

# Report on the introduction of the new curriculum, pedagogy and assessment in primary schools (Grade 1 in Kazakhstan)

Fifth Report  
on the research collaboration between  
University of Cambridge Faculty of Education  
Nazarbayev University Graduate School of Education

November 2016



## Executive Summary

This report is the outcome of the study conducted by Nazarbayev University Graduate School of Education, the Faculty of Education University of Cambridge and the Nazarbayev Intellectual Schools research department. The study examined the attitudes and perspectives of schoolteachers, school principals and other stakeholders towards the implementation of novel features of the primary education curriculum and new principles and practices of assessment at mainstream schools in Kazakhstan. It had two aims

- To examine the attitudes and perspectives of schoolteachers, school principals and other stakeholders towards the implementation of novel features of the primary education curriculum and the new principles and practices of assessment at mainstream schools in accordance with the State Compulsory Standards of Primary Education in Kazakhstan.
- To provide recommendations for the effective implementation of the new curriculum and assessment practices in the primary education sector in Kazakhstan.

## Methods used

The study used two methods of data collection:

- 14 interviews and 7 focus groups with a total 35 participants were conducted in late April 2016 in six pilot schools to represent southern, western and central regions of Kazakhstan and an equal number of rural and urban locations
- A survey, which generated qualitative and quantitative data through a mix of written open and closed questions, was distributed to 67 Grade 1 and 253 teachers of other grades in late April 2016 in the six pilot schools visited. It was further administered to 253 Grade 1 teachers (only) in early May 2016 in the remaining 24 pilot schools.

The discussion of the curriculum strand of the study opens with the suggestion that two concepts of ‘curriculum control’ and ‘curriculum coherence’ used by Oates (2010) in a transnational analysis of the development of and management of curriculum development could prove useful in the analysis and these are discussed further.



## Findings on the new aspects of the curriculum

**The main finding of the curriculum strand of the study suggests that perceptions and practices did change over time in the introduction of the new curriculum.**

The qualitative data showed that many teachers and head teachers saw the new curriculum as a significant change in thinking and practice or as one head teacher said, ‘We have had change before but this is a paradigm shift.’ (Principal\_SK\_U). Teachers strongly believe that the new primary school curriculum is aimed at the development of functional literacy of students, i.e. an ability to apply knowledge in real-life conditions, efficiently analyse, validate, communicate and solve problems in different situations.

Results show that first grade teachers in the 30 pilot schools (n = 282) have a relatively positive attitude towards the content of the new curriculum. Teachers tend to agree that the content of subjects is aligned with the aims and objectives in the new curriculum. In contrast, teachers are less positive about the support received to deal with the demands of the new content, the number of contact hours available with the students in the new curriculum and especially with the level of difficulty of the new curriculum.

Teachers stressed the importance of preschool education and the preparation of children for school. The perception of urban and rural teachers about the new curriculum is similar for all components of the curriculum. Only statistically significant differences were found in the teachers' perceptions regarding the difficulty of the curriculum.

Rural teachers considered that the difficulty of the curriculum is less adequate for the majority of the students compared to their urban counterparts. More specifically, 66% of urban teachers agreed or strongly agreed that the difficulty of the new curriculum is at the right level for students, compared to 54% of rural teachers.

**Overall, teachers working with the new curriculum demonstrate a more positive attitude toward curriculum content than teachers working with the old curriculum.** 88% of teachers using the new curriculum agree or strongly agree with the statement ‘The content of subjects is appropriate to achieve the aims and objectives of the curriculum’, compared to over 81% of the sample of teachers of other grades working with the old curriculum.

Similarly, 80% of first grade teachers indicated that they agree or strongly agree with the statement ‘The number of subjects in the new curriculum is more appropriate to achieve the aims and objectives of the curriculum’, compared to 60% of the sample of teachers using the old curriculum. On the contrary, analysis of the interview data



evidenced that a number of teachers were not confident about the efficiency of integration of certain subject in the new curriculum, such as Music and Fine Art.

**In the area of pedagogy, teachers reported the change in the role, which required new ways of working in the classroom and a shift to greater preparation.** The teachers noticed that pupils wanted to come to school more and found the pedagogic approaches more interesting and engaging. This parallels the increased motivation that some teachers described.

Collaboration had increased and teachers were collaborating within and between schools. This was highly valued. The collaboration was between teacher and teachers, student assistants and teacher, between schools and it took many forms. The teachers were engaging in joint planning, co teaching, observations of each other, training sessions and team teaching. This was very new in many cases and at first had been challenging but the teachers talked of it being valued.

### **Challenges**

One of the biggest issues faced by teachers is the increased workload. One of the reasons for the increased load is more preparation time for planning lessons, added to by the need to search for resources, make materials and be creative, as mentioned in previous sections. Another reason for increased load is the extensive reporting that the schools were required to undertake and it was not clear how the information gathered was used for decision-making.

There were issues around managing the content in the curriculum, the prescription of the timetable hours and the time allocation per subject. The research analysis shows that teachers faced a lot of difficulties while piloting the new curriculum on language subjects; however, they saw marked advantages of the programme as well. In contrast to the Russian language teachers, English language teachers were less positive in their statements about innovation.

The **conditions for active learning** in some schools were very limited i.e. furniture immovable etc. The big issue for many teachers was mixed ability teaching, particularly in the rural schools. Resources vary a great deal between school types from some having a lack of water to some schools having daily Internet access. Internet access was key as many teachers were making their own resources.

One of the **essential resources** for pilot schools was an online platform (sk.nis.edu.kz). Unfortunately, some schools could not access those online resources because of technical issues and limited Internet connection. To sum up, rural schools need support in improving their infrastructure, and urban schools need solutions with oversubscription of schools.



In terms of **textbooks**, interviewees preferred textbooks of Almaty Kitap & Nazarbayev Intellectual Schools. The majority admitted that Almaty kitap textbooks followed the curriculum exactly, which made teacher's life easier, whereas NIS textbooks required more effort from teachers and a contribution to the development of higher-order thinking skills. There were issues with multiple types of textbook and delays in delivering textbooks to schools.

### **Findings on the new practices and principles of assessment**

The assessment strand of the report opens with a discussion of **the purposes of assessment** and the shift being required of teachers in Kazakhstan from using assessment as an **accountability** function to using it to assess **learning and progress**. Winter et al.'s (2014) proposition that the existing five-point scale has come to be seen as unfit for purpose includes a critique concerning the absence of level descriptors and low discriminative function of using only three points from 3 to 5. Furthermore, teachers' judgments are often based on comparing each student's achievements with those of other students in the same class to adopt a norm-based model of assessment rather than an individualised pattern of child-by-child ability and achievements.

The findings of the assessment strand of the report support the idea of tailored learning and suggest that rewards of the new system include more **motivated children**. The previous system of motivation by simple grade allocations is being replaced by more individualised feedback on way to improve that encourage children's **self-reflection and autonomy**.

At the same time, traditional record keeping appeared to be getting in the way of thinking consciously about the deeper purposes and strategies of assessing students' learning. 'Control' was often mentioned as the purpose of assessment by those unfamiliar with the new curriculum. Indeed, teachers of other grades to Grade 1 in the six schools visited had little to offer in their opinions of the purposes of assessment beyond teachers being equipped to present to others evidence of their hard work through the mechanical repetitive checking of individuals in student workbooks. By contrast, two themes were significantly more prevalent for Grade 1 teachers compared to teachers of other grades: assessment to check the **acquisition of skills**; and, assessment to explicitly check each **student's learning objectives** had been achieved. Hence, one of the most significant findings was the awakening of teachers' professional interest in how and why students are assessed to benefit them best. Thus changes in assessment practices have prompted **higher salience** in the purposes of assessment towards a general review of teachers' attitudes on what it is they are hoping to see realised from their teaching.



Apart from discourse within schools, what has taken a considerable amount of effort on the part of teachers of the new curriculum is **explaining to parents** what the new forms of reporting mean to explain and justify why students are not grades given on a daily basis. This has taken up teachers' time but has provided a mechanism by which children's learning can be discussed in parent-teacher groups and individually with parents. Therefore, an important by-product of altering the reporting system to parents has been to engage more with parents. Conversations have begun to be more commonplace that directly set out to create a **common understanding of a child's learning objectives** at school that involve parents directly and through negotiation and joint endeavour build up better home-school relationships. Although, it had to be said that hard-to-reach parents still await this new dynamic and not all parents were that concerned as to the changes or their meaning.

Uncertainty around the precise and constant **definition of criteria** illustrates the potential lack of coordination and leadership within the school and a reluctance to make professional judgements with confidence. The confusion over how criteria were set and applied was not limited to just one school but in other cases the flexibility of the system was seen as a benefit as much as a drawback. Some of the criteria for some subjects for some teachers are still unclear and the responsibility as to who defines them even more problematic. The level of difficulty of criteria needs monitoring and constant review to allow the level to be realistically achievable for all students.

However, through the introduction of criteria-based assessment, **formative assessment** is becoming better understood in its own right. Despite this it has taken some effort to undo the practices of many years and for teachers to write a formative comment rather than a habitual grade. Indeed, there is still a long way to go in allowing all teachers, even those exposed to the new curriculum, to develop confident understanding of formative assessment principals and their place in an overall assessment for learning paradigm.

Overall, despite the radical overhaul in thinking required, teachers seem overwhelmingly positive towards the reforms and as professionals can see its benefits as well as initial problems of implementation. In terms of reform, the survey results show that an **Assessment for Learning** approach is already prevalent in the Grade 1 teachers in the 30 pilot schools so marked progress towards emphasising learning over reporting for accountability appears to be on the way.

### **Training, support and the management of change**

The strand of the report on training, support and the management of change stresses that **crucial role undertaken by NIS** was very important for all schools and for rural schools in particular, where other sources of support were limited. This has implications as the process is scaled up.



Importantly, there are **different needs at different times** in the training and learning process and this needs careful thought (Cordingley et al, 2016). The survey data also showed that the training needs of less experienced staff were greater than the experienced staff even if the content was new to both groups. This suggests that less experienced staff need greater support and may be for longer.

Some **schools felt isolated** and wanted more connection to the Oblast [regional] office. Others were connected, running workshops and sharing their experiences with schools and parents in their locality. There were different perceptions of their roles and collaboration amongst the pilot schools and this was related to the variability of leadership, support, feedback, and collaboration.

There was **some evidence of tensions or differences of understanding of purposes** between different parts of the system and at different levels. An example was the tension between accountability and development. The teachers and schools described being in an experimental state i.e. learning about and developing practice, trying out ideas and working to understand the innovations required. At the same time, the change was being assessed via student outcomes. This is a very early stage and this is a controversial and debatable idea.

It was not clear in the enquiry **how the feedback from the teachers was informing decision-making**. There was much reporting and multiple forms according to the teachers. If the system and policy makers are to learn from the experience of the teachers, then the system needs to have a learning orientation rather than a solely accountability focus.

The experience of the pilot schools suggests that the challenge of implementing a new curriculum with new assessment modes and new pedagogical approaches has been positive and has shown elements of innovation and ownership in these schools.

## Recommendations

The report concludes by providing recommendations, as listed below, on the implementation of new curriculum and assessment principles in Kazakhstan.

### 1. Coherence and control in the reform

We have suggested that the idea that coherence and control can be a very important analytic tools for examining the effectiveness of educational policy. We see that the examples of coherence in the policy and practice have been very powerful drivers of change in this research.

- The coherence between the aims of the curriculum and the assessment practices have been powerful drivers



- The cross-curricular themes have been levers for collaboration within and between schools
- The autonomy of teachers and schools have driven important aspects of the reform, e.g. school principals engaging with their communities and parents to explain the reform and take the initiative; teachers creating their own resources and collaborating within schools
- The sustained support and training have been supportive of real change in many teachers

However, there are also tensions

- Between the imperative of teacher experimentation at a time of the introduction of a new curriculum, pedagogy and assessment practices and the understandable desire of policy makers to demonstrate success thus monitoring and testing prematurely
- Between the aims and the provision of resources to meet those aims
- Between prescription and flexibility
- Between the experience of the pilot schools, the pace of change and the demands of scaling up

## **2. The Basics: Resources**

Rural schools need support in improving their infrastructure, and urban schools need solutions with oversubscription of schools. Moreover, schools require more resources to implement the new curriculum. There are examples quoted in our report which show that Akimats (local authorities) responsible for providing school with resources did not have sufficient budget to provide those. One of the suggestions is that funding goes from the Republican budget. Provision of necessary resources is essential, as it can have serious implications for the future roll out and even more demand on resources. This is a key recommendation and is crucial to the impact of the reform in rural areas.

## **3. The curriculum and content**

Teachers and head teachers to be given some autonomy over the timetable e.g. length of lessons, ability to have double lessons and sequence the content. This will enhance necessary local problem solving as well as the sense of professionalism and motivation of staff.

## **4. Pedagogy**

Continue to monitor the curriculum introduction and particularly with a focus on the pedagogic approaches to ensure the change develops.

Build on and reward the autonomy, collaboration and creativity of teachers who are creating their own resources.

Develop credible alternatives to the web based materials on the NIS sites that rural teachers can easily access, e.g. on CD.



## **5. Textbooks**

Textbooks need to be consistent with the curriculum and learning objectives, and if teacher autonomy and resourcefulness are to continue to be expected then teachers need more support in the professional use of textbooks. There were issues with multiple types of textbook and delays in delivering textbooks to schools. We are aware that this situation has moved on and that decisions have been made already about textbooks to be used.

## **6. Teachers and teachers' workload**

The shift in the teacher's tasks and role should be openly acknowledged and adjustments made in the Stavka to recognise the different expenditure of time on tasks such as preparation.

There needs to be a monitoring of the increase in teacher workload and steps taken to address increases and the recognition of this.

## **7. Support and training**

There is a need to ensure the coherence of the key messages re the new curriculum assessment and pedagogy and these need to be communicated clearly at all levels of the system including regional and local.

- The identified supports e.g. methodological collaboration etc. need to continue to be developed
- The emphasis on teacher education and the increase in quality needs to continue as it is showing dividends
- Continue the level of support and training and recognition of different stages of training according to experience of the changes. More experienced colleagues will need support but less than less experienced colleagues and they can be used to support and mentor less experienced peers
- Continue to allow teachers a range of training experiences including seeing the desired changes in action
- Assess the level of need and the capacity of training and support providers to meet the real need
- Build on the local networks being established at local level i.e. between schools and schools and parents and schools. Give resource to these networks in order to strengthen them and support the leaders emerging at this level.
- There is an urgent need for training in mixed ability teaching for many teachers in rural settings who have to deal with multiple changes and this will escalate in the near future
- The activities where teachers and school principals are working closely with parents should be encouraged and the best practices shared

## **8. Change and scaling up**



Training and support have been identified as a key driver of the development. Three key issues for the scaling up of the mainstream roll out are these:

1. The issue of the future level of training and support. Will the same level of training be available? Would the pilot schools have to provide this level of training and support and could they provide it?
2. The induction of new teachers who have moved after training will be an issue i.e. how will new teachers be inducted?
3. There is a need to test the cascade model, which may dissipate the understanding. The issue of fidelity to the programme means that there must be an awareness and recognition of signs of dilution.
  - Need for monitoring, ongoing research and evaluation of the pilot experience
  - The point made above to inform policy amendments
  - Monitor the reporting load and bureaucratic demands on teachers and try to reduce the overload

## **9. Criteria-based assessment**

Initial-teacher education and professional development programmes need to talk more specifically about the reasons behind the criteria that are being asked to be upheld. An overall strategy for each subject discipline for each year would be helpful. This would be especially helpful for some subjects such as music, physical education and less formal academic subjects.

A grade on grade plan that clearly shows the continual acquisition of knowledge, skills and student autonomy from Grade 1 to Grade 11 would provide some short-term and long-term targets in a larger sense to allow contextualisation of criteria for teachers in each grade.

## **10. Formative assessment and other classroom practices**

Although there is encouraging evidence that teachers are beginning to adopt a student-centred Assessment for Learning approach that includes formative assessment principles, monitoring and evaluation of the reform process in assessment needs to continue with research to compare the growth and overall acceptance of Assessment for Learning beliefs as they spread out to other grades and from pilot schools

Teachers' and parents' understanding of how formative assessment works beyond stickers and other forms of extrinsic motivation needs to be developed. More training in the theories and rewards of formative assessment in terms of motivating and appraising students to encourage self-development and intrinsic willingness to learn need to be made more prominent

Teachers' need to have age-appropriate awareness of the types of activities that may be seen as formative plus consider how some summative activities may work alongside formative practices especially as children are readied for external evaluations in the higher grades



As the curriculum pilot is occurring initially in Grade 1, opportunities for self-assessment and peer-assessment are more limited than perhaps they would be for older children. As cognition naturally develops and children mature, additional aspects of assessment need to be monitored in respect to how a full suite of formative assessment possibilities are being used

### **11. More general aspects of assessment**

Individualised learning in a classroom setting has challenges in accommodating the children identified as slow or quick learners. For those who are working at a different pace to the majority, support needs to be provided either in the form of more teaching assistance or extension work programmes. Otherwise students will not be able to work to their full potential or teachers may become overburdened.

School-parent dealings need resources to facilitate meetings and suchlike to avoid miscommunication and confusion in order to explain the shift in assessment practices

The new discourse on what constitutes academic success for pupils through different types of assessment should be encouraged to continue – maybe through a special interest group in (Kazakhstan Educational Research Association) KERA or elsewhere that provides fora opportunities and the possibility of national expertise to be collectively developed

Monitoring of teachers' effectiveness needs to be considered and accountability concerns made more transparent and appropriately designed. This is in particular so teachers' accountability is not measured by falling back on simplistic tests or examinations for students