

# INTEGRATED CRITERIA-BASED ASSESSMENT MODEL IN NAZARBAYEV INTELLECTUAL SCHOOLS

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## Abstract

In accordance with the Development strategy of Nazarbayev Intellectual schools (NIS) the mission of NIS to enhance the intellectual capacity with the development and implementation of innovative model of school system is realised through NIS strategic tasks including creating curricula and learning resources, helping students to become functionally literate lifelong learners who are polylingual, patriotic, responsible citizens, creative and critical thinkers, and developing a transparent system for assessment. The NIS Integrated Educational Programme values set like respect for self and others, cooperation, transparency, social responsibility, lifelong learning within which conditions are established for student acquisition of a range of skills essential for success in the 21st century.

Formation of innovative model of school education is the objective necessity of modern education. Establishment of such model requires changing not only the content of education, methods of teaching, school structure and interrelation system but principles of academic achievement assessment as well. Integrated criteria-based assessment model presents the system of assessment for the objective student achievements assessment, based on clearly defined assessment criteria, designed to correspond with the learning objectives stated in the Integrated Educational Programme.

**Key words:** education, assessment system, criteria-based.

## INTRODUCTION

Nazarbayev Intellectual Schools (NIS) are intended to act as experimental platform offering development, monitoring, research, analysis, approbation and implementation of modern educational programme models.

Existing requirements and standards of education in the Republic of Kazakhstan did not permit to introduce modern forms of management in the field of education, implement innovative educational programmes and scientific projects at an adequate level.

Formation of innovative model of school education combining the best traditions of the Kazakh and world education systems is the objective necessity of modern education. Establishment of such model requires changing the content of education, methods of teaching, principles of academic achievement assessment, school structure and interrelation system.

Assessment system which is used in the education system of the Republic of Kazakhstan is, as a rule, based on the comparison of individual achievements of students with the norm or results of the high, middle and low level students in the class. The use of the system did not allow to define the level of each student and to motivate their work, or ensure individual progress in learning, or provide information to evaluate the effectiveness of educational programme and to establish feedback with all the participants of the educational process.

To meet these challenges there appears the need for transparent, valid and objective system of school-based assessment, based on common criteria that would allow for timely individual educational support for students in the planned learning outcomes achievement.

Development of criteria-based assessment system in NIS consisted of several stages. Thorough analysis of international experience and best practice assessment systems allowed to determine the differences and common understanding in approaches to criteria-based assessment realization.

To ensure objective assessment of students achievements and progress NIS develops and implements criteria-based assessment system, which includes development of criteria-based assessment model and technology of its application. The model has been developed in collaboration with Cambridge International Examinations experts to be used within NIS and to be a flexible tool which can also be applied in organizations for secondary education in Kazakhstan.

On the approbation stages of the assessment system training sessions for teachers, criteria-based assessment system conception and regulations, guidelines for teachers were provided. The system was initially piloted in grades 7 and 8 of Intellectual schools.

According to the results of approbation there was the report prepared, which reflected the benefits and positive aspects and difficulties faced by schools in the application of the criteria-based assessment, as well as activities of schools aimed at eliminating the difficulties.

Recommendations on the assessment system improvement provided by CIE experts during consultation meetings following the approbation, assessment review activities with received feedback from all the stakeholders were the basis for the amendments made to the criteria-based assessment model. Implementation of the integrated model of criteria-based assessment model started in academic year 2013-2014 in grades taught under the Integrated educational programme.

### **MODEL OVERVIEW**

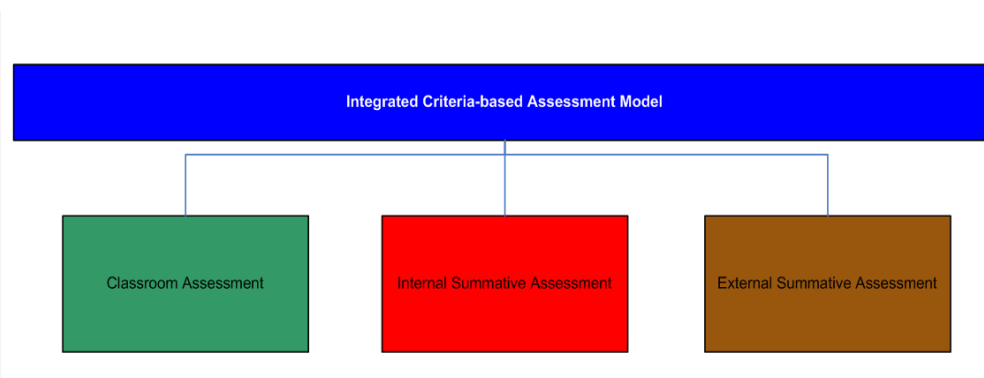
The use of integrated criteria based assessment model allows carrying out internal and external assessments in NIS systematically.

The Integrated criteria based assessment model:

- is based on the principle of teaching and assessment unity;
- focuses on forming a coherent approach to ensure learner progress and achievement;
- ensures realization of learning objectives and gathering evidence of the subject knowledge and skills achievement in accordance with the subject programmes;
- includes variety of methods and forms of assessment based on the content of the subject programme for each grade.

There are three strands of assessment used throughout the school year to capture learner achievement and progress of students of NIS:

- Classroom assessment – carried out throughout each school term.
- Internal summative assessment– carried out at the end of each of the four terms.
- External summative assessment– carried out at key assessment points in certain subjects.



### **Links with the Subject Programme and Course Plans**

All three forms of assessment are based on the content of the subject programme. The subject programme provides the key information relating to the subject at a phase of education (primary, secondary or high school). Each subject programme contains information on required knowledge, understanding and skills for the subject, acquisition of which ensure achievement of learning objectives and learner progress in comparison with the previous year.

Course plans order the content of the subject programme for a subject and grade to give a suggested way in which requirements can be covered. They include all the learning objectives and group together related topics and concepts in the learning objectives into units to ensure recommended way to cover requirements. The medium-term planning section of this document gives suggested activities to cover these objectives.

#### **Assessment criteria**

Achievements in learning of Nazarbayev Intellectual schools students are assessed against assessment criteria when using classroom and internal summative assessment.

Criteria differ by subject groups and allow assessing key skills achievement which have been identified in the Integrated educational programme of Nazarbayev Intellectual schools as broad spectrum of skills or 21<sup>st</sup> century skills which include:

- enquiry (analysis and synthesis)
- problem solving
- critical thinking
- independent learning
- collaboration
- information handling
- creating and designing
- practical and experimental skills.

The assessment criteria reflect the subject knowledge content and skills on which the subject programme and course plans have been produced. Subject programmes and course plans contain learning objectives, aimed at knowledge acquiring and skills development. Assessment criteria are linked with the Subject programme learning objectives. Based on the learning objectives assessment objectives were formulated in accordance with assessment criteria for each subject and grade. Consequently, the Integrated criteria-based assessment model has a clear link with teaching and learning.

**Classroom assessment (CA)**, an ongoing assessment which is carried out by teachers against selected learning objectives of the subject programmes as part of teaching and learning.

Classroom assessment is carried out throughout each term and used to:

- receive evidence of the acquisition of subject knowledge and skills from the subject programme;
- receive information on teaching and learning and to provide classroom feedback for teachers, learners and parents on an ongoing basis.

Teacher judgement for classroom assessment is based on a combination of:

- subject knowledge
- teaching and assessment experience
- using information in subject programmes and course plans (for example, the learning objectives for adjacent grades provide a reference point for making a judgement)
- opinion of Professional Teacher Network colleagues, international teachers.

#### **Results record**

Results from assessment are recorded in the *Electronic register* in the context of learning objectives. Collecting the outcomes in this manner allows teachers to consider not only the overall results of the assessment but also any patterns or trends in learning objectives achievement, that allows for effective classroom assessment.

Such assessment approach allows not only for the results, required for end of term reporting but also provides a wealth of information for the teacher to analyse learner achievement and adjust the organization of the educational process with the educational material acquired by students.

**Internal summative assessment (ISA)**, end of term assessment which defines the level of knowledge and skills maturity by finishing the learning of a domain of learning content and developed and conducted by school. Internal summative assessment is carried out on a termly basis at the end of each term in the form of progression tests or tasks which are designed to focus on the assessment of achievement of the learning objectives covered in that term.

The results of the ISA form part of the annual or final attestation for each learner but also provide feedback to teachers on the progress made by learners during the term.

**External summative assessment (ESA)**, assessment which defines the level of knowledge and skills maturity by finishing the level of education – primary school, secondary school and high school developed and conducted by organizations external to school.

The results from these assessments are certificated separately from the other forms of assessment (classroom and internal summative) and act as stand-alone qualifications for the international recognition.

#### **LESSONS LEARNT AND PLANS FOR FUTURE**

Results of the criteria-based assessment of students academic achievements and sociological researches are used by teachers of Intellectual Schools for organization of differential learning and teaching support of students, timely correction of the academic process.

At the same time that experience gained at different stages of criteria-based assessment implementation allows realizing that there is need for the further improvement of the assessment model. One of the challenges faced that could be noted is the lack of previous experience in the use of criteria-based assessment which has led to some misunderstanding of the key concepts used. Since the system is at the initial point of implementation different value issues appear in recognizing the assessment approach with resistance of teachers, students and their parents in place. The significant reduction of the quality of knowledge indicator compared with grades where traditional assessment system is used was considered to be the proof of the objective approach to the learner achievement assessment provided. Therefore the interim period of implementation allows good opportunities to overcome existing and forthcoming issues taking into account arising concerns and experience acquired.

The analysis of the feedback currently being received from all the stakeholders makes it clear that the criteria-based assessment model meets the NIS objectives set and appears to be transparent, valid and objective system required in education system in Kazakhstan.

**The advantage of the criteria-based assessment is that it allows teachers:**

- to identify the level of each student at every stage of the learning process;
- to monitor the progress in learning and adjust the individual trajectory of student development;
- to motivate students to eliminate gaps in learning;
- to monitor the effectiveness of the curriculum;
- to provide feedback between teachers, students and parents.

It allows students:

- to know and understand the assessment criteria to predict the result of their own learning

and awareness of success;

–use the variety of learning styles, types of mental activity and the ability to confirm the results of learning;

–engage in reflection, assessing themselves and their peers;

–use the knowledge and skills to solve real-world problems, to express different points of view, to think critically.

And parents:

– to receive objective evidence of the level of proficiency of their child;

– track the progress of the child's learning;

– provide child support in the learning process;

– establish feedback from teachers and school administrators.

The work on the improvement of the assessment model focused on assessment criteria refinement, assessment objectives standardisation, amendments in grading mechanism will continue for effective use of criteria-based assessment system in NIS and its further translation to state schools of the Republic of Kazakhstan for implementation in the education system of the country. It is obvious thereby these processes require careful planning including ones in appropriate teacher training for the effective use assessment methods and the system itself, establishing common understanding and support for and from all the stakeholders.