддержки, которая в свою очередь создаст благоприятные условия для эффективной реализации данной образовательной реформы.

Ключевые слова: оценивание обучения, трудности, реформа, учитель.

Аңдатпа

Қалыптастырушы бағалауды Назарбаев зияткерлік мектебінде

қолданудың қиындықтары

Қалыптастырушы бағалау білім алудағы оқушылар жетістіктерін бағалаудағы
әлемдік тренд деп те айтуға болады. Қазіргі таңда қалыптастырушы бағалаудың
білім берудегі тиімділігін зерттеуге бағыттылған көптеген халықаралық ғылыми
жұмыстар бар. Алайда бұл бағалау түрі Қазақстандық білім беру контекстіне
жақында ғана енді. Бұл ғылыми жұмыс Назарбаев зияткерлік мектебі мұғалімдерінің
қалыптастырушы бағалауды қолданудағы тәжірибесі мен қиындақтарың зерттеуге
бағытталған. Сонымен қатар зерттеу жұмысының тағы бір мақсаты мұғалімдердің
қалыптастырушы бағалаудың тиімділігі жөніндегі ой-пікірлерін анықтау және
қиындықтарды жою мен олардың алдын алу жолдарын ұсыну болды. Аталған
зерттеу қалыптастырушы бағалауды негізгі құрал ретінде қолданатын Назарбаев
зияткерлік мектептерінің бірінде өткізілді. Мұғалімдердер тәжірибелеріне терең
шолу жасау мақсатында сапалы зерттеу әдісі қолданылды. Зерттеуге әртүрлі пәннен
сабақ беретін, әрі үлкен және кішкентай педагогикалық өтілі бар мұғалімдер
қатысқандықтан аталған мәселе жан жақты қарастырылды.

Зерттеудің нәтижелері бойынша қалыптастырушы бағалауды қолданудағы
негізгі қиындықтар мұғалімдердің кәсіби біліктіліктері мен дағдыларының
жетіспеушілігімен байланысты. Сонымен қатар оқушылардың танымдары мен рөлі
қалыптастырушы бағалаудың тиімділігіне зор әсерін тигізеді. Демек, мұғалімдердің
бірлескен жұмысы және кәсіби біліктілікті арттыру курстары қалыптастырушы
бағалаудағы қиындықтарды алдын алу жолдары ретінде ұсынылды.

Қалыптастырушы бағалау – білім берудегі қуатты құралдардың бірі болып
табылады. Алайда, бұл әдістің тиімділігі мұғалім біліктілігімен тікелей байланысты.

Сондықтан, бұл зерттеу жұмысының нәтижелері мектеп әкімшілігі және басқа да
білім берудегі көшбасшылары үшін маңызды ақпарат көзі болып табылады. Өйткені
қалыптастырушы бағалауды қолданудағы мұғалімдердің қиындықтарын білу оларға
тиісті қолдау жасауға мүмкіндік береді.

Кілт сөздер: оқу процессіндегі бағалау, қиындықтар, реформалар, мұғалім.

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Chapter 1. Introduction

Educational assessment is a significant component of teaching and learning process. According to Stiggins and Conklin (1992), ordinary teachers spend up to one-half of the classroom time assessing and evaluating students' learning (as cited in Wyatt-Smith & Cumming, 2010, p.1). The interest of scholars and policymakers towards assessment has always been very high and assessment has been one of the key targets in educational research in recent years. As a result, the way students are assessed in class has undergone various changes all over the world.

In 21st century classroom assessment goes beyond classical paper and pencil quizzes. It has a lot more functions and is used for various purposes such as diagnosis, monitoring, grading, providing feedback, improving instruction, motivating and others (MacMillan, 2014). One of the classroom assessment types aimed at "gathering evidence of student learning and providing feedback to students, and adjusting instructional strategies to enhance achievement" is formative assessment (MacMillan, 2014, p.93). It was also referred to as assessment to promote learning of students. According to the Assessment Reform Group, "assessment that is explicitly designed to promote learning is the single most powerful tool we have for raising standards and empowering lifelong learning" (as cited in Earl, 2010, p.16). Moreover, there is another benefit of formative assessment related to motivation and increasing students' self-confidence in learning. Boston (2012) states that formative assessment helps students believe that everyone can learn and achieve positive results in their studies. In other words, formative assessment has also features that affect students on psychological and emotional levels giving them opportunity to avoid unwillingness and discouragement in learning. Therefore, formative assessment has been defined as assessment for learning, as it is able to impact students' performance and improve instruction.

1.1 Background of the Problem

Formative assessment was first introduced in Kazakhstani educational context

within the establishment of Nazarbayev Intellectual Schools (NIS). These schools were

opened by the initiative of the President Nursultan Nazarbayev in 2008. The NIS project

was launched to adapt and implement best international practices into Kazakhstani context.

Moreover, one of the strategic missions of NIS was to transmit its experience to all the

other mainstream schools across the country later on (nis.edu.kz, 2013). Therefore, it is

clearly seen that NIS are considered to be not only a front-rank schools for gifted and

talented children, but also a platform for implementing and applying advanced

technologies and methods in teaching.

One of the first advances that were implemented in NIS was a new assessment

model, which was completely different from the previous traditional 5-scale assessment[1].

The reason why traditional norm-based assessment was considered to be ineffective was

explained by director of Department for Educational Quality Assessment at Autonomous

Educational Organisation "Nazarbayev Intellectual Schools" Gulnar Kurmanbayeva:

> ... traditional assessment system does not follow for complex evaluation of all
> competences of the students; it is primarily focused on the evaluation of the
> student's personality rather than his/her educational achievements. The final mark,
> according to our practice depends on teacher's opinion. It should be noted that there
> were situations when the teacher had difficulty in explanation on the given marks
> (Kurmanbayeva, 2016, p.47)

Therefore, traditional assessment system in NIS was replaced by formative

assessment which is aimed at comparing student's achievement to his own previous result

and focused on considering students' individual features and needs in learning.

Another difference of formative assessment from traditional model is that students

are not graded based on teacher's opinion and perception. Instead, students' evaluation is

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[1] an assessment type in which students' performance is graded by giving points from 1 (lowest) to 5
(highest).

based on the criteria and rubrics that are generated according to students' specific needs in learning. Harlen and James (2006) define formative assessment as "criterion-referenced" which means both students and teachers use and aware of the assessment criteria.

Finally, there is one more significant feature of formative assessment in comparison with traditional five-scale model. In the process of formative assessment students are not focused on grades they achieve. On contrary, the feedback given by teachers is more important as it guides students' learning and identifies the area of improvement.

1.2 Problem Statement

Having considered the features of both five-scale assessment model and formative assessment it can be clearly seen that the two models have many differences. Most importantly, the two assessment tools have different purposes in teaching. Therefore, implementation of new approach in evaluating students' knowledge can be rather challenging for Kazakhstani educators as 5-scale assessment has always been the main assessment instrument.

Formative assessment can be difficult for both teachers and school administrators. Firstly, teachers are to change their philosophy and understanding of assessment purpose and its methods. This reform will probably transform and bring significant changes in teaching and learning styles due to the fact that formative assessment is not based on comparing students' with each other and previous pedagogy to some extent will not be applicable any more. Another challenge may be connected with school administrators, because their role is crucial at implementing any policy or reform. Moreover, senior management teams are those who support and guide teachers in overcoming challenges, and they also have to change their vision of classroom assessment and shift to new standards and purposes in assessment. Hence, considering the previous experience of

Kazakhstani schools in assessing students' knowledge in class, going through such significant changes may not be an easy process for teachers and administrators.

Another important stakeholder in implementing formative assessment at NIS is a student. This is mainly because students' philosophy and attitude towards class assessment are to go through transformation as well. It means that students also need to change their learning styles and get used to the new way of assessment in class. This process can be rather difficult for students because of previous experience. One of the main changes that students have to undergo is learning to study without comparing themselves with other students and competing to get a better grade.

Thus, it is distinctly seen that teachers, administrators and students are key stakeholders in implementing formative assessment at NIS, and having to go through such significant changes may turn to a rather complicated process and create obstacles to successful implementation of a new assessment model at NIS.

In addition, the experience of NIS is a valuable source for all the other mainstream schools which are to implement formative assessment in the nearest future. This means that teachers of NIS could be seen as a bridge between new assessment model and mainstream teachers, as they are the ones who have already employed formative assessment in a Kazakhstani context.

What is more, there is a lack of qualitative studies on Kazakhstani teachers' and students' perception towards the effectiveness of formative assessment and challenges of its implementation in the national context. One of the studies conducted on Kazakhstani assessment was a research done by Makhmetova (2014), graduate student of Nazarbayev University. The study was aimed at discovering university teachers' perception towards assessment in Kazakhstan. However, there is lack of empirical study targeted on challenges

of formative assessment as a learning tool. Therefore, this gap in research could possibly hinder the effective use of assessment for learning in Kazakhstani schools.

Hence identifying the main challenges of implementing formative assessment at NIS and the main reasons behind them will allow policymakers, teachers and teacher trainers prevent the same issues in public schools. The process of dissemination of NIS experience in implementing new assessment model has already started and all schools in Kazakhstan are to apply formative assessment in grade 1 beginning from 2016 (Kurmanbayeva, 2016). That is why being aware of the challenges and issues that teachers may face implementing formative assessment might be useful for providing professional support and guidance for both NIS and public school teachers.

1.3 Purpose of Study

The study aims to explore the main challenges of implementing formative assessment at an NIS. In other words, the study is focused on looking at those challenges from different perspectives such as years of experience and background knowledge on formative assessment. Moreover, it is aimed at suggesting ways in which formative assessment practice can be improved. Finally, the empirical study aims at exploring NIS teachers' perceptions towards effectiveness of formative assessment.

1.4 Research Questions

In order to reach the purpose of this study, the research was guided by the following research questions:

1. What are the main difficulties teachers experience in using formative assessment in class?

2. What are the main reasons behind the challenges that teachers experience using formative assessment at NIS?

3. What are teachers' perceptions towards the effectiveness of formative assessment in their classroom?

4. In what ways can existing formative assessment practice be improved?

1.5 Research Design

Due to the fact that the study is focused on uncovering teachers' lived experiences and professional stories, it makes it clear that the data needed to provide answers to research questions is rather qualitative than numerical. Therefore, qualitative interview design (Cresswell, 2014) is the most appropriate for the project, as it allows to create the situation in which participants will be able to provide full and detailed responses to the questions regarding their experience in using formative assessment. Thus, one-to-one interviews with eight different teachers will be conducted in order to collect subject specific information and provide deep understanding of collected data.

The study argues that main challenges teachers face using formative assessment are related to lack of professional knowledge and experience in new assessment instrument. However, having those issues does not cause teachers' resistance and they hold quite positive attitudes towards formative assessment as a teaching tool. Finally, the study suggests teachers' collaboration and professional trainings as the main measures to be taken for an improvement of formative assessment practice at an NIS.

1.6 Significance and Contribution of the Study

The effectiveness of formative assessment has been widely researched around the world. The existing studies show that formative assessment is a powerful educational tool, however the positive effect on learning is achieved when formative assessment is used correctly and effectively: "Recent reviews of more than 4000 research investigations show clearly that when formative assessment is well implemented in the classroom, it can essentially double the speed of student learning . . ." (Popham, 2011,p.201).

The difficulties and issues related to the implementation and development of formative assessment practices have been studied and reflected in international studies. However, there limited data about Kazakhstani educational context. It may be due to the fact that formative assessment is relatively new for Kazakhstani educators and previous 5-scale assessment model is far more different from what is being used now.

NIS are pioneers at using formative assessment in Kazakhstan, as these schools opted for new assessment model as a part of modernization of national education. In other words, experience of NIS is crucial for Kazakhstani education and it will be translated to all the other mainstream schools in few years. According to Winter, Rimini, Soltanbekova and Tynybayeva (2011):

> NIS experiences and practices need tailoring to meet the needs of mainstream schools that may have less well-equipped facilities, fewer resources and a broad mix of abilities. Again, there needs to be discussion and dialogue about what has worked and why it may not readily transfer, plus what has been gained from strategic partners that have sought to locate Kazakhstani schools in an international context (p.148).

Therefore, the importance of research is highly significant, as being aware of challenges in applying formative assessment will give chance to adapt and use it more effectively in the future.

In addition, Winter et al. (2011) state that before experience of NIS is introduced to the other schools in system there is need in a more extended research on school-based assessment and how it is culturally constructed in Kazakhstan to ensure effective transmission of new practices to a larger-scale platform. Therefore, findings of qualitative study may be of a significant value and beneficial for all participants of educational process. Thus, teachers' voices will be heard and they will be able to receive relevant support and improve the instruction through overcoming challenges they have. Being

informed about real classroom experiences and challenges teachers have school administration and policymakers may be able to plan and implement more effective work on supporting and assisting teachers in implementing formative assessment. As for students, effective use of formative assessment will positively influence their learning and increase their academic achievements. As a result, high quality school education will allow parents to decrease their expenditures on private tutoring. The empirical study may also contribute to further implementation of formative assessment in mainstream schools, as being aware of main challenges and their causes schools may receive a better professional guidance and support from NIS.

As for research participants, the study will reveal those areas in which their practice can be improved. It will also give chance to inform school administrators about the type of professional training and support needed by the teachers of different subjects and years of experience. Being aware of problems teachers have, it is possible to create more realistic plans of school development which will affect the effectiveness of teaching and improve quality of education.

The research paper contains six chapters such as literature review that discusses existing studies on formative assessment, methodology chapter which contains description and justification of research instruments applied in this study, findings section reports data revealed from the study, discussion chapter provides analysis of data in relation to literature and conclusion that summarizes findings of entire research.

Chapter 2. Literature Review

Since this study is aimed at exploring the challenges of implementing formative assessment, this chapter will review the existing literature related to formative assessment, its definition, implementation features and challenges in different contexts. It will also discuss the features of formative assessment in comparison with traditional for Kazakhstani context 5-scale assessment model.

2.1. Conceptualization of Educational Assessment

What is assessment and why do teachers assess students? Assessment is an integral part of any educational process. Its impact is crucial for improving teaching and learning. In 1967 Scriven made first distinctions in educational assessment and proposed the use of such terms as "formative" and "summative" assessment. He described former as an instrument for on-going improvement of teaching and latter as assessment of completed curriculum (as cited in William, 2006). To put it more simply, formative assessment was defined as a tool for making teaching more effective during the course, while summative assessment had more grading and evaluative purposes to check students' progress at the end of the course.

Harlen and James (2006) also define summative and formative assessment models as different in their purposes "unlike summative assessments, which may be either criterion-referenced or norm-referenced, formative assessments are always made in relation to where pupils are in their learning in terms of specific content or skills". In other words, formative assessment is more individualized and targeted on student's unique performance in learning, while summative assessment is aimed at seeing whether all students fit the norms and criteria in relation to curriculum.

Another distinction was made by Popham (2014). He suggested reasons why teachers assessed students about 50 years ago and now. Thus, early in the past the main

purposes of assessment were diagnosing students' weaknesses and strengths, keeping track

of the progress, giving grades to students and saying whether one's teaching is effective or

not (Popham, 2014). It can be seen that assessment in education used to be done mostly for

grading purposes.

As for assessment today, Popham (2014) identified some specific to present time

assessment purposes such as assessment for improving instructional quality, assessment for

teacher evaluation and assessment for determining public perceptions regarding the

effectiveness of education. One of the main features of modern assessment is that

information on students' performance can be used to improve teaching. In other words, as

every teaching instrument assessment in education has also got its own purposes. Thus,

formative assessment was meant to form students' knowledge and skills, as the

information on students' progress in a particular subject was primarily used for improving

teaching rather than grading purposes.

2.2. Effectiveness of Formative Assessment

As it was said in the previous chapter, formative assessment is an instrument used

to collect evidence on student's progress while instruction. Is this assessment really

effective in promoting student learning? This chapter will discuss existing research on the

effectiveness of formative assessment which can explain why many countries including

Kazakhstan opted for formative assessment as a main assessment tool.

According to McMillan (2014), formative assessment is a way of evaluating

students' progress during teaching in order to make decision on further actions. In other

words, evidence of student progress is not used for judgment; instead it helps to know what

should be done to help the student in his learning.

In his definition of formative assessment Popham (2014) emphasizes the word

"process", saying that it is a planned process rather than a "test". "Formative assessment is

a planned process in which assessment-elicited evidence of students' status is used by

teachers to adjust their ongoing instructional procedures or by students to adjust their

learning tactics" (Popham, 2014, p.262). Thus, in formative assessment a student is seen as

an active participant responsible for their own learning. This gives students a chance to

plan their further actions based on teacher's recommendations.

Another important fact that may define formative assessment is that its

effectiveness largely depends on teacher's diagnostic abilities (Earl, 2013). This means that

the main aim is not only to collect evidence about student learning, but also to be able to

analyze and reflect on it. According to Earl (2013), "considering student work is not

designed to assign marks and make comparative judgments among students but to

highlight each student's strengths and weaknesses and provide them with feedback that

will further affect their learning" (p.27). Hence it is clearly seen that formative assessment

aims to facilitate and enhance students' learning through various in-class activities.

According to research on classroom assessment conducted by Black and Wiliam

in 1998, the effectiveness of formative assessment was proved based on the review of

nearly 10 years of research and 250 reports regarding the impact of assessment for learning

on students' achievement (Popham, 2014). Thus, Black and Wiliam drew the following

conclusion: "the research reported here shows conclusively that formative assessment does

improve learning" (as cited in Popham, 2014, p.270). This shows that formative

assessment is considered a powerful instrument in both assessing students and teaching

them.

However, Shavelson (2008) made a rather contradictory statement regarding the

effectiveness of formative assessment based on his experience of implementing and

studying its effects: "after five years of work, our euphoria devolved into a reality that

formative assessment, like so many other education reforms, has a long way to go before it

can be wielded masterfully by a majority of teachers to positive ends (294)" (as cited in Benett, 2011). In other words, achieving positive results in implementing formative assessment is a quite long and complicated process and its effectiveness does not seem to appear immediately.

Overall, formative assessment has turned into a global educational trend due to its effectiveness in promoting students' learning, however this reform is not implemented easily and requires significant effort and knowledge. Therefore, shifting to formative assessment can appear to be complicated reform which has to be properly planned and assisted throughout the whole implementation process.

2.3. Challenges of implementing formative assessment

The previous chapter discussed the data regarding effectiveness of formative assessment for student learning and its importance in increasing the quality of education. However, it should be noted that for Kazakhstan this assessment practice is rather new and its implementation may be provided with different obstacles. It is important to know what factors may influence the implementation of formative assessment and hinder its effective use. This chapter will therefore discuss existing research regarding the challenges of implementing formative assessment. Revised studies were organized in the following subthemes: 1) challenges related to teachers' knowledge and skills in assessment; 2) teachers' attitudes towards formative assessment; 3) provision of constructive feedback; 4) students' knowledge and skills in assessment.

2.3.1 Teacher knowledge and skills

Teachers are considered to be key change agents in implementing any new policy in education. The success or failure of implementing formative assessment may largely depend on teachers' professionalism and knowledge, as they might have no or very little previous experience and knowledge in using formative assessment. Thus, educational

research review of 60 studies conducted by Heitink, Van der Kleij, Veldkamp, Schildkamp and Kippers (2015) on prerequisites of implementing formative assessment identified teachers and their professionalism as the main factor that may hinder the effectiveness of assessment for learning. Thus, the findings of the study suggest that both pedagogical and content knowledge have a great impact on teachers' ability to give feedback to students, which can later on affect their learning strategies and progress in general (Heitink et al., 2015).

Moreover, lack of professional knowledge on formative assessment does not allow teachers to effectively create learning situations and elicit students' thinking (Heitink et al., 2015). Another important factor that was identified in the study of Heitink et al. (2015) is "discussion" in which teachers should be able to engage students in order to analyse and assess their own progress.

According to Birenbaum et al.(2011), Feldman and Capobianco (2008), Lee (2011) and Lee et al.(2012):

> Discussion can give teachers valuable insight into students' thinking, difficulties and understanding. This information can be used in adjusting instruction and providing feedback. Because AFL (assessment for learning) takes place in everyday classroom practice, such as during discussions, it was also noted that teachers need the ability to interpret information about student learning on the spot (as cited in Heitink et al., 2015, p.56).

Finally, Heitink et al. (2015) asserted that teachers ability to develop formative tasks, ability to construct questions, skills of using various hardware and software have a great impact on the effectiveness of formative assessment. Similar findings were revealed in a study aimed at outlining and discussing the challenges of implementing formative assessment in early learning conducted by Dunphy (2010, p. 52):

> … in the area of professional knowledge, the importance of educators having a comprehensive understanding of early development and learning is stressed. This includes an understanding of diversity, content matter and pedagogical knowledge, as well as how authentic assessment can be carried out.

In addition to that, in his critical review of formative assessment Bennet (2011) claimed that the average teacher does not have substantial knowledge for effective implementation of formative assessment, which makes formative assessment highly dependent on qualification of teachers. This is to some extent close to the conclusion made by Wei (2010) in action research on the effectiveness of formative assessment: "as a new educational assessment trend in China, FA requires the intervention of expertise and professionals so as to make it effective. Some data from this study shows the effects of FA are not so obvious with less experienced teachers' class" (p.840)

Hence teachers' professional knowledge, experience and skills may create obstacles for effective use of assessment for learning and hinder students in achieving better results in learning. As the quality of feedback and assessment tools used by the teacher highly depends on the abilities and pedagogical knowledge of teachers.

Taking everything into consideration, teachers play a significant role in implementing formative assessment. Their professional readiness and knowledge, experience and skills are seen to be of a great importance for using formative assessment effectively. To put it more simply, being unprepared teachers are not able to achieve positive results that formative assessment can offer. Therefore, policymakers should ensure teachers' professional preparedness and support in the process of classroom assessment.

2.3.2 Teachers attitudes and perceptions towards formative assessment

Teachers' attitudes and perceptions are crucial at implementing new policies and should be considered by leaders. This means that the goals set by policymakers and senior management teams are not reachable without teachers as they are key change agents at implementing any school policy. According to Viegut (2015) , "leaders must couple their

high expectations with support for the educators implementing the assessments".

Furthermore, he states that teachers can be frustrated and resistant to change when they do

not get enough support (Viegut, 2015). This, probably, means that teachers' attitudes

towards any reform are influenced by the level of support they receive and they may turn

into a key factor at implementing new assessment model. In other words, being frustrated

and stressed by an assessment model that is quite challenging and unknown for them,

teachers may not be willing to use it and stick with old assessment instruments.

Heitink et al. (2015) reported that "fourteen studies found evidence for

characteristics of teachers' beliefs and attitudes as important for 'deep' implementation of

assessment for learning. Teachers' beliefs, attitudes, perspectives and philosophy about

teaching and learning influence the quality of AFL (assessment for learning)

implementation"(p.56).

As for resistance to change, formative assessment requires practical

transformation of one's pedagogy and teaching style, therefore one of the most important

criteria for implementing formative assessment successfully should be teachers'

willingness to change (Heitink et al., 2015). It is, thus, no surprise to find that a big number

of studies on teachers' attitudes towards a new policy are conducted every year. A good

illustration of such research related to formative assessment is a quantitative study on pre-

service and in-service teachers' attitudes towards peer-assessment conducted in Taiwan by

Wen, Tsai and Chang (2006). Their study revealed that both pre-service and in-service

teachers have rather positive opinions regarding the effectiveness of peer-assessment as a

part of formative assessment. However the findings of the study also showed that in-

service teachers held more positive attitudes than pre-service teachers, which was

explained by lack of confidence and experience in using this assessment instrument (Wen,

Tsai & Chang, 2006).

All in all, teachers' perceptions and attitudes towards any reform can impact the achievement of goals and plans set by leaders. Therefore, teachers should be clearly aware of the purpose and features of formative assessment in order to shape their own philosophy and understanding for its further effective implementation. The existing research suggests that in implementing an assessment reform it is crucial to involve teachers and form their right attitudes towards formative assessment. This will allow policymakers to avoid teachers' resistance to change and effectively implement new assessment model.

2.3.3 Provision of quality feedback

As it has already been said one of the main features of formative assessment is that it ensures students learning. In other words, this assessment is aimed at creating situations, guiding and scaffolding students in the process of knowledge acquisition. Therefore, teacher's feedback and recommendations given to students are considered to be an integral component of formative assessment, as they are to provide students with necessary information on what should be done in order to achieve learning objectives.

McMillan (2014) in her book "Classroom Assessment" defines feedback as teacher's response that is aimed at informing student about their achievement in learning. Moreover, in her book the researcher argues that even though feedback seems like a simple teaching tool, in fact it is a rather complex process (McMillan, 2014). In addition to that, McMillan emphasizes the fact that feedback can sometimes be misused and giving responses like "Good!" or "That's right!" have more evaluative judgment function rather than recommendation or guidance (2014). Hence it can be seen that providing quality feedback may be a quite difficult skill that teachers may not have. This may create obstacles to effective use of formative assessment by teachers in class. Finally, not being able to provide effective feedback to students may result in lack of information about learning among students.

The study conducted in USA by Wylie and Lyon (2015) aimed at examining

issues of breadth and quality of formative assessment showed a similar perspective to the

one given by McMillan (2014). The scholars studied the experiences of 202 science and

mathematics teachers in regards of formative assessment implementation. One of the most

important statements scholars made related to the feedback is that "not all feedback, such

as providing students with information regarding their current level of achievement, moves

learning forward" (Wylie & Lyon, 2015, p.142). It means that it is not enough to say where

student is in their learning, but it is also crucial to provide a student with suggestions and

recommendations on how they can move ahead and achieve learning goals. This shows

that not all teachers are able to give a quality feedback which will be able to impact student

learning positively. Thus, the result of the study conducted by Wylie and Lyon (2015)

revealed that:

> the implementation of Formative Feedback was considered to be weak, largely
> because the information that teachers report sharing with students does not meet
> the definition of formative feedback. Teachers need additional support to separate
> out comments and grades, to write meaningful comments that include actionable
> information and to provide greater support for students to internalise the feedback
> and apply it to current work (p.157).

This shows that teachers should be able to differentiate the grades and comments

they give to students, as they have different functions in teaching and learning. Having

insufficient knowledge and training on giving quality feedback to facilitate student

learning teachers may find it difficult to both analyze student work and give proper

recommendations to students. It is therefore important that teachers are provided sufficient

training on giving quality feedback to students. Otherwise, being unable to comment on

students' performance teachers will not be able to correctly and effectively use formative

assessment.

2.3.4 Student knowledge and attitude

Students' role in classroom assessment is also important, as they have to be familiar with the purpose and format of assessment, especially when it comes to shifting to a new assessment model. In formative assessment students' are supposed to take an active position in moving their own learning forward. This is achieved through self-and –peer assessment. In action research conducted by Wei (2010), a researcher implemented formative and summative assessment in her English lessons in Chinese college to see whether it is effective for student learning. Wei (2010) found that "through self-evaluation, they know better their weaknesses and strengths, the gap between their current situation and their desired goal, the success criteria and thus make them take action to close the gap" (p.839). This shows that formative assessment is a multi-assessor instrument in which all participants of learning process are actively involved.

A similar study on students' experiences of different formative assessment types was conducted by Weurlandera, Söderbergb, Schejac, Hultb, and Wernerson (2011). Its main aim was to investigate students' perceptions and experiences regarding formative assessment. The study contained an insight into two types of formative assessment: oral group assessment and written individual assessment. The conclusion that Weurlandera et al. (2011) made on results of study showed that:

> Formative assessment influenced the students' motivation to study, made them aware of what they had learned, and therefore acted as a tool for learning which influenced both the process and outcomes of learning. The way the assessment methods were constructed was important for the students' experiences (p.756).

This demonstrates the understanding and perception of students towards the effectiveness of formative assessment. The study conducted by Heitink et al. (2015) defined "a student" as key factor for implementing formative assessment. Based on the study review, students' ability to effectively use self- and peer assessment was proven to be crucial for effective implementation of formative assessment model (Heitink et al,

2015). In other words, in line with teachers' abilities it is crucial to develop students'

assessment skills, as formative assessment is based both teachers' and students' abilities to

reflect on one's learning. This means students should also be able to provide effective

feedback and it may impact greatly on achievements of peers which can double the

effectiveness of the assessment strategy.

Another important fact discussed by Heitink et al.(2015) is related to students'

beliefs and attitudes. Formative assessment requires students to have such skills as

autonomy and responsibility which can be fostered by positive attitude and students' active

involvement in the learning process (Heitink et al., 2015). Thus, according to presented

results students' role at implementing formative assessment is as important as that of

teachers'. Therefore, paying insufficient attention towards shaping students' understanding

and philosophy may hinder the implementation of formative assessment in general.

2.3.5 Other challenges of formative assessment

In line with some specific factors and challenges that may affect implementation

of formative assessment practice, there are also some general aspects that should be

mentioned. Concluding the findings of bibliographic study as a part of action research in

Chinese college, Wei (2010) described some limitations related to formative assessment

such as time-consuming, labor extensive and low reliability. In other words, formative

assessment was described as a method which requires much time and effort from teachers

and information collected through formative assessment has rather short-term validity and

demonstrate students' progress on a particular lesson only. Moreover, Wei (2010) stated

that to achieve positive results in using formative assessment those limitations and features

should be considered. It is important therefore to provide teachers with relevant training,

facilitate their collaborative work, involve students in assessment criteria development,

improve the quality of given feedback and ensure fairness in assessment (Wei, 2010). As

the preceding data suggest, formative assessment can bring positive results and increase

students' academic achievements, however there are various limitations which are able to

hinder that process.

2.4. Educational Assessment in Kazakhstani Context

Realities of classroom assessment in Kazakhstani mainstream schools are quite

different from the ones accepted internationally. Traditional education in Kazakhstan

including assessment was mostly inherited from Soviet Education. Despite the fact that

national education system is being modernized these days, still some proportion of

approaches and teaching instruments are based on those used during Soviet period.

According to OECD report (2014) on educational assessment in Kazakhstan:

> Teachers assess their students by using a 1 to 5 scale, and a set of general didactic
> criteria that were first developed during Soviet times is supposed to provide them
> with broad and subject-independent guidance to classroom assessment. In
> practice, teachers' judgments are based on comparing each student's achievement
> with those of other students in the same class (p. 117).

In other words, it seems that the main purposes of classroom assessment in

Kazakhstani mainstream schools is judging students and comparing them with one another.

To what extend is current 5-scale assessment effective for student learning?

In the same OECD (2014) report traditional 5-scale assessment was defined as

"norm-referenced" and it was criticized due to its following features: • subjectivity - the

absence of differentiated criteria for students and parents, the evaluation of student is based

on teacher's opinion only;

• "benchmarking" - students in class are divided as high, medium and low-

performing which means two students given the same mark from two different schools

may have absolutely different level of knowledge.

In addition to that, the study on educational assessment conducted by OECD

(2014) revealed the fact specific to Kazakhstani teachers. The analysis of students' written

answers and their marks showed that teacher do not tend to use lower ranking grades such as 1 or 2 even in case of very low-performing students. As it was explained by teachers, the lowest grades were not used due to the fear of demotivating students and showing their own teaching as absolutely ineffective (OECD, 2014). This demonstrates that traditional 5-scale assessment is more focused on ranking students and putting them in a particular group or rating. Moreover, the grades given to students are not standardized and do not show a real picture of knowledge a student has in a particular subject. It is thus no surprise to find that Kazakhstan has launched first reforms in educational assessment. The country opted for new criteria-based assessment which is aimed at addressing all the issues related to previous 5-scale traditional assessment. Thus, OECD (2014) reported that "a criteria-based assessment model compares students' achievements with clearly defined, collectively developed criteria, which are known to all participants of the process (teachers, students, their parents, education school administrators) in advance" (p.118). This means that new assessment model will allow educators to avoid subjectivity in assessment, as students will not be assessed based on teachers' subjective viewpoints anymore.

Referring back to OECD (2014) report, criteria-based assessment will be used in forms of "formative" and "summative" assessment which differ according to their purposes: formative assessment takes place during the course in order to identify further actions for student improvement and summative assessment is used at the end of each stage of education level. This shows that distinction in educational assessment have also been made in the national context. As a result, assessment models applied in Kazakhstan have become more functional which can improve the quality of national education. However, these changes in assessment system have not happened in all the schools of Kazakhstan. Criteria-based assessment is currently being applied only in private schools and NIS

(OECD, 2014) which means that mainstream schools are still using traditional 5-scale assessment. When will assessment reforms reach all the other schools in Kazakhstan?

Shamshidinova (2011) define the following main tasks of NIS:

> According to the "Strategic Plan for the Development of the Republic of Kazakhstan until the year 2020", and the "State Programme of Education Development for 2011-2020", the Intellectual Schools had two main tasks, the first of which was to develop in these schools themselves best practice informed both by international experience and what was valuable in Kazakhstan's own educational tradition. The second task was to transfer the lessons of its own experience to other schools in the system (p.79).

This means that NIS were meant to try a new assessment model as one of the best international practices and see if it fits the national context in order to share their experience with other mainstream schools further on. As transformation of assessment system in secondary education is a complicated process which should be implemented gradually as well as assisted by the research.

All in all, it can be seen Kazakhstan has taken its first steps towards effective assessment in education. This process does require significant effort from both educators and policymakers, moreover it is important to adapt new assessment model to national context in order to make it work most effectively in Kazakhstani education settings.

2.5. Summary

From the overall perspective, the reviewed studies show that there are various factors that may influence the effectiveness of formative assessment. Firstly, teachers' knowledge and assessment skills seem to be crucial for achieving positive results in applying formative assessment strategies, as being unaware of the key concepts teachers will not be fully facilitate students' learning through assessment. Another important factor relates to teacher's attitudes and perceptions towards the effectiveness of formative assessment. This may be influenced by lack of training and experience. Hence it may cause teachers' resistance and unwillingness to refuse from previous assessment model. Finally,

students are also seen as key stakeholders at implementing assessment for learning as their knowledge and skills are also important. This may be explained by the fact that self-assessment and peer assessment are key features of formative assessment. Therefore, in this particular assessment model shaping students' abilities is considered to be important for its effective use.

Chapter 3. Methodology

This section presents a comprehensive explanation of the methodology selected for this inquiry to answer the overarching research question: What are the challenges of implementing formative assessment at an NIS?

3.1. Research Design

Since the main purpose of the study was understanding the challenges that teachers face at implementing formative assessment, the qualitative approach was used to provide the study with deep exploration of teachers' lived experienced at using formative assessment. In order to answer research questions it was important to uncover teachers' individual professional stories. Therefore, there was need in more descriptive data rather than numerical so as to provide in-depth understanding of respondents' viewpoints. To talk about difficulties at using formative assessment it was necessary to give participants chance to speak out and explain because each participant had their own specific subject and background of using formative assessment model.

The study was aimed at exploring and seeing the picture of formative assessment implementation at an NIS which means the results of the study may not be generalized to all Kazakhstani schools. The chosen method was directly aimed at exploring the subjects at one particular site which made it possible to collect unique and relevant data. Shank (2002) notes that qualitative research is the study of phenomena in their natural settings whereby the researcher conducts a systematic enquiry into meanings, attempting to interpret and make sense of phenomena and the meanings that people attribute to them (Shank, 2002). Therefore, qualitative study was employed to collect descriptive data relevant to the context of one school.

Unlike quantitative research, qualitative paradigm is naturalistic, based on meanings, and has often been linked to interpretive epistemology (Cohen, Manion &

Morrison, 2007). This feature of qualitative study allowed to analyze and interpret

collected data to understand real issues related to implementation of formative assessment.

This method relies on the assumption that reality is a subjective phenomenon, where the

researcher seeks to explore, makes sense, and interprets social phenomena through

interaction and meaning from the subject's perspective, conducting the research 'from the

inside' usually in its natural setting (Cohen, Manion & Morrison, 2007). That is why,

qualitative study was considered the most appropriate in order to reveal real picture

regarding the experience of an NIS.

The reason why quantitative research method was not chosen for study is that it

may not be able to provide a deep insight to challenges related to implementation of

formative assessment, as quantitative research design is more focused on numeric and

statistical data rather than descriptive information.

3.2 Research Site

The study was conducted at an NIS in Central Kazakhstan which recently started

implementing criteria-based assessment learning which contains formative and summative

assessment models. The focus of research was on teachers' experience at using formative

assessment and the challenges they face implementing it. The school was chosen mainly

due to the fact that it is an innovative platform for implementing best international

practices in school education including assessment model. Teachers have been using

formative assessment as a main teaching and assessment tool since the opening of the

school in 2013. Moreover, it was easily accessible in terms of distance, as conducting the

research required spending big amount of time and money at the research site. Therefore,

this school was considered to be a convenient place because of both relevance to the

studied phenomenon and accessibility.

3.3 Participants

Research participants were chosen using purposeful typical sampling (Creswell,

2014), as it fits the nature of study and allowed to collect data from individuals who are

directly connected with the issue of implementing formative assessment model at NIS.

Since there were teachers of various subjects, experience and background at using

formative assessment it was important to choose participants who would provide with

different perspectives regarding the challenges they face implementing this assessment.

Therefore, teachers of both science and humanities subjects were chosen for the study in

order to collect data from both perspectives. It was done to see any specific challenges

teachers experience in their particular subject. Moreover, to get information from teachers

with different years of teaching both experienced and non-experienced teachers were

chosen as participants for the study. Thus, eight teachers of subjects such as math, biology,

English, Russian and Kazakh language were selected and their work experience varied

from 1 to 32 years of teaching. This sampling allowed to explore the central phenomenon

from different perspectives, to collect relevant data and see a teachers' real experiences of

using formative assessment.

3.4 Interview

One-on-one semi-structured interviews were chosen as data collection

instrument. The rationale for choosing this method is that it does not only give

opportunities to get responses from participants, but also allows to ask for clarification or

more extended answers which is crucial for better understanding of the researched

phenomena. Thus, according to Cohen, Manion and Morrison (2007) "the order of the

interview may be controlled while still giving space for spontaneity, and the interviewer

can press not only for complete answers but also for responses about complex and deep

issues" (p.113). Therefore, the interview was used to identify even minor factors that have

influence on the issue. Moreover, multiple truths and different reasons were accepted in

order to understand the reasons behind the challenges school community face in assessment for learning.

Teachers were asked questions about their attitudes and perceptions towards the effectiveness of formative assessment, as well as their beliefs regarding the obstacles that hinder their effective work with the assessment model. Clarifying and elaborating probes were used to clarify the responses given by participants as well as elicit more extended answers regarding their experiences. Interviews were conducted in English and Russian languages which were chosen by participants. Interview questions are reflected in protocol that was prepared in two languages (Appendix 1).

3.5 Procedures

This section describes the followed stages which ensured that ethical standards and principles in educational research were taken into consideration. According to Kitwood (1977) "if the interviewer does his job well (establishes rapport, asks questions in an acceptable manner, etc.), and if the respondent is sincere and well-motivated, accurate data may be obtained" (as cited in Cohen, Manion & Morrison, 2007). That is why sufficient significance was given to this procedure that would make all research participants feel comfortable and build trust.

Date collection started after gaining an approval from NUGSE ethics committee. School principal was contacted via email and asked to give permission to conduct the study. After getting the approval and teachers' contact details from the gatekeeper, participants of the research were sent an email with an offer to take part in the study. Before the interviews participants were informed about the purpose and procedure of study. They were asked to sign a consent form which ensured the protection of their rights.

The interviews were conducted at a time and location of participants' choice. Each interview lasted approximately 45-60 minutes. With the permission of participants,

all interviews were audiotaped. It was done to accurately record the information for transcribing purposes only. Participants were informed about their rights to refuse being audiotaped as well as not to answer the questions they felt uncomfortable with.

3.6 Data Analysis

Raw data obtained by conducting the interviews were read several times and thematically coded by hand highlighting ideas which were later organized into themes. Cresswell (2014) defines coding as "the process of segmenting and labeling text to form descriptions and broad themes in the data". Thus, coding was used to interpret and analyze the received data so as to reveal broader themes in accordance with research questions of the study. The analysis of data was done from different perspectives such as the subjects that teachers taught and years of teaching experience they had. It was done to see identify any patterns in teachers' responses that would relate to their background.

3.7 Ethical Issues

From the beginning, the research project was conducted in accordance with ethical principles and standards. Participants were treated with an ethic of respect, protecting their interests and not putting them at risk was among the main priorities.

Participants were informed about the nature of research design. They were given information about duration of the study, nature of research and what exactly was required from their participation. Introductory letter, participant consent form, and a support letter from the research supervisor were provided. The introductory letter and participant consent form consisted of information related to the purpose of the study, confidentiality statement. Participant could withdraw from the study at any time. If the participant did not wish to answer any of the questions during the interview, he/she could say so and the interviewer moved on to the next question. Participants were informed that gathered information was used in writing a qualitative research report, which would be read by researcher's

supervisor. Though excerpts from the interview would be included in the final research report, participant name and other identifying information would be kept anonymous.

Furthermore, participants were informed that researcher would use pseudonyms to protect their confidentiality. Participants of the study were assured that the information from the interview would not be used for any other purposes and would not be recorded in excess of what is required. Participants were guaranteed that the information recorded would be confidential, and no one else except for the researcher and her supervisor would have access to the tapes. Participants were informed that their participation would contribute to revealing the challenges of implementing formative assessment at Nazarbayev Intellectual School.

Chapter 4. Findings

In this chapter the findings of conducted research are presented. The study aims at exploring the main challenges and difficulties that teachers face using formative assessment model. It is also focused on identifying reasons behind the issues in current assessment practice and suggesting the ways it can be improved.

The study was guided by the following overarching research question: 1) What are the main difficulties that teachers face using formative assessment in class? and sub questions: 2) what are teachers' perceptions towards the effectiveness of formative assessment in Kazakhstani context? 3) what are the main reasons behind the challenges that teachers experience applying formative assessment at NIS? 4) In what ways can existing formative assessment practice be improved?

Collected data is presented in the chapter in accordance with research questions. Thus, the first part provides information about participants of study. This data includes the years of experience teachers have and the subject they are specialized in. Next part represents the findings that align with sub question 1 on teachers' perceptions and attitudes towards the effectiveness of formative assessment model. The third part is related to the main research question about the challenges that teachers face implementing formative assessment. It is divided into subtopics which refer to different types of difficulties in using the given assessment model and the reasons behind the challenges that teachers face (sub question 3). The third chapter represents data related to the ways of improving current assessment practice, which is the answer to sub question 4.

4.1 Demographics

Participants of the study included two main groups of experienced and inexperienced teachers. Experienced teachers were those who had previously used another assessment models, such as traditional 5-scale assessment, and whose work experience

varied from 19 to 32 years of teaching. Second group included non-experienced teachers
who had not previously used any other assessment models except for formative assessment
in their practice and whose work experience did not exceed 3 years of teaching.
Additionally, in order to collect data from different perspectives both groups of
experienced and inexperienced teachers contained two sub groups such as humanities and
science teachers. They were teachers of English, Kazakh, Russian languages and science
subjects such as biology, chemistry and math. Overall, eight teachers were interviewed and
their names were changed to letters of alphabet in order to keep their identities anonymous.
Participants' work experience and specialized subjects are shown in Table 1. Collected
data were transcribed and coded into topics and subtopics to be presented in accordance
with research questions of the study.

Table 1.

Information about participants

	№	Participant	Years of experience	Specialized subject
Non-experienced teachers	1	Participant A	1 year	Kazakh language
	2	Participant B	2 years	Math
	3	Participant C	first year	Biology
	4	Participant D	2 years	English language
Experienced teachers	5	Participant E	30 years	Russian language
	6	Participant F	32 years	Biology
	7	Participant G	26 years	Math
	8	Participant H	19 years	English language

4.2 Teachers' Perceptions Towards Formative Assessment

Formative assessment has been used at Nazarbayev Intellectual School (NIS) as a main assessment model, as it is considered to be one of the most effective teaching approaches that facilitates student learning. Teaching staff at NIS either come from local public schools or after graduating from university and none of them previously applied formative assessment before NIS. Such lack of experience may be explained by the fact that NIS were first schools starting implementation of formative assessment in Kazakhstani educational context. As a result, teachers may have different viewpoints regarding the effectiveness of formative assessment, since they were previously used to apply other assessment instruments. Therefore, the study was aimed to see if teachers' personal viewpoints regarding formative assessment are rather positive or negative. As being contradictory to the philosophy of teachers formative assessment might not be used effectively or it could be affected by previously used assessment models. This means that teachers may be resistant to use formative assessment all the time if they find it rather ineffective comparing to the previous assessment models.

Talking about non-experienced teachers, the study was aimed to know whether the lack of experience and practical knowledge had any influence on their attitudes towards formative assessment. However, according to the revealed data, inexperienced teachers were all quite positive about using formative assessment and found it rather effective for students learning. Participants reported that they regard formative assessment as an important instrument in teaching, due to the fact that it allows students not to focus on their marks, but instead be aware of their progress in learning. Despite of the fact that inexperienced teachers did not have any training at universities on assessing students formatively, the responses demonstrated their positive attitudes towards this assessment

model. Thus, the main positive features of formative assessment highlighted by teachers were clear criteria and constructive feedback.

An interesting point was made by Participant D who compared formative assessment to training in sport, because it "trains" and prepares students to perform well and improve their skills:

> …so I consider this to be a training like for people doing sports, lessons are formative assessments and I consider my lessons to be like training sessions rather than just official matches…something like that. So that students can come and try to practice their skills and become better. (Participant D)

In addition, most participants were comparing formative assessment to their own school experiences at the time when they were students. Thus, reflecting back on their learning stories teachers highlighted the difference between formative assessment and traditional 5-scale assessment model. They said that formative assessment provides students with more information about their learning, as they receive comments and feedback rather than just numerical grade without any explanation:

> I think formative assessment is very effective, it means not only teacher works on improving student's knowledge, but student as well knows what to do… when I studied in school we were assessed using 5-scale model and whenever we got a bad mark, we did not know what it was given for, but in formative assessment we let our students know where they had a mistake and give chance to correct it and be responsible for their learning. (Participant A)

> I think it is very effective, because students get feedback in form of comments from the teachers, but not a grade. (Participant C)

> I think it is effective, because students know the criteria according to which they are assessed… I think having criteria makes it easier to assess not only for teachers, but also it is very informative for students, because they know what do next. (Participant B)

Data provided by inexperienced teachers show that they perceive formative assessment as a very effective tool. Therefore, it was seen that having no previous experience or having very little experience at applying it does not affect their opinions in a

negative way. This shows that teachers are willing to use formative assessment and they believe it can facilitate learning and make their work more effective. As it gives opportunities to achieve lesson objectives, forms and develops students' skills. All of these allow students to become better and successful in learning, as they receive better guidance from teaches and become responsible for their own progress

As for experienced teachers, it was important to see whether wide experience in using other assessment models has any impact on teachers' perceptions towards formative assessment which they were introduced only when they came to NIS. As these teachers had already taught for about 20 years before they started applying formative assessment as a main assessment instrument at NIS . Therefore, the study aimed to see if experienced teachers have changed their teaching philosophies and formed their own attitudes towards formative assessment.

From the overall perspective, experienced teachers also shared quite positive opinions regarding formative assessment. The data revealed that having worked at NIS for two or three years allowed experienced teachers to get acquainted to the new assessment model and they now clearly see its effectiveness in teaching. All participants were talking about benefits of formative assessment at the same time comparing it to traditional 5-scale assessment model they had previously used. A good illustration of that could be a point made by Participant E who defines formative assessment as a tool for creating "situation of success" for students learning:

> …I think formative assessment is an assessment of future…In traditional 5-scale assessment students were assessed based on their defects, but in formative assessment I say what has been done well, and what should be done to make the work even better, so it is more based on benefits of students. This situation of success created in formative assessment allows students to know how they can improve. (Participant E)

Another positive feature of formative assessment mentioned by experienced teachers is that it is "informative". This means formative assessment provides both teachers and students with necessary information for improving teaching and learning. This information includes students' progress, strengths, weaknesses, their learning styles and others. Moreover, experienced teachers also emphasized the impact of formative assessment on teacher's role. It was explained by Participant H who stated that in comparison to traditional 5-scale assessment in formative assessment teacher's role is not to judge students, but more like to provide support and assist students in their learning:

> This new assessment model is very effective. Because it allows both students and teachers to be aware of and to keep track of where they are with teaching and learning, well, I mean this method is very informative… teachers' role is not to judge, but to find out more about student in order to help him become better. Students are not focused on the marks they get; they are more concentrated on their achievements and goals. (Participant H)

However, the data also revealed some neutral viewpoints of experienced teachers towards formative assessment. Some participants were convinced about the necessity of giving marks to students. In other words, having no marks given to students in class has negative impact on their motivation for learning. This means that being assessed formatively and not being given particular numeric grades for some students leads to losing their interests. Therefore, according to some of the participants, 5-scale traditional assessment model is more effective for keeping students motivated, because they study and complete tasks in order not to receive "bad" marks:

> … I do not fully agree that it is more effective than 5-scale assessment, because there are no marks to give students, which is rather motivational for students…I mean, there are some students who study because they are afraid of getting bad mark, and if there are no marks they get demotivated... but it is only about some students. (Participant G)

The response given above reflects the influence of previous experience on teacher's attitude towards effectiveness of formative assessment. For instance, Participant

G thinks that marks are needed to motivate some of the students to learn. This might not be related to the teacher's professional skills. Instead, it can be explained by the fact that students also have different background in assessment, because before entering NIS all students studied in public schools for 6 years and were always assessed using 5-scale traditional model. This means that not all of the students are able to change and shift their focus from marks to getting progress in learning. It means that they study to get a grade rather than to improve their skills and increase knowledge. Therefore, such students still need to have numerical mark to stay motivated.

Thus, despite the fact that experienced teachers had used traditional assessment model for many years, they find formative assessment quite effective and beneficial for student learning. As formative assessment provides students and teachers with necessary information that is used to promote learning. It allows students to know what they are good at and what should be done to improve their skills. The data demonstrates that experiences teachers perceive formative assessment as a two-sided process in which both teachers and students work for achieving learning goals.

Research participants had many years of experience in assessing students' in class. However, they were not only able to know and get used to another assessment tool, but also change their teaching philosophies to completely different approach with different purposes. As a result, teachers refused from using previously 5-scale assessment and transformed their teaching.

Thus, having analyzed the responses of both inexperienced and experienced teachers, the data suggests that regardless the subject they teach and years of teaching experience all of the teachers have rather positive attitude towards formative assessment. They find it effective for both teaching and assessing students in class. Both groups of teachers shared their opinions regarding formative assessment stating that it is an effective

way of checking students' knowledge that facilitates learning. However, inexperienced teachers were seen to hold a bit more positive attitudes than experienced teachers. Interestingly, despite the fact that teachers were quite positive about the effectiveness of formative assessment, all of the participants shared their professional stories regarding difficulties they face applying it.

4.3. Difficulties and Challenges of Implementing Formative Assessment

During analysis of participants' answers to questions regarding challenges of using formative assessment the following difficulties were revealed: (1) generating formative assessment tasks; (2) giving constructive feedback; (3) students' ability to assess themselves and peers; (4) time-consuming assessment. All of the sub themes refer to the key research question of the study about difficulties of implementing formative assessment. I am going to discuss each challenge highlighted by participants in the subsections below.

4.3.1 Generating tasks and classroom activities to assess students

The challenge related to creating formative assessment tasks emerged from various responses teachers gave about generating tasks for student assessment. These tasks are the main instruments of teachers in formative assessment, as they are used to collect information about student learning. Depending on the subject, assessment tasks may be presented in oral or written format. They are generated according to students' age, learning objectives and other important features. For instance, in English language to assess students' writing skills teachers may give a task to write an essay. As a result, by analyzing students' works teachers give comments to students pointing out their mistakes and suggestions on how they can improve their work. Therefore, assessment tasks have to be generated in accordance with learning objectives, students' level in a particular subject, age

and learning style. The relevance and credibility of collected information from formative assessment largely depend on the quality of generated tasks.

According to participants, one of the main challenges connected to generating assessment tasks is using differentiated approach. As it was explained by teachers, students in one class have different levels of knowledge and learning styles which requires tasks to be aligned to them. This means that teachers have not only to choose the format of task, but also design it in the way that fits to students' levels. For instance, a task should be neither too easy nor too difficult for students; otherwise it will not be effective for learning. As it was explained by participants, generating such kind of tasks requires teacher's professionalism and time. Teachers should know students well in order to create the task which will allow them to collect relevant information about progress and help students learn:

> For me it is differentiation, it is difficult to choose and create different tasks according to students' level. (Participant B)

> I think differentiation is difficult sometimes, cause we know there different learners with different abilities, who need differentiated approach in assessment as well. This means we have to generate different tasks for our students, which is not only time consuming, but also rather complicated process itself. (Participant H)

This shows that formative assessment requires differentiated approach which can be a challenge for teachers. It is more time-consuming and depends on teachers' professional knowledge and skills.

Another difficulty related to generating formative assessment tasks is developing assessment criteria. The data revealed that teachers find it quite challenging, as criteria must be clear and achievable for students. Basically, criteria are aimed at telling students what they should do in order to achieve learning objectives. Therefore, it has a great impact on student success in completing tasks and achieving learning goals:

> When we assess students we need to create assessment criteria and tasks which
> must be clear and achievable for students, I think this is most difficult.
> (Participant A)
> The data implies that creating formative assessment tasks requires a lot of effort

from teachers. Thus, in order to gather relevant information about students' progress and

later on assess and give feedback to learners teachers have to choose or generate high-

quality tasks. These assessment tools have to be achievable and match student's level.

Moreover, a task has to have clear assessment criteria according to which students may

complete it and be guided. All of these features of formative assessment are quite

challenging, especially for inexperienced teachers. Thus, it can be assumed that lack of

experience and irrelevant training received at university may be an obstacle for young

teachers in applying formative assessment.

4.3.2 Provision of constructive feedback

Another important component of formative assessment is providing students with

feedback that facilitates their learning. This is considered to be a special feature of

formative assessment which makes it different from traditional 5-scale assessment model.

The data shows that providing students with constructive feedback might be a challenging

task for teachers. As it was shared by Participant H, who is an English teacher, giving

feedback on students' speaking skills is sometimes difficult for her. It is related to the fact

that speaking activities are often conducted in pairs which means teacher has to observe all

students while speaking and collect information about their performance. Being alone

teacher is not always able to hear responses of all students which makes it impossible to

provide all students with comments regarding their performance:

> … specifically about my subject, I find it sometimes difficult to assess my
> students' speaking skills when they are working in pairs or in groups at the same
> time. Yes, I try to monitor and listen to what students say, but it is not always

enough, I mean I don't always gather enough information about their performance
to give them proper feedback later. (Participant H)

This shows that giving feedback to students' speaking skills in teaching languages can be difficult, as there is no written evidence which teachers may use to see students' strengths and weaknesses. In assessing speaking skills feedback is based on students' immediate answers and teachers have to manage to listen to all students during one activity.

The response given by biology teacher, Participant C, showed another perspective of difficulties in giving feedback to students. As it was pointed by the participant, feedback should include both positive and negative comments regarding students' work. It is done to inform students about their strengths and weaknesses, as well as to motivate them to do better. However, sometimes there are students whose written work is of low quality and it is difficult to mention its positive sides in feedback:

When we give feedback it should be like "a sandwich", we should praise student
in order to motivate him, then we should point at his weaknesses and then give
some positive directions for improvement. But sometimes it is difficult to praise
students, when their answer is too weak. (Participant C)

The responses above show that giving constructive feedback can be challenging, but it is not that frequent. Most of the comments had the word "sometimes" which shows that providing students with constructive feedback depends on different factors, such as form of work, the quality of student's answer and the assessment criteria. Difficulties teachers face in giving feedback also depend on the subject they teach. For instance, for humanities teachers it is more challenging to give feedback to students' oral answers, while science teachers find it more difficult to provide feedback to students' written work. It may

be related to specific features of subjects according to which in humanities oral responses

of students are of a great importance, while in science it is more important to find solution

and provide written justification to their answer.

4.3.3 Students' ability to assess themselves and peers

In formative assessment teachers are not the only ones who assess; students can

also be involved in this process by assessing themselves and peers. However, being unable

to constructively assess students may create difficulties for teachers, as it may hinder

learning and achieving lesson goals. According to the data revealed, teachers in school

often involve students in assessment process, yet the result of this work is not always

successful. It is related to students' attitudes to assessment. Having had different

background in assessment and being previously assessed by traditional 5-scale assessment

model, some students perceive the role of an assessor as a judge rather than assistant in

learning. It takes time until students change their attitudes and start focusing on providing

support to peers instead of judging their performance:

> ...well I believe the majority of them still feel like if I am an assessor then I am
> judging, and I don't want to judge anybody, because this is just not a good idea.
> They have the ability, but I think it takes time to reveal those abilities. I think they
> can do that, but they need firstly understand a few things, that you are not judging,
> but helping another person to improve, and secondly, this benefits not only the
> person who you are assessing, but it also benefits you (Participant D)

In addition to that, some participants emphasized another issue related to students'

understanding and attitudes:

> Well, I think it is another difficulty… Not all students are able to that, some of
> them give feedback which is not constructive, I mean… they can just say "it's
> good" without being able to explain why, also some students do not realize why
> we do this kind of assessment and they do not take it seriously, they do not
> understand how important this part of assessment is. But of course, the majority
> can do this properly and it is really helpful. I use this type of assessment quite a
> lot. (Participant H)

It is clearly seen that teachers believe that students can assess themselves reasonably and give feedback to their peers; however the effectiveness of this process largely depends on students' philosophy and understanding of assessment and its purpose. This means they simply need to realize the significance of this process and take an active position in the learning process. The comments above show that students may not always be effective assessors at the lesson which may prevent teachers from achieving their goals.

The challenge related to students, however, was not the biggest among all. The data revealed that teachers were more struggling with the increased amount of time spent on assessment rather than students' abilities to assess.

4.3.4 Time-consuming assessment

Another sub theme that emerged from the responses of teachers regarding the difficulties they face in applying formative assessment is the time factor. As it has already been said this type of assessment requires significant effort from teachers and the comments below show that it is also quite time-consuming:

> Difficulties… I spend a lot of time working on the tasks for formative assessment, they have to be of a very high quality and they should work on achievement of learning objectives. I have to think about many things when I prepare the tasks, what I want my students to do, what the criteria are, in what form I want to assess my students and so on… Also, checking student's work takes a lot of time. In traditional assessment we just used to read student's work and put mark at the end, but in formative assessment we have to write comments to every student's work. And this part takes a lot of time. (Participant E)

> For me, first of all it is time. Formative assessment is very time-consuming. Because you have to work individually with every student, differentiate tasks, give feedback. (Participant F)

The given responses show that time factor is one of the difficulties that teachers face. However, it should be noted that this issue was mentioned by the second group of teachers only. Here it can be assumed that experienced teachers have pointed time as one

of the difficulties, because they have also got experienced at using traditional 5-scale model. This means that teachers did not use to spend that much time on assessing student's learning practicing the previous assessment form. Therefore, formative assessment seems to them quite time-consuming comparing to what they previously used to do.

The study showed that challenges that teachers have at using formative assessment to some extent depend on years of experience and previous knowledge. However, the data did not reveal any significant subject-specific difficulties related to formative assessment.

4.4 Improvement of Current Formative Assessment Practice

One of the aims of the study was to explore teachers' opinions regarding the improvement of assessment model being used in school. It is crucial for administrators to hear teachers' voices when it comes to school improvement and development. This is mainly because teachers are the "insiders" and they know the situation better than anyone else in school. Moreover, they are considered to be change agents and implementation of any policy is highly dependent on their active involvement in the process. Thus, to answer the sub question 4 "In what ways can existing formative assessment practice be improved?" participants were asked about professional training they would like to take and ways of improving current assessment policy in school. The given responses were grouped into following two sub themes: professional development and collaborative work of teachers.

4.4.1 Professional development

It is well-known that the quality of teaching and learning is connected to teachers' professionalism. Every year a vast majority of funding is being invested to teachers' professional development trainings and courses. Such significance to this aspect is being paid due to the fact that teachers have to be aware of new trends in teaching methods to

increase the effectiveness of their work. Formative assessment is one of such trends in

education for Kazakhstani schools. This means that teachers need to be taught and their

teaching philosophy has to be changed according to new assessment policy. What are the

teachers' views regarding professional development in assessment? One of the participants

expressed the following opinion:

> Theoretical seminars maybe, but the ones which do not just explain some simple
> basic things, the ones that go a little bit further, the majority know those basic
> things and when they start implementing them some difficult things start
> appearing and the people tend to refer back to traditional assessment, because
> there are some difficulties and I don't want to deal with them (Participant D).

The answer reflects a quite important point which means that teachers are familiar

with the basics of formative assessment, but probably this knowledge is insufficient

sometimes especially when it comes to some difficult situations in class. It shows that

teachers might need training on some more advanced techniques at using formative

assessment. This will probably help teachers to deal with the challenges that they face

assessing students' progress. Another participant shares a similar view:

> I want to know something new, new trends and techniques; being a teacher means
> learning all the time. I would like to learn new strategies of assessment in
> language teaching (Participant H)

The next common viewpoint on professional training of teachers is connected to

one of the challenges shared by participants in the previous chapter. The following

opinions demonstrate the need of teachers in workshops and courses on developing the

tasks to assess students formatively:

> I would like to take a course on developing tasks for formative assessment for
> students with Kazakh as second language, because working with them is more
> difficult and we have to adapt the resources all the time. (Participant A)

> Last year I took a course on assessment in Astana conducted by a professor from
> Cambridge, now I would like to continue my professional development in this

sphere - using differentiated approach in developing tasks for formative
assessment. (Participant B)

It can be seen that regardless their experience teachers seem to be willing to know
more about the assessment model they have been using. The given responses also reflect
the link between professional trainings teachers want to take and the difficulties they face.
It is also clear that teachers understand the importance of professional training in
increasing the effectiveness of assessment practice.

Apart from professional training, teachers themselves were also seen able to
improve the situation. In other words, working together in collaboration and providing
support to peers was identified to be another way of raising the effectiveness of formative
assessment.

4.4.2 Collaborative work of teachers

The importance of collaboration in teaching community was another viewpoint
emphasized by participants during the interviews. There are various types of teachers'
collaboration reflected in the answers given by participants. First, collaboration can be
done in the form of attending the lessons of peers in order to learn from more experienced
colleagues. This idea was mainly highlighted by inexperienced teachers:

> I think I would like to attend classes of people who do formative assessment, like
> real formative assessment. I think it will be helpful. (Participant D)

Next way of teacher collaboration is related to planning. The reason of
collaborative planning is well-explained in the response of Participant H who empathizes
the importance of developing common understanding of assessment purposes for its
effective implementation:

> May be teachers should work together more, I mean during planning and
> reflecting. Because I noticed, that teachers have different understandings and
> priorities in assessment. Some prefer to use self- and –peer assessment a lot, some

do not trust students and do everything themselves. I think teachers should maybe
communicate more and share their best experience, not only teachers of one
subject, but all the teachers in school. (Participant H)

It can be seen from the findings that working together is beneficial for both groups

of teachers. It may create possibilities for both sides to learn, share experience and

overcome difficulties.

There is one more opinion regarding collaborative work of teachers which was

suggested by Participant A. This teacher also emphasizes the difference in the way other

teachers in school assess their students and proposes the creation of common resource pack

of formative assessment tasks which will serve as a sample and ensure fairness in assessing

learners:

We do not have a particular resource base which contains formative tasks created
according to learning objectives. It would be great to have particular samples so as
to make the assessment by different teachers common and fair for students. It
would be very effective because formative assessment is done differently in
different classes. (Participant A)

The need in such resource pack can be explained by the lack of experience of

participant A, as inexperienced teachers sometimes need to see a sample of a task for

generating their own. The suggestion above could be very helpful in avoiding subjectivity

in assessment among all teachers. This work again requires collaboration of all teachers, as

they need to discuss and come to an agreement in developing the tasks for database.

Moreover, the result of such communication between teachers might be beneficial for

teachers in forming their common understanding of purpose and other features of

formative assessment.

4.5 Summary

All in all, the data revealed from the study made it possible to answer all targeted

questions of the study. Even though, teachers have only positive attitude towards formative

assessment and there is no resistance to use it, each participant faces some difficulties applying this assessment model. Both experienced and non-experienced teachers have had particular challenges in their practice. Those issues are related to generating tasks, giving feedback and students' ability to assess. In addition to that, teachers who have previously applied another assessment model emphasized the fact that formative assessment requires more time and effort rather than traditional 5-scale assessment. It can be also seen that the challenges teachers face shape their preferences in professional training.

As for suggestions regarding the development of current assessment model, teachers highlighted the importance of collaborative work. They believe working together effectively can be helpful in providing support and setting common understanding of assessment by all teachers. In addition, teachers' responses also demonstrated their willingness to learn more about formative assessment by taking various professional development courses.

Chapter 5. Discussion

This chapter will provide interpretation of results in relation to previously reviewed studies regarding challenges of implementing formative assessment. The information in this chapter is organized in accordance with research questions. Thus, the first part will provide analysis of findings and literature that align with the main research question on difficulties teachers face implementing formative assessment and the main reasons of these challenges. Second part will discuss the data related to teachers' perceptions towards formative assessment and the third part will present the discussion of findings related to improvement of formative assessment in the context of a sample school.

5.1 Challenges of Implementing Formative Assessment and Reasons Behind Them.

Main research question of the study intended to explore the difficulties teachers have using formative assessment in class. Results of the study revealed four main challenges: (1) generating tasks and classroom activities for assessing students, (2) giving constructive feedback to students, (3) more time-consuming assessment, (4) students' abilities to assess themselves and peers. I am going to discuss each issue as well as their possible reasons in relation to previously conducted literature review.

One of the issues emerged from teachers' stories was related to their abilities to create tasks and classroom activities to assess learners. Results of this study show that these difficulties are mainly connected with teachers' abilities to generate assessment criteria and use differentiated approach in task development. Although all participants were to some extend referring to this issue, inexperienced teachers seemed to struggle more than experienced ones. The most probable explanation to this can be lack of training and professional knowledge of inexperienced teachers. This aspect was also highlighted by Heitink et al. (2015), however in their study it was reported that in line with teachers' abilities to develop formative tasks teachers' skills to use various hardware and software

may also have a great impact on the effectiveness of formative assessment. Thus, computer competence and ICT intelligence did not seem to be a problem for neither experienced nor inexperienced teachers in my study. Their responses were specifically focused only on the task development. Overall, being unable to create relevant and reliable instruments for assessing students it is not possible for teachers to collect information about student learning.

Another important challenge shared by participants of my study is provision of quality and constructive feedback. As it has already been discussed in literature review chapter, the role of feedback is crucial in formative assessment, because it gives opportunities to move learning forward. According to participants of my study, effective feedback has several functions: (1) it has to motivate a student, (2) inform them about their weaknesses, (3) provide with recommendations on further actions in learning. However, it is quite difficult to give feedback that will fully complete all its functions. This was also reflected in explanation provided by McMillan (2014) who defined feedback as a complicated process which is often misused by teachers. Moreover, this point was also supported by Wylie and Lyon (2015) who claimed that "not all feedback, such as providing students with information regarding their current level of achievement, moves learning forward" (p.142). It is thus no surprise that teachers find this element of formative assessment difficult, as to improve their ability to provide constructive feedback teachers most presumably need more practice and relevant training.

Third issue revealed from teachers' professional stories referred to students. Participants of this study pointed at some students' wrong understanding of their own roles in classroom assessment. This means students are not always aware of their own responsibilities in classroom assessment. It is therefore difficult for teacher to activate learners as owners of their own learning when they apply self-assessment and as

instructional resources for one another when they assess peers. Instead, students take more

judging roles and focus on grading each other rather than supporting and providing

guidance. This is similar to what Heitink et al.(2015) say about students' beliefs and

attitudes. They claim that formative assessment requires students to have such skills as

autonomy and responsibility which can be fostered by positive attitude and students' active

involvement in the learning process (Heitink et al., 2015). This shows the necessity to

change students' understandings of their own roles in classroom assessment and accept the

fact that teacher is not the only person in class that can facilitate their learning.

One of the interesting issues revealed from my study was related to time.

Participants were saying that formative assessment is a very time-consuming instrument

which requires them to spend a big proportion of their time on it both inside and outside

the class. This is connected with such features of formative assessment as giving feedback,

creating assessment criteria and classroom activities. Teachers claimed that all the

activities require much time and effort. This issue was only highlighted by experienced

teachers who could compare formative assessment with previous traditional system. It is

not, however, possible to relate this challenge to teachers' professional knowledge. Instead,

it looks more like an interference of their past experience in assessment which can refer to

the fact that formative assessment is far more complex and demanding than traditional 5-

point scale assessment. The same limitation of formative assessment was highlighted in the

study conducted by Wei (2010) who described it as a feature of formative assessment

which may hinder its effectiveness. Results of my study prove that such factor as time may

be an obstacle for teachers; however in context of a sample school it only seems to be an

issue for experienced teachers.

Overall, the major difficulties emerged from this research replicate the findings of

previous studies regarding the challenging aspects of implementing formative assessment.

I found that main challenges in this Nazarbayev Intellectual School are related to teachers'
knowledge and skills in applying formative assessment. This corresponds with Benett
(2011) who claimed that average teacher does not have sufficient knowledge to effectively
use formative assessment. In other words, to achieve positive results it is important to
consider teachers' professional preparedness and ensure support and guidance throughout
the whole process of implementation.

5.2 Teachers' perceptions towards effectiveness of formative assessment.

In order to answer research question related to teachers' perceptions towards the
effectiveness of formative assessment, participants of my study were asked if they believe
that this assessment instrument can really facilitate student learning. Interestingly, both
experienced and inexperienced teachers shared their positive viewpoints regarding
formative assessment in spite of its difficulties and limitations. This also demonstrates their
willingness to use formative assessment as a main instrument in teaching. Similar results
were found in the study conducted by Wen, Tsai and Chang (2006) on teachers' attitudes
towards peer-assessment as an element of formative assessment. They found that both pre-
service and in-service teachers held positive attitudes, however there was a significant
difference in the results of two groups of teachers: in-service teachers were more positive
about the effectiveness of peer-assessment than pre-service teachers (Wen, Tsai & Chang,
2006). Scholars explained it by the fact that pre-service teachers might not be very
confident due to lack of experience using such assessment instrument. This does not fully
replicate the findings of my study, as inexperienced teachers who took part in my research
seemed slightly more confident about the effectiveness of formative assessment than
experienced ones. It could be associated with previous experience, as more experienced
teachers were able to compare formative assessment with traditional 5- point scale
assessment which also had some positive features. For instance, experienced teachers

highlighted the influence of grades on increasing student motivation in traditional assessment. It is therefore clear why they might not be as confident as inexperienced teachers, who have used only formative assessment since they started their careers.

Overall, teachers in a sample school hold positive attitudes towards effectiveness of formative assessment which allows to avoid their resistance to use it as a main instrument in class. It can be assumed that having such viewpoints will positively affect the implementation of formative assessment in a sample school, as according to Heitink et al. (2005) teachers' beliefs and attitudes are crucial for positive outcomes at using assessment for learning.

5.3 Suggestions to improve formative assessment practice in a sample school.

Last research question was targeted on finding ways to improve formative assessment in Nazarbayev Intellectual School. Participants of my study were asked to share their feelings regarding the actions that can be taken to make the assessment more effective. As a result, teachers suggested various ways which were grouped into two main categories such as professional development and collaboration. It can be clearly seen that there is a link between the suggestions teachers' made and challenges they experience applying formative assessment. Thus, the need in professional training can be associated with lack of knowledge and skills, as inexperienced teachers mainly made this suggestion.

Talking about collaboration, it may be assumed that working together on planning, generating tasks and others will allow teachers to spend less time working on their own which is related to the issue of time. To some extent similar suggestions on increasing the effectiveness of formative assessment were made by Wei (2010). Having conducted an action research on the effectiveness of formative assessment in one of Chinese colleges, except for facilitation of collaborative work the researcher also highlighted the importance of relevant professional training, involving students in

assessment criteria development, improving the quality feedback and ensuring fairness in assessment (Wei, 2010) .

It seems that teachers need sufficient guidance and support in applying formative assessment. They therefore cannot be left alone and should be accompanied by school administrators in order to make classroom assessment work for student progress and their high academic achievements.

Chapter 6. Conclusion

This chapter will present the summary of findings on challenges of implementing formative assessment at an NIS. It will also discuss some limitations and delimitations of the study, as well as suggestions for further research.

From the qualitative research that has been carried out, it is possible to conclude that teachers in a sample school experience various challenges in implementing formative assessment. These are related to insufficient professional training and knowledge (generating tasks and activities for classroom assessment, giving constructive feedback to students), time and students (wrong understanding of their roles in classroom assessment). It was possible to differentiate findings in accordance with teachers' years of experience, however there was no any significant subject-specific data revealed. Interestingly, although teachers' professional stories revealed the number of difficulties, all the participants demonstrated rather positive attitude towards the effectiveness of assessment model they use. Moreover, suggestions teachers made on improving classroom assessment in their school demonstrate teachers' willingness to overcome those challenges.

To sum up, both existing research and findings of my study show that formative assessment is a powerful tool in education, however its effectiveness is not easily achieved. It is therefore important for policymakers and school administration to consider the issues teachers have implementing formative assessment in their classrooms.

This study adds to existing research on regarding implementation of formative assessment in Kazakhstani context. Therefore, its findings have a great potential for applications such as improvement of formative assessment model in a sample school. Thus, the results of this research may contribute to the development of classroom assessment at NIS and to further research in other mainstream schools, as the assessment reform has already started being implemented outside of NIS.

6.1. Limitations

Even though the study enabled me to answer all research questions, there were some limitations that should be mentioned.

First and foremost, the revealed findings cannot be generalized for all the other schools in Kazakhstan. This is due to the fact that sample school differs a lot from Kazakhstani mainstream schools in terms of curriculum, facilities, instruction and teaching staff. Therefore, teachers of mainstream schools may have more difficulties applying formative assessment.

Another limitation is related to the fact that analysis of findings does not enable to determine challenges of implementing formative assessment specific to particular subjects. The study was aimed at exploring the issue from different perspectives such as experience of teachers and subjects they were specialized in. However, the responses received from participants do not show any significant subject-specific challenges. It would provide school administration with more detailed information on what kind of support teachers of different subjects need.

Finally, there was a gender disparity, as only one male teacher agreed to take part in my study. This may not largely affect the results, however some existing research on formative assessment showed different perspectives in the responses of male and female teachers making it an important aspect to consider.

6.2. Recommendations for Further research

Since there is a limited research on formative assessment challenges at NIS, it is clear that further research will be required to validate the findings of my study which will make them more relevant for other schools. Based on the results of this study and taking into account its several limitations, it is of great importance to explore the experiences of teachers from some mainstream schools who have already started implementing formative

assessment in their classes. Moreover, further studies should eliminate gender disparities including equal number of male and female participants and be aimed at revealing some subject-specific issues of using formative assessment.

6.3. Research Implications

The findings related to the sample school may show a general picture of teachers' experiences at using formative assessment in all the other NIS in Kazakhstan. The results may be used by school administrators and policymakers so as to improve classroom assessment in these schools by ensuring relevant professional support and guidance for teachers. The findings of the study may be also used by teachers in order to see a broader picture of formative assessment practice and facilitate teacher collaboration.

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Appendix 1

Interview Protocol

Project: Challenges of Implementing Formative Assessment at One Nazarbayev
Intellectual School

Time of interview:

Date:

Place:

Interviewer: Assel Akhmedina

Interviewee:

Position of Interviewee:

The purpose of the study is to explore the challenges of implementing formative
assessment in your school. The interview will involve questions about your perceptions
towards effectiveness of formative assessment, as well as difficulties you have
implementing it.

I will audiotape and take notes during the interview. The recording is to accurately
record the information you provide, and will be used for transcription purposes only. If
you choose not to be audiotaped, I will take notes instead. If you agree to being
audiotaped but feel uncomfortable at any time during the interview, I can turn off the
recorder at your request. Or if you do not wish to continue, you can stop the interview at
any time. The tapes will be used only for data analysis purposes. The recorded audio files
will be destroyed after transcribing the data. If you do not wish to answer any of the
questions during the interview, you may say so and the interviewer will move on to the
next question. No one will use your name in reports, so your privacy will be protected. The
results of the study will be used for scholarly purposes only.

Questions:

Warm-up questions:

1. What subject do you teach? How long have you been teaching?

2. What is your experience working in NIS?

3. What assessment model did you use before formative assessment?

Teachers' attitudes:

4. What do you think about the effectiveness of formative assessment?

5. Do you think formative assessment differs a lot from traditional 5-scale assessment model? If yes, in what ways?

Challenges:

6. What is the most difficult aspect of formative assessment in your practice? Why (not)?

7. Do you find it difficult to give feedback that will facilitate learning? Why do you find it difficult?

8. What do you think are the reasons of challenges you face?

9. What do you think of students' ability to self- and peer-assess?

10. What do you think should be done to improve current formative assessment practice in your school? What kind of professional training regarding formative assessment would you like to do?

Russian version of interview protocol:

Протокол интервью

Проект: Трудности в применении формативного оценивания в одной из Назарбаев Интеллектуальных школ

Время:

Дата:

Место:

Интервьюер: Assel Akhmedina

Респондент:

Описание и процедура:

Исследование направлено на выявление трудностей связанных с применением формативного оценивания в одной из Назарбаев Интеллектуальных школ. Вопросы интервью будут связаны с Вашей практической деятельностью, а

именно с трудностями применения формативного оценивания и Вашего мнения относительно его эффективности.

С Вашего согласия интервью будет записываться на диктофон. Запись интервью будет осуществляться только с целью дальнейшего транскрибирования и наиболее точного сохранения всей полученной информации. Если Вы по каким-либо причинам пожелаете отказаться от аудиозаписи я буду записывать ваши ответы в ручную. Если Вы дадите согласие на аудиозапись, но во время интервью пожелаете прекратить запись вы можете сообщить об этом мне и я продолжу интервью записывая ваши ответы самостоятельно. Аудиозапись с вашими ответами будет использована только для дальнейшего анализа данных. Все аудиозаписи будут удалены после транскрибирования. Во время интервью Вы также имеете право не отвечать на какой-либо из вопросов. В таком случае Вам нужно сообщить об этом и можно будет перейти на другой вопрос. Ваше участие в исследовании будет полностью анонимным. Ваше имя будет заменено на псевдоним. Результаты исследования будут использованы только в научных целях.

Вопросы:

Вводные вопросы:

1. Какой предмет вы преподаете? Какой у вас педагогический стаж?

2. Как долго Вы работаете в НИШ?

3. Какую модель оценивания Вы применяли раньше?

Отношение учителя:

4. Что Вы думаете об эффективности формативного оценивания?

5. Как Вы считаете, намного ли формативное оценивание отличается от традиционной пятибальной системы оценивания?

Трудности:

6. Что для Вас является самым сложным в применении формативного оценивания? Почему?

7. Является ли для Вас трудным предоставление конструктивной обратной связи учащимся, которая способствует обучению? Почему?

8. Что по-вашему является причиной трудностей которые вы испытываете?

9. Что вы думаете о способности учащихся оценивать себя и друг друга?

10. Как можно улучшить применение формативного оценивания в вашей школе? Какие профессиональные тренинги или курсы по формативному оцениванию вы бы хотели пройти?

Appendix 2

INFORMED CONSENT FORM

Challenges of implementing formative assessment at one Nazarbayev Intellectual

School

My name is Assel Akhmedina. I am a student at Nazarbayev University, working with my faculty supervisor, Professor Dilrabo Jonbekova in Graduate School of Education.

DESCRIPTION: I would like to invite you to take part in my research study, which concerns exploration of challenges of implementing formative assessment at one Nazarbayev Intellectual School. If you agree to participate in my research, I will conduct an interview with you at a time and location of your choice. The interview will involve questions about your perceptions towards effectiveness of formative assessment, as well as difficulties you have implementing it. With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide, and will be used for transcription purposes only. If you choose not to be audiotaped, I will take notes instead. If you agree to being audiotaped but feel uncomfortable at any time during the interview, I can turn off the recorder at your request. Or if you do not wish to continue, you can stop the interview at any time. The tapes will be used only for data analysis purposes. The recorded audio files will be destroyed after transcribing the data. Only I will have access to audio files and transcribed data. If you do not wish to answer any of the questions during the interview, you may say so and the interviewer will move on to the next question. No one will use your name in reports, so your privacy will be protected. The results of the study will be used for scholarly purposes only.

TIME INVOLVEMENT: Your participation will take approximately 45-60 minutes.

RISKS AND BENEFITS: There are no major risks to participants associated with the present study. The minor risks related to revealing the names of participants will be minimized by using pseudonyms that will ensure your anonymity. The benefits which may reasonably be expected to result from this study are that as a participant you will have a chance to share your experiences regarding formative assessment for further improvements of current assessment practices in your school. Your decision whether or not to participate in this study will not affect you negatively in any ways.

PARTICIPANT'S RIGHTS: If you have read this form and have decided to participate in this project, please understand your **participation is voluntary** and you have the **right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled**. **The alternative is not to participate.** You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

CONTACT INFORMATION:

Questions: If you have any questions, concerns or complaints about this research, its

procedures, risks and benefits, contact the Master's Thesis Supervisor for this student

work, Professor Dilrabo Jonbekova, dilrabo.jonbekova@nu.edu.kz, tel. +7718996815

Independent Contact: If you are not satisfied with how this study is being conducted, or if

you have any concerns, complaints, or general questions about the research or your rights

as a participant, please contact the NUGSE Research Committee to speak to someone

independent of the research team at +7 7172 709359. You can also write an email to the

NUGSE Research Committee at gse_researchcommittee@nu.edu.kz

Please sign this consent from if you agree to participate in this study.

- I have carefully read the information provided;
- I have been given full information regarding the purpose and procedures of the study;
- I understand how the data collected will be used, and that any confidential information will be seen only by the researchers and will not be revealed to anyone else;
- I understand that I am free to withdraw from the study at any time without giving a reason;
- With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Signature: _____   Date: _____

**The extra copy of this signed and dated consent form is for you to keep.
Russian version of informed consent form:**

СОГЛАСИЕ

на участие в исследовании

Трудности в применении формативного оценивания в одной из Назарбаев

Интеллектуальных школ

Меня зовут Асель Ахмедина. Я студент Высшей школы образования Назарбаев Университета, совместно с моим научным руководителем - профессором Дильрабо Жонбековой, провожу исследование в рамках работы над диссертацией на получение степени магистра.

КРАТКОЕ ОПИСАНИЕ:
Я бы хотела пригласить Вас принять участие в моем исследовании, которое направлено на выявление трудностей связанных с применением формативного оценивания в одной из Назарбаев Интеллектуальных школ. Если Вы дадите свое согласие на участие в исследовании я проведу с Вами интервью в удобное для вас время и в выбранном вами месте. Вопросы интервью будут связаны с Вашей практической деятельностью, а именно с трудностями применения формативного оценивания и Вашего мнения относительно его эффективности. С Вашего согласия интервью будет записываться на диктофон. Запись интервью будет осуществляться только с целью дальнейшего транскрибирования и наиболее точного сохранения всей полученной информации. Если Вы по каким-либо причинам пожелаете отказаться от аудиозаписи я буду записывать ваши ответы в ручную. Если Вы дадите согласие на аудиозапись, но во время интервью пожелаете прекратить запись вы можете сообщить об этом мне и я продолжу интервью записывая ваши ответы самостоятельно. Аудиозапись с вашими ответами будет использована только для дальнейшего анализа данных. Все аудиозаписи будут удалены после транскрибирования. Во время интервью Вы также имеете право не отвечать на какой-либо из вопросов. В таком случае Вам нужно сообщить об этом и можно будет перейти на другой вопрос. Ваше участие в исследовании будет полностью анонимным. Ваше имя будет заменено на псевдоним. Результаты исследования будут использованы только в научных целях.

ПРОДОЛЖИТЕЛЬНОСТЬ: Продолжительность интервью составит примерно 45-60 минут.

РИСК И ПРЕИМУЩЕСТВО:

Участие в исследовании не представляет для вас угрозы. Незначительный риск, связанный с раскрытием вашего имени будет предотвращен путем использования

псевдонима. Таким образом, Ваше участие в исследовании будет полностью анонимным. Преимущества данного исследования для Вас заключаются в возможности поделиться опытом применения формативного оценивания, а именно проблем и трудностей из вашей практики. В дальнейшем полученные данные могут быть применены для улучшения системы оценивания и решения проблем. Ваше решение относительно участия в исследовании не будет иметь никакого отрицательного влияния на вас.

ПРАВА УЧАСТНИКА: Если вы прочитали данное соглашение и решили принять участие в исследовании Вам необходимо помнить, что ваше участие является полностью добровольным и вы имеете право прекратить участие в исследовании без каких-либо последствий для вас. У Вас есть право не отвечать на какой-либо из вопросов интервью. Результаты исследования будут представлены только в научных кругах.

КОНТАКТНАЯ ИНФОРМАЦИЯ:

Вопросы: Если у Вас имеются какие-либо вопросы, жалобы или сомнения

относительно исследования, Вы можете связаться с моим научным руководителем,

профессором Дильрабо Жонбековой: dilrabo.jonbekova@nu.edu.kz, тел. +7718996815

Независимое контактное лицо: Если Вас не устраивает то как проводится

исследование, либо у вас имеются какие-либо вопросы или жалобы относительно

процедуры, вы можете связаться с научным комитетом Высшей школы образования

Назарбаев университета: тел. +7 7172 709359, gse_researchcommittee@nu.edu.kz

Если Вы согласны на участие в исследовании, поставьте свою подпись в данном

соглашении.

- Я внимательно ознакомился со всей представленной информацией;
- Я полностью ознакомлен с целями и процедурой исследования;
- Я имею понятие о том, как будет использована информация, полученная от меня и о конфиденциальности всей процедуры;
- Я знаю о том, что имею право прекратить участие в исследовании в любое время без объяснения причины;
- Имея полное представление об исследовании, я даю свое добровольное согласие на участие.

Подпись: _____   Дата: _____

Второй экземпляр соглашения предназначен для участника исследования

Appendix 3

Sample of interview transcript:

Interview Protocol № 7

Project: Challenges of Implementing Formative Assessment at One Nazarbayev Intellectual School

Time of interview: 14.00

Date: 04.03.2017

Place: NIS Karaganda, T206

Interviewer: Assel Akhmedina

Interviewee: D

Position of Interviewee:

The purpose of the study is to explore the challenges of implementing formative assessment in your school. The interview will involve questions about your perceptions towards effectiveness of formative assessment, as well as difficulties you have implementing it.

I will audiotape and take notes during the interview. The recording is to accurately record the information you provide, and will be used for transcription purposes only. If you choose not to be audiotaped, I will take notes instead. If you agree to being audiotaped but feel uncomfortable at any time during the interview, I can turn off the recorder at your request. Or if you do not wish to continue, you can stop the interview at any time. The tapes will be used only for data analysis purposes. The recorded audio files will be destroyed after transcribing the data. If you do not wish to answer any of the questions during the interview, you may say so and the interviewer will move on to the next question. No one will use your name in reports, so your privacy will be protected. The results of the study will be used for scholarly purposes only.

Questions:

Warm-up questions:

1. What subject do you teach? How long have you been teaching?

- *English language. For two and a half years.*

2. What is your experience working in NIS?

- *I have been working here for two and a half years. NIS is my first place of work.*

3. What assessment model did you use before formative assessment?

- *When I was having practice at university we used just usual form of assessment, when you ask a student and you put a mark, whether it is 4,5 or 3 without any criteria specified.*

- Like traditional 5-scale assessment?

- *Yes.*

Teachers' attitudes:

4. What do you think about the effectiveness of formative assessment?

- *I think it's a very effective tool when both parts – the teacher and the student understand the purpose of this assessment. I mean, first of all, you have to differentiate between the formative and summative assessment. And traditional 5 point scale assessment looks to me more like a summative assessment in some ways. Formative assessment is useful because it allows to students not to really focus on the mark the student get, but more how he or she may improve their answer, for example. So I consider this to be a training like for people doing sports, lessons are formative assessments and I consider my lessons to be like training sessions rather than just official matches. Something like that. So that students can come and try to practice their skills and become better.*

5. Do you think formative assessment differs a lot from traditional 5-scale assessment model? If yes, in what ways?

- *Well, as I said, because 5-scale looks to me like a summative assessment, I think there has to be the huge difference then. In a traditional form you just give a mark, if you liked the answer you will give that answer a particular good mark, if you didn't like the answer you just give not a good mark. It's also different; I mean I am not sure if teachers who have been using traditional method have any established criteria, which means this assessment is biased and prejudiced because there is no criteria for assessment. So the first thing that's different to me is having no criteria for assessment and the second which is different is that 5-scale looks like summative. These are key differences for me.*

Challenges:

6. What is the most difficult aspect of formative assessment in your practice? Why (not)?

- For me the most difficult is that you have no experience, I mean I have never been assessed formatively myself. So it may become a little bit difficult to understand it from the start when you start teaching and using formative assessment, cause it may be difficult to understand how to do that, but difficulty that I faced is I think developing the criteria. I mean you really have to know what you want to do, and I think this takes a lot of planning to develop good criteria, because criteria they don't just appear from nowhere, you have to connect them with specific outcomes of your lesson and connect them to what you want your students to know at the end of the lesson. And ... so these two things I think are the most difficult for me.

7. Do you find it difficult to give feedback that will facilitate learning? Why do you find it difficult?

- Well, if you have good criteria I think it's not difficult, because when you have the criteria you see how the answer of the student is different from criteria. And if you see that difference it is not a big deal to give a good feedback. So to my mind, I think I most of the time give a good feedback, but since everyone has some area to improve I would keep it as most of the time, not all the time.

8. What do you think are the reasons of challenges you face?

- Well, probably inexperience is the biggest challenge I beleive, and the second one may be is when you create the success criteria you really have to keep in mind all of the things, and if don't keep them in mind or you don't know some of the things, and you are not aware about some of the processes which may be happening in your lesson, you probably.. this will be another difficulty, I think.

9. What do you think of students' ability to self- and peer-assess?

- I think first of all it takes a little bit of time to make students assess themselves and assess other people, because some ... well I believe the majority of them still feel like if I am an assessor then I am judging, and I don't want to judge anybody, because this is just not a good idea. They have the ability, but I think it takes time to reveal those abilities. I think they can do that, but they need firstly understand a few things, that you are not judging, but

helping another person to improve, and secondly, this benefits not only the person who you are assessing, but it also benefits you. So unless they understand those, I think they have some problems, but if they understand those I think students are able to assess, because if you give them criteria how to assess I think they can do that.

- Do you apply this kind of assessment?

- *Oh yeah, because watching students' giving feedback to each other may also tell about how much they know on a particular topic. So I think it works both ways, for students and for a teacher. Because you can also evaluate students.*

10. What do you think should be done to improve current formative assessment practice in your school?

- *Well I think the most important point is that everybody has to understand the purpose of formative assessment and everybody has to know how to do that, so I think may be some workshops, something like that, some seminars or training sessions will be good, although I am not really sure, this is just about how well people understand the purpose of formative assessment, how well all the school know the principles of formative assessment. And if the majority of people don't know how to do that, maybe we need some large scale sessions.*

- What kind of professional training regarding formative assessment would you like to do?

- *I think, I would like to attend classes of people who do formative assessment, like real formative assessment. I think it will be helpful, and also maybe some theoretical ones, theoretical seminars maybe, but the ones which do not just explain some simple basic things, the ones that go a little bit further, the majority know those basic things and when they start implementing them some difficult things start appearing and the people tend to refer back to traditional assessment, because there are some difficulties and I don't want to deal with them.*

- Do you think some teachers may not use formative assessment because of the challenges they face?

- *Well, I believe so, it's human's nature.*

Appendix 4

Sample of thematic color coding:

Interview Protocol № 7

Project: Challenges of Implementing Formative Assessment at One Nazarbayev
Intellectual School

Time of interview:14.00

Date: 04.03.2017

Place: NIS Karaganda, T206

Interviewer: Assel Akhmedina

Interviewee: D

Position of Interviewee:

The purpose of the study is to explore the challenges of implementing formative
assessment in your school. The interview will involve questions about your perceptions
towards effectiveness of formative assessment, as well as difficulties you have
implementing it.

I will audiotape and take notes during the interview. The recording is to accurately
record the information you provide, and will be used for transcription purposes only. If
you choose not to be audiotaped, I will take notes instead. If you agree to being
audiotaped but feel uncomfortable at any time during the interview, I can turn off the
recorder at your request. Or if you do not wish to continue, you can stop the interview at
any time. The tapes will be used only for data analysis purposes. The recorded audio files
will be destroyed after transcribing the data. If you do not wish to answer any of the
questions during the interview, you may say so and the interviewer will move on to the
next question. No one will use your name in reports, so your privacy will be protected. The
results of the study will be used for scholarly purposes only.

Questions:

Warm-up questions:

1. What subject do you teach? How long have you been teaching?

- *English language. For two and a half years.*

2. What is your experience working in NIS?

- *I have been working here for two and a half years. NIS is my first place of work.*

3. What assessment model did you use before formative assessment?

- *When I was having practice at university we used just usual form of assessment, when you ask a student and you put a mark, whether it is 4,5 or 3 without any criteria specified.*

- Like traditional 5-scale assessment?

-*Yes.*

Teachers' attitudes:

4. What do you think about the effectiveness of formative assessment?

- *I think it's a very effective tool when both parts – the teacher and the student understand the purpose of this assessment. I mean, first of all, you have to differentiate between the formative and summative assessment. And traditional 5 point scale assessment looks to me more like a summative assessment in some ways. Formative assessment is useful because it allows to students not to really focus on the mark the student get, but more how he or she may improve their answer, for example. So I consider this to be a training like for people doing sports, lessons are formative assessments and I consider my lessons to be like training sessions rather than just official matches. Something like that. So that students can come and try to practice their skills and become better.*

5. Do you think formative assessment differs a lot from traditional 5-scale assessment model? If yes, in what ways?

- *Well, as I said, because 5-scale looks to me like a summative assessment, I think there has to be the huge difference then. In a traditional form you just give a mark, if you liked the answer you will give that answer a particular good mark, if you didn't like the answer you just give not a good mark. It's also different; I mean I am not sure if teachers who have been using traditional method have any established criteria, which means this assessment is biased and prejudiced because there is no criteria for assessment. So the*

first thing that's different to me is having no criteria for assessment and the second which is different is that 5-scale looks like summative. These are key differences for me.

Challenges:

6. What is the most difficult aspect of formative assessment in your practice? Why (not)?

- For me the most difficult is that you have no experience, I mean I have never been assessed formatively myself. So it may become a little bit difficult to understand it from the start when you start teaching and using formative assessment, cause it may be difficult to understand how to do that, but difficulty that I faced is I think developing the criteria. I mean you really have to know what you want to do, and I think this takes a lot of planning to develop good criteria, because criteria they don't just appear from nowhere, you have to connect them with specific outcomes of your lesson and connect them to what you want your students to know at the end of the lesson. And … so these two things I think are the most difficult for me.

7. Do you find it difficult to give feedback that will facilitate learning? Why do you find it difficult?

- Well, if you have good criteria I think it's not difficult, because when you have the criteria you see how the answer of the student is different from criteria. And if you see that difference it is not a big deal to give a good feedback. So to my mind, I think I most of the time give a good feedback, but since everyone has some area to improve I would keep it as most of the time, not all the time.

8. What do you think are the reasons of challenges you face?

- Well, probably inexperience is the biggest challenge I beleive, and the second one may be is when you create the success criteria you really have to keep in mind all of the things, and if don't keep them in mind or you don't know some of the things, and you are not aware about some of the processes which may be happening in your lesson, you probably.. this will be another difficulty, I think.

9. What do you think of students' ability to self- and peer-assess?

- I think first of all it takes a little bit of time to make students assess themselves and assess other people, because some … well I believe the majority of them still feel like if I am an assessor then I am judging, and I don't want to judge anybody, because this is just not a

good idea. They have the ability, but I think ==it takes time to reveal those abilities==. *I think they can do that, but they need firstly understand a few things, that you are not judging, but helping another person to improve, and secondly, this benefits not only the person who you are assessing, but it also benefits you. So unless they understand those, I think they have some problems, but if they understand those I think students are able to assess, because if you give them criteria how to assess I think they can do that.*

- Do you apply this kind of assessment?

- Oh yeah, because watching students' giving feedback to each other may also tell about how much they know on a particular topic. So I think it works both ways, for students and for a teacher. Because you can also evaluate students.

10. What do you think should be done to improve current formative assessment practice in your school?

- Well I think the most important point is that ==everybody has to understand the purpose of formative assessment== *and everybody has to know how to do that, so I think may be* ==some workshops, something like that, some seminars or training sessions will be good==, *although I am not really sure, this is just about how well people understand the purpose of formative assessment, how well all the school know the principles of formative assessment. And if the majority of people don't know how to do that, maybe we need some large scale sessions.*

- What kind of professional training regarding formative assessment would you like to do?

- I think, I would like ==to attend classes of people who do formative assessment==, *like real formative assessment. I think it will be helpful, and also maybe some theoretical ones, theoretical seminars maybe, but the ones which do not just explain some simple basic things, the ones that go a little bit further, the majority know those basic things and when they start implementing them some difficult things start appearing and the people tend to refer back to traditional assessment, because there are some difficulties and I don't want to deal with them.*

- Do you think some teachers may not use formative assessment because of the challenges they face?

- Well, ==I believe so,== *it's human's nature.*