



Republic of Moldova

Review of the Evaluation and Assessment in Education

July 2019



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EXECUTIVE SUMMARY

Introduction and Purpose

The present Review of Assessment and Evaluation in Education (“Review”) was commissioned by the Ministry of Education, Culture and Research (MECR) of the Republic of Moldova and UNICEF Moldova as a thematic policy assessment accompanying the national Education Sector Analysis. The purpose of the Review is to analyze the educational policies and approaches to assessment and evaluation in the general school system of Moldova, assess the strengths and areas for improvement of existing arrangements, and provide concrete policy recommendations. The Review is designed to inform the strategies for improvement of the assessment and evaluation system in the forthcoming national Education Sector Plan. The Review is structured around four types of assessment in education: student assessment, teacher appraisal, school evaluation and system evaluation. The main findings are summarized further.

Review Methodology

The Review relied on secondary and primary research methods. Secondary research consisted of extensive documentation and literature review, whereby the research team structured the study based on international evaluation frameworks, policies and existing country reviews. National educational policies and reports were examined in detail both for study context and as objects of the Review.

Field research was carried out in three regions of the country, in nine urban and rural public schools (three each of: primary schools, gymnasiums and lyceums) that varied from low to high average student performance. Representatives of school leadership teams, teachers, parents and governance boards were interviewed in each school, and 26 lessons were observed. Three lyceum students that have reached 18 years of age were interviewed for the study as well.

Interviews were also conducted with respective regional departments of education, as well as national-level entities, including the MECR Department of General Education, National Agency for Curriculum and Evaluation, National Agency for Quality Assurance in Education and Research, and National Institute of Education Science. A detailed methodology of the study is further described in Appendix B.

Student Evaluation

Current national curricula/ learning standards, assessment guides and methodologies, particularly for primary school, are often quite complex and academic in nature, and at times lack consistency of approach, format and some key definitions. The multi-step system and variety of suggested approaches to qualitative assessment scoring in primary school are above average teacher capacity, and a simplified model is recommended in future guidance. While average primary school teachers follow the national assessment methodologies, their compliance remains superficial and procedural in nature. In order to facilitate teacher understanding and meaningful engagement with learning standards and assessment best practice, curriculum and assessment guidance needs to be simplified and consolidated.

Very little national guidance currently exists on assessment practice in gymnasium- and lyceum-level classes (“secondary school”), which needs to be remedied in future iterations of curricula and methodologies. In particular, formative assessment needs to be defined and explained in detail, as the concept is relatively new to most teachers. As objectivity of marks is a concern in secondary school, criteria-based assessment (using marks) is advised to be extended to core subjects in grades 5 and above. Besides the benefits of objectivity of marks and clarity of expectations, criteria-based assessment would provide continuity for students transitioning from primary school where there are no marks to gymnasium where marks are abruptly introduced.

Across the grades, authors of national guidelines should emphasize the meaningful use of success criteria (and/or assessment criteria) for further learning. The use of appropriate criteria of success (broadly defined) at every level of the education practice – assignment, lesson, topic, module, year – will ensure that marks are assigned objectively, and that teachers, students and parents know which skills the students have acquired, and which they still need to practice, further supporting the formative function of assessment. Parents are currently most content and able to assist their children’s learning in schools where teachers regularly share with them the child’s attainment against success criteria. This practice is advisable across general education levels.

Formative assessment rightly presents a cornerstone of the current curriculum and assessment methodologies, yet its definition and purpose need to be further clarified: first, internally among national-level stakeholders and teacher trainers, and second, in revised curricula across grades, including in guidance for gymnasium- and lyceum-level classes. The formative function of assessment for feedback and growth needs to be further emphasized to teachers. The concept of a learning journey (known as “route of study” in some international contexts) that emphasizes skill development over and above summative results would be a helpful tool in ensuring ongoing formative use of assessment. Such an approach would also incentivize highest-performing primary-school students who are currently frequently de-motivated due to the absence of marks and insufficient meaningful use of success criteria. A detailed discussion of formative assessment best practice is presented in the body of the report, as well as in Appendix C.

Further, a clearer and more consistent emphasis on assessment of student competencies is advisable in guidelines across subjects and grades. Competencies need to be defined more clearly and consistently in updated versions of curricula in the coming months and years. Accordingly, updated concepts of national assessments and examinations that capture competencies need to be developed as well. The knowledge-based focus of national assessments is also currently distinct from the practical-skills focus of the PISA assessment, which is used by the MECR of Moldova as a benchmark of the country’s performance in general education. As competencies are defined and assessed in a more targeted fashion, greater content alignment with PISA on national assessments and examinations will be achieved as well.

Teacher, Leader and School Evaluation

The introduction of new methodologies of school performance evaluation aligned to the MECR’s performance standards and coordinated by one agency (ANACEC) is

a positive step toward systematic evaluation design in Moldova's schools. The strength of this reformed approach lies particularly in internal alignment, such as that of evaluation criteria and performance standards, and self-, internal and external evaluation tools. It is also noteworthy that self-evaluations are projected to be part of internal evaluations, and the latter to be part of external evaluations. Finally, external evaluations of teachers, school leaders and schools are planned to be carried out concurrently, promising resource and time efficiency, and tapping into the interconnectedness of the context of the school and its stakeholders.

In order to facilitate schools' integration of performance standards into practice, the evaluation methodologies would benefit from further explanation of how the evaluation criteria and/or descriptors would look in practice. This type of guidance would also be helpful in aligning expectations among evaluation commission members. Helpful guidance would include examples of evidence that would lead to high ratings, and/or sample high-, medium- and low-rated school, leader and teacher profiles structured around the descriptors.

As a result of a recent order by the Ministry of Finance, as of 2019, all government employees in the Republic of Moldova, including school staff, are entitled to supplementary performance-based pay totaling up to 10% of the school salary fund. While school leaders and district departments of education are in need of guidance on what criteria they can use to evaluate their subordinates' performance, care needs to be taken in mandating that they use the same evaluation criteria as the ones in national performance evaluation methodologies, as this would likely increase or introduce high stakes into teachers' and leaders' growth toward performance standards. It is advisable that teachers, leaders and DOEs be consulted in deciding on the best approach.

Teacher Appraisal

Teachers will need extensive training and measurable evaluation criteria to be able to apply their performance standards to practice. It is also important that, as the national curriculum changes, national teacher standards and appraisal methodologies be adapted to the new curriculum expectations and approaches, as instruction and curriculum must be aligned.

Lesson observations are not explicitly included in methodology, as ANACEC envisions the purpose of external evaluation not as direct appraisal of teachers, but rather as evaluation of staff's self-appraisal and schools' internal appraisal process and capacity. This approach is indeed likely to lead to more sustainable performance results, and should be pursued by training all school staff, particularly the leadership team, on sound evaluation procedures and school-level data analysis.

It is further envisioned that district DOEs will carry out individual teacher observations as part of their thematic evaluations, due to DOEs' staff capacity and pedagogical expertise. The vision, specific goals and scope of thematic evaluations should be clarified and their value-added above and beyond the new evaluation framework established by national-level authorities. Due to current shortcomings of thematic evaluations, it is highly advisable that DOE staff be trained on pre- and post-evaluation procedures. Currently, there is little advance guidance or written follow-up associated with DOE thematic evaluations, which diminishes their effectiveness. It is also important to define teaching and learning criteria that regional authorities and

school leaders are to use for lesson observations, as the lesson is the fundamental unit of the learning experience. Such criteria should be consistent with the wider evaluation framework, curricular methodologies, empirical evidence and international best practice. In the case that DOEs and schools are given autonomy in the types of criteria they use, general expert guidance and review would be helpful nonetheless.

Finally, it is key that teacher appraisal and student assessment results be used to identify teacher growth and in-service professional development needs on national, district and school levels. School and DOE leaders should be trained on how to make decisions based on the internal or external evaluation data they collect, such as staff professional development needs, hiring needs, and so on. Such formative use of data can be facilitated by leader training, provision of outside expertise or support, and/or automating some analyses in pre-made data-tracking sheets. On the national level, external evaluation data should be analyzed, and professional development policy be decided accordingly. It should be explicitly decided which national entity is in charge of in-service teacher (and school-leader) professional development and how its policy will be formulated taking into account teacher appraisal results.

School and School-leader Evaluation

Similar to the above, school and school-leader evaluation findings should be analyzed systematically for trends to influence policy, such as in-service professional development recommendations for leaders, changes to national guidance for schools, clarification of policies, orders or other messages and documentation, and so forth. To ensure this, data-based decisions should be promoted at every level of the education system.

As ANACEC stakeholders have stated that one of the purposes of external evaluations is to examine schools' capacity to self-evaluate, it will be important to provide explicit guidance to evaluation commission members on examining discrepancies between internal and external evaluation findings. Examining such discrepancies will allow schools with self-evaluation capacity gaps to be identified in a systematic fashion.

System Evaluation

On the system level, investments must be made into the capacity of national entities to collect, track and interpret data. This is necessary for national education authorities to develop a nuanced understanding of the state of student, teacher and school performance, as well as to inform national-level policy. The current approach to the self-assessment of the education system relies primarily on PISA results and national assessment and examination results. Currently, national reports are lengthy and complex, and do not appear to be meaningfully used by stakeholders in the education system. As national data analysis capacity is developed, it is strongly recommended that national reporting on student performance become less focused on general descriptive analyses and more driven by research questions formulated jointly by representatives of national education authorities. Analyses should be explicitly interpreted, and policy and practice implications be observed in national reports.

The formative function of such analyses is powerful when used. Respective departments and agencies should thus take into account student, teacher and school

evaluation data when they formulate national policy. This approach would allow the system to overcome the current top-down compliance focus, fostering instead a two-way feedback loop between authorities and ground-level stakeholders. Policy should naturally lead to implementation, but implementation strengths and weaknesses should likewise be analyzed and affect policy in turn.

Finally, there is currently a measure of ambiguity in the roles, collaboration lines and authority structures of Moldova's national education authorities (i.e., departments and agencies). As some of them are autonomous or semi-autonomous from the MECR, while others are part of the MECR, coordination among them needs to be established more clearly. This can be done by defining their specific roles in the main areas of education policy and provision, delineating collaboration lines between the entities, clarifying the authority structure, and tightening communication channels. Such measures hold the potential of unifying the system and creating synergies among its vital components.

Summary of Key Conclusions

The Review of Assessment and Evaluation in Education concluded that to increase the effectiveness of student assessment in Moldova's public schools, its *formative function* needs to be further clarified and accurately understood by national-, regional- and school-level stakeholders. Both policy and practice relating to formative assessment and meaningful formative use of assessment are in need of improvement. The essence of *criteria-based assessment* needs to likewise be further understood by all stakeholders to ensure meaningful implementation in primary school, and should be expanded to gymnasium- and lyceum-level classes (substituting descriptors for marks). The strong theoretical focus of the curriculum and national assessments should be supplemented with practical skills to strengthen the *competency-based approach*.

Corresponding school, school-leader and teacher evaluation methodologies are a positive development in the education system of Moldova. Next steps to ensure their effectiveness for school improvement are to: provide *more specific guidance* to evaluators and schools on how differentially rated criteria would look in practice; and *train district DOE staff* on the role of and approach to thematic evaluations in light of the new centralized external evaluation system.

On a system level, an interdependent system of national departments, institutes and agencies needs to be refined by further *clarifying specific roles and authority structures*, and creating a *holistic system* where assessment, instruction, curriculum and professional development inform one another. Likewise, national standards for learning, teaching and school administration should be constantly aligned and treated as parts of one framework. To ensure this, communication lines need to be sharpened both among national entities and between the levels of the system, instituting *two-way communication* in place of the present mainly top-down system. Data collection and hypothesis-driven analyses should serve a formative function, whereby *national policy is based on data-analysis results*.

CHAPTER I. INTRODUCTION

1. Purpose

The present Review of Assessment and Evaluation in Education (“Review”) was commissioned by the Ministry of Education, Culture and Research (MECR) of the Republic of Moldova and UNICEF Moldova as a thematic policy assessment accompanying the national Education Sector Analysis. The purpose of the Review is to analyze the educational policies and approaches to assessment and evaluation in the general school system of Moldova, assess the strengths and areas for improvement of existing arrangements, and provide concrete policy recommendations for strengthening the existing system. The Review is to inform the strategies for improvement of the system of educational assessment and evaluation in the forthcoming national Education Sector Plan. As an overarching guideline, the Review was informed by empirical evidence and international best practice, including UNICEF, UNESCO, World Bank, and OECD research and policy publications on evaluation in education systems of other countries. All Review methodologies, tools and recommendations are focused on student learning as their ultimate goal.

2. Introduction to Assessment and Evaluation in Moldova

Improvement of the system of educational assessment and evaluation comprises one of the seven strategic objectives of Moldova’s Education Development Strategy for 2014-2020 (‘Education-2020’). The objective is to “Design and institutionalize an effective system of evaluation, monitoring, and quality assurance of the education system through developing national standards and creating an institutional framework for quality assurance.”ⁱ Some of the challenges identified by the national educational authorities in 2014 included: a ‘lack of tools for coherent data collection and indicator measurement, as well as of an information system for monitoring and evaluation of the situation in the system’ (p. 13); an ‘excessive focus on... evaluation of knowledge learning and content reproduction to the detriment of evaluation of competencies’ (p. 24); ‘the system for monitoring, evaluation and ensuring the quality of school results... not linked to the curricular provisions on building competencies and to rigours of international evaluation programmes’ (p. 27); ‘lack of professional standards for teachers and managers [which] makes impossible an adequate assessment of their performance and hence building a performance-based salary system’ (p. 28); ‘lack of a specialized institution empowered to control and evaluate educational institutions and teaching staff’ (p. 28); need for a ‘modern performance-focused evaluation system... to ensure objectivity of evaluation and modernization of the teaching/ management assessment system’ (p. 35).

Among the pertinent priority actions identified in Education-2020 strategy were (1) the development and implementation of national education standards, including performance standards and indicators for teachers, and (2) the development of educational quality assurance frameworks and external monitoring and evaluation structures, including the National School Inspectorate, Curriculum and Evaluation Agency and the National Agency for Quality Assurance in Vocational Education (which later became the National Agency for Quality Assurance in Education and Research, ANACEC).

As of the present Review conducted in 2019, efforts have taken place to meet many of the observed challenges and take action on the priorities. An EMIS system has been set up for schools to submit their students' performance and background data; professional standards and evaluation frameworks have been produced for teachers, leaders and schools; ANACEC (which took the place of the National School Inspectorate) became the specialized body responsible for evaluating schools and their staff; and the National Agency for Curriculum and Evaluation has been established to design and oversee national student assessments and examinations.

As described in detail in the present Review, the Republic of Moldova has made significant strides toward a systematic approach to quality assurance in general education and toward fulfilling its evaluation-related objectives of Education-2020. Importantly, many of the objectives are to be ongoing priorities in the long-term, such as ensuring the competency focus of curricular and assessment guidance and practice, continuous improvement of curricular, assessment and evaluation frameworks for all school-based actors, and two-way alignment of policy and practice.

3. Structure of the Review Report

The Review is structured around four types of assessment in education: student assessment, teacher appraisal, school evaluation and system evaluation. A separate chapter of the present report is dedicated to each type of evaluation. Due to a recent reform of performance evaluation, a chapter summarizing the new approach to both teacher and school (including school-leader) evaluation precedes the chapters detailing each of these evaluation types individually.

A legend is provided on the page margins of the present report as guidance for which section of the chapter one is reading. Each chapter of the report begins with an Introduction that maps out key issues in the respective type of evaluation. The Legislative and Policy Context section follows with the purpose of providing background information to audiences unfamiliar with Moldova's education authority structure, legislation or reform. This section is descriptive in nature and contains minimal analysis, and will thus likely be of greatest interest to international audiences.

The Context section is followed by primary and secondary Research Findings of the present Review, and subsequently by resulting Recommendations. All recommendations are based on international best practice, as well as empirical evidence from the fields of teaching, learning and education management.

Conceptual assumptions and key definitions used in the writing of the present Review are summarized in Appendix A, and a detailed study Methodology is presented in Appendix B. Appendix C contains a conceptual discussion of formative assessment and formative use of assessment for readers to whom this information is most pertinent, particularly national authority stakeholders responsible for policy and guidance on student assessment in the Republic of Moldova.

CHAPTER II. STUDENT ASSESSMENT IN MOLDOVA

1. Introduction

The main goal and determinant of the quality of a country's education is the attainment and progress of its students. Assessment the means by which students, as well as their parents and teachers, know how they are performing and, importantly, what they have mastered and what they still need to improve and how. In order for student assessment to be effective, it needs to be carried out against effective learning standards, which are defined through objective success (assessment) criteria, and used for individual, class, school and nationwide student growth. Thus, the essence of assessment is, above all, targeted improvement. Missing or misunderstanding this formative function of assessment has the danger of leading to assessment practices that are superficial, haphazard or punitive. This section considers student assessment at the levels of the individual student and classroom. School-level tracking of student assessment is covered in Chapter V: School Evaluation, and district- and national-level tracking of student assessment are discussed in Chapter VI: System Evaluation.

During the field study on student assessment, the following issues were examined, as reflected in this section's discussion of respective assessment types:

- National assessment guidelines
- Teacher skill in following national guidelines
- Assessment design
- Assessment marking and scoring
- Assessment data tracking and analyzing
- Assessment and mark objectivity
- High-stakes and formative use of assessment results

2. Legislative and Policy Context of Student Assessment

2.1 *History and Reform*

The past decade has seen a series of reforms in the education sector of the Republic of Moldova. A new general education curriculum was implemented in 2010, and an updated version of the curriculum is being developed for academic year 2019-2020.

Assessment approaches and reform fall under the national vision of Education-2020, which strives for an effective system of evaluation, monitoring and quality assurance. In terms of assessment reform, national high-stakes examinations have been introduced at the end of gymnasium and lyceum education, and national mandatory assessment has been introduced at the end of primary school. A new assessment methodology has been implemented in primary school, whereby starting in 2015 criteria-based assessment through descriptors, rather than marks, was introduced using a phased approach. End-of-year national primary school assessment taking place in 2019 is the first instance of national assessment using descriptors.

Instruction and assessment of students with special educational needs and disabilities (SEND) has also undergone reform, whereby individualized educational plans (IEPs) have been introduced to guide teaching and learning of children with SEND. Assessment according to IEPs has been introduced, and inclusive practices

have been integrated into the content and/or format of national and school-based assessments for students with SEND.

2.2 *Pertinent National Law, Policy and Their Implementation*

Overall, in current Moldovan national policy and guidance, there is an emphasis on competency-based education. The key policies guiding national approach to teaching, learning and assessment state that the strategic direction of Moldovan education is “relevance of education for life, active citizenship and career success,” and that the national priority in education is “Development of curricula for pre-university education from the point of view of significance of the acquired competencies for life and student-centeredness” (Education-2020ⁱⁱ).

Moldova’s Education Code (Article 11) defines nine key areas of competencies to be emphasized during general education, including communication in Romanian, native and foreign languages, mathematics and science, digital technology, study skills, entrepreneurship, cultural expression, and social and civic competencies. The National Curriculum defines competencies as “an integrated system of knowledge, skills, attitudes and values” (p. 11, National Curriculum for Primary School), built on the PISA model.

Teaching practice in Moldova is informed by a series of key national policies and guidelines designed to guide on-the-ground practice. Figure 1 summarizes the main national policy and guideline documents that outline the learning standards and recommended approaches to education delivery, including school-based assessment. Following is a summary of national expectations of Moldovan students, as reflected in these documents.

	Primary School	Gymnasium	Lyceum
Curricula and Academic Plans	National Curriculum: Primary Education ⁱⁱⁱ Guide to Integration of the Curriculum for Primary Education ^{iv}	National Curricula (documents by subject)	National Curricula (documents by subject)
	National Curriculum supplement: Academic Plans for Education in Primary School, Gymnasium and Lyceum, Academic Year 2018-2019		
	Methodological Organization of the Educational Process in Primary Education, Academic Year 2018-2019 ^v	Methodological Organization of the Educational Process, Academic Year 2018-2019 (documents by subject)	
Methodologies of Classroom Assessment	Regulation on Evaluation and Marking of Learning Outcomes, Promotion and Graduation in Primary and Secondary Education ^{vi}		
	Methodologies of Integration of Criteria-based Assessment through Descriptors (documents by grade)	Methodological Foundations on Provision of Continuity for the Integration of Criteria-based Assessment through	--

		Descriptors in IV and V Grades	
	Methodological Guides for Integration of Criteria-based Assessment through Descriptors (documents by grade)	--	--

Figure 1. Structure of national documentation on curriculum and assessment methodology in general education of Moldova.

3. National Learning Standards and Curriculum^{vii}

3.1 Learning Standards: Primary School

The main policies guiding national approach to teaching and learning in primary schools of Moldova are the National Curriculum for Primary Education, which is dedicated to key student competencies and corresponding content, and the Guide to Integration of the Curriculum for Primary Education, which provides deeper guidance by primary school discipline. The Curriculum and its Integration Guide include overall guiding principles and academic discipline-specific guidance.

Curricula are consistently structured around competencies and sub-competencies, associated academic content, classroom activities and their expected results. Subject-specific guidance is provided on student outcomes by the end of each grade level. Brief assessment guidance is provided in the Curriculum. The Integration Guide includes pedagogical strategies and methodological recommendations, as well as assessment guidance for each discipline.

There is variability in the type of content, its structure and thoroughness in the Guide to curriculum integration, depending on discipline, as different approaches were taken by the writers of the subject-specific sections of the Guide. While one of the listed conceptual foundations of the primary school curriculum is a systemic approach, including systems of competencies, content and processes, the approach to the curriculum and accompanying guides and methodologies is currently lacking in system and uniformity, as discussed below.

A transdisciplinary approach is another key component recommended in curriculum policies, though the recommendation currently centers on transdisciplinary days. Continuity of transdisciplinary principles is recommended, as teachers learn to incorporate cross-disciplinary connections into their regular lessons and consider how this type of content can facilitate *transversal competencies* (see below).

The foundation for effective assessment is its correspondence to performance standards. As such, effective student assessment corresponds to well-defined learning standards. Learning standards in Moldova are defined using *competencies* and the *learner profile*. The overarching learner profile of a primary school graduate is provided in curricular materials. This learner profile is characterized by transversal competencies, which comprise knowledge, skills and attitudes, and are not subject-specific. Four learner characteristics describing primary school graduates of Moldova are:

- “confident in their own abilities”,

- “open to life-long learning”,
- “active, proactive, productive, creative, advancing innovation”, and
- “demonstrating civic position and responsibility”.

Subject-specific learning standards in primary school guidance take the form of a learner profile provided for every subject for every grade level. At this point, learner profiles take on different forms and are presented using different approaches depending on the subject. Some learner profiles are presented by grade as lists of sub-competencies that are defined as skills and outcomes, and are directly mapped onto school-based results (“products”). Some are phrased as descriptions of holistic learner characteristics, which are less defined.

This inconsistency is likely to create confusion among primary school teachers who teach all these subjects. An incoherent approach to competencies, sub-competencies and learner profiles is likely to lead to teachers not treating these concepts seriously or being unable to implement them. Without a unified conceptual approach and structure, teachers are likely to either fall back on traditional methods with which they are comfortable or pursue the most concrete and clear part of the curriculum implementation guides – novel instructional tools, - rather than changing their philosophy of education.

In summary, primary school curriculum and integration guidance is currently very academic in nature, lacks consistent structure, and, while providing good examples of activities and plans, is hard to process and implement because the approaches to implementation are vastly different by subject. Teachers are unlikely to be successful in designing assessments around suggested competencies in such an approach. Rather, they are likely to focus on assessing content knowledge, which is the clearest and most consistent part of the curriculum policies, potentially dismissing skills and attitudes. Thus, the suggested competency-based approach to curriculum and assessment is a positive step toward deep and well-rounded education, but its execution by teachers is likely to need further support and guidance, which can be facilitated by simplifying and systematizing existing documents.

3.2 Learning Standards: Secondary School

The present section discusses gymnasium and lyceum guidelines and documentation simultaneously as “secondary school” guidelines due to their similarities. In cases where guidelines vary by level of schooling, this is explicitly mentioned.

Curricula and methodological guidelines in secondary school are organized by subject, rather than as a holistic framework. Generally, secondary school curricula follow the same structure as that of primary school. For core lyceum-level subjects, subject-specific competencies differ by “stream” (i.e., the educational emphasis chosen by the student – technical or humanities). Competencies are phrased differently depending on the subject and grade level, which impedes the coherence of the system. Sometimes, competencies are presented as outcomes (e.g., “students are able to analyze problem solutions...”), sometimes as student characteristics (e.g., “students are analytical problem solvers...”), and sometimes as skills (e.g., “analysis of problem solutions...”). It is essential to ensure that both education leaders (e.g., curriculum and methodology authors) and teachers have a consistent understanding of what

competencies are and use similar language to define them. While substantively, competencies may be defined similarly by education leaders, the inconsistency in terms and formulations is likely to affect teachers' ability to comprehend and implement competency-based instruction.

Teacher guidance on designing assessments also varies. In some subject-specific curricula, teachers are instructed to design assessments based on competencies, while in others, guidance is given for assessments based on discrete pieces of content or skills. It is not immediately clear how teachers might use competencies for assessment, though this is a promising principle. In order to promote competency-based assessment, examples and/or specific guidance on its implementation in the classroom may be needed.

Primary research confirmed that both primary and secondary school teachers show good understanding of curriculum standards and try to follow the curriculum closely. Driven mostly by compliance, few teachers attempt to adapt the curriculum for themselves or their students. Teachers refer to competencies and skills in interviews and know the appropriate national policy documents. It is clear that they have been trained on the MECR documentation and are held accountable for using it both by school leaders and district Departments of Education (DOEs). The current educational approach, as will be discussed elsewhere in the present report, is structured around top-down compliance, emphasizing the importance of policies, standards, documentation, and their execution on the ground.

4. National Student Assessment Guidelines

4.1 Overview of Student Assessment Guidelines

Moldova's national-level assessment policy for general education is currently summarized in the Regulations on Evaluation and Marking of Learning Outcomes, Promotion and Graduation in Primary and Secondary Education^{viii}. The focus of the Regulations is on calculation of marks and types of marks used across the school cycle in Moldova. Overall, the regulations are necessary, but insufficient in themselves, tapping into surface-level and/or administrative guidelines. The regulations are thus supplemented accordingly with other policies providing in-depth guidance for primary, but not secondary, school. This section expounds on existing guidelines in primary and secondary education in their respective sections.

4.2 Assessment Guidelines: Primary School

4.2.1 Methodological guidelines

According to the Education Code of the Republic of Moldova (Article 16), all primary school assessment is to be criteria-based and carried out using descriptors. This approach to assessment in primary school has been implemented one grade at a time, starting with grade 1 in 2015 (Education Code, Article 152), meaning that the first class of students that were taught using this approach every year of their primary schooling are graduating at the end of academic year 2018-2019.

Article 3 of the Education Code defines *descriptors* as “qualitative assessment criteria that describe the level of competency attainment of a student and allow identification of the extent of their development.” In place of marks, descriptors are to add up to a

qualitative result: “very good”, “good”, and “satisfactory” in grades 2-4. In grade 1, no qualitative result is assigned to student work, and only descriptors are used for assessment. It is noteworthy that MECR Regulations on Evaluation of students in primary and secondary school, as well as the Education Code, state that descriptors are “qualitative assessment criteria”, while primary school methodologies distinguish between assessment criteria and descriptors – an inconsistency that adds to the complexity of assessment terminology in primary school.

The primary school Guide for Curriculum Integration also includes discussion on assessment in subject-specific sections; however, the discussion varies by subject, with inconsistency in whether assessment is mentioned, which types are addressed, or whether the focus is on assessment tools or a conceptual framework of assessment types. Consistency in approach to assessment across subjects is recommended to ease teachers’ understanding and usefulness of the tools, particularly as the same teacher is in charge of all core subjects at this stage of education.

Detailed methodological guidance is provided in National Curriculum Council-approved Methodologies of Integration of Criteria-based Assessment through Descriptors and Methodological Guides for Integration of Criteria-based Assessment through Descriptors. Both of these documents are available for every primary school grade. The two documents are identical for grade 1, with the exception of a few appendices, and could be consolidated to aide teacher comprehension. Methodological guides state that systematic application of criteria-based assessment through descriptors accomplishes two purposes: (1) informing the teacher about the difficulties faced by the students in the learning process, suggesting the need to revise the teaching strategy, and (2) demonstrating to students the level they have attained and what they need to do to improve. While this comprises sound underpinning of the approach, the primary research suggests that the complex process of implementing it, as currently suggested in the methodology guides, takes teachers’ attention away from the purposes of the approach itself. Thus, average teachers appear to implement the method mechanically, but do not appear to benefit from accomplishing the two purposes indicated above. These purposes appear to be accomplished by the more advanced teachers, though they, too, indicate that the implementation on the ground is very cumbersome and takes up a significant amount of time, including after work hours.

National guidelines identify three types of assessment: baseline, formative and summative assessment.

4.2.2 Baseline assessment

Baseline assessments are meant to serve a formative function – that is, they are to inform the teacher of students’ level of attainment of prerequisite skills or knowledge. In addition to serving this function, in order to assist teachers with identifying particularly advanced students and to assess a baseline of existing knowledge, it may be beneficial for the baseline assessment to also include questions or tasks assessing students’ knowledge or skills in upcoming content areas.

4.2.3 Formative assessment

Formative assessment is defined throughout the methodological guidelines as a smaller unit of summative assessment, such that “when taken together, competency

units that are subject to step-by-step formative assessment throughout a module, cover completely competency units that are planned for the summative assessment at the end of the module” (p. 14, Guide to Integration of National Curriculum for Primary Education). Primary school teachers’ understanding of formative assessment as “intermittent” summative assessment is informed by this guidance, as interviewed teachers defined formative assessment using this description repeatedly.

Methodological guidance then sub-divides formative assessment into: (1) interactive (carried out with the purpose of organization and feedback, as well as a motivational tool), (2) pointwise (assessing a single competency unit or skill), and (3) stepwise (assessing a sub-competency or set of skills). In contrast, summative assessment is meant to capture all the skills students are to have mastered as part of a module. The assessment’s timing, not its purpose, is emphasized in determining its type, confirming the above observation that formative assessment is presented by the methodological guidance documents as a lesser version of summative assessment.

Formative assessment is to lead teachers in observing students’ “behavioral levels” of attainment on each task, which are then to be recorded through descriptors (e.g., student able to complete task “independently”, “under teacher guidance” or “requires ongoing support”). Methodological guides suggest tables that teachers can use for keeping track of formative assessment results. The system of record-keeping appears intricate and complex, particularly for a largely non-academic audience of classroom teachers, and observed teachers varied widely in their adoption of this system. Most teachers used the traditional approach of student ledgers to keep track of data, though some kept additional notebooks with observations for themselves. In terms of guidance on formative assessment data tracking, a simplified approach with fewer options and types of tables is recommended.

The stated main tasks of criteria-based assessment using descriptors leading up to the main goal of learning, are: (1) collection and interpretation of data on student progress, difficulties, gaps; (2) diagnosis of causes behind student difficulties; and (3) adaptation of teaching and learning in accordance with the collected data. This type of analysis is, indeed, foundational to formative assessment. However, formative use of data was not readily observed in schools during primary research. Data from intermittent assessments are indeed gathered by teachers but treated for the most part as summative and/or used for motivating students rather than informing their further learning journeys. Teachers appear to rely on intuition and personal knowledge of students to adapt their instruction rather than make explicitly data-based decisions, thus implementing the suggested system alongside traditional methods that they consider reliable.

Teachers are encouraged to use *success criteria* during each lesson, presented on posters and phrased in first person (“I pose the question”, “I name the main parts of the sentence”, etc.). Success criteria for students are to correspond to assessment criteria for teachers and are suggested alongside each student outcome in methodological guidance documents. This is no doubt a helpful strategy that relieves much pressure off the teacher, particularly as most teachers are new to using success criteria. At the same time, teachers are free to state their own success criteria should they wish to do so. School visits confirmed that success criteria are used consistently

and with some success in primary classrooms and appear to be the most effective part of criteria-based assessment through descriptors, as discussed further in the report.

Finally, *self-assessment* is also emphasized as part of formative assessment methodology, and teachers are given guidance on facilitating quantitative (e.g., number of tasks completed, how many solved correctly) and qualitative (e.g., how satisfied the student is) self-assessment. Self-assessment was, indeed, frequently practiced in the observed classrooms. It is noteworthy that the assignment of quality indicators (“very good”, “good”, “satisfactory”) is categorized as quantitative, while the assignment of descriptors (done “independently”, “under guidance” or “with help”) is categorized as qualitative self-assessment. There is a level of ambiguity and complexity of terms used in guiding documentation for teachers that may lead to challenges in their understanding.

4.2.4 Summative assessment

Primary school assessment methodologies state that all summative assessments are to be designed in accordance with the selected sub-competencies and school-based results. Suggested strategies for summative assessment are generally consistent with traditional oral and written testing approaches and are not analyzed here in great depth.

In terms of scoring and data tracking, with the exception of grade 1, teachers are instructed to calculate the percentage of correct answers on students’ summative assessments and then translate it into an indicator of quality, following the conversion guidelines provided by the methodological guides (e.g., 81-100% = “very good”, etc.). Quality indicators (“very good”, “good”, “satisfactory”) for each summative assessment undertaken in a semester are then to be assigned numerical values (3, 2, 1, respectively), and an average be calculated in order to arrive at the end-of-semester and end-of-year indicators of quality. Students’ qualitative results are recorded and stored in teacher ledgers.

This system of scoring is quite thorough and is designed to ensure objectivity but is also relatively complex. Interviewed teachers have indicated that the system of multi-step conversion of students’ results into indicators of quality is unclear to them and takes up a significant proportion of their time. Some requested for an electronic tool that would automatically convert students’ results into indicators to save teachers time spent on manual calculations – a suggestion worth considering alongside options of simplifying the scoring system.

4.2.5 Summary: Assessment guidelines in primary school

The system of criteria-based assessment through descriptors for primary schools of Moldova is rather complex. Two types of assessment – formative and summative – are identified, with formative subdivided into three sub-types. Summative assessment is meant to result in “cumulative levels” of attainment (“very good”, “good”, “satisfactory”), while formative assessment results in corresponding “behavioral levels” of attainment (“independent”, “under teacher guidance” or “requires ongoing support”). Each level of attainment is associated with corresponding descriptors and indicators. While thorough, this system appears quite academic and high-level and, as mentioned above, includes an element of inconsistency of approach and ambiguity across methodological documentation. Measures need to be taken in simplifying or

condensing the guidance to ensure that the essence of student-centered assessment is not lost for teachers behind the complex multi-level framework and guidance. Such measures are planned by the Department of General Education whose representatives reported that methodological guides and other curriculum documentation was planned in stages, year by year, as the new approaches were developed. Now that the development stage is at its end, the Department plans to combine the grade-wise guides into one document. It is recommended that this opportunity will be used to review and simplify the content and synchronize the approach across subjects as well.

4.3 *Assessment Guidelines: Secondary School*

4.3.1 Transition-year assessment

Transition from primary schools that have used criteria-based assessments for many years (e.g., primary schools deploying the Step by Step curriculum and approach) to mainstream secondary schools has been associated with challenges, which are likely to be replicated nationally as all primary school students now similarly receive qualitative performance indicators. According to parent reports and interviews with MECR representatives, students may struggle knowing the meaning of a quantitative mark when transitioning to fifth grade. For this reason, the Methodological Foundations on Provision of Continuity for the Integration of Criteria-based Assessment through Descriptors in IV and V Grades^{ix} were issued, recommending the method of “criteria-based assessment through descriptors and marks” for fifth-grade instruction. The guidance is mostly conceptual in nature and recommends that fifth-grade teachers in a few non-core subjects collaborate with fourth-grade teachers on the use of descriptors in their discipline. It appears that initiative is left up to the teachers and school leaders to make arrangements to do so. The document advises that district DOEs oversee the implementation of the methodology in the transition year, the training of fifth-grade teachers, and best practice sharing between primary and secondary schools.

While the process of transition is likely to face challenges due to lack of specific guidance for teachers, introducing criteria-based assessment through descriptors in non-core subjects in fifth-grade may be a good way to begin testing criteria-based assessment in secondary school. While marks are advisable in secondary school, the MECR is recommended to consider introducing criteria-based assessment (using marks) throughout the school cycle, potentially treating fifth-grade as a pilot stage.

4.3.2 Formative assessment

Pedagogical strategies and assessment guidelines are part of secondary school curriculum guidance, but are much less detailed and more conceptual than guidelines presented to primary school instructors. Assessment guidelines in the curriculum are very brief. While in primary school, separate policy documents are dedicated to methodological guidelines that explain assessment in detail, in secondary school such documents do not currently exist; neither are guidelines specific in the curricula. Formative assessment is mentioned inconsistently and not explained thoroughly. When it is presented, formative assessment is described as “ongoing” assessment, with examples including projects, research, testing, etc. Formative use of such assessment is not thoroughly addressed, leaving it up to the teacher to interpret its purposes. Feedback as part of assessment is mentioned occasionally, but inconsistently. Thus,

assessment is described mostly in theoretical terms and a mostly summative approach to “formative” assessment is assumed. MECR guidance on formative assessment for secondary school is recommended, containing both brief conceptual explanation and practical illustration of formative assessment and its use for student learning. To reduce complexity and ensure consistency, this guidance does not have to be subject-specific, but may include a range of illustrations across subjects.

Regulation on Evaluation and Marking of Learning Outcomes, Promotion and Graduation in Primary and Secondary Education makes a distinction between continuous, formative and summative assessment in secondary school. It is pertinent to observe that continuous assessment, as described, is in fact formative in purpose, while the definition of formative assessment somewhat makes it similar to summative in its purpose, leading to a level of ambiguity of terms. In fact, a significant portion of interviewed secondary school teachers, similarly to their primary school colleagues, appeared to define formative assessment as miniature-summative assessments. At the same time, at least verbally through interviews, many secondary school teachers were able to demonstrate correct understanding of the aim of formative assessment as informing the teacher and the students as to their level of attainment and further steps. Teachers’ understanding and application of *formative and summative uses* of assessment are, indeed, more important than distinctions in their format, and should be emphasized in future guidelines and trainings.

4.3.3 Summative assessment

Only technical guidance, such as the mandatory number of summative assessments per subject, procedures of end-of-semester papers and approach to calculation of end-of-year marks, is specified in MECR regulations on summative assessment in secondary school. This type of guidance is doubtlessly needed, but may be insufficient, as it does not relate to learning standards, learner profile or competencies.

Two documents were shared with the research team by education specialists at the MECR, but were not observed used in visited schools: the Referential of Evaluation of Specific Student Competencies and the Standards of Effectiveness of Learning^x. Both provide useful guidance on assessment across subjects and standards of learning for all three levels of education (primary, gymnasium and lyceum). The Referential contains assessment criteria associated with sub-competencies, while the Standards contain success indicators across domains and grades. The Referential also includes detailed interpretation of the meaning of marks from 1 to 10 for every curriculum competency. Despite containing the beginnings of useful guidance, neither document has been recently updated or approved as formal guidance for Moldova’s schools. A mentioned aim to update the Standards of Effectiveness of Learning for school use by year 2020 is encouraged.

4.4 *Special Assessment Guidelines*

Separate assessment guidelines exist for students with SEND in Moldova.^{xi xii xiii} Students that have studied according to individual educational plans and/or according to the Adapted Curriculum, are assessed accordingly. Further, students with mobility and other physical disabilities, who have studied according to the National Curriculum, are allowed additional time to complete their assessment, including during national examinations.

4.5 National Assessment and Examination

National assessments take place at the end of fourth grade (primary school assessment), ninth grade (gymnasium examination) and twelfth grade (baccalaureate examination). The National Agency for Curriculum and Evaluation (NACE) is the federal body responsible for the oversight and strategy of these assessments. By the order of the MECR, the national assessments are to correspond with and provide a balanced sampling of the national curriculum for respective academic disciplines. The national assessments are designed at the federal level by working groups appointed by the NACE.

Provisions are made against corruption and bias associated with administration and grading of national assessments. All student work is anonymized via individual identification numbers. Repercussions for fraud relating to national assessments are outlined for different stakeholders. Two evaluators grade each assessment to ensure correct and unbiased marking and scoring, and at least two randomly assigned monitors supervise each room during gymnasium and lyceum examinations.

Subject-specific programs of evaluation are issued by the National Examination Commission to illustrate to all stakeholders the structure of the national assessments, their correspondence with subject-specific and cross-cutting competencies, and the scoring approach (e.g., Program for Final Evaluation of School Results in Primary Education in mathematics,^{xiv} etc.). Past and practice assessments, as well as corresponding scoring schemes, are publicly accessible online^{xv}. An additional assessment/ examination session is organized for candidates that did not pass the examination on first attempt.

4.5.1 National primary school assessment

At the end of primary school, all students are mandated to participate in national assessments in the following disciplines: mathematics, Romanian language and literature (for Romanian or non-Romanian language schools), and mother tongue/ language of instruction and literature (Russian/ Ukrainian/ Gagauzian/ Bulgarian), if applicable. Students enrolled in non-Romanian language schools or streams also have an oral Romanian language assessment.

According to the methodology for national fourth-grade assessment^{xvi}, its administration, marking and scoring is executed at the level of the school. School-level activities are coordinated and monitored by the district Departments of Education. The DOEs are also responsible for collecting data on student results from the schools under their jurisdiction and submitting them through electronic forms to the NACE, where the results are analyzed on the national level.

In order to aide in objectivity of assessment results, teachers do not supervise the administration of or mark assessments of their own classes, though in schools where there is more than one fourth-grade class this may not be feasible. An evaluation committee is to be formed at the school level, and the evaluation methodology, including marking and scoring scales, shared with the schools by the NACE is to be followed when grading all assessments.

As of 2018-2019 academic year, no marks will be assigned to students' national primary school assessment results. Instead, students' accuracy will be expressed in

percentage points and assigned a qualitative rating corresponding to specified points-ranges, such as “Very good”, “Good”, “Satisfactory” and “Recovery” (for fewer than 25%), with the latter indicating that the student has not passed the assessment.

4.5.2 National gymnasium examination

At the end of ninth grade, all students must take the national gymnasium graduation examination in the following subjects: mathematics, Romanian and world history, native language and literature (Romanian/ Russian/ Ukrainian), and Romanian language and literature for non-Romanian medium schools. Marks from 1 to 10 are assigned to students’ work, with 5 (a score of at least 25%) constituting the passing mark. A grading scheme issued by the National Examination Commission as part of the gymnasium examination methodology^{xvii}, provides the correspondences between accuracy percentage points and marks assigned to students’ work.

The gymnasium examination is administered in local schools, while its marking, scoring and review of appeals are the responsibilities of the district or municipal DOEs. The district/ municipal evaluation commissions follow the marking and scoring schemes submitted to them by the national-level examination working groups. As in the case of the primary school assessment, the DOEs are responsible for collecting and submitting students’ examination results to the NACE. Gymnasium completion certificates are issued to the students who have passed their gymnasium examinations.

4.5.3 Baccalaureate examination

At the end of twelfth grade, candidates participate in the national baccalaureate examination. All candidates are required to take examinations in their language of instruction, a foreign language and Romanian language and literature for non-Romanian medium schools. Depending on their specialty stream (technical, humanities, art or sport), they are also required to take an examination in mathematics, Romanian and world history (and native history for minority-language schools), art and sport, respectively. In addition to compulsory examinations, a range of optional disciplines is offered for candidates’ selection.

Marks from 1 to 10 are assigned to students’ work, with 5 (a score of at least 25%) constituting the passing mark. A marking and scoring scheme issued by the National Examination Commission as part of the baccalaureate examination methodology^{xviii} provides the correspondences between accuracy percentage points and marks assigned to students’ work.

As the national assessment with highest stakes, the baccalaureate examination is overseen directly by the National Examination Commission under the supervision of the NACE. The examination is administered at designated baccalaureate centers equipped with surveillance cameras. Students’ work is marked and scored by the federal evaluation commission, and individual password-protected results, including scanned copies of marked student tests, are made available online. Examination scores are stored in a national online database. Appeals are managed by the federal complaints board. Baccalaureate diplomas are issued to candidates who have successfully passed their baccalaureate examinations.

4.6 *International Assessment*

The Republic of Moldova has participated in multiple international assessments, taking part in TIMSS testing in 1999, 2003 and 2007, and in the PIRLS assessment in 2001 and 2006. Moldova's results on these international assessments were roughly comparable to those of the countries in the region and close to the international median score. Starting in 2009, Moldova commenced its participation in PISA (Programme for International Student Assessment, OECD) and has since participated in it in 2015 and 2018. As assessment results are still pending for the 2018 assessment cycle, the present report focuses on trends and related practices of national entities between 2010 and 2015.

4.6.1 PISA methodology

PISA assesses science, reading and mathematics literacy of 15-year olds across participating countries, with an emphasis on knowledge required by citizens to participate in a country's socio-economic life. In Moldova, this means that most participants came from grade 8 classes in schools selected using the PISA methodology. Socioeconomic and other background data are also collected as part of the PISA assessment.

The National Agency for Curriculum and Evaluation oversees international assessment in Moldova. Representatives of the Agency have reported the value of the country's participation in PISA not only from the perspective of an external assessment of students' skills, but also as a tool for internal NACE capacity building, as PISA conducts training seminars for representatives of participating countries. The NACE national assessment methodologies and approaches have been informed by PISA methodology and best practice in such areas as assessment design, assessment monitoring, scoring and marking quality control, data coding, analysis, etc.

PISA provides participating countries with analyses of their results, including their comparison to other participating countries. While student-level PISA data are accessible to NACE, a capacity gap has so far prevented national experts from accessing and analyzing the data directly. Bridging the capacity gap would present an opportunity to carry out internal analyses driven by NACE's and/or MECR's own research questions. The results can then be used formatively, in order to inform system-level and district-level improvements.

4.6.2 PISA performance

Moldova's performance on PISA 2009 and 2015 was among the lowest in the region, with the performance gap between Moldova and its neighboring countries, including the Commonwealth of Independent States, estimated at two years of schooling. According to the results, roughly half (42-50%) of 15-year-old students in Moldova may not have the basic practical reading and mathematics skills necessary to participate effectively and productively in professional and civic life^{xix}. This may indicate a challenge faced by the current curriculum and approach of the educational system in Moldova, as PISA focuses on applied skills. This discrepancy and primary research suggest that the Moldovan educational system has a substantially more theoretical and abstract emphasis than the practical skills assessed by PISA and increasingly suggested to be developed by OECD and other international agencies.

It is worth noting that girls outperformed boys on all PISA assessment portions in 2015. The performance gap is particularly wide in reading. This is a trend to be watched by the NACE, and compared to national and school-based assessment results. Should the trend continue, be replicated on national or school-based assessments, or widen on the next PISA assessment, investigation into potential causes of boys' underperformance may be warranted, followed by interventions to mitigate it.

Moldova has seen a rise in PISA scores from 2009 to 2015. As an independent assessment, PISA is currently regarded as the most objective measure of academic performance in the country. Thus, the rise in scores is taken seriously by the national-level leadership in education. The rise in scores is attributed by different stakeholders in the Ministry of Education to two factors: (1) the introduction of a new national curriculum in 2010, and (2) a mindset shift among schools and students, whereby students engage in deeper learning, due to decreasing levels of academic cheating. The latter has been attributed to the introduction of video surveillance and independent testing centers during Baccalaureate examination, which may have set a new standard of diligence for the whole system. While empirical evidence as to the reasons for the rise in PISA scores is not readily available, both of the suggested reasons offer possible, non-mutually exclusive, explanations.

5. Student Assessment: Research Findings

The Republic of Moldova is in the process of reforming its assessment policy and practice, particularly in primary school. At this stage of the reform, there are challenges to its effective implementation. National curricular and assessment guidance at times lacks clarity, and its complexity is above average teacher capacity. While formative assessment is emphasized throughout national guidance documentation, its execution by teachers is currently superficial. Stakeholders at different levels of the education system appear to lack clear understanding of the purpose and use of formative assessment. While student performance in primary school is often based on success criteria, it is frequently unclear how marks are assigned in gymnasiums and lyceums, which undermines their objectivity and the ability of students to improve. In general, assessment guidance is lacking in secondary school, leading teachers to continue with traditional practices, whether or not they are effective. Competency-based assessment is minimal throughout the general education cycle, with the emphasis currently remaining on theoretical mastery of content.

5.1 Formative Assessment

5.1.1 Formative assessment: Primary school

When teachers were asked to explain what formative assessment is, their responses varied. Some teachers defined formative assessment (accurately) as assessment used for teachers to know the students' level of understanding (i.e., "assessment *for* learning"), others as tasks and questions that deepen students' learning through or act as a reminder of what they have learned (i.e., "assessment *as* learning"), while yet others saw formative assessment as preparation for or smaller version of summative assessment (i.e., "assessment *of* learning"). Some of the teachers also mentioned the ability to self-assess as part of the reason for formative assessment. A minority of teachers spontaneously mentioned success criteria as part of formative assessment, and all but one of them were primary school teachers. This mixture of responses

illustrates that indeed, formative assessment is not a consistently well-defined concept in teachers' minds, some of which may originate out of the fact that it is not consistently or clearly defined in the range of national curricula and methodologies.

The way that the curriculum guidance presents formative assessment, it may be more appropriately defined as intermittent, as its formative function (i.e., assessment *for* learning) is not readily observable. When asked to define formative assessment, most teachers and school leaders reported that it is "brief assessment, which together adds up to summative assessment". The format of written formative assessment is not distinct from summative assessment in the majority of cases.

In-class formative assessment is to end with recommendations for further work, based on assessment results. This was not always readily evident in observed lessons. Most of the time, in-class formative assessment ended with a mark, score, qualitative indicator or descriptor, making it summative in nature, or perhaps unarticulated teacher conclusions (as per interviews where teachers indicated that they noticed their students' strengths and areas for improvement). Rarely did formative assessment in observed lessons lead to an opportunity for students to benefit from the assessment via identified areas for further growth.

Relatedly, formative marks with descriptors are perceived by school teachers and leaders as summative in nature. Teachers in both primary and secondary school are required to track students' marks in teacher ledgers ("journals"). While this requirement is consistently kept by teachers, it is unclear how thorough or effective teachers' formative use of student results is. Many primary school teachers report also keeping track of students' formative assessment results in progress monitoring charts and diagrams, as per curriculum methodology recommendations. At minimum, this indicates that they are aware of these recommendations by the MECR. However, not all teachers shared these tables with the research team, possibly indicating that they do not always comply with the methodology, despite knowing it.

The approach to filling in and tracking formative assessment results varies by teacher, with some teachers using a color or symbol scheme and others using numerical assessment scores (e.g., 25/30). This approach is complemented by students' self-assessment, teacher assessment and/or parent assessment slips sometimes issued to each child. Most primary school teachers counterintuitively report that summative results cannot be quantitative, but formative can, further indicating a fragile understanding of formative assessment and its use.

The MECR Department of General Education reported that starting in the next academic year, teachers will be asked to track the progress of struggling students separately against objectives/ assessment criteria chosen by the teacher. Each struggling student will be tracked long-term until he/she attains the expected level on the objective. This is a positive shift toward both long-term tracking of skills and an element of differentiation in teachers' approach to student progress.

Unlike in secondary school, success criteria were observed being used consistently across primary grades. Whether or not teachers assess their students effectively against the success criteria is unclear, as most intermittent assessments take on the form of quizzes or worksheets, often coming from a work-/textbook, and may or may not be directly tied to the success criteria. It is also unclear whether the correspondence to

success criteria is communicated clearly to the students during in-class assessment. A more detailed discussion of effective use of success criteria can be found in Appendix D.

5.1.2 Formative assessment: Secondary school

In secondary school, formative assessment mostly took place through frontal whole-class questioning by the teacher and individual students' working out of problems or tasks at the board. As a positive trend, questioning is used frequently and on an ongoing basis in Moldovan classrooms. However, teachers mostly limit their repertoire to guiding questions that lead students' thinking along conceptual steps toward a conclusion or through a procedure. There appears to be less of an emphasis on questions targeting students' deep, holistic understanding. Such questions for in-depth, holistic understanding would allow students to practice a systems-approach to information or problem/ concept analysis, rather than being limited to engaging information in discrete portions. Developing students' ability to make connections is one of the key goals of the educational process. Only by being presented with a holistic picture do students learn to reflect, predict and transfer knowledge.

Further, opportunities for deeper student self-explanation of reasoning across the levels of schooling would benefit both students' understanding and communication skills. Currently, self-explanation opportunities are mostly limited to expression of opinion or factual recall. Teachers may benefit from training or modeling of such questions and pedagogical strategies that create opportunities for student self-explanation and reasoning.

5.2 *Summative Assessment*

5.2.1 Summative assessment: Primary school

In order to arrive at qualitative judgements, teachers calculate points and percentages. This means that, in their essence, qualitative descriptors are akin to quantitative scores. That said, the main difference between qualitative and quantitative results, as proposed by the national methodology, and upheld by the interviewed stakeholders, is the motivational factor, whereby young students are able to approach schooling from the perspective of intrinsic motivation toward learning, rather than a competitive, evaluative stance. Interviewed teachers and school leaders explained that not receiving marks, particularly low marks, keeps children from feeling judged or inadequate. This practice in primary school led to three main findings.

Success criteria: In interviews, those parents and teachers who are content with the qualitative descriptor system expressed that its advantage lies in the fact that, unlike quantitative marks which were used before, they are tied to success criteria and are thus more objective. Schools and teachers that assess students with qualitative descriptors, as per the methodology, but do not share success criteria with parents, or do not use them effectively in the classroom (though they may be displayed on the walls), also appear less secure in their mastery of this approach. Teachers and parents at these schools are less content with qualitative assessment, as they feel that they had sacrificed a familiar concrete measurement of student attainment without gaining an adequate substitute. Thus, using qualitative descriptors without success criteria appears less effective than using quantitative marks. However, using them with success criteria

may be regarded as equally valid and potentially more effective than the previous system of marks.

Student motivation: There is concern among parents, students and school leaders that qualitative descriptors lead to a loss of student motivation, as students do not perceive differences in reward as proportionate to the amount of effort that they put in. That is, a student that makes no mistakes on an assignment may get a “Very Good” like his/her peer who made a few mistakes. There is perception that while the qualitative approach to assessment is potentially motivating to lower achievers who no longer get “bad marks”, it has the opposite effect on higher-achievers who no longer experience the reward of getting a “good mark”. This may be indicative of the fact that a further mindset shift is required among all stakeholders in emphasizing skill development over competition. Nevertheless, teachers at some schools are attempting to make a distinction between levels of student work by adding encouraging words, exclamation marks, stars, and so on, to the qualitative descriptors of the highest achieving students to boost their motivation.

Transitioning from primary school to gymnasium/ lyceum: Some parents report that it is difficult both for them and their children to know the true level of mastery of the students in the absence of quantitative marks in primary school. This leads to a confusing transition to secondary school, where marks abruptly appear, and students are not equipped to interpret their meaning. The new MECR transition-year methodology to be implemented in year 2019-2020 may somewhat smooth out this shift.

5.2.2 Assessing competencies

While curriculum guidance is heavily competency-based (albeit, at times inconsistent), it is unclear how much assessment is currently aligned with the competency-based approach. It may be helpful to study further how much skills are assessed, in addition to content knowledge, on both formative and summative assessments in Moldovan classrooms.

Further, the curriculum (and thus associated assessment) is currently theoretical in its emphasis. Skills such as practical application should be promoted in the curriculum, during instruction and assessed formatively and summatively.

5.2.3 Objectivity of summative marks

Objectivity of marks emerged as a concern among DOE representatives, some interviewed students and parents. There are at least two reasons for why students’ summative (and formative) marks may not always be an objective reflection of their mastery of the curriculum and expected competencies: insufficient teacher skill in grading, and intentional distortion of students’ scores.

Insufficient teacher skill: According to interviews with stakeholders at multiple levels of the system, as well as classroom observations, end-of-class marks are often given to students without reasons for the marks, or subjective reasons, such as “You answered well” or “I liked your essay” are sometimes used. Likewise, critiques resulting in lower marks are sometimes ambiguous and subjective. Introduction of success criteria in secondary school may lead to more objective grading, particularly as teachers are trained on using specific success criteria succinctly.

Intentional distortion: The issue of objectivity and fairness of marks issued by teachers came up in several conversations with stakeholders, including parents and students. In some situations, there is personal incentive for teachers to give marks unfairly, particularly when the teacher acts as a paid out-of-class tutor for his/her students. In order to attract students to pay the teacher for such services, students' marks are reported to sometimes be pushed down for those students who do not attend out-of-class tuition.

5.3 National Assessment and Examination

5.3.1 National assessment objectivity

National assessments constitute a high-stakes system for schools and parents, both of whom have expressed feelings of pressure over students' scores. Lyceums' average Baccalaureate examination scores are published in an open-source location where schools can be compared based on their yearly results. As parents consider these results in choosing a lyceum for their child, and federal funding is tied to enrolment numbers, lyceums are incentivized to invest in the quality of the academic provision. Investing in quality is the only way for schools to influence lyceum graduates' scores, as the Baccalaureate examination is administered and scored independently.

Gymnasiums and primary schools likewise experience the high-stakes nature of the national assessments based on which they are respectively rated. This pressure on the schools not only drives them to invest in improved academic provision, but also, in some cases, may encourage unethical behavior. For example, some DOE interviewees mentioned that they suspect exaggeration of fourth-grade testing scores by schools, particularly primary schools for whom this is the high-stakes examination that defines their students' performance. As a consequence of suspicion that primary schools exaggerate or misreport their students' scores, the reality of students' primary-school performance is unknown and school reports not always trusted by some of the district DOEs. While this does not occur nationally, some districts or municipalities may rank primary schools and gymnasiums based on their national assessment results, increasing the high-stakes nature of the national assessments/examinations at the end of 4th and 9th grades.

Suspicion that the high-stakes nature of the examination may lead to attempts at unethical behavior was confirmed by a recent poll among Moldova's students^{xx}. Half of the polled respondents reflected on the ninth-grade examination and a third on the Baccalaureate examination when reporting on whether they thought that the examination was fair to everyone. Less than a quarter of the respondents stated that they thought it was fair. While it is not clear how the respondents interpreted "fairness", 50% reported that they observed cheating/ copying during the exam, with the number going up to 67% when reflecting on the primary school examination. Eight percent of all the respondents reported that teachers helped students during the examination. In summary, the issue of ensuring objectivity on national examinations needs to be further addressed by NACE.

5.3.2 National assessment quality

The national assessments currently tap into both students' procedural knowledge and conceptual understanding of academic subjects. Questions span a range of

difficulty levels, with an emphasis on challenging and language-heavy tasks. The tasks follow content areas specified by the curriculum. Current assessment of theory in national examinations is strong and well-rounded; however, it needs to be complimented by assessment of applied and practical skills that form most competencies. As competencies are more clearly defined in future iterations of the curriculum, assessment is likely to more clearly match and capture them.

5.3.3 National assessment design

There appears to be a need for a more enhanced system of quality control in national assessment design. Some national-level interviewees have reported that the national assessments and examinations are not independently approved by MECR or other stakeholders. Further, it was voiced more than once that the assessment design teams often consist of academics and are in need of a stronger on-the-ground perspective, such as that of active teachers. Currently, the selection process of the test design teams lacks in transparency, whereby no formal terms of reference or qualifications-based competitive process is evident.

6. Student Assessment: Recommendations

6.1 *Formative Assessment*

6.1.1 Re-defining formative assessment and its purposes in national guidelines

Teachers, leaders, and potentially higher-standing stakeholders may benefit from further training and discussion on what is meant by formative assessment, its purposes and its fit with the current and aspirational versions of the Moldovan system of education. Additionally, teachers often use “formative assessments” provided in commercial textbooks, which both influence teachers’ practice and inform their understanding. It may thus be beneficial for textbook publishers to also be further familiarized with formative assessment and/or their work rigorously edited accordingly. More conceptual underpinnings and best practice on formative assessment are discussed in Appendix C.

A challenge for effective implementation of true formative assessment, however, is classroom size. Typical classrooms in Moldovan primary and secondary schools can reach upwards of 30 students per teacher. Without reducing class size or employing learning support assistants, formative assessment is likely to have some, but limited, impact. Solutions to this issue have been pursued in other national and curricular contexts, such as snapshot assessment tools (e.g., multiple-choice tests, traffic light cards, etc.), small group interventions, and so forth. Any policy aimed at increasing the effectiveness of formative assessment in Moldova should be developed carefully and with in-depth consideration of constraining factors.

6.1.2 Simplification of primary school formative assessment guidelines

Several national policy documents address assessment in primary school. While the documents agree on the assessment approach at a high level, they use a variety of formats and terms to describe it that vary across subjects and policies themselves. It is recommended that the principle of parsimony be applied as national policies are revised, and the guidance (a) be consolidated, if possible, into fewer documents – which is already planned by the Department of General Education, - and (b) be made consistent across policies and subjects conceptually, structurally and terminologically.

Simplified national guidelines forming the new national curriculum are likely to aide in teachers' understanding and implementation of formative assessment in their classrooms.

A recurring finding in stakeholder interviews was that the nationally recommended approach to formative assessment in primary school involves “a lot of paperwork”. The instructions on how to calculate the scores and qualitative descriptors: (a) surpass teachers' knowledge level, and (b) take up a significant amount of time. This leads to teachers not following the MECR methodology strictly (matrices are only used on key assessments, etc.). It is advised that the system be simplified, to the extent possible, while maintaining the purpose of formative assessment – tracking of student progress. This can be done using a variety of approaches, such as: clearer, more consolidated methodological guidance, fewer types of assessments or necessary transformations to arrive at a result, more teacher training, provision of tools, such as electronic spreadsheets with built-in formulas, and/or designating a data specialist at every school, to name a few. A simplified assessment methodology is likely the most effective first step.

The backgrounds of curriculum and assessment writers are to be considered, and multi-expert teams may be a more effective approach than individual experts, when preparing teacher-facing guidance. Particularly when academics design curriculum or assessment, there may be a bias toward factual knowledge and its theoretical expression over practical, on-the-ground application. Including academics, as well as educator-practitioners, in the design of curriculum and assessment holds promise of delivering more a well-rounded approach that includes practical applications and skills.

6.2 *Summative Assessment*

6.2.1 Effective use of qualitative indicators in primary school

In their on-the-ground implementation, Moldova's primary schools may benefit from a shift from an emphasis on qualitative descriptors (which are at times regarded as more significantly distinct in their essence from marks than they likely are) to an emphasis on the use of success criteria, where the key to successful implementation of qualitative assessment truly lies. Moreover, using numeric scores (such as 25/30) to accompany qualitative results of summative assessment may be helpful in accomplishing both the purpose of keeping students focused on skills they have or have not achieved, and giving parents, students and the teacher an objective measure of student performance. Care must be taken not to view or present these types of scores competitively among children, but rather engage them from the perspective of knowledge, skill or competency formation.

While using qualitative results, such as “Very Good”, may accomplish the aim of not discouraging lower performers, they are insufficient to guide improvements. Success criteria are to be emphasized in teachers' implementation of the primary school assessment methodology, and objective measures such as numeric scores are to be considered as a supplement to qualitative results. Both of these approaches are likely to also motivate high performers due to their objective and concrete nature, and evidence of progress and improvement that a qualitative result cannot provide by itself.

In order to ensure an effective transition from a qualitative assessment system to a marks-based one, fifth-grade teachers need to be intensively supported in mastering the system of qualitative indicators and descriptors, which has not proven to be intuitive for primary school teachers up to this point. As capacity allows, time will need to be allocated in fifth-grade teachers' schedules for both learning and implementing the qualitative approach to assessment.

6.2.2 Parent engagement

Parents of primary-school students are frequently unsure about how to assess their children's performance due to perceived ambiguity of qualitative results. As mentioned above, assessment against success criteria, which is shared with parents, can help to address this issue.

Further, at this point, parents are expecting a summative report that answers the question of, "How is my child doing?" In addition to answering this question by sharing performance against success criteria, a mindset shift may need to be promoted through parent education, whereby they learn to approach their children's education from the standpoint of the child's potential and his/her strengths and areas for improvement on a learning journey toward this potential. In other words, a formative approach to education needs to complement the more commonplace summative approach for parents and teachers both. As mentioned above, at this point, the marks in primary school have been taken away, but formative assessment has not yet truly taken their place, and this void is felt by parents. Parent participation and two-way communication with the school and teachers is to be encouraged, particularly at this sensitive juncture.

Further, similar formative reports for parents may be considered in secondary school as well, particularly should criteria-based assessment be introduced there, as discussed below.

6.2.3 Integrating success criteria in secondary school

No specific assessment methodology or scoring guidelines are currently provided in secondary school curriculum documentation, potentially posing a threat to teachers' objectivity of grading. Criteria-based assessment is a strong option to consider introducing and explaining in detail to secondary school teachers. While it is used widely in Moldova's primary schools, criteria-based assessment can be used alongside marks in secondary school. Success criteria, broadly defined, can and should be used in any unit of instruction: a task, a lesson, a chapter, a module, a term, a year. Success criteria allow all stakeholders to have clarity and the same understanding of the steps or skills comprising the learning journey, which leads to successful academic mastery. Assessing students based on criteria of success is likely to lead to increased objectivity of grading and clarity of expectations from students. In fact, interviewed parents' and teachers' positive feedback on the assessment system in primary school centered mainly on the use of success criteria, rather than the use of qualitative results, due to associated objectivity and transparency of assessment. Secondary school teachers would benefit from training on success criteria and grading their students against them.

There are national documents that are already available, but do not appear to be actively used by teachers, such as the Referential of Evaluation of Specific Student

Competencies and the Standards of Effectiveness of Learning, that could provide useful guidance on criteria-based assessment. The Referential contains assessment criteria associated with sub-competencies, while the Standards contain success indicators across domains and grades. To be maximally useful, the documents should be updated to be consistent with the curriculum and possibly combined into one to ensure conciseness, as per the recommendation of the present report discussed above with primary school guidance documents. Such a unified document should then be issued formally to schools (in contrast to current informal use), and used by teachers to define high-level success criteria in terms of broad skills against which students' learning journey can be tracked. Teachers will need more training on identifying success criteria for smaller units of instruction, such as individual lessons or tasks.

Success criteria are discussed from a conceptual point of view and international best practice in Appendix D.

6.2.4 Objectivity of summative marks in secondary school

In addition to integrating criteria-based assessment, national-level intervention can assist with promoting objectivity of summative marks in secondary school. In order to ensure validity of students' summative assessment results, school-clustered correlation analyses between students' summative marks and national examination scores are recommended. Currently, it appears to be the prerogative of the school to carry out such analyses; however, centralizing this function would ensure that any radical discrepancies are detected, and schools are kept accountable to provide objective summative marks. That said, should discrepancies be detected, it is recommended that the identified schools are mentored, rather than penalized, for such discrepancy. If such a measure is implemented, the cut-off point below which the correlation is concerning should be decided carefully, based on the current national average and international best practice.

Further, while it is unclear how common cases of intentional mark distortion are, school, district and national educational authorities are recommended to pursue strategies to ensure objectivity of teachers' grading and discourage such practices.

6.3 *National Assessment and Examination*

6.3.1 Alignment of curriculum and national assessment

The 2010 curriculum introduced competencies (knowledge, skills, attitudes), yet classroom instruction and national examinations appear to mostly focus on knowledge. While skills and attitudes are much more difficult to assess, as mentioned above, consideration to assessing skills appears necessary if curriculum goals, instruction and assessment are to be aligned. Assessment holds teachers accountable in the way that they approach the curriculum. If assessment focuses most heavily on knowledge, particularly factual knowledge, this is likely to be the angle from which teachers approach instruction of the curriculum material. As skills are increasingly introduced into assessment, teachers will be encouraged to engage student competencies in the curriculum more fully.

An internal feedback loop between the Department of General Education and National Agency for Curriculum and Assessment could be a helpful step to achieve alignment between curriculum and national assessment. As the National Agency

creates assessments, a system of quality assurance (internal or external, as appropriate) on whether they are consistent with the curriculum may be helpful to put in place. Likewise, feedback from the National Agency on particular areas of students' strength and weakness (e.g., based on item-level analysis of examination performance) may be taken into consideration as the Ministry adjusts curriculum to students' needs. More on this is discussed in Section VI.

6.3.2 Objectivity in grading national assessments

The high-stakes system of school Baccalaureate examination results being published nationally and other assessment results occasionally published regionally creates a competitive attitude among schools, which may both be a healthy driver for improved quality on the one hand, and a pressure mechanism that leads to decisions detrimental to the unbiased functioning of the educational system on the other. The NACE is advised to consider strategies to ensure objectivity particularly of fourth-grade assessment scores, though starting this year (2018-2019), it may be less of an issue as qualitative scores are introduced on this assessment, potentially lowering its high-stakes nature to primary schools. Ninth-grade examination monitoring for objectivity also needs to be continually considered.

No school financing should be tied to examination scores at any point in the future to avoid further heightening the stakes of student examination scores for both the students and the schools, and threaten the principles of honesty, objectivity and equity that are to be the hallmarks of the public education system.

There seem to be fewer concerns about the objectivity of student scores on the national Baccalaureate and ninth-grade examinations, though the issue of personal connections and corruption has been brought up by some of the interviewed students as a concern even at the level of these examinations. Though the approach to scoring students' exams is thought-through, the NACE is advised to examine and take precautionary measures to ensure this does not take place and launch investigation should a complaint be issued in this regard.

6.3.3 Quality control in assessment design

A more transparent system of assessment design team selection is recommended, including desired qualifications summarized in terms of reference, based on which the teams are selected. Additionally, an independent examination monitoring and feedback system would strengthen the existing approach.

6.4 ***International Assessment***

6.4.1 Alignment of national and international assessment

As PISA 2020 approaches, Moldova is set to have another independent assessment of its 15-year old students' academic performance. It is advisable that the results of the assessment be statistically correlated, on an individual basis if possible, with the same students' results on the ninth-grade examination. While some conclusions may be drawn in comparing international assessment scores to Baccalaureate examination scores, it may likewise be most pertinent, retrospectively or in the future, to correlate longitudinal growth in international assessment scores with changes in ninth-grade examination performance, due to similarity in ages of the participants. Such an analysis

would provide insight into the ability of national assessments to capture skills similar to those tested by PISA, or equivalent measures of students' academic performance.

6.5 ***Conclusion***

The first step to improving student assessment practice in the schools of the Republic of Moldova is clarifying and simplifying national *curricular and assessment guidelines*. National-level authorities, trainers and textbook creators should sharpen their understanding of the essence and purpose of key assessment practices and communicate it effectively to teachers through professional development training and simplified, streamlined guidance documentation. The key assessment practices of focus in both primary and secondary school should be *formative assessment* and use of *success/ assessment criteria* for assessment. With these practices solidly in place, all other suggested recommendations will naturally follow suit.

CHAPTER III. TEACHER, SCHOOL-LEADER AND SCHOOL EVALUATION REFORM IN MOLDOVA

1. Introduction

While the goal and center of the education system and process is student learning, the student is part of an ecosystem that consists of teachers, school leaders and the overall school community and organization. Effective learning is facilitated by effective teaching and leadership. While student learning outcomes form the primary evaluation point of the school's and teachers' effectiveness, they alone cannot explain the root of why student performance is high or low, or how performance can be improved. Evaluating teachers, leaders and schools against agreed-upon performance standards allows them, as well as external regional and national entities, to identify areas of practice that are strong and those that require support. As with student assessment, the main purpose of school-actor evaluation is continued improvement, as well as accountability.

In the Republic of Moldova, evaluation of teachers', school leaders', and schools' performance overlaps to a large extent, particularly in the timing and approach to their execution. While separate sections are further dedicated to each type of evaluation, it is pertinent to introduce the system of external evaluation as a whole. This section is dedicated to review of external evaluation guidance, while the forthcoming sections on teacher and school/ school-leader evaluation focus on current practices and guidance on internal evaluation.

Several types of school-level evaluations are conducted in Moldova: school accreditation evaluation, authorization of provisional functioning, external performance evaluation, and internal evaluation (and/or self-evaluation). The present report focuses on external and internal evaluations, both of which are to be performed in all schools of Moldova for the purpose of quality assurance and continued improvement. The MECR has put forward performance standards and the National Agency for Quality Assurance in Education and Research (ANACEC) has designed evaluation methodologies for these evaluations, as discussed further throughout the report.

The main legal and policy documents guiding external teacher, school-leader and school evaluations in Moldova are the Education Code, the Labor Code, the MECR performance standards for teachers, school leaders and schools, and the accompanying methodologies designed by ANACEC.

2. History and Reform

2.1 *National Evaluation Reform*

2.1.1 Existing (pre-2019) system of external evaluation

The National School Inspectorate of Moldova was formed in 2014 to carry out school inspections, evaluating school leaders, teachers and school performance overall against MECR school performance standards of 2013 (discussed further). The National School Inspectorate functioned independently before it was absorbed into ANACEC in 2018. National inspections according to the previous system took place

for two years, with the last wave carried out in academic year 2016-2017. No holistic external evaluations have taken place since, and ANACEC evaluations are scheduled to commence in academic year 2019-2020.

In the interim, the current system of teacher and school evaluation consists of district/ municipal Departments of Education carrying out “thematic” evaluations of schools throughout the academic year, monitoring particular issues identified by the DOE or the MECR as priorities (e.g., the school’s documentation on a particular topic, teaching practice in particular subject, etc.). According to interviews with school leaders, the focus of thematic evaluations is frequently not revealed to the school ahead of time, leading schools to doubt their expectations and evaluation criteria. Following the evaluation, oral recommendations are usually given, with a report sometimes following weeks to months later, if at all. There was some variability in school leaders’ reports on this process.

There is perception among some school leaders that the process of school evaluation has already seen some improvement, as the attitude has reportedly changed from an inspection to a supportive evaluation process that is followed by recommendations targeting improvement in teaching or administrative practice. Some leaders, on the other hand, perceive thematic evaluations as taking place for the benefit of the DOE, with little follow-up happening for the school’s benefit.

2.1.2 External evaluation reform

The national entity presently responsible for teacher, school and school-leader evaluation is ANACEC. New professional standards for teachers and school managers were developed by the MECR in 2018, in addition to school performance standards of 2013 that were based on UNICEF’s Child-Friendly School standards.

At the time of the writing of this report, in the academic year 2018-2019, ANACEC is finalizing the methodology of evaluation against MECR’s Performance Standards. In the writing of this methodology, ANACEC reports having consulted international best practice and hosted focus groups including representatives of schools from different districts of Moldova, as well as external experts.

2.1.3 Introduction of evaluation for financial incentive

In addition to the new approach to external and internal assessment of school leaders and teaching staff proposed by ANACEC and discussed further, year 2018-2019 saw the commencement of a new type of school-based staff evaluation for a Ministry of Finance-initiated yearly supplementary payment, disbursed every three months, comprising in total up to 10% of the school’s salary fund. The exact amount of supplementary payment for school leaders is to be decided by their DOE, while supplementary payment amount for each teacher is to be decided by the school leadership team.

When school leaders were asked about being externally assessed separately from their schools, almost all cited the DOE’s new evaluation for supplementary payment. Findings on the first round of these disbursements are discussed further in the report.

2.2 *Role of the DOE Post-Evaluation Reform*

Under new ANACEC evaluation methodology, the DOE is to monitor and promote the process of internal school evaluation of teachers and leaders by the school evaluation commissions. The DOE is to present a synthesis of the results of the annual evaluations of school leaders to ANACEC and the MECR.

Other types of DOE-led school evaluations are not mentioned in the national guidelines. While ANACEC evaluations are to replace holistic evaluations that had been carried out by the DOEs under the National School Inspectorate, there are no new national guidelines for thematic evaluations. ANACEC representatives reported that the DOEs will carry forward the responsibility of conducting lesson observations via thematic evaluations. ANACEC considers that DOEs are well-positioned for this due to their pedagogical expertise and staffing capacity that ANACEC cannot provide. Specific purposes of these observations, including their value-added over and above self-, internal and external evaluations under the new evaluation approach, need to be articulated by ANACEC and communicated to the DOEs and the schools. To avoid over-burdening teachers and school leaders with administrative responsibilities, it is important for ANACEC to both justify continuing thematic evaluations, and provide vision for their goals, purposes and scope.

It is further recommended that ANACEC consider guidance and/or training of DOE specialists on their thematic evaluations. Best practice should be shared with them, particularly as pertaining to advance notice of the focus of the evaluation and timely written feedback. Besides this, guidance may be given to the DOE to align their thematic reviews, as much as is appropriate, to the national professional/ performance standards and evaluation criteria, in addition to learning standards and curriculum which appear to be an existing focus of thematic reviews. In summary, thematic reviews should be integrated into the new evaluation methodology to ensure a holistic, streamlined and consistent approach to school-based evaluation.

2.3 *Internal Evaluation Reform*

More on existing system of internal evaluation and lessons that can be learned from it is discussed in forthcoming sections. This section focuses on the reform and guidance introduced to the system of internal evaluation by ANACEC methodologies.

2.3.1 Internal evaluation

A school-based teacher evaluation commission is to appraise teachers against the Teacher Assessment Sheet, produced by ANACEC, annually. The results of the appraisal are to be reviewed by the Teaching Council of the school. Professional development plans are to be prepared by teachers based on the recommendations that emerge from the self-evaluation and the internal appraisal process – a positive step connecting professional development to appraisal. Teachers are able to appeal the rating assigned to them by the school commission's via internal review process using ANACEC guidance based on the new evaluation methodology.

As part of the internal evaluation of the school leader, he/she is to fill out an annual school-activity report and present it to be further approved by the school's Teaching Council, Governance Board and a representative of the local DOE. The internal evaluation of the school leader is intimately connected to that of the school.

It is noteworthy that internal evaluations of both teachers and school leaders are to incorporate their self-evaluations. This is likely to both make internal evaluations more well-rounded, and to strengthen the link between evaluation and professional development planning.

2.3.2 Self-evaluation

According to ANACEC's evaluation methodology, teachers are responsible to carry out self-evaluations at the end of every academic year using the Teacher Assessment Sheet and submit their self-assessment and Professional Portfolio to the Teaching Council.

According to the new methodology, schools and school leaders are also responsible to carry out self-evaluations at the end of every academic year. School leaders assess their own performance in an annual school-activity report with supporting evidence, submitted to the school's Teaching Council and Governance Board.

An internal evaluation committee is to head school self-evaluation. As part of the self-evaluation report submitted to ANACEC before an external evaluation, the school is to indicate its annual self-evaluation scores on every indicator for the past four years, which are then to be compared to the external evaluation score during the evaluation commission's visit. School self-assessment reports are to be made public on each school's website alongside external evaluation reports.

Standards-based tools for self-evaluation are provided by ANACEC, but schools are free to use other evaluation tools in addition to these. The same tools are suggested to be used for self-, internal and external evaluations of teachers. This consistency is one of the strongest elements of the new evaluation methodology.

3. Methodology of External Performance Evaluation

3.1 *Performance Standards and Evaluation Criteria*

As mentioned above, Moldova currently has three types of performance standards and corresponding methodology documents: those for Teacher, School-Leader and School Evaluation. ANACEC appears well-positioned to fulfill the evaluation function due to its existing expertise in carrying out evaluations in the fields of Higher Education and vocational education and training in the Republic of Moldova. However, in contrast to its other areas of work that have been performed autonomously, its function in relation to the MEQR needs to be further clarified in the area of general education, both in terms of standards modification that may need to take place with time, and the execution and editing of the accompanying evaluation methodology. More on delineation of responsibilities and roles, as well as communication channels, is discussed in Section VI.

Evaluation criteria correspond to national performance standards and indicators. Not every performance descriptor is evaluated against directly, with some descriptors being omitted or combined with others in the evaluation criteria, but there is overall consistency between standards and how they are evaluated.

Building an evaluation methodology is a significant step toward operationalizing professional and performance standards in the schools of Moldova. As a next step, it is recommended that ANACEC provide further guidance to school staff on how the

descriptors and/or evaluation criteria can be operationalized practically on the ground. For example, schools may find it helpful to receive examples of evidence that would lead to a high, medium and low rating, or sample school, leader or teacher profiles on every evaluation criterion that represent practice according to high, medium and low ratings. The purpose of such guidance would not be prescriptive, but rather formative, serving an illustrative purpose. Without such guidance, schools may experience difficulty integrating the performance standards into practice. Further, this type of guidance can be used to ensure alignment of expectations among evaluation commission members. A Methodology Guide is currently considered by ANACEC to this end.

3.2 External Evaluation Commissions and Quality Control

As mentioned above, ANACEC is responsible for national-level external evaluations of teachers, schools and school leaders. All three types of evaluations are to be carried out simultaneously every 5 years. Evaluation commissions are planned to comprise ANACEC employees, external education experts, local DOE representatives, and, if possible, representatives of the MECR. No fewer than three persons are to comprise an evaluation commission. All commission members are to be familiar with the laws, policies and system of education of Moldova, have practical experience in the field of education, and be trained on the process of external evaluation.

A quality control measure is incorporated into the process of awarding evaluation ratings to schools and school leaders, whereby the evaluation commission is to present its school reports to an ANACEC-based oversight department, which in turn reviews them, gives feedback, if necessary, and assigns an evaluation result. While the system of accountability is well-designed from the perspective of impartiality, it is advisable for ANACEC to monitor the process against (a) excessive bureaucratization which may be resource-heavy (financial, human, time, etc.), and (b) decision makers being too far removed from the ground-level observations, hence not being well-enough informed for a fair decision to be made. Depending on ANACEC's reflections on the early stages of this process, it may be necessary to de-bureaucratize it and/or include a component of the evaluation commission proposing the final rating, or making a judgment which is not initially disclosed to the oversight department, but is later used for comparison, leading to discussion of any discrepancies.

Another quality control measure is the ability of the school to contest its rating by submitting an appeal to ANACEC, followed by a prescribed appeal review process.

3.3 External Evaluation Procedure

Five-year schedules of external school (and accompanying school-leader and teacher) evaluations are planned to be published on the ANACEC website and renewed every year, giving schools certainty about the timing of their evaluation. In advance of the evaluation commission visit, the school is to submit an evaluation dossier, including a variety of legal documents as well as the school's self-evaluation report, and school leaders are to submit a self-evaluation and supporting professional portfolio, to ANACEC.

The evaluation is to last 1-3 days and consist of the commission evaluating the school's documentation, considering pedagogical practice, teaching materials, teaching staff and students, and interviewing members of the school community (students, parents and staff). Results of the annual internal evaluation of school leadership and teaching staff will be considered during the external school evaluation, creating a correspondence between internal and external appraisals. School-leader and teacher evaluation are mandatory components of the external school evaluation that occurs every 5 years, establishing a natural correlation between school-leader, teacher and school evaluations. Systematicity can be observed throughout the evaluation design.

Periodic external evaluations performed according to ANACEC evaluation methodology are to result in separate qualitative ratings of the school, school leaders and teaching staff. The ratings are: "Very good", "Good", "Satisfactory" and "Unsatisfactory" (based on evaluation scores of 86% and above, 64-85.99%, 50-63.99%, and under 50%, respectively). The rating, main observations and recommendations are to be recorded by the evaluation commission in a Periodic External Review Report, to be submitted to the school by ANACEC within 30 days of the evaluation visit. External school evaluation reports are to be publicly accessible on the respective school and DOE websites, as well as on the ANACEC website. The advance notice of the evaluation, the clarity of assessment criteria and the promptness and clarity of a written report comprise substantial improvements to the current evaluation system of schools, which is marked by none of the above.

Schools that receive an "unsatisfactory" rating are to be monitored by the DOE and re-evaluated the following year. An "unsatisfactory" rating obtained two years in a row is to lead to contract termination of the school leader, as one deemed unfit to lead the school. School leaders that obtain an "unsatisfactory" rating on their personal evaluation are to be dismissed immediately. Those that receive a "very good" rating are to be eligible for a salary raise. The evaluation methodology and performance standards for school leaders apply both to school leaders (directors) and to deputy leaders.

Teachers that obtain an "unsatisfactory" rating two years in a row are considered to have committed a disciplinary offense and are to be disciplined by the school leader. Teachers that are rated "very good" are recommended to be promoted to mentoring status at the school and may benefit from a financial bonus. Consecutive "very good" ratings also carry positive implications for teachers' ability to acquire a higher professional status.

In response to the recommendations submitted to the school in the periodic external evaluation report, the school is responsible to adjust its annual development plan and School Development Plan. This formative function of external school evaluation is a continuation of the existing positive practice of assessment being tied to improvement plans.

The ratings of external school evaluations are assigned based on the MECR's performance standards. Each indicator associated with the standards has been assigned a point-value in the evaluation methodology, which are summed up to arrive at a rating.

4. Recommendations

Overall, the new national system of evaluation is a significant positive step toward an internally-consistent system of performance and professional evaluation of school staff. Its main strengths lie in that: (1) it corresponds to national standards, (2) the evaluation approach is streamlined between the three types of school-based performance evaluation, which are now designed to take place simultaneously yet be distinct from one another, (3) it introduces self-, internal and external evaluation, all of which use the same or similar tools and criteria and are thus internally-consistent, and (4) the function of periodic evaluation is centralized, enabling strategic oversight and data tracking, while leaving ongoing monitoring and support with the local Departments of Education. In order to further build on the strengths of the new evaluation system, the following recommendations are given.

4.1 System of Data Tracking

It would be beneficial to establish a system of data tracking for ANACEC evaluation results, whereby common trends and issues can be identified and reported to the MECR, in order to formulate national policy on curriculum, instruction, assessment and professional development.

As a positive development, ANACEC is planning for a special commission of c. nine experts who will conduct qualitative analyses of school evaluation reports and work on recommendations for national policy. It appears that currently the plan is to outsource data analysis to the MECR itself or other institutes that specialize in analyzing data. While it is feasible for multiple entities to analyze the data, it is recommended that ANACEC, as the agency in closest proximity to school-level practice, also carry out quantitative analyses, as its function is to advise the MECR on national policy. In order to fulfil this function, capacity building may be necessary for ANACEC staff or contractors to be able to examine and analyze the collected data quantitatively, driven by internal research questions and hypotheses, in addition to the already-anticipated qualitative analyses.

4.2 Follow-up on External Evaluation Recommendations

Guidance may be necessary to DOEs on how they may carry out monitoring and support after ANACEC evaluations. Currently, there appears to be an emphasis on checking that schools have all required documentation, as well as if the other records (e.g., student marks etc.) are consistent with national policy guidelines. DOE employees are likely to require training on the new performance standards, and how to monitor and support performance accordingly in ways that go beyond documentation screening. Ideally, DOE would host pedagogical expertise (whether through training up the employees or attracting contractors) that could be drawn upon in supporting schools toward the performance standards.

4.3 Supplementary Payment and Performance Evaluation

There appears to be little clarity on the part of school leaders and DOEs in relation to how supplementary payment allocation is to be decided. Further, it is questionable whether tying financial reward to performance is an appropriate incentive for performance improvement, as it may introduce a high-stakes system that threatens honesty of self-evaluation reporting on performance by the evaluatees. Besides, unless accountability measures and success criteria are introduced, decisions on

supplementary payments are likely to be made based on more subjective or personal factors.

Thus, as this is a Ministry of Finance policy that cannot in itself be altered, it is recommended that the MECR, at minimum, provide more specific guidance in regard to how the payment allocation is to be decided. The current plan articulated to the research team by national authority stakeholders is to use the ANACEC evaluation methodology criteria as criteria for performance-based supplementary pay. The danger of this approach is that it would introduce a high-stakes component into an evaluation methodology that is otherwise designed to be formative and developmental in nature. The appraisal scheme could then be seen, rather, as evaluative and top-down and limit teachers' growth mindset, willingness to take ownership, try novel approaches and experiment, at the risk of being unsuccessful when reviewed for pay. Finally, this intervention could increase competitiveness among staff if they perceive that they are competing for resources with others in the same position.

It is important to clarify whether supplementary pay is to be allocated for exceptional performance or for meeting standards, as there is currently disagreement among stakeholders about this. Typically, bonus-pay schemes are used as a reward for above-and-beyond performance. International best practice also suggests that pay-related performance reviews have a negative effect on staff performance and satisfaction if the methods of gathering evidence of performance are imprecise.^{xxi} Thus, simplicity and objectivity should be pursued in the choice of evaluation measures.

A strength of the method currently proposed by the national authorities is the inclusion of self-evaluation in the review. It is suggested that teachers, school leaders and DOE representatives be interviewed about an evaluation scheme that they would consider fair, and one that would encourage them to develop professionally and preserve positive staff and leadership relationships at the school. Research shows that school staff are less skeptical of pay-related review, and that it leads to increases in student learning, when they play a part in developing the performance measures.^{xxii}

4.4 Training on Performance Evaluation Standards

While there already appears to be a moderate level of familiarity among schools and DOEs with teacher, leader and school performance standards, further training on the standards and the associated evaluation methodology will be needed when the methodology is finalized.

Further, should DOEs continue conducting thematic evaluations, it is advisable for them to share evaluation criteria with schools well in advance of the evaluation. Currently, schools often become aware of the criteria against which they are evaluated two days before the evaluation, and sometimes in the report they receive after the evaluation. It is crucial that evaluation be used as a guidance tool for improved school performance, which is best accomplished through communication of expectations from national standards and indicators, and criteria used in district-led evaluations, as well as written formative feedback that follows. It is advised that ANACEC articulate the role of the thematic evaluations more clearly and align their goals and observation criteria with the wider school-based evaluation goals and approach.

CHAPTER IV. TEACHER APPRAISAL IN MOLDOVA

1. Introduction

Teacher appraisal refers to the processes and criteria used to evaluate the performance of school teachers, as well as the way the outcomes of such evaluation are used for improvement. To be part of the cycle of improvement, teacher appraisal needs to be objective and based on rigorous evaluation criteria, which correspond to performance standards. Only by being familiar with these expectations can teachers have shared vision of the type of practice to which they should aspire. As the teaching profession is multi-faceted, it is important for effective teacher appraisal to capture a range of administrative and pedagogical skills, the primary of which is lesson delivery as this is the main point of contact with students. Teacher appraisal can lead to continuous improvement of pedagogical practice at the school if its results are used to inform in-service professional development and support at the school level, and strategy for curriculum, in-service and pre-service teacher training at the national level.

During academic year 2017-2018, 28,600 teachers were employed in the general education sector of the Republic of Moldova (primary and secondary schools), of them 86% were female, 58% had more than 20 years of professional experience, and only around 11% were novice teachers with 5 years of teaching experience or less. There is a lack of teachers for particular subjects, especially the sciences. The teaching profession does not attract enough young cadres and is threatened by oncoming teacher shortage. In order to enter the teaching profession, candidates are to have a teaching qualification.

This demographic profile indicates that most Moldovan teachers have extensive experience built on Soviet and post-Soviet approaches to education delivery and structure. This affects both their instructional practice, and their views and practices of student and staff evaluation.

At the school level, deputy school leaders generally oversee teacher performance. At the national level, as mentioned above, ANACEC is the agency responsible for teacher appraisal. It must be noted that at the time of the writing of the present report, the Teacher Appraisal Methodology was in draft form. The analysis provided below may or may not apply depending on the extent of changes to the final version of the Methodology.

2. Legislative and Policy Context of Teacher Appraisal

2.1 *National Standards of Teaching Practice*

The 2016 MECR Professional Standards for Teacher Performance comprise five standards, as listed below:

- Standard 1 – Teaching and evaluation against curriculum
- Standard 2 – Learning environment (relationship, safety, behavior management)
- Standard 3 – Provision of the educational process
- Standard 4 – Management of own professional development
- Standard 5 – Collaboration and community partnerships

The teacher performance standards generally support learning standards and are consistent with the competency-based approach to teaching and learning, though more explicit links may be implemented in future iterations of the standards. In order to support learning, teachers are expected to deliver instruction and evaluation against curriculum competencies; adapt the curriculum for and consider individual needs and knowledge of students, including students with special needs; and incorporate an interdisciplinary and transdisciplinary perspective. Peer and self-evaluation of students are listed as expected teaching strategies, as are baseline, formative and summative assessments and differentiated assessment methods. The standards also expect teachers to periodically provide the necessary information to parents/ legal representatives of children about their progress, successes and needs of development and support of students during their learning. Operationalizing this further and reinforcing the message to teachers has the potential to have a very positive effect on teacher-parent communication, particularly in terms of facilitating students' criteria-based learning journeys (consistent with recommendations on parent communication above).

2.2 Correspondence of Evaluation Guidelines to Performance Standards

The reviewed teacher appraisal guidelines generally correspond to teacher professional standards. External teacher appraisal methodology does not (at the time of the writing of this report) include evaluation criteria associated with performance indicators, which may make the standards difficult to interpret both for teachers as they seek to improve their practice, and for external evaluation commissions as they seek to appraise it. It is suggested that descriptors are referenced in the final version of the Teacher Appraisal methodology more thoroughly, and similar examples or guidance to the ones mentioned in the previous section supplement the existing methodology document.

Teacher professional standards also generally correspond to and support the elements captured in school and school-leader standards. The standards underscore the inter-related components of teaching, learning and assessment.

3. Research Findings

Moldova's teachers currently vary in the extent of their familiarity with or understanding of the national performance standards, and schools use different evaluation criteria of teacher appraisal. The appraisal approach is generally informal and not always based on criteria or used to collect data. While the existing personal, individualized approach to teacher evaluation and feedback has strengths, it frequently lacks in objectivity and systematicity. As a result, individual interventions run the risk of being haphazard and/or inconsistent. School leaders rarely examine results of their teacher appraisal at the school level, which impedes their ability to plan for whole-school professional development and support based on common needs. The national and regional teacher appraisal authorities have up to this point also lacked in consistent evaluation criteria, high-level analyses of performance and data-based strategy of professional development planning.

3.1 Internal teacher appraisal employed by schools

Interviewed teachers and school leaders varied in terms of their knowledge of national teacher professional standards, though most leaders and about half of the interviewed teachers were generally aware of and had a copy of the MECR standards. Despite a level of awareness of the standards, at present, schools appear to lack guidance on teacher appraisal and use a variety of systems and criteria, evaluating teachers against: their job descriptions, teacher portfolios, teacher attestation regulations, in-class observations using internally, externally- or DOE- developed lesson observation forms, teacher self-evaluations, student interviews by school psychologist, etc. Some schools use forms and policies put forward by Moldovan Labor Law, such as the professional performance evaluation form. Others have adapted select national teacher standards to their appraisal needs.

Some schools perceive the teacher professional standards developed by the MECR as overly complex and indicate that full-time staff may be needed for the sole purpose of teacher evaluation, particularly for large schools. It appears that the standards are currently perceived as difficult to measure, so the few schools that have set out to appraise teachers based on the standards, have selected only those that are focused on measurable inputs and outputs (e.g., PD attendance, participation in extra-curricular activities, etc.), rather than teacher characteristics that are perceived as vague and requiring too much evidence to establish a case. Some schools reported that the standards appear useful in terms of long-term, but not short-term, teacher appraisal. This feedback confirms that ANACEC and/or the MECR should consider operationalizing performance descriptors and evaluation criteria further by providing practical examples and/or suggesting types of evidence that can aide in demonstrating performance on a standard. That said, precaution needs to be taken with the latter, so as to design such supports as would be formative, rather than prescriptive or burdensome for schools and teachers that already frequently appear over capacity. Professional development on the new teacher appraisal methodology would also be helpful for school leaders who are reportedly mostly self-taught in their existing approaches.

School leaders also appear confused by the new performance-based financial bonus, as it is another cause for teacher appraisal, and a new system needs to be developed for it. School leaders have taken different approaches in designing this system. Teacher appraisal for the purposes of internal evaluation, attestation and award of didactic degree, and supplementary pay are sometimes conflated by schools. In summary, there is currently a lack of direction in terms of teacher appraisal, and the new national methodology of appraisal is likely to simplify the process for schools. It is advisable to make clear to school leaders and teachers how the different types of internal evaluations will relate to one another in the new system. It may be prudent to keep performance-based supplementary pay independent of the national criteria-based teacher appraisal scheme. A more detailed discussion on this is included in Chapter III, Section 4.3.

Finally, every visited school had their own lesson observation form, but at least some general guidance from ANACEC may be helpful to guide schools in what they should consider as they observe teachers' lessons. The new teacher appraisal methodology does not sufficiently address in-class teacher observations in their relation to capturing teaching and learning in the classrooms of Moldova.

3.2 *Formative use of internal appraisal*

When asked about being internally appraised, teachers' responses usually focused on appraisal for attestation or didactic degree, and rarely for internal improvement. Mostly, it appeared that such formative use, when it takes place, is informal and individual. Rare schools reported organizing professional development based on perceived trends of teacher needs. This is likely related to the fact that data-keeping of teacher appraisal results is not practiced in most schools, making data-based decision making, such as decision about professional development or other intervention, unlikely.

4. Teacher Professional Development

Teachers undergo professional development at the school (mostly organized by the school's deputy head), at the district/ municipal level (organized by the DOE), occasionally at the national level (such as when it is organized by a national agency or the MECR), and at external professional development centers. Professional development is organized by these entities in response to a variety of factors. Most courses (with the exception of school-based) are designed to meet mandatory and optional teacher accreditation requirements and explain policy and new expectations by the MECR. In other words, currently, teacher professional development is primarily provided for teachers to fulfil expectations. While this purpose will continue needing to be met to a large extent, a more flexible approach is also recommended, whereby professional development is also organized in response to identified teacher needs.

There are currently 15 approved centers that provide teacher professional development in Moldova, including the National Institute of Education Science that also performs a research function. Interviewed stakeholders in this field reported limited interactions with schools and the lack of a formal system of feedback that they could use to design their professional development offering.

5. Teacher Appraisal: Recommendations

5.1 *Alignment of Teacher Professional Standards and Evaluation*

As learning standards and associated assessment approaches are defined more specifically and parsimoniously in the new curriculum and curriculum integration methodologies/ guides, it is suggested that they are taken into consideration and teacher professional standards be intentionally aligned with them, as effective teaching is teaching for effective learning. As the MECR further defines approaches leading to effective learning, it is suggested that they are reflected in teacher professional standards and teacher appraisal tools more conspicuously.

It is noteworthy that the methodology for national teacher appraisal and the recommended internal evaluation methodology do not include an observation component. ANACEC stakeholders have clarified that lesson observations will remain a part of thematic evaluations by the DOEs, while the national external evaluation process will focus on ensuring that the school is able to appraise its teachers. As the teaching profession has its greatest effect on student learning in the classroom, classroom observations need to be accounted for, such as in guidance provided to DOEs and school leaders on the types of indicators to observe.

5.2 *Alignment of Teacher and Learning Standards*

When schools report on professional development, they often emphasize teachers' subject-knowledge, or training on new curriculum standards or methodologies. It is recommended that teacher competencies are viewed in terms of pedagogical skill beyond content knowledge and fulfillment of curriculum methodology requirements (both in standards and in professional development).

Overall, there is a consistent narrative at schools that the system of records (grading schemes, etc.) associated with following the curriculum and its assessment methodology make it difficult for teachers to know their students and reach their own potential as professionals, particularly in primary school. In addition, the curriculum is often viewed as dense, similarly leading to a lack of teacher time. Thus, the structure and requirements of the curriculum and its methodology, as discussed in Section II, appear to negatively impact teacher professionalism. There may be a variety of reasons for this, including, but not limited to, teachers' lack of aptitude when working with the curriculum/ assessment methodology, teachers' misunderstanding of the curriculum guidelines (e.g., every aspect is treated as a requirement, rather than recommendation), and so forth. As the new national curriculum and its accompanying methodology are being finalized, it is recommended that the issue of teacher workload – both in terms of assessment requirements and level of detail in the curriculum content itself – is considered, and the curriculum is structured in such a way that enables teachers to grow in pedagogical skill, including knowledge of their students through genuine formative assessment. Precaution should be taken against ambiguity in requirements versus recommendations, and a content-saturated curriculum that does not make space for the building of student skills or in-depth understanding of the content.

In summary, it is advised that guidelines surrounding learning standards consider teacher professionalism and skill-building, and facilitate an approach that would allow teachers to be well-rounded professionals, rather than agents of fulfilling requirements.

5.3 Analysis of Teacher Appraisal Results

The new system of nationally-stored and analyzed teacher appraisal data can be used effectively to identify trends in teacher performance and set the direction for national policy of teacher professional development and training. Data can also be segregated by district/ municipality to make recommendations to the DOEs about specific teacher PD needs in their district. Alternatively, DOE capacity can be built to encourage such analyses on the district level.

National student assessment results should also be used to identify professional development needs of teachers. Item analyses on the national level may be necessary to distinguish where teachers may be lacking content knowledge or pedagogical skill to deliver instruction.

The National Institute of Educational Science both carries out research in the field of education, and provides professional development. It is unclear whether or to what extent the two functions currently inform one another, or whether this would be appropriate. It may be efficient for the research arm to be used to inform professional development policy on the national level. More research would be required to investigate the Institute's capacity to deliver this type of research. Regardless of who carries out the research or obtains/ analyzes data on student and teacher performance,

it is necessary that PD providers be connected to ground-level needs on an ongoing basis. Currently, there does not appear to be such a system.

It is important that professional development offering be informed both top-down by policy and research, as well as bottom-up by requests, current teacher practice and student results. Schools' capacity should be built up to enable leaders to systematically identify teacher professional development needs. Along with introducing and explaining the new system of teacher appraisal, ANACEC or another national or regional entity is recommended to illustrate a system of storing and analyzing school-level teacher appraisal data and train school leaders on how it can be used formatively for teacher development, so that teacher growth and support at the school, district and national level are informed by data on their performance.

5.4 Teacher Professional Development

More clear delineation of responsibilities or communication about them is needed to distinguish the function of Universities and PD centers in regard to teacher professional development. It is unclear who in the country has the ultimate oversight function of professional development policy and provision – this may need to be clarified. Professional development providers need both input (top-down and bottom-up, as described earlier) in regard to teachers' needs, and a level of oversight and quality control of their provision.

While PD centers often provide courses under similar names, it is unclear that they are held accountable about the content of these courses, likely meaning both that the quality of their provision varies, and that neither school leaders nor higher educational authorities know the type of content that teachers may have covered in a PD course.

Besides, PD centers receive state funding for mandatory courses proportionately to the number of registered participants. Currently, this creates a competitive environment among them. As with competition among schools, this can push the market players to better provision, or serve as an obstacle to sharing best practice and transparency.

A potential solution to both of these challenges is to create a system of collating or make it mandatory for PD providers themselves to share the content of their courses, such as in the form of briefs and outlines. This would both promote a level of accountability and encourage transparency, potentially leading to a more collaborative environment in the field. As PD centers see each other's provision, they may be encouraged to compete in a healthy way, by providing improved quality of training courses. Another potential solution could be for building blocks of the professional development provision (at least of mandatory modules) to be developed by a centralized body and delivered by the independent centers.

An outcomes-based system of follow-through with changes to teacher and/or student performance as a result of professional development courses may also be a long-term goal, though there is complexity to implementing this in the field. A simpler version could be instituted in the form of a pre-post test based on national teacher standards, indicators or descriptors that teachers take before and after the PD course.

5.5 Conclusion

As with all school-based evaluations under the new evaluation framework, it is recommended that the next step is for ANACEC develop detailed guidance that further operationalizes teacher appraisal criteria in a concrete way to help teachers understand the expectations. The guidance should serve as an illustration, rather than requirement, allowing teachers the freedom of personalizing and innovating in the bounds of the performance standards. It is considered that this intervention would strengthen the quality of the teacher appraisal framework, which currently appears quite general. Specificity is required for pedagogical practice to improve as a result of criteria-based evaluation.

Further, as Moldova adopts the new teacher appraisal framework, the role of the regional Departments of Education needs to be specified, and guidelines given for focus, scope and number of thematic evaluations that may continue taking place. Guidance for lesson observation should be given to the DOEs and schools, as lesson delivery is the key component of teaching.

As the new evaluation approach is adopted, it is important that national stakeholders engage in an ongoing process of: (1) updating professional teacher standards and appraisal criteria to facilitate national learning priorities as curriculum and assessment guidance is updated, (2) analyzing teacher appraisal data for the purpose of informing professional development strategy at the school and national level, and (3) assessing the schools' ability to accurately appraise teachers internally. As self- and internal appraisal capacity grows, the administrative burden of external evaluations should diminish.

CHAPTER V. SCHOOL EVALUATION IN MOLDOVA

1. Introduction

To achieve the goal of deep and effective student learning, it is not only necessary to provide effective teaching, but also effective school administration and leadership. Both students and teachers exist in a complex ecosystem created by school leaders which is called ‘school’. A successful school meets agreed-upon standards of performance which contribute to optimal physical, academic, developmental and socio-emotional well-being of all students. School leaders need to be equipped to create such a school through corresponding skills and vision. One such skill is the ability to reflect on own performance and the performance of one’s school. Transparent self- and internal evaluation helps leaders develop a growth mindset and make informed decisions about pathways to improvement.

Most schools in Moldova are managed by the school leader (“director”) and one or more deputy school leaders (“vice directors”), depending on school size. The leader’s responsibility largely centers on school management and administration from a practical and strategic perspective, while the deputy/-ies are responsible for specifically leading and assessing the school’s pedagogical practice (teaching and learning). The present section is constrained to the main school leader’s evaluation. Further similar research focused on deputy leaders may be pertinent.

District Departments of Education immediately oversee school leaders’ performance, while ANACEC, as mentioned previously, is the national body responsible for school and school leader evaluation. At the level of the school, the Board of Directors (Management Board) and the Teaching Council are two bodies that hold school leaders further accountable.

2. Legislative and Policy Context of School Evaluation

2.1 *Pertinent National Laws/ Policies*

Moldova’s Education-2020 strategy stipulates reconceptualizing of educational management at the system level according to the following emphases: promoting participative and efficient management; promoting strategic and innovative management; developing the organizational culture of educational institutions; developing human resources management; developing curriculum management; linking management at national, local and institutional levels; and identification and implementation of modern management mechanisms, such as diagnosis, design, decision making, organization, evaluation, communication, and so forth. These emphases are partially reflected in Moldova’s national school and school-leader standards of 2013 and 2016, respectively.

2.2 *National School and School-Leader Standards*

2.2.1 School performance standards

Moldova’s national school performance standards are based on UNICEF’s child-friendly school standards. A summary of the standards follows:

Standard 1 – Safety, security and health

Standard 2 – Participation & democratization

Standard 3 – Inclusion

Standard 4 – Educational process (at the school- and teacher-level)

Standard 5 – Gender equity

In summary, Moldova's schools are to ensure the basics necessary to facilitate the educational process: security and protection of all students, community partnerships to protect their physical and mental integrity and support services to promote a healthy lifestyle among students. Schools are to be inclusive of all children, equitable and create optimal conditions for the realization and development of every student's academic potential.

Teaching and learning are addressed in one of the five standards, whereby schools are to create conditions conducive to quality educational process, and teachers are expected to make good use of educational resources toward goals set by the national curriculum.

2.2.2 School-leader standards

Professional Competence Standards of General Educational Institution Management put forward by the MECR in 2016 define performance standards for school leaders. The same standards are to guide leaders' self-evaluation, internal and external evaluations of their work, and to be used by entities providing continuous professional development.

A summary of the leader standards follows:

Standard 1 – Vision and implementation of strategic goals and objectives;

Standard 2 – Curriculum development and implementation;

Standard 3 – Recruitment, management, evaluation and professional development of staff;

Standard 4 – Financial and material resource management;

Standard 5 – Operations management and quality assurance;

Standard 6 – Development of community partnerships.

The six standards are described through indicators, which are further operationalized through descriptors. Academic goals are addressed through Standards 2 and 5, while most of the standards are centered on general school management.

2.3 Correspondence of Evaluation Guidelines and National Standards

School and school-leader evaluation criteria correspond directly with respective national standards. All school performance standards and indicators fall under the authority of the school leader, making school performance a direct reflection of the school leader's and, to a certain extent, teachers' performance. Indeed, a school's persistently unsatisfactory performance is interpreted in the current ANACEC school evaluation methodology as a reflection on its school leader, as his/her contract is discontinued in this case. Additionally, one of the stated objectives of school-leader evaluation is to establish the link between its results and the results of the school evaluation.

3. School Evaluation: Research Findings

Current internal school evaluation approach in Moldova is characterized by an inconsistent understanding of school performance standards among school leaders. Moreover, the prevailing attitude toward internal school evaluation is focused on compliance with higher-standing authorities and top-down expectations, rather than on collecting information to make informed decisions on which areas for improvement to pursue and how.

3.1 Internal School Evaluation

3.1.1 Internal school evaluation currently employed

There currently appears to be inconsistent understanding of national school performance standards by school leaders. Most schools participating in field research for the present study did not mention the standards developed by the MECR in 2013 when asked about school performance standards – leaders referred to the Education Code, DOE school standards, or reported they did not know of any.

The current approach to internal school evaluation of most schools is based on the DOE requirement for school leaders to submit an administrative evaluation of each of their schools' readiness to operate before the beginning of the academic year. Some schools reported that the DOE issues new standards against which schools are to assess themselves on these yearly self-evaluations, while others referred to the 2013 MECR standards as the basis. Most school leaders expressed need for more clarity on self-assessment criteria. The new school evaluation methodology developed by ANACEC is a substantial step in this direction and should provide school leaders with helpful initial guidance on school self-evaluation criteria. Recommendations on further operationalizing expectations, stated above, apply.

3.1.2 Formative use of internal school evaluation

According to interviewees, school self-assessment generally informs schools' five-year school development plans; some schools also report considering teacher, parent and student views in their SDP development. It must be noted that the emphasis of school evaluation and the SDP is administrative, rather than academic, though some academic variables are considered. Separate yearly academic plans are developed by schools' deputy leaders, who act as academic heads in most schools. Interviewed school leaders frequently reported that they had not been trained on how to conduct school self-evaluations, but rather relied on their own expertise.

It is noteworthy that the goals set by schools in their SDPs and academic plans are often phrased as inputs or outputs (e.g., book purchases, introduction of new subjects, number of hours of professional development), rather than outcomes. School leaders may need training on setting outcome-focused goals and objectives (e.g., increase in particular student scores, teacher appraisal ratings, etc.).

Further, school leaders expressed lack of capacity for data analysis that could be used formatively for school improvement. Leaders reported inputting certain school parameters and statistics into an electronic data system put forward by national-level education authorities, but none expressed that they understood how these data could be used for internal school improvement.

3.2 Reporting on Internal School Evaluation Results

3.2.1 Reporting to national and district authorities

Schools fill out electronic data forms on academic outcomes, which are submitted to the national educational authorities. It is unclear how these data, or which of these data, are used at the national level.

Yearly, schools submit self-evaluation reports to their local DOE. Based on the primary research of this study, DOEs view most submissions through the lens of examining them for having fulfilled Ministry requirements. If requirements are not met, DOEs take action to address this. Trends or performance indicators are not examined by DOEs very closely, with the emphasis being on standard fulfillment. It is also unclear whether DOEs use these data formatively for their own purposes.

3.2.2 Reporting to parents

Most school leaders indicated that there is a parent meeting once a year where school-level performance results are shared with parents. In general, however, the emphasis in parent communication is on the individual student or, at most, average class-level results. Observing and reporting on school-level performance to parents is not a typical practice, according to primary research. As schools develop data analysis capacity, as per the recommendations in this document, it is advisable for them to share performance trends with parents, educate them on what these trends mean and invite them to be part of the growth and improvement process. ANACEC-introduced expectation for schools to publish their self-evaluation reports on the school website is a positive step in this direction.

4. School-Leader Evaluation: Research Findings

The concept of school-leader evaluation as distinct from school evaluation is uncommon among Moldova's school leaders who tend to focus on performance outcomes rather than skills. While outcome-based self-assessment is a sound approach, there is currently almost no self- or internal evaluation of school leaders apart from this. This reinforces the external compliance approach to leader evaluation. Self-reflection and continuous professional improvement are mindsets that most school leaders have not yet developed.

4.1 *Internal School-Leader Evaluation*

Most of the interviewed school leaders reported currently being evaluated by the Teaching Council and/or the Administrative Council (Management Board), whereby the school leader presents a report of his/her work to the council, and the council passes it on to the DOE. Some leaders reported that the council gives them a qualitative result (e.g., "good", "satisfactory", etc.), while others indicated that the process of internal leader review is informal, as they are "known by the staff" who give them daily feedback or approve of their work. Some schools practice giving the leader's report to parents. Overall, it does not appear that internal school-leader evaluation is taken seriously at the schools or having much of a bearing on the leader's work. The formative function on the leader's professional practice was not explicitly reported. Most feedback received by school leaders concerned school performance and school improvements, and affected the school development plan. School leaders currently make little distinction between their and their school's performance – an

understandable approach that ANACEC will need to consider as they integrate distinct criteria for the two types of evaluation.

No professional standards appear to be used to evaluate school-leader performance in most Moldovan schools. While many of the leaders have access to and are aware of the national professional standards for school managers, almost no schools use them to assess their performance.

4.2 *School Leader Self-Evaluation*

Self-evaluation was not observed among school leaders. All interviewed school leaders consider the internal evaluation process pertaining to the school to be their perceived method of self-evaluation as leaders. While this approach has limitations, primarily in that school leaders do not use professional standards when evaluating themselves – at the same time, the advantage of this approach is that it leads to outcome-focused self-evaluation, rather than one focused on inputs (e.g., PD hours) that are often tracked in internal and self-appraisals of other staff, as mentioned above.

5. School and School Leader Evaluation in Moldova: Recommendations

5.1 *Formative Function of Performance Evaluation*

The formative function of school and school-leader performance evaluation will need to be emphasized to all stakeholders as the new evaluation methodology is implemented in the schools of Moldova. The MECR emphasizes the formative function of the national performance standards as guiding one's individual development. In addition to this, school and school-leader evaluation results should play a bottom-up formative role, whereby evaluation findings are systematically collated, and trends reported on from schools to DOEs and/or national-level education authorities. ANACEC or other national-level authorities should then use these data to understand trends in school and leader performance and in turn make recommendations for school leaders' professional development. More on the formative function of performance evaluation results for professional development is discussed in Chapter IV.

5.2 *Data Analysis Skill-Building*

Data tracking and analysis skills are clear needs of school leadership teams, whereby either existing leadership staff need to be trained or external specialists hired to be in charge of data, measurement and evaluation at the school level. Some schools have deputy leaders that are attempting analyses themselves. Ideally, school leadership teams need to be able to make decisions based on data themselves, but not all have the capacity to build up their skills to the required level in the short-term. An alternative suggestion is for ANACEC or another national-level authority to provide schools with Excel spreadsheets that have built-in formulas which could generate analyses and graphs, as well as guidance on how to interpret each one, before leaders are equipped to perform their own analyses and interpretations.

Overall, school leaders, similarly to teachers, are used to an intuitive approach to performance management and improvement of their schools and students, respectively. Data-based decision making is currently foreign to most school leaders and may at first seem to them like a burden. Any suggested data-based approaches should be recommended or integrated slowly, allowing for the transition, and ensuring

that the day-to-day connection of school leaders and their schools is not lost amid leaders trying to satisfy a data requirement. The current conversations- and observations-based (qualitative) approach should be nurtured alongside developing quantitative and analytical capacity.

5.3 ***Guidance on Self-Evaluations of Schools and Leaders***

The new evaluation methodology will be instrumental in guiding school leaders in carrying out self-evaluations and internal evaluations of their schools – a skill that is currently lacking, and one that has been identified by ANACEC interviewees as one of the primary goals of external evaluations. As external evaluations are to use the same criteria as internal and self-evaluations, discrepancies should be examined as part of the external evaluation process. If significant discrepancy is found between self- and external evaluation, this may indicate that further development of self-evaluation capacity is needed for a teacher, leader or school staff.

Sharing school-level internal evaluation results with stakeholders aside from regulators (e.g., parents) is very limited. As school self-evaluation is not yet a developed concept or skill, schools mostly report to parents on their children's individual performance. The concept of how the school is doing as a whole is not yet familiar to school leaders, and needs to be developed through the new evaluation methodology and training.

5.4 ***Conclusion***

As with teacher appraisal, the next step in strengthening school and leader evaluation in Moldova is for ANACEC to provide more detailed evaluation criteria to illustrate the application of the new school evaluation frameworks to practice. As mentioned before, specificity of guidance would strengthen the quality of the framework and allow for more effective criteria-based improvement of leadership and governance of the school. Current framework guidance may be too vague to allow for such improvement.

During training, schools should be made aware of the fact that their self- and internal evaluation capacity is the main proposed focus of the new approach to school evaluation. Training should thus focus on the formative function of evaluation and use of data analysis for school improvement.

Further, discussions should take place at the national level to establish the process of data collection and analysis of school-based evaluations. In the long-run, it is critical that national policy and interventions are informed by the findings of these analyses.

CHAPTER VI. EDUCATION SYSTEM EVALUATION IN MOLDOVA

1. Introduction

The underlying objectives of an education system's self-evaluation are to monitor progress of the system's performance through time, instill accountability of the authorities and, at its bottom line, improve student learning. For system evaluation to be effective, system-level data on student performance and other, supporting indicators need to be regularly collected and analyzed. Effective education systems use results of such analyses to inform national policy and interventions in a targeted way and ensure that all parts and levels of the complex system work together. The many elements of the education system are inter-related; thus, policy and practice in one area influence outcomes in other areas and must be coordinated for optimal efficiency and performance of the system as a whole.

2. Education-System Evaluation: Context and Findings

One of the key messages that comes through at every level of the educational system in Moldova is the message of transparency. From parents to teachers, school managers, district Departments of Education and national-level leadership, all interviewed stakeholders have emphasized the fact that the system of both assessment standards and assessment data is transparent. This appears to be a step in the right direction, as trust among stakeholders is built up and corruption is minimized at every level of Moldova's system of general education. This system of transparency may be utilized for further building up of the educational system, as discussed below.

Nevertheless, the capacity of the system to collect and analyze data at the national and regional levels is limited, which affects the core formative function of system evaluation in Moldova. While some analysis does take place, the education system's ability to make policy decisions and introduce interventions or changes based on performance data requires further development. In addition, Moldova's educational authority entities currently often operate in silos, which undermines the efficiency of policy-making and execution that leads to student learning growth.

2.1 *National Level*

Moldova's national-level student assessment and analysis practices are heavily informed by PISA international assessment. National assessment experts have learned about assessment from the PISA experience, including such components of assessment preparation and execution as test design, sampling strategy, coding of responses, analysis of results, etc. This influence continues as international PISA experts provide two training seminars per year, in addition to video conferences. Further, PISA results are the most trusted indicator of educational system performance among interviewed MEQR stakeholders. PISA results are generally cited by national agencies as currently the most objective measure of system performance (though percentage of students that have passed the Baccalaureate examination is also used as a measure by some agencies).

2.1.1 Data tracking

Student performance data are tracked nationally by the NACE primarily through national assessments and examinations. An EMIS system is used to store national examination results. An electronic database system is also used nationally to track other types of student data input there by schools. By-student PISA data are also accessible to the NACE.

Teacher and school/ leader performance data are not currently tracked nationally, though such tracking is set to begin through the new national system of streamlined internal and external evaluations in year 2019-2020. Thus, much of the discussion of national-level data tracking, analysis and use in this section refers specifically to student performance data.

2.1.2 Data analysis and interpretation

It is unclear whether school-reported data on student attainment are used by the NACE at the level of the country. Though the NACE has access to PISA data, it currently defers to PISA for data analysis.

Data from national assessments and examinations comprise the main type of data analyzed on the national level. As mentioned above, mainly descriptive analyses are used in data analysis reports. Practically-useful interpretations of these analyses are currently limited.

The National Agency for Curriculum and Evaluation stores data on students' national assessment and examination results and publishes yearly open-access reports analyzing the results of the three assessments. Special-purpose reports are also published, such as the longitudinal study of baccalaureate examination results^{xxiii}.

The National Assessment Report^{xxiv} includes data analyses, school-specific and district-specific assessment results. Types of data analyses include: descriptive statistics on outputs (e.g., examination attendance) and outcomes (e.g., average marks, mark distributions by subject), and comparative categorical analyses (e.g., outcomes compared by year of examination, specialty stream, urban vs. rural area, etc.). Currently, there is little emphasis on analysis of findings, but rather their presentation, from which trends and conclusions could be inferred, albeit unreliably. Thus, the analyses are not structured or presented in a way that will easily lead to conclusions about interventions that may be needed for improvements. The number of analyses may also prevent them from being practically useful to various groups of stakeholders.

There also appears to currently be an emphasis on baccalaureate examination in data analysis. As primary school assessment marks are transitioned out in 2018-2019, the NACE will need to make decisions on analyzing percentage accuracy and/or qualitative scores, as well as how comparisons to previous years can be carried out using comparable scales (e.g., by transforming results of both years into percentages).

A strong development is that a seconded staff is currently being trained by OECD on data processing to help the NACE with national reporting. This is a promising direction which could enable national stakeholders to analyze PISA data internally and refine their approach to national assessment analysis and reporting.

2.1.3 Formative use of data

National-level data are used formatively occasionally, but it is not yet a significant purpose behind data collection and tracking. When students have substantially underperformed on a subject during a national examination in past years, professional development training has been organized for the teachers of this subject on the national level. Besides this, however, while data are collected, it is not clear whether they are used to inform policy, curriculum or professional development.

In national reports on student attainment, while descriptive analyses are necessary, more focus should be dedicated to correlational analyses and comparative analyses that focus on outcomes. Correlational analyses are recommended: correlating outputs and outcomes, correlating outcomes to one another. Analyses comparing performance across grade levels/ examinations may also provide useful insights. It would also be informative to present statistical significance of the results of correlational analyses, as not all differences are statistically significant and thus, noteworthy.

Item-wise analyses may prove useful, whereby trends are analyzed in terms of the type of content or competencies in which students are particularly strong or underperforming. Not all intermediary analyses need to be presented, but only those that offer meaningful or practically and statistically significant findings.

It is advisable to conduct comparisons and correlational analyses in a way that would lead to meaningful conclusions. It may be helpful to begin with a list of research questions (e.g., Is there a difference in the percentage of candidates admitted to the examination across linguistic groups?), potentially proposed by the NACE and supplemented by other stakeholders (MECR, DOEs, schools). The research question-driven approach may reduce the number of analyses presented to those that are most relevant, and would make analyses both meaningful and immediately applicable, and allow for an easy write-up of findings, as the analyses would be provided and analyzed in answer to questions. Any findings that emerge during the analyses that were not initiated with questions could also be included, if the findings are deemed informative.

In summary, analyses should be selected, presented and discussed in a way that facilitates data-based decision-making.

2.2 District Level

2.2.1 Data tracking: types of data tracked

At the district level, DOEs track and store data from national primary school assessments and national gymnasium examinations (while Baccalaureate examination data are stored nationally, as it was reported by most DOEs). DOEs also track data on students' year-end marks submitted to them by schools.

While the new methodology of evaluation of schools and teachers against national standards has not yet been implemented, most DOEs track school and teacher evaluation data from holistic and thematic evaluations. Some DOEs limit their evaluations to qualitative observations and recommendations that do not take the form of data that can be tracked quantitatively.

2.2.2 Data analysis & interpretation

DOEs perform basic data analyses (mostly average student scores) on student data they track, in order to assess school performance. For the most part, the analyses are

meant to identify compliance with standards, whereby they aim to identify underperforming schools that need intervention or special cases, such as schools where an administrative exception may be made due to very high examination scores. District-level self-evaluation is not yet a concept broached by the DOEs in Moldova.

2.2.3 Formative use of data

DOEs' student attainment, teacher and school evaluation data analyses appear to have a strong focus on individual school monitoring, rather than regional-level planning. Occasionally, trends are noted that lead to district-level teacher professional development, but this practice appears inconsistent across DOEs and not intentionally pursued as part of data analysis. DOEs often reported that they perceive their roles as passing on guidance to schools and monitoring its implementation, while it is up to the schools to identify and address issues, particularly in student attainment, to ensure improvement.

2.3 Internal System Efficiency

2.3.1 Coordination between national-level entities

The national-level entities considered in this section include, but are not limited to: the MECR (Departments of General Education and of Monitoring and Evaluation of Educational Policies), the NACE, ANACEC, National Institute of the Science of Education, as well as related stakeholders, such as Universities and authorized teacher professional development providers.

As noted throughout the present report, there have been shifts in the delineation of responsibilities among education sector authorities, whereby the Ministry of Education, Culture and Research has been establishing independent agencies to lead some aspects pertaining to evaluation in the field of general education. While the MECR is the authority ultimately responsible for educational strategy and outcomes in the Republic of Moldova, national and international assessment of students has been delegated to the NACE, and teacher, school and leader evaluation has been delegated to ANACEC. The National Institute of the Science of Education and Universities play somewhat of a leading role in establishing the direction of professional development for educators in the nation, though this role is not clearly defined. As many of the responsibilities are new or in transition from one entity to another, roles and collaboration lines between them are currently often not clearly defined.

2.3.2 Coordination between levels of system (district and national)

The district and municipal Departments of Education currently hold the function of intermediaries that enforce national educational policy at schools. In the top-down process, DOE staff receive orders, regulations and guidelines from the respective national authorities that they introduce to schools, train their staff on, and monitor the implementation of on the ground. In the bottom-up process, DOEs also collect high-level data on schools under their authority (e.g., teacher attestation, student attendance, etc.) and pass them on to national-level authorities in yearly activity reports.

As the new school evaluation methodology has not yet been introduced on the ground, DOEs are currently unclear as to what the methodology will entail, or what their and ANACEC's respective roles will be in the evaluation process. As the system

is implemented, clarifying relationships between district and national stakeholders will be an important step toward synergy.

Overall, interviewed DOE representatives across the country interpret their function as per Moldova's legal and policy framework as one of "carrying out Ministry requirements" or "fulfilling national requirements". Thus, the relationship between national and district/ municipal levels of educational authority is currently regulations-driven.

3. Educational System Evaluation: Recommendations

3.1 Systemic Approach to National Policy and Practice

Clear communication and coordination of effort between national-level agencies and departments serves as the foundation of an efficient functioning of the educational system. In light of recent reforms and transitions of responsibility between entities, it may be helpful for every national-level entity to have renewed clarity on their respective roles in areas that include, but are not limited to:

- Curriculum design,
- National student assessment design,
- Issuing of standards for school-based student assessment,
- Establishing alignment between national assessments and curriculum standards,
- Student assessment results analysis,
- Recommendation for teacher professional development,
- Revising teacher, school leader and school performance standards,
- Design of methodology for teacher, leader and school evaluation,
- Etc.

It must be noted that multiple departments or agencies can have a role in the above areas. In these cases, it would be beneficial to define these roles. Types of roles may be, for example, design, review, consultation, approval, implementation, commissioning, reporting, recommendation, etc. For instance, the entity responsible for evaluating students' assessment results can serve both a review function in regard to the results themselves and a consultation function to the entities responsible for teacher professional development and teacher appraisal, based on the review of the results. A diagram of the entities and their respective functions in relation to each aspect of the system may be a helpful tool to summarize the desired system.

Besides communication about distinct roles of each entity on each area above, an authority structure may need to be clarified around these aspects of educational system functioning, verbally or in writing, whereby autonomous and semi-autonomous entities may serve in structures of: direct accountability, equal collaboration, independent evaluation, consultation, and so forth.

It must be underscored that there are many national-level authorities and stakeholders involved in the process of assessment and related policy in Moldova. It is not uncommon for these stakeholders to not be fully aware of the decisions or practices of other stakeholders, or not have clarity as to their own relation to other entities. This appears to be resulting in a somewhat disjointed system, where stakeholders are often working in silos, particularly around certain areas (e.g.,

alignment of professional development to student/ teacher assessment results, among others). Greater clarity and tighter channels of communication would serve to unify the system and create synergies among its components. The Ministry of Education, Culture and Research has demonstrated a vision for a unified system and the respective roles of its parts. It is recommended that this vision be shared and, to the extent that it is appropriate, discussed by the involved stakeholders.

3.2 Coordination between District and National Levels

The district level of educational authority holds a promising position of mediation between national-level authorities and schools. Currently, the Departments of Education on average perceive their role as fulfilling top-down requirements of the MECR and reporting back to the MECR on indicators that suggest requirements have been fulfilled. The current approach does not tap into the unique position of the DOEs, which could be a crucial link in (a) communication between levels of the education system, creating bottom-up feedback and guidance for national authorities, and (b) the national system's self-assessment (addressed in the following section).

Communication between levels of the education system is necessary, in order to create a feedback loop that provides guidance to national authorities. While assessment has an evaluative function of ensuring that requirements are being met by ground-level stakeholders, its formative function, which the DOE could be key in performing, can be a powerful driver for improvement.

An important factor to consider, should such functions of the DOEs be pursued, is the capacity of the DOEs to carry out these functions. Interviews with DOE representatives revealed a range of skills, levels of motivation and capacities across the Departments. DOE staff would require training on data collection, analysis and interpretation, should the DOE function be optimized in ways recommended above. The Chisinau municipal DOE could be treated as an example of best practice, and with additional training, could demonstrate true leadership to the country's district-level educational authorities.

3.3 Capacity for System Self-evaluation

Self-evaluation capacity is an area for improvement at every level of the education system. The mindset throughout the levels of the system is currently centered around fulfilling top-down requirements, rather than reflecting on own performance or self-assessment. Reflective practice is not at this time an integrated part of the culture of the national system of education.

Among schools, capacity for self-evaluation varies – some take initiative and a self-reflective approach, but in general data are gathered and submitted into an electronic system for the purposes of reporting up. This system is not generally seen as a tool to also be used by the school for own self-improvement.

At the DOE level, employees are self-taught in self-evaluation of the district at best, and some have expressed desire for further training. Similar to the schools, the reporting function is emphasized by DOEs, often to the exclusion of district-level self-evaluation.

At the national level, some self-evaluation is taking place, as reflected, for example, in the national student assessment reports. There are capacity constraints, however.

For instance, PISA results are currently not analyzed internally due to lack of expertise in carrying out such analyses, though action is being taken to remedy this. Nevertheless, much data are or about to be available to the MECR, including forthcoming external school evaluation data, and internal expertise for data analysis and self-evaluation needs to be developed.

Analyzing national data helps identify the most pertinent national needs and components of the system that should receive more attention in future reforms. For example, national assessment and examinations data may point to particular challenges in specific subjects or skills. Such information can guide further examination into how those subjects and skills are addressed in the curriculum, classroom practice, initial teacher training, in-service teacher professional development or the school evaluation framework. Without such data and analyses it is difficult to determine confidently the most important national priorities and the parts of the system that should be improved to address them.

3.4 Schools' Familiarity with National-level Results

Schools are not particularly familiar with national trends in performance. School leaders are aware of the NACE website where they can see national reports, but do not appear to be using them meaningfully. Similarly, schools do not appear to see themselves as participants in the national system or understand how the data they are required to enter into the electronic database will be used. They seem to be concerned mostly with protecting their interests and fulfilling requirements. National-level results are used mostly from the perspective of knowing the school's own position in comparison to other schools and are not currently used formatively or to anticipate issues schools are experiencing nationwide at one's own school. As ANACEC begins data collection, analysis and interpretation focused on teacher, school-leader and school performance, and publishes national-level analyses on its website (a recommended approach), similar issues may arise.

This can be addressed through restructuring the national student attainment reports, as discussed above, simplifying them and focusing on interpretation more explicitly. Second, school leaders and DOEs would benefit from training on how such reports could be used to inform their practice.

3.5 Analysis of National-level Data and Data-based Decision-making

In order to satisfy the above recommendations, capacity of national agency staff would need to be built up in terms of research and statistics, or external experts invited to assist with the analyses. However, interpretation of findings cannot be outsourced, as national agencies are positioned to make policy recommendations to the MECR.

Existing best practice to be emulated in yearly national assessment reports is captured in the Study on Evaluation of School Results/ Core Competencies of Primary and Secondary Education Graduates, academic year 2015-2016, in Mathematics, Romanian and Russian Language^{xxv} and, to some extent, in the brief on Evolution of Baccalaureate Examination Results^{xxvi}. The 2015-2016 Study includes correlational analyses, consideration of background characteristics (e.g., student socioeconomic

background, teacher's years of experience), and meaningful interpretations of student performance.

Human capital used for this study could be sourced to assist with capacity building of NACE staff and/or with conducting national assessment reports. Many of the same analyses (possibly, already stored in the form of SYNTAX files in SPSS or formulas in Excel) could be conducted nearly automatically with new datasets in following years, only to be spot-checked. Research questions addressed in the 2015-2016 Study that are academic in nature could be eliminated, while practically relevant research questions pertaining to student outcomes, particularly those whose changes are tracked year to year, could be kept. Variables that are outside the NACE/ MECR influence (e.g., background characteristics of students and teachers), if available, could be used as controls to isolate as much as possible the effect of the education provision on yearly national assessment outcomes (more complex analyses, such as ANCOVA and Linear Regression, may be required). It may be advisable to shorten the report from the current length and breadth of focus of the 2015-2016 Study report, and focus on identified research questions, as mentioned previously.

Capacity development stands out as an important action step to be taken at every level. Capacity of education staff needs to be built up both in terms of self-evaluation as an ongoing process in general and basic statistical analysis as a tool to be used specifically. Stakeholders at different levels of the system can be trained according to their needs and existing capacity, or additional experts brought in to take on this function.

3.6 Conclusion

To increase the efficiency and efficacy of educational governance in the Republic of Moldova, it is advised that the MECR, along with its departments and other national-level agencies, outline their specific roles and authority lines in terms of both policy-making and evaluation. Representatives of all national and regional authorities need to be trained on the formative function of evaluation, as well as statistical analyses that can inform this function. As the formative function of system evaluation is developing, the role and purpose of the regional DOEs should be re-defined as well, including to facilitate two-way communication between policy-makers and schools.

CHAPTER VII. CONCLUSIONS

1. Education Reform

Positive education reform trends have been observed in Moldova, consistently with the vision of Education-2020. In terms of assessment of students, competency-based assessment and an emphasis on formative assessment are among the strongest elements being introduced into the system of general education, albeit their execution needs further improvement. Shifts to criteria-based assessment ensuring objectivity of grading and to supplementing a theoretical emphasis with practical skills are promising further directions.

One of the strongest improvements in the general education system of Moldova is the introduction of the methodology of evaluating schools and school staff against aligned professional standards. The new methodology is marked by alignment between guidance on self-, internal and external evaluation, and gathers all external evaluations and evaluation policy under the same national entity, both of which are foundational to the effectiveness of its implementation.

2. Holistic Framework of Educational Assessment

The next step of importance in the educational system of Moldova is to create a holistic framework of educational assessment, which currently does not exist. The four types of assessment discussed in the present report exist in parallel and are currently undergoing changes. As they are finalized, a system of correspondence between different types of assessment may need to be considered. Two complimentary pathways to creating such a system are proposed below.

2.1 *Correspondence between Standards*

The first pathway is to establish correspondence between all standards of teaching, learning and school administration. This is achieved, first, through ensuring that all types of assessment are aligned both to one another, and to the National Vision for Education, as expressed in the national Education Code, Education-2020 strategy and other key strategic policies. Second, all standards are to be aligned to one another, whether or not they are physically part of one framework. Even as stand-alone guidance on the different types of education standards continues being developed, a holistic framework document indicating aspirational and actual correspondences between its components is advisable. The system is moving toward correspondence between expectations of schools, teachers and students.

2.2 *Holistic Data Analysis System*

The second pathway is to introduce data collection and analysis at every level of the general education system, in order to inform policy with data. Cross-domain analyses may also be helpful as system capacity develops to carry them out. Teacher, school and leader evaluation should be included in educational system evaluation, in addition to student assessment. Currently, mostly student evaluation is considered in evaluation of system effectiveness. Indeed, student attainment is the bottom line, but teacher and school evaluation results may provide insight into factors mediating policy

and student outcomes. As positive or negative mediators are identified, interventions can be planned accordingly.

The formative function of evaluation at every level of the system was summarized by OECD^{xxvii} in Figure 2. It is important to stress that data gathered at every level can and should be used to inform policy, practice and decisions at the other levels, as the system is interconnected and should be aligned and coordinated.

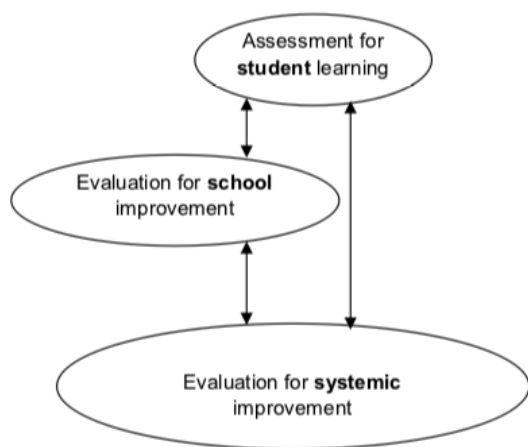


Figure 2. Formative assessment and evaluation in a coordinated system. (Source: OECD)

3. Interconnected Cycle of Education Provision

An interdependent system of assessment-instruction-curriculum-professional development (Figure 3) needs to be articulated in Moldova, whereby the components of the system can inform one another. Mechanisms to facilitate this interdependence need to be developed further, and communication channels and action levers built into the existing ecosystem of student-teacher-school-district-nation. It is essential to ensure that the existing systems and communications are not one-way but are structured to enable feedback and flexibility in the system's response to its own needs. The most challenging part of this is likely to be the required mindset shift among the many stakeholders, and national-level leadership will be positioned to model openness and encourage bottom-up input and recommendations in a systematic way.

Examples of this are taking place, but there is need for it to become part of the system and the culture that characterize the cycle of evaluation, policy and practice in the Republic of Moldova.

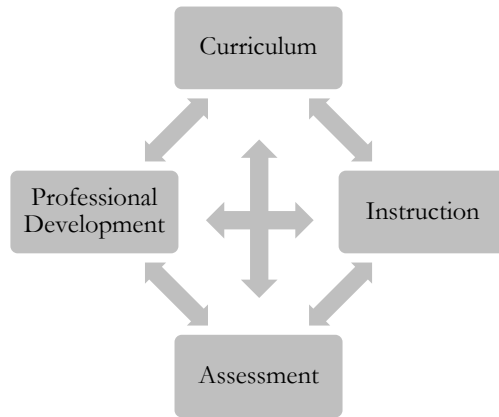


Figure 3. Interdependent system of assessment-instruction-curriculum-professional development.

APPENDIX A. KEY ASSUMPTIONS

1. Correspondence of standards and assessment

The main components of education delivery are: curriculum (learning standards), instruction and assessment. There is some disagreement among educators regarding the concept and recommended extent of alignment between these components. An assumption of the Review is that, while some discrepancies between these are natural and provide room for stakeholder autonomy, these are to be aligned to a significant degree.

2. Parsimony

It is assumed that the simplest possible way to achieve a goal is to be chosen over more complex ways to achieve the same goal. In this Review, this assumption guides recommendations in relation to approaches to assessment and grading, reporting structures, responsibilities of national, district and school authorities, etc.

3. Key Terms

Due to discrepancies between English-language terminology used in different national contexts, terms in the present report are defined as follows:

Grade = year of study.

Primary school = grades 1-4.

Secondary school = grades 5-12, used when gymnasium and lyceum practices are discussed as distinct from primary school practices.

Class = lesson or subject, depending on context.

Mark = used interchangeably with “score”, in the sense of student assessment result. When possible, to avoid confusion with year of study, the term “grade” is not used.

Marking = the process of teacher checking and identifying correct and incorrect responses in students’ work, as well as providing feedback.

Scoring = assigning a quantitative or qualitative score to student work.

Grading = the process of marking and scoring students’ work.

School leader = also referred to as “school manager”, “principal” or “head teacher” in different national contexts. The term was chosen as reflective of the essence of the role in the context of Moldova.

District = an administrative division in the Republic of Moldova (“rayon”).

Secondary school = gymnasium- and lyceum-level grades (grades 5 and above), or school following the gymnasium or lyceum format. [Note: This term is not used in Moldova’s education system, but was chosen to be used in the present report in English for the sake of grammatical conciseness.]

4. Key Abbreviations

MECR	Ministry of Education, Culture and Research
NACE	National Agency for Curriculum and Evaluation
ANACEC	National Agency for Quality Assurance in Education and Research

APPENDIX B. REVIEW METHODOLOGY

Overview of Study Benchmarks

The present study sought to review four main assessment domains: student, teacher, school and system evaluation – in the educational system of Moldova, in order to assess strengths and weaknesses of existing policies and procedures and provide recommendations for continued improvement. The research team sought to carry out exploratory research involving the following benchmarks:

Student assessment

- National learning standards and standards-based approach
- School-based formative assessment
- School-based summative assessment
- National standardized assessment and examination
- International assessment
- Teachers' assessment knowledge and skills
- Supplementary tests for minority language groups

Teacher appraisal

- National teaching standards and evaluation criteria
- School-based teacher appraisal
- External teacher appraisal
- Teacher career structure, progression and professional development
- In-service teacher training

School evaluation

- National school performance standards and school evaluation framework
- School self-evaluation
- External school evaluation
- Internal school leader evaluation
- External school leader evaluation

System evaluation

- National education strategy and vision
- National system assessment
- Regional assessment
- Tracking of system-level teacher supply and demand

Each of the study benchmarks were further operationalized by a number of metrics. Data on the metrics were collected using a combination of primary and secondary sources, as discussed below. A detailed assessment matrix, including the full list of study metrics, and their corresponding data collection methods and sources is available upon request.

Secondary Research

In preparation for undertaking the study, the research team undertook desk-based research on the general context of the education system in the Republic of Moldova; national laws, policies and practices in relation to student assessment, teacher appraisal, school and system evaluation; and research and policy-level publications by international bodies that have undertaken similar reviews in other countries or propose tools and approaches to evaluation of assessment systems.

The review of international policy-level background literature – policy papers, frameworks and existing country-level reviews – focused on recommended approaches and tools used in educational assessment studies, with a particular focus on the following sources, which were used to guide the present study design:

- OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*. OECD Reviews of Evaluation and Assessment in Education.
- Kitchen, H., et al. (2017), *Romania 2017*, OECD Reviews of Evaluation and Assessment in Education.
- Global Partnership for Education (2014), *Methodological Guidelines for Education Sector Analysis. Volume 1*.
- UNESCO Institute for Statistics (2016), *Making Education Count for Development: Data Collection and Availability in Six PISA for Development Countries*.
- Clarke, M. (2012), *What Matters Most for Student Assessment Systems: A Framework Paper*, SABER Working Paper Series, The World Bank.
- The World Bank (2013), *What Matters Most for Teacher Policies: A Framework Paper*, SABER Working Paper Series.
- World Bank Group (2014), *What Matters Most for Education Management Information Systems: A Framework Paper*, SABER Working Paper Series.
- World Bank Group (2015), *What Matters Most for School Autonomy and Accountability: A Framework Paper*, SABER Working Paper Series.
- World Bank Group (2014), *Teachers: Republic of Moldova*, SABER Country Report.

Legislative and policy context of evaluation and assessment in the Moldovan education system relied primarily on the following sources:

- The Education Code of the Republic of Moldova;
- Significant MECR (or Ministry of Education, for pre-October 2017) orders;
- MECR national curricula for primary and secondary school;
- MECR criteria-based student assessment methodologies for primary and secondary school;
- MECR national examination orders;
- National examination samples and scoring rubrics;
- National education strategy (“Education 2020”);
- National projects and programs targeted at developing assessment practices, and school-based teaching and leadership skills;
- National education system reports and official statistics;
- National School Inspectorate and ANACEC school-evaluation methodology;
- National School Inspectorate and ANACEC guides for school self-assessment and teacher appraisal;
- Sample school evaluation reports;

- MECR school and educational leadership regulations, standards and competencies;
- MECR school governance rules;
- Independent research and reviews of the Moldovan school system and educational policies;
- NACE national examination and evaluation reports and studies;
- Official government decisions and orders on system-level education governance and authority;
- Country-level international student assessment results.

In addition to the sources listed above, documentation was reviewed in the field. Such documentation included school and DOE policies, reports, data tracking systems and analyses, appraisal forms/ tools, and assessment examples.

Primary Research

Sampling strategy

A sample of Moldova's schools was visited by the research team during the field study, chosen using the criteria below. As discussed in detail in the Procedure section, the team conducted lesson observations and interviews at each school.

Regional sample. According to UN Statistics Division (2014)^{xxviii}, the population of Moldova is 66% rural and 34% urban. For the school sample to be representative, both rural and urban schools were selected at a ratio approximating the national and regional ratios. As the Review aimed to capture both national consistency and regional diversity in educational assessment and evaluation in Moldova, a maximum-variation sample of regions was selected using socio-economic, ethnic, and first-language characteristics of regional demographics. A southern and a northern district of Moldova, as well as a city municipality were chosen for the study. District/ municipal Departments of Education were interviewed in each selected region, creating a sample of three DOEs.

School sample. For review of school-based assessment, one public primary school, one gymnasium, and one lyceum were chosen from each of the three regions, totaling a sample of nine public schools, comprising three schools of each type. The Review captured high-, medium- and low-performing schools across most school types, based on their students' average scores on the highest-grade national assessment taken at the school (i.e., grade 4, 9 or 12). Score ranges for high, medium and low performance categories were defined by dividing the national distribution of scores into top, middle and bottom terciles (thirds), respectively. This sample size and composition were deemed sufficient to satisfy both diversity and data saturation requirements in order to reliably meet the study's research goals. The research team was blind to the assessment scores of the chosen schools.

Classroom sample. In order for classroom-based assessment to satisfy the criteria of diversity and data saturation, the study captured a variety of subjects and grades, with an emphasis on nationally-assessed subjects: mathematics, language of instruction and mother-tongue across the grades; Romanian language/ literature and history in middle and upper grades; and foreign language, science (biology, physics, chemistry or geography), and humanities (history, art, information science) in the upper grades.

Teachers were chosen for in-class observations at random by the research team in each school, totaling 27 teachers representing different grades and subjects.

Participant sample. At each school, the research team interviewed the school leader (or the school leader-pedagogical leader team), a parent and a member of the governance board, leading to a sample of nine participants in each of these categories. Two teachers were interviewed at each school, and variability of subject specialties and grades of instruction was captured in the teacher sample of 18. Three students were interviewed (one at each of the three participating lyceums). Only students who had reached 18 years of age were interviewed during the study due to ethical restrictions on carrying out research with minors. The parents, teachers, students and board members were a convenience sample mostly nominated for interviews by the schools themselves, with the exception of cases where the research team requested to interview a teacher specializing in a particular subject or stage (primary or secondary) to fulfill requirements of sample characteristics. All participants signed an informed consent form prior to participating in interviews or observations.

Procedure

Interviews. The research team conducted stakeholder interviews at each selected school, as well as with representatives of the MECR, ANACEC, NACE, Institute of Pedagogical Sciences and regional DOEs. Interview questions were formulated based on the selected study metrics. In cases where questions were deemed likely to lead to unreliable or incomplete answers due to their sensitive or complex nature, likely social desirability pressures, or lack of holistic perspective by any one stakeholder, triangulation of primary sources was used to get as reliable of information as possible. This was particularly important for comparison of perspectives by national governing bodies and school-level stakeholders.

Interviews were shortened and/or modified as data saturation requirements were reached on some of the study research questions, and other research questions arose out of participant responses. Most interview questions were open-ended; leading questions were avoided to ensure truthfulness among participants.

Lesson observations. Classroom observations followed an open-ended format whereby researchers recorded teacher-student interactions happening during the observed lessons. Additionally, the lesson observation form included a checklist where the researcher marked whether or not the teacher followed specific assessment-related practices (e.g., using student self-assessment, keeping track of student formative data during the lesson, providing feedback, etc.). This was included to ensure that all researchers commented on the same list of factors, regardless of their free-form qualitative notes. The lesson observation ended with a brief teacher interview, where the teacher was asked to show to the researcher his/her system of tracking student results, explain how they assigned marks during the lesson and how they plan to use assessment results in future lessons.

Materials

Primary data collection tools for the Review included the observation protocol and form, and the interview protocol and forms. The researchers had the choice of filling

out a printed or electronic version of observation and interview forms. The study tools are available upon request.

All participants will be assigned unique IDs, and records of names corresponding to IDs were separated from the collected data. Researchers recorded each participant's ID on the corresponding observation or interview form. Participants were informed of confidentiality of their data in advance. Data were stored electronically in a password-protected folder upon completion of data collection.

Study Limitations

Data validity and reliability

The study tools were piloted and edited accordingly, researchers were trained, conducted initial joint interviews and observations, and followed interview scripts and protocols. While these procedures led to inter-rater agreement, due to the qualitative nature of the research it is not possible to eliminate researcher effects completely. Thus, there may have been variability in researchers' recorded observations and participant answers.

An additional inherent threat to the validity and reliability of primary data is the reliance on self-report measures during participant interviews. While effort was made to make every participant comfortable and explain the purpose of the study, it is possible that participants felt a degree of social desirability/ approval pressure or other factors that may have led them to provide answers that are not fully truthful or accurate. Data triangulation was used to minimize this threat to data validity, though it could not be completely eliminated.

Further, while teachers were chosen for observation randomly, it is possible that school leaders made arrangements for the team not to see practice they consider inferior at their schools. Similarly, it was not possible or practical for the team to arrange for random selection of teacher, student, parent or board member interviewees, so the findings are likely reflective of the most favorable views and practices in the field. On the other hand, this may strengthen the conclusions of the study, as recommendations were pertinent even if stronger practice and advantageous opinion was put forward.

Study language and translation

Original study instruments were written in English and further translated into Romanian and Russian. This may have influenced the non-English speaking researchers' and participants' understanding of the nuanced meaning intended by the interview questions. Interviews were conducted in either Romanian or Russian, and responses recorded in the final data in English. Nuanced meaning may have been lost during this translation as well.

Pre-service professional development

The research team acknowledges the importance of national policies and approaches to pre-service teacher training. It must be noted that pre-service training fell outside the scope of the present study; however, the MECR is encouraged to pursue further investigation into its links with evaluation. Specifically, a feedback loop

is encouraged between pre-service providers (pre-service program content) and needs identified during school evaluations and teacher appraisals.

APPENDIX C. NATURE AND PURPOSE OF FORMATIVE ASSESSMENT

Purpose of Formative Assessment

The purpose of formative assessment is to assess students' skill and knowledge levels 'in real time', in order to meet their needs on the journey of making progress and achieving their potential. The concept of a *learning journey* is a helpful approach to formative assessment: formative assessment is performed to know where a student is on his/her learning journey and how he/she is to progress further. It could be argued that formative assessment does not need to be graded at all. If it is graded, it may measure against criteria specific to the individual student's learning journey, effort, progress against baseline or progress toward a milestone.

The end-goal of formative assessment is not a mark, which assesses the student's level of mastery against an objective (this is the goal of assessment *of* learning, i.e., summative assessment). Rather, it is an indication of the strengths and areas for improvement on each student's and the class's learning journey that is focused on which skills the student/ class has already acquired and on which skills the teacher needs to focus in order to support further growth. Formative assessment is intended to be a process by which the teacher is able to develop students' skills (or sub-competencies) in a targeted way. For this reason, the key to formative assessment is specific, actionable *feedback*. After a student is formatively assessed, he/she should have a clear plan of action for continued growth and improvement.

The main difference between summative and formative assessment is that the latter generally happens in an ongoing way and may be formal or informal, graded or ungraded, while the former happens at the end of an instructional unit and is generally graded (quantitatively or qualitatively). In the absence of formative assessment, teachers deliver blanket whole-class instruction, assuming equal needed levels of practice and explanation across students and skills, until a summative assessment reveals which students did or did not master certain areas of learning. Formative assessment, on the other hand, is part of the daily educational process and informs teaching practice during, not after, the process of learning.

Tracking Formative Assessment Results

Students' formatively assessed progress can be documented by the teacher in a variety of ways. For example, the teacher may have a progression of skills (whether developmental, general, or content-specific), where he/she marks off when he/she observes evidence that a student has mastered one or more skills. This progression can be made for every lesson, for a chapter/ module, or for a whole term or year. Progressions provided by the curricula can also be used or adapted for this purpose. The teacher can track students' skill development using a variety of ways, such as by using checkmarks against a list of skills, colors indicating level of mastery of skill acquisition by each student, a quantitative score, or qualitative notes. The goal is not how many checkmarks, what color or score a student gets, but rather what skills the teacher needs to further develop and support in order for the student to reach his/her potential (whether this potential is at, below, above or significantly above curriculum expectation – with the goal that at least minimum curriculum expectation or individual learning goals are eventually reached by every student). The way a learning journey is

tracked and structured is strongly related to the use of success criteria, which are discussed further in Appendix D.

Formative Use of Assessment

Besides focusing on the structure and purpose of formative assessment, it is important to stress *formative use* of summative assessment as well. To use all assessment results formatively (i.e., to “form” students’ learning), teachers should be encouraged to analyze their students’ summative marks and, as capacity allows, conduct analysis of skills or knowledge students did not master according to summative results. This should be taken into consideration as future teaching is planned. Thus, both formative and summative assessments should have a formative function – that is, both should be used to inform targeted further teaching and learning.

International experience shows that formative assessment, as well as formative use of summative assessment, lead to differentiated instruction (as students have different strengths and areas for improvement) and optimal growth in skills and knowledge of every student.

International Experience

OECD Centre for Educational Research and Innovation defines formative assessment as “frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately.”^{xxix}

An excerpt from National Curriculum of Estonia^{xxx xxxi} below is an international example of defining formative assessment and indicating how it is to be conducted:

(1) Formative assessment shall mean assessment taking place during studies, in the course of which the pupil’s knowledge, skills, attitudes, values and behaviour are analyzed, feedback if provided on the pupil’s previous results and shortcomings, the pupil is encouraged and guided in further studies and the future objectives and routes of studying are planned. Formative assessment focuses above all on comparing the pupil’s development with his or her previous accomplishments. Feedback shall describe, at the right time and as precisely as possible, the pupil’s strengths and shortcomings and shall include proposals for further activities that support the pupil’s development.

(2) In the course of the lesson, the pupil shall receive mainly oral or written verbal feedback regarding knowledge and skills pertaining to the subject and the subject field (including general competences, learning and educational objectives of a stage of study and cross-curricular topics). Teachers shall provide pupils with feedback throughout the school day in order to support the formation of the pupil’s behaviour, attitudes and values. The school shall respond to cases in conflict with generally recognized values and good practice.

Likewise, the Ministry of Education of New Zealand^{xxxii} describes formative assessment (assessment for learning), its uses by teacher and students, and recommended strategies in the following way:

What is assessment for learning?

Assessment for learning is best described as a process by which assessment information is used by teachers to adjust their teaching strategies, and by students to adjust their learning strategies.

Assessment, teaching, and learning are inextricably linked as each informs the others.

Assessment is a powerful process that can either optimise or inhibit learning, depending on how it is applied.

For teachers

Assessment for learning helps teachers gather information to:

- plan and modify teaching and learning programmes for individual students, groups of students, and the class as a whole
- pinpoint students' strengths so that both teachers and students can build on them
- identify students' learning needs in a clear and constructive way so they can be addressed
- involve parents, families, and whānau [extended family] in their children's learning.

For students

Assessment for learning provides students with information and guidance so they can plan and manage the next steps in their learning.

Assessment for learning uses information to lead from what has been learned to what needs to be learned next.

Describing assessment for learning

Assessment for learning should use a range of approaches. These may include:

- day-to-day activities, such as learning conversations
- a simple mental note taken by the teacher during observation
- student self and peer assessments
- a detailed analysis of a student's work
- assessment tools, which may be written items, structured interview questions, or items teachers make up themselves.

What matters most is not so much the form of the assessment, but how the information gathered is used to improve teaching and learning.

APPENDIX D. NATURE AND PURPOSE OF SUCCESS CRITERIA

In order to be effective and objective, all assessment (both summative and formative) should be based on a set of criteria upon attaining which a student is considered to have mastered the required content or reached the learning objectives. These criteria can and should be used to assess every unit of a student's learning: from complex tasks to lessons, chapters, topics, modules, terms and years. Such criteria are called 'success criteria' or 'assessment criteria'.

However, in practice, the success criteria are either not identified by the teacher, leading to subjective, intuitive grading of students, or identified but not shared with students who are left to guess how they will be assessed. The purpose of success criteria is to help teachers state and students understand the expectations. Another way of looking at it is for teachers to define and students be familiar with the skills that they are to acquire by the end of the learning unit (whether it is a lesson or a module). form their learning journeys.

Students' clarity on the expectations they are to meet and skills they are to acquire leads to a greater ownership of the educational process by them. They are able to set learning goals, reflect on skills they have or have not mastered, target their practice, and use success criteria for self-assessment. Instruction that emphasizes a journey of skill acquisition leads to a mindset of continuous improvement among teachers and learners both, rather than focusing on summative results.

Reflecting on which success criteria (skills) each student has or has not mastered allows teachers to pursue differentiated instruction, whereby students are given tasks that allow them to practice the specific skills with which they still struggle. Thus, while the same success criteria, aligned to curriculum standards, are used for all, students travel down different learning journeys at their own pace. Students with special needs and disabilities can also be accommodated on their own learning journeys, which can consist of the same success criteria as their peers, or the success criteria set for them by their Individualized Education Plans.

Finally, success criteria are beneficial for parents who are able to gain a more nuanced understanding of their children's progress and attainment against expectations and skills. Parents with whom success criteria and criteria-based assessment results are shared will be able to assist their children with more targeted practice at home, and will themselves acquire a mindset of growth and improvement for their children.

In order to be effective, success criteria need to be specific, measurable, attainable, relevant and time-bound (SMART). Indicators of success used in Moldova's Standards of Effectiveness of Learning (2012) are a good example of high-level success criteria that can be used to map out students' termly or yearly learning journey.

Moldova's primary school methodologies contain examples of low-level success criteria against which the mastery of a lesson or a task can be judged. These can be formulated in first-person (e.g., "By the end of the lesson, I will provide the definition of an ecosystem") or in second-person (e.g., "By the end of the lesson, you will add two-digit numbers with regrouping").

It is important to understand that the use of success criteria is not limited to a particular subject, grade or type of assessment. They can be used with or without marks and across a variety of contexts. It is important to share success criteria with students before an assignment, lesson, chapter or module, so that they can anticipate and plan their own learning. Formative assessment is used with success criteria, whereby students are evaluated against them, receive feedback and practice further toward the criteria they did not meet.

Learning journeys for any and all units of learning (long-term and short-term) can be structured as bullet-point lists/ checklists or flowcharts of skills that the learner is expected to acquire. The skills can be simply checked off (e.g., 'Yes/No' or 'Achieved/Not achieved') or can involve a rubric with levels or descriptors of achievement. The success criteria can be marked off on the learning journeys by the student and/or by the teacher. Parents can be involved in marking off the skills they observe at home as well.

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