

Evaluation of Trends in General Education in Georgia

Final Assessment report with recommendations

June 10, 2022

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Acknowledgements

We greatly appreciate the contributions of the many people who influenced this system diagnostic of general education in Georgia. We especially thank Tamar Sanikidze and Lia Gigauri at the PMU for their support and guidance throughout the process of developing the inception report, the instrumentation, and the progress report, as well as for their continued support through the months of data collection and analysis. We also extend our gratitude to the staff at the Ministry of Education and Science of Georgia (MoES) for their support in our data collection efforts, which ensured a high response rate from principals throughout the general education System.

In Georgia, we sincerely thank Ms. Ekaterine Dgebuadze, former Deputy Minister of Education and Science for sharing her perspectives on Georgia's education strategy, strengths and weaknesses of the system and providing insights into the future vision of education. We would also like to thank MoES staff, including Eka Khutsishvili, Kakha Khandolishvili, Natia Gabitashvili and Mari Tabatadze; in particular, the team of the preschool and general education development department, including Mariam Chikobava, Niko Silagadze and Ia Aptarashvili for their contributions to the systems diagnostic. We would also like to thank members of the various education agencies who participated in the interviews and helped our team gather extensive amounts of administrative data to support the findings in the systems diagnostic. Many thanks to Sophio Gorgodze and Eka Jeladze (NAEC), Kakha Eradze (NCQAQ), Dimitri Beridze, Maya Simonidze and the EMIS staff (EMIS), Berika Shukakidze, Khatuna Barabadze and TPDC subject and training experts. We would also like to thank members of the donor community, including Nino Kutateladze from the World Bank for her guidance and support of the systems diagnostic; Nino Udzilauri from USAID; and Magda Magradze from MCC/MCA for their perspectives on education support in Georgia. We'd like to please extend our gratitude to education experts, scholars representing academia and CSOs for sharing their knowledge, vision and thoughts about the Georgian education system generously with us.

Several other colleagues made important contributions to this report. At Mathematica, Sarah Hughes reviewed and provided thoughtful comments on the draft report. PMCG staff and enumerators worked diligently to schedule and complete interviews and focus groups during the COVID pandemic. Cindy George and John Kennedy, who worked on the editorial review, Allison Pinckney and Sharon Clark formatted the report, and the translator in Georgia who brought the English version to life in Georgian.

Finally, we are grateful to all the school directors, teachers, students, members of the ERCs, and Board of Trustee members who gave their time to our team and whose perspectives we share in this report.

Abbreviations and Acronyms

ECTS	European Credit Transfer and Accumulation System
EU	European Union
EMIS	Education Management and Information System
I2Q	Innovation, Inclusion, and Quality Project
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MoES	Ministry of Education and Science of Georgia
NAEC	National Assessment and Examination Center
NCEQE	National Center for Educational Quality Enhancement
NSM	New School Model
OECD	Organisation for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PMCG	Policy and Management Consulting Group
PMU	Project Management Unit
TIMSS	Trends in International Mathematics and Science Study
TOR	Terms of Reference
TPD	Teacher Professional Development
TPDC	Centre for Teacher Professional Development
TPDS	Teachers' Professional Development Scheme
WB	World Bank
WSIA	Whole School Improvement Approach

Executive Summary

Over the past two decades, Georgia has seen remarkable progress in modernizing and improving its general education system. Reforms have improved access and equity in general education, upgraded curricula and schools' per capita financing, increased decentralization, and enhanced schools' autonomy. For example, the net enrollment increased from 89 percent in 2013 to 96 percent in 2018 (World Development Indicators, World Bank 2018). The retention rate in all levels of education increased between 2015-2016 and 2020-2021 school year. In primary, the retention rate increased from 91 percent to 96 percent; in basic education, the retention rate increased from 88 percent to 92 percent; and in secondary level, the retention rate increased two percentage points (from 79 to 81 percent). The dropout rate in secondary level decreased, particularly among students in grade 10. The dropout rate for male students in grade 10 decreased from 19 percent in the 2015-2016 school year to 7 percent in 2020-2021. The dropout rate for female students in grade 10 decreased from 13 percent in the 2015-2016 school year to 4 percent in 2020-2021. In addition, the repetition rate in primary education decreased from 0.7 percent in the 2015-2016 school year to 0.1 percent in 2020-2021. In basic education, repetition rate decreased from 1.2 in the 2015-2016 school year to 0.2 percent in 2020-2021, and in secondary level, the repetition rate decreased from 1.4 in the 2015-2016 school year to 0.3 percent in 2020-2021. MoES introduced free textbooks for all public schools and school transportation for remote schools, developed infrastructure, granted personal netbooks to first graders, and introduced various performance-based incentive mechanisms for teachers and students. Multiple enabling factors, such as defining the roles of each state structure, strengthened the adoption of the national curriculum.

These policies have resulted in near-universal participation of various sociodemographic groups in education. They also slightly narrowed the socioeconomic gaps in students' reading, science, and math results, according to the international assessments of the Programme for International Student Assessment (PISA) 2018 and Trends in International Mathematics and Science Study (TIMSS) 2019. Despite showing significantly lower PISA results in 2018 compared to those observed in 2015, the gap between socioeconomically advantaged and disadvantaged students has decreased from 87 points in 2009 to 68 in 2018 (OECD, PISA 2018). However, despite improvements in enrollment over the past decade, reforms have not yet translated into better learning outcomes. Fifteen-year-olds in Georgia scored 107 points lower on average (380) than Organisation for Economic Co-operation and Development (OECD) countries across all three subjects in PISA (487). Girls performed better than boys in Georgia, with a statistically significant difference of 38 points (PISA 2018).

Improving the quality of general education in Georgia is the objective of the World Bank-financed **Innovation, Inclusion, and Quality (I2Q) Project**, which will expand access to preschool education, improve its quality, and enhance the overall learning environment. The Project Management Unit (PMU) and MoES are financing this systems diagnostic and evaluation to help the MoES understand the status of general education in Georgia, how past reforms have affected teaching and learning, and how the New School Model (NSM) pilot program has affected school management, climate, and learning. The outcomes of the evaluation will help the PMU gain a deeper understanding of the current general education system (Component 2), inform the I2Q Component Terms of Reference (TOR), and support the implementation of the projects once they are under way. The IQ2 program is set to begin in 2022.

This report presents the findings of the systems diagnostic for Georgia. The report then draws conclusions about the findings and provides responses to the research questions driving the study. It also

provides action-oriented recommendations from the systems diagnostic to support the MoES in continuing their improvement journey.

Methodology

Mathematica conducted a mixed-methods systems diagnostic evaluation to answer MoES' research questions. The diagnostic includes a qualitative study based on interviews with key informants, teachers, and principals; an extensive document review (see Appendix B); and an online quantitative survey. We use traditional data analysis methods paired with contribution analysis to complete the system's diagnostic. Appendix A describes the details of the methodological approach that is summarized in this section.

The mixed-methods diagnostic evaluation used a web-based survey to collect data from (1) a randomly selected group of 238 principals across Georgia, (2) a desk review of policy documents, (3) important international literature, (4) administrative data, (5) key informant interviews, and (6) focus groups with principals, teachers, MoES staff, donors, Parliament, the education resource centers, and students. The multicomponent study will draw on various methods and data sources to answer three research questions:

- 1.** What is the current situation in the general education sector regarding quality, equity, and efficiency?
 - What factors explain the differences among schools (e.g., geography, ethnicity, languages) in the general education system?
 - What are the major factors affecting the quality of education delivery in schools?
 - How do the learning experience and effectiveness of teaching differ for students of different socioeconomic and ethnic backgrounds?
 - How have recent reforms affected the quality of teaching in schools?
 - What types of problems or issues affect the efficiency of the general education system?
 - How does the school community perceive these reforms?
- 2.** What is the current school situation related to management, school climate, and students' learning gains?
 - What are differences (if any) related to region, ethnicity, languages?
- 3.** How have the reforms for achieving whole school improvement contributed to changes in the assessment of students' learning outcomes, school climate, and management?
 - What can we learn about the NSM pilot implementation that contributes to improvements in the general education system as a whole?
 - How has NSM affected teachers' instructional practices? School management practices and school climate?

Our team used administrative data and data collected through the nationally representative school survey to develop key indicators of performance (see Appendix A). We also used these data to triangulate and support the qualitative contribution analysis. The team developed an analytic framework using McKinsey's (2010) intervention cluster criteria and the systems accelerator (Ndaruhutse et al. 2019) framework.

Overarching Summary of Findings

1. The Georgian education system ranks in the ‘fair to good’ category along the improvement continuum, but reforms need to be systematically linked to accelerate the reform process.
2. Access to education is strong, school attendance is rising and better monitored, and structures are in place to improve teacher effectiveness and reform outdated modes of teaching. Despite extensive TPD efforts, traditional methods of teaching and assessment are deeply entrenched and difficult to change.
3. The MoES has made some progress towards decentralizing authority to ease pressure on mid-level or school level management, but in practice, decision-making remains highly centralized and school-based innovation is rare.
4. Georgia has also established a strong foundation for collecting data on schools, but data analytics is a persisting weak link that limits the potential for evidence-based decision-making. They are also beginning to cultivate collaborative practices, including school-based professional development.
5. Strong foundations are in place to professionalize the teaching force including alternative recruitment schemes, professional development schemes, career ladders, and retirement. Frequent shifts in the teacher career scheme limit the system’s effectiveness in evaluating and rewarding good teaching practice
6. Main system weaknesses include lack of communication and collaboration across government agencies; unstable vision and leadership (i.e., constantly shifting MoES priorities); and the need to empower ERCs and schools to truly establish school-based management.
7. The challenge for Georgia is to address the recommendations below within the complexity of education reform and engage in comprehensive and coordinated solutions that are necessary for system improvement.

High-level Recommendations

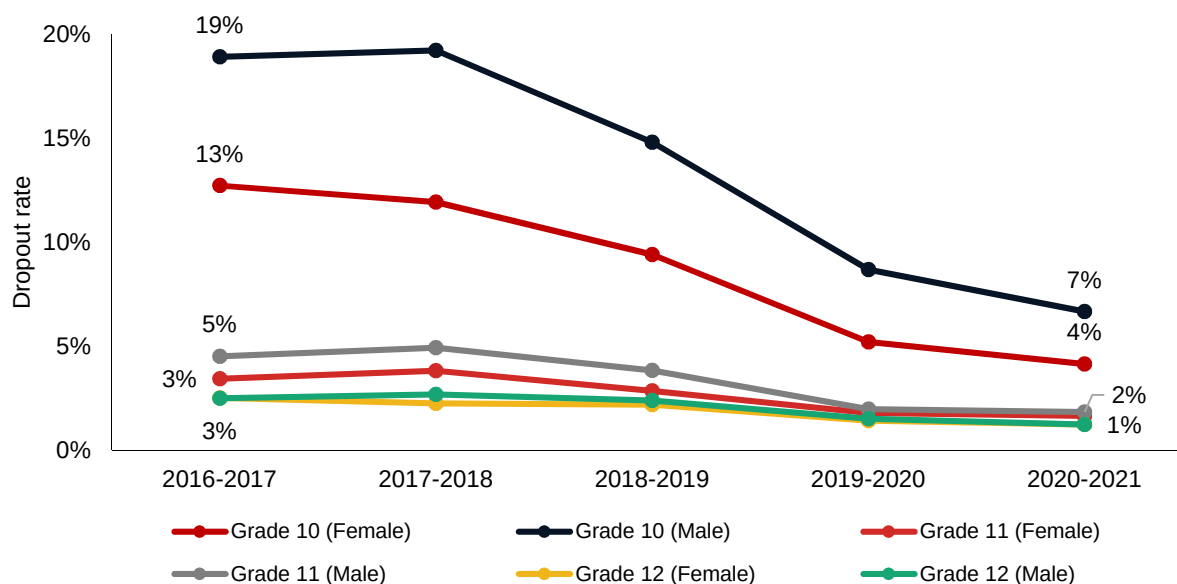
-) To improve move towards school-based management and a WSIA, the MoES needs to clearly define what decisions about education should be made at what level and empower the entities to implement the decisions.
-) To improve the quality of pre-service teacher training, the MoES needs to raise the status of teaching and rigor of entrants into the system; strengthen the teaching practicum as well and monitor and evaluate programs.
-) Establish regular consultations and meetings with MoES, TPCD, ERC, NAEC, education institutions, school leaders and other stakeholders to ensure that in-service offerings are aligned to education reforms
-) Convene MoES, university faculty and principals to conceptualize/plan a pre-service leadership program for practicing principals that is aligned with the current reforms/NSM and provide on-going support to current principals.
-) Work across agencies and levels of education to refine the school authorization process where profile and capacity of the schools are well-conceptualized and considered during the authorization regulation; define the criteria for continuous progress and help schools and ERCs develop report cards that support formative feedback with a focus on improvement.

-) Develop a clear and transparent process for engaging people across technical agencies and at different levels of the system. The process should allow relevant stakeholders to participate in the design of education interventions and help oversee the implementation process. Use data and evidence to drive discussions and decisions about policies and interventions.
-) Use the new ten-year education strategy to maintain a stable and consistent vision, with a priority of moving towards a whole school improvement approach.

I. Introduction

Over the past two decades, Georgia has seen remarkable progress in modernizing and improving its general education system. Reforms have improved access and equity in general education, upgraded curricula and schools' per capita financing, increased decentralization, and enhanced schools' autonomy. For example, the net enrollment increased from 89 percent in 2013 to 96 percent in 2018 (World Development Indicators, World Bank 2018). The retention rate in all levels of education increased between 2015-2016 and 2020-2021 school year. In primary, the retention rate increased from 91 percent to 96 percent; in basic education, the retention rate increased from 88 percent to 92 percent; and in secondary level, the retention rate increased two percentage points (from 79 to 81 percent). The dropout rate in secondary level decreased, particularly among students in grade 10. The dropout rate for male students in grade 10 decreased from 19 percent in the 2015-2016 school year to 7 percent in 2020-2021. The dropout rate for female students in grade 10 decreased from 13 percent in the 2015-2016 school year to 4 percent in 2020-2021. Exhibit I.1 shows dropout rates for all grades in secondary level. In addition, the repetition rate in primary education decreased from 0.7 percent in the 2015-2016 school year to 0.1 percent in 2020-2021. In basic education, repetition rate decreased from 1.2 in the 2015-2016 school year to 0.2 percent in 2020-2021, and in secondary level, the repetition rate decreased from 1.4 in the 2015-2016 school year to 0.3 percent in 2020-2021. MoES introduced free textbooks for all public schools and school transportation for remote schools, developed infrastructure, granted personal netbooks to first graders, and introduced various performance-based incentive mechanisms for teachers and students. Multiple enabling factors, such as defining the roles of each state structure, strengthened the adoption of the national curriculum.

Exhibit I.1. Dropout rate in secondary grades by sex



Source: EMIS data

These policies have resulted in near-universal participation of various sociodemographic groups in education. They also slightly narrowed the socioeconomic gaps in students' reading, science, and math results, according to the international assessments of the Programme for International Student Assessment

(PISA) 2018 and Trends in International Mathematics and Science Study (TIMSS) 2019. Despite showing significantly lower PISA results in 2018 compared to those observed in 2015, the gap between socioeconomically advantaged and disadvantaged students has decreased from 87 points in 2009 to 68 in 2018 (OECD, PISA 2018). However, despite improvements in enrollment over the past decade, reforms have not yet translated into better learning outcomes. Fifteen-year-olds in Georgia scored 107 points lower on average (380) than Organisation for Economic Co-operation and Development (OECD) countries across all three subjects in PISA (487). Girls performed better than boys in Georgia, with a statistically significant difference of 38 points (PISA 2018).

Improving the quality of general education in Georgia is the objective of the World Bank-financed **Innovation, Inclusion, and Quality (I2Q) Project**, which will expand access to preschool education, improve its quality, and enhance the overall learning environment. The I2Q project has three main components: (1) improving the quality of and access to early childhood education, (2) fostering quality teaching and learning in general education, and (3) strengthening financing options and promoting institutionalization. The Project Management Unit (PMU) and MoES are financing this systems diagnostic and evaluation to help the MoES understand the current status of general education in Georgia, how past reforms have affected teaching and learning, and how the New School Model (NSM) pilot program has affected school management, climate, and learning. The outcomes of the evaluation will help the PMU gain a deeper understanding of the current general education system (Component 2), inform the I2Q Component Terms of Reference (TOR), and support the implementation of the projects once they are under way. The I2Q program is set to begin in 2022.

In 2021-2022, Mathematica's team conducted a systems diagnostic of the general education system to examine Georgia's progress in advancing learning outcomes and the challenges that remain to reach its goals of quality, equity, and efficiency in the system. This report begins with a summary of the study methodology. Section III summarizes the trends and cross-cutting issues facing the Georgian general education system based on our review of the national and international literature. Section IV presents the findings of the systems diagnostic for Georgia. Section V draws conclusions about the findings and responses to the research questions driving the study. Section VI provides action-oriented recommendations from the systems diagnostic to support the MoES in continuing their improvement journey.

II. Methodology

Mathematica conducted a mixed-methods systems diagnostic evaluation to answer MoES' research questions. The diagnostic includes a qualitative study based on interviews with key informants, teachers, and principals; an extensive document review (see Appendix B); and an online quantitative survey. We use traditional data analysis methods paired with contribution analysis to complete the system's diagnostic. Appendix A describes the details of the methodological approach that is summarized in this section.

A. Data Collection

The mixed-methods diagnostic evaluation used a web-based survey to collect data from (1) a randomly selected group of 238 principals across Georgia, (2) a desk review of policy documents, (3) important international literature, (4) administrative data, (5) key informant interviews, and (6) focus groups with principals, teachers, MoES staff, donors, Parliament, the education resource centers, and students.

Exhibit II.1 presents the research questions and data collection methods the team used to complete the study. The final number of respondents for the survey and qualitative study are in Appendix A.

Exhibit II.1. Research questions and the analytical approach

Research questions	Analytic approach
What is the current situation in the general education sector regarding quality, equity, and efficiency? – What factors explain the differences among schools (for example, geography, ethnicity, languages) in the general education system? – What are the major factors affecting the quality of education delivery in schools? – How do the learning experience and the effectiveness of teaching differ for students of different socioeconomic and ethnic backgrounds? – How have recent reforms (see Exhibit 3) affected the quality of teaching in schools? – What types of problems or issues affect the efficiency of the general education system? – How does the school community perceive these reforms?	System diagnostic study Quantitative analyses of administrative and survey data to identify trends of enrollment, completion, education system internal efficiency, and out-of-school children, and assessment of supply, demand, and equity issues on access and retention.) <i>Secondary data:</i> Education Management and Information System (EMIS), MoES school-monitoring data (for example, enrollment, completion, infrastructure), data such as the examination results of students and teachers; the register of TPD activities from TPDC and NAEC data sets. A desk review of legal and policy documents, research reports, evaluation reports of educational interventions, teacher preparation programs, etc.) <i>Primary data:</i> Diagnostic school survey of a nationally representative sample that will assess system problems and progress, governance, financing, school culture, and student outcomes. The final report will complement the quantitative diagnostic assessment by integrating qualitative findings from the descriptive implementation study.

Research questions	Analytic approach
What is the current school situation related to management, school climate, and students' learning gains? – What are differences (if any) related to region, ethnicity, languages?	System diagnostic study Quantitative analyses of administrative and survey data to identify trends in public education spending, system capacity, management practices, school climate, and students' performance, with an emphasis on differences by region, geography, and sociodemographic composition. <i>Secondary data:</i> EMIS and the MoES school-monitoring data) <i>Primary data:</i> Diagnostic school survey of a nationally representative sample that will reveal schooling concerns and needs. Qualitative information from interviews with key stakeholders, consultative meetings, and workshops will be integrated with the quantitative data in the final report.
How have the reforms for achieving whole school improvement contributed to changes in the assessment of students' learning outcomes, school climate, and management? – What can we learn about the NSM pilot implementation that contributes to improvements in the general education system? – How has NSM affected teachers' instructional practices? School management practices and school climate?	Descriptive qualitative study Qualitative contribution analyses of key stakeholders' perceptions of the effects of reforms on school management, school quality and climate, and students' performance trends) <i>Secondary data:</i> Desk review of policy documents, including reports on the implementation of NSM and assessment results) <i>Primary data:</i> (1) Qualitative interviews of key MoES and PMU informants, principals in NSM and non-NSM schools, and national and international education experts; (2) focus groups with teachers and students in NSM and non-NSM schools; and (3) focus groups with members of the education resource centers; (4) focus groups with heads of the University in-service programs; and (5) systems change workshop with key representatives of the stakeholder groups.

This diagnosis of the Georgian general education system includes the perceived needs of the stakeholders within the system and recognizes the complexity and interdependency of stakeholder roles and responsibilities. We sought to understand, for each stakeholder group, its perspectives about the system, its effectiveness, and its ideas regarding how to effect quality improvements. The key technical pillars of interest, as guided by the MoES and PMU project requirements, included Governance and Management, Classroom and National Assessments, Quality Assurance, and Teacher Professional Development. In addition, embedded in the study is our analysis of the New School Model and how it contributes to moving the general education system toward a whole-school improvement approach. We used contribution analysis (described below) to analyze and weight the data. The contribution analysis resulted in a coherent and systematic collection of recommendations for future reforms (Section V).

B. Data Analysis

Our team used administrative data and data collected through the nationally representative school survey to develop key indicators of performance (see Appendix A). We also used these data to triangulate and support the qualitative contribution analysis. Because our analysis incorporated data from several different sources, we used triangulation to test for consistency in the findings from these data sources. As a result of comparing and contrasting input from different types of stakeholders, the findings in this report reflect aspects in the education system that are working well, so that the MoES can build on the positive findings. However, the report also has a lot of nuances about aspects in the education system where there is room for the MoES to make adjustments. The team developed an analytic framework using

McKinsey's (2010) intervention cluster criteria and the systems accelerator (Ndaruhutse et al. 2019) framework. Exhibit II.2 defines each education system accelerator, links the intervention cluster criteria, and shows how each accelerator links to Georgia's technical pillars of interest. Appendix A explains how we used this framework to conduct the contribution analysis.

Exhibit II.2. Contribution Analysis Framework

Technical Pillar ^a	System Accelerator	Definition of the accelerator	Intervention Clusters ^c
Governance and Management	Clear Organizational and Financial Architecture	The education system has clear structures, roles, and responsibilities; supports effective communication between stakeholders; and allows for school-based decision making.	System has strong financial and organizational foundations, including the optimization of school and teacher volumes, decentralized financial and administrative rights, transparent models for funding allocations, and clear organizational structure. Schools have the learning materials and infrastructure needed to support learning. Decentralized entities (for example ERCs, school boards) are engaged in decision making.
Teacher professional development	Teacher and school effective leadership	Building the capacity of the education workforce so that staff own change and have the skills to sustain improvement over time.	The system has an effective education model and language of instruction. The system is raising the caliber of entering teachers and principals through effective recruitment programs, pre-service training, and certification requirements. The system is raising the caliber of existing teachers and principals through effective In-service training programs, coaching, clear career ladder steps, and teacher/community forums. School staff have administrative support so they can focus on the technical aspects of teaching.
Quality assurance and accountability Classroom and national assessments	Collective accountability	The use of data, including student assessment data for formative feedback and learning loops at all levels of the education system.	The system has a clear data and accountability foundation, including the provision of transparent data to schools or the public on school performance, school inspections, and school formative and summative tests (including EOG tests). System has a quality assurance mechanism, including school self-assessments and minimum standards for quality and outcome targets. The system provides support to low-level teachers, including scripted lessons, coaching, and incentives for good performance. Data on access, student learning, equity, and quality to inform decisions.

Technical Pillar ^a	System Accelerator	Definition of the accelerator	Intervention Clusters ^c
Governance and management Teacher professional development	Coalitions for change	The capacity to solve complex problems is distributed across many stakeholders who rely on collaboration and negotiation of outcomes to find solutions and actions, rather than a technocratic approach.	Central Ministry works closely with other education agencies to develop and implement policies. The system cultivates peer-led learning for teachers and principals, including collaborative practice and decentralized pedagogic rights. Parents and community members are engaged with schools.
Governance and management	Vision and leadership	Vision and leadership require:) Understanding of how the different components of a system work together.) Strategic thinking.) Adaptability and resilience in response to unforeseen outcomes.) Horizon scanning to see how the education system might be affected by changes.) Ability to work across organizational boundaries.) Ability to deal with ambiguity.	System-sponsored experimentation and innovation across schools, including the provision of additional funding for innovation and the sharing of innovations. A focus on developing leadership capacity for the future. Sustained vision and strategy over time.
Governance and management	Evidence-informed policy and decision making	The use of evidence and data to inform the planning, budgeting, and decision-making process.	The system has information systems in place to provide data to decision makers in a timely manner. Policymakers use data to develop, implement, and update policies and regulations.

^a Technical pillars are the education areas of focus specifically mentioned by the MoES as core areas of interest for these systems diagnostics.

^b A *system accelerator* is defined as providing “core capabilities that policymakers need to develop or improve for rapid school improvement at scale, and which address common binding constraints in education systems” (Ndaruhutse et al. 2019).

^c McKinsey (2010) defines an *intervention cluster* as a group of selected interventions that policymakers choose to move along a continuum of educational improvement. Two different types of interventions are carried out by improving systems: (1) interventions appropriate to a particular performance stage; and (2) interventions that apply equally during all stages but manifest differently in each stage. Stage-dependent interventions vary from stage to stage (poor/fair, fair/good, good/great, great/excellent) but are discrete and sustained in each stage.

The detailed steps for undertaking the contribution analysis are in Appendix A.

III. A System Diagnostic of General Education

Georgia has made significant progress in implementing education reforms over the past two decades, including (1) decentralizing school governance, (2) introducing new, competence-based curricula, (3) developing standards for principals, (4) creating an initial framework for school authorization, (5) and developing a teacher professional development scheme (OECD 2019). These reforms have improved access, narrowed the socioeconomic gaps in participation in education, and marginally improved learning. This chapter presents the findings for the systems diagnostic. Section A presents an overview of findings based on the McKinsey (2010) and Ndarhutse et al. (2019) framework. Section B discusses the findings by each system accelerator, drawing in the details from the administrative, survey, and qualitative data collected from education stakeholders.

A. System diagnostic results

Much of what constitutes investment in educational reforms emphasizes the technical aspects of education: a revised curriculum, a new instructional program, new textbooks, and a teacher and/or principal professional development program. Innovations sometimes work and then disappear into the traditional or historical forms of practice. Although each of these components is critical to system change, they entail different requirements for and from the stakeholders within the system to be comprehensive and sustainable. Many reforms fail because reformers do not account for the dynamic and complex nature of education systems, nor do they grasp the importance of stakeholder perspectives that result in a deeper, less-biased understanding of the system.

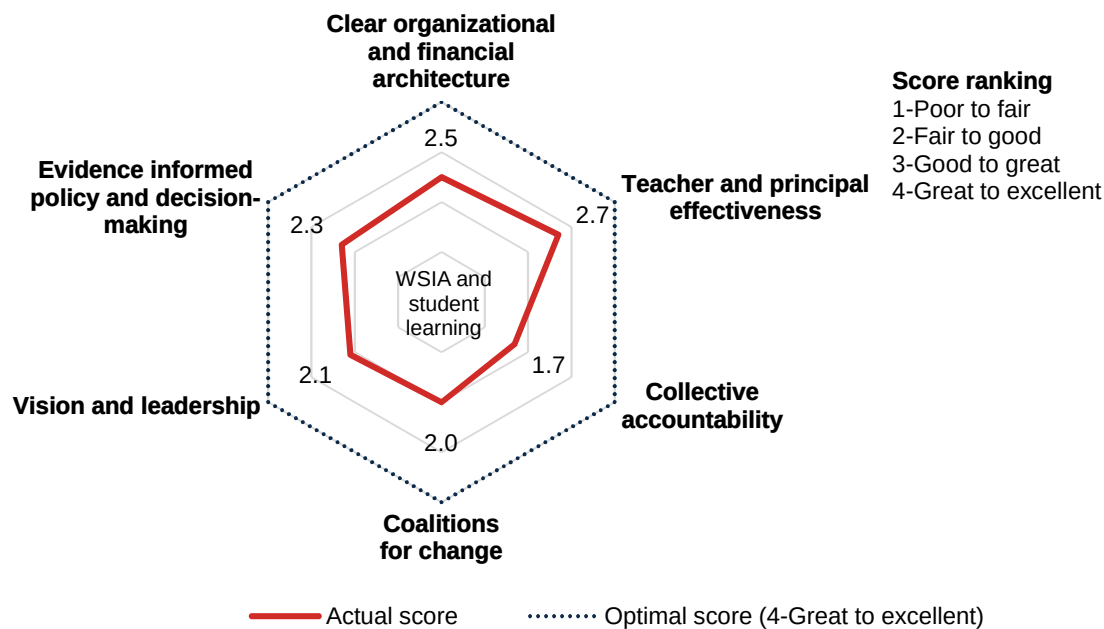
Systems thinkers (McKinsey 2010; Ndarhutse 2019) capture complexity by recognizing how multiple components within a system influence each other in different ways.¹ In contrast to a linear or technical approach to education reform that looks at individual parts in isolation and employs best practices from elsewhere, a systems-thinking approach examines the interdependencies among the multiple components within the system and how they affect each other. Systems thinkers understand that change is embedded within the context, the history of leadership, the organizational relationships, and the communication patterns that form the system. Systems thinkers also acknowledge that the responsibility to achieve education reforms is distributed among stakeholders, and they understand that buy-in, capacity, and readiness must be nurtured through structures that enhance collaboration and communication among stakeholders.

As discussed in Chapter II, the framework we used to conduct the contribution analysis is based on six system accelerators plus a set of reform criteria grounded in the international education literature. Because they address binding constraints in the system, these accelerators are areas that policymakers must address rapidly for whole-system improvements at scale. Applying the framework, the Georgian education system ranks “fair to good” along the improvement continuum. This diagnosis means that access to education is strong, school attendance is rising and better monitored, and structures are in place to improve teacher effectiveness and reform outdated modes of teaching. The MoES has made some progress towards decentralizing authority to ease pressure on mid-level or school-level management. For collecting data on schools, Georgia has also established a strong foundation that could be used both to improve instruction and to inform policy. The MoES is also beginning to cultivate collaborative practices,

¹ Ndarhutse, S., C. Jones, and A. Riggall. “Why Systems Thinking Is Important for the Education Sector.” Education Development Trust: UK, 2019. www.educationdevelopmenttrust.com

including school-based professional development. Georgia has also put in place strong foundations to professionalize its teaching force, including alternative recruitment schemes, professional development schemes, career ladders, and retirement. As we show in Exhibit III.1, teacher and principal effectiveness is approaching the “good-to-great” category, and the accelerators of vision and leadership, the coalitions for change, the evidence-informed policy, and the clear organizational and financial architecture for education are all in the “fair-to-good” category. One accelerator that needs additional support is collective accountability for improvement.

Exhibit III.1. Diagnostic of the Georgia general education System



The rest of this section elaborates on the detailed findings for each of the six accelerators of education reform. Under each accelerator, we discuss the positive trends that emerge from the diagnostic of general education and the areas that continue to face institutional challenges.

B. Detailed results of the systems diagnostic

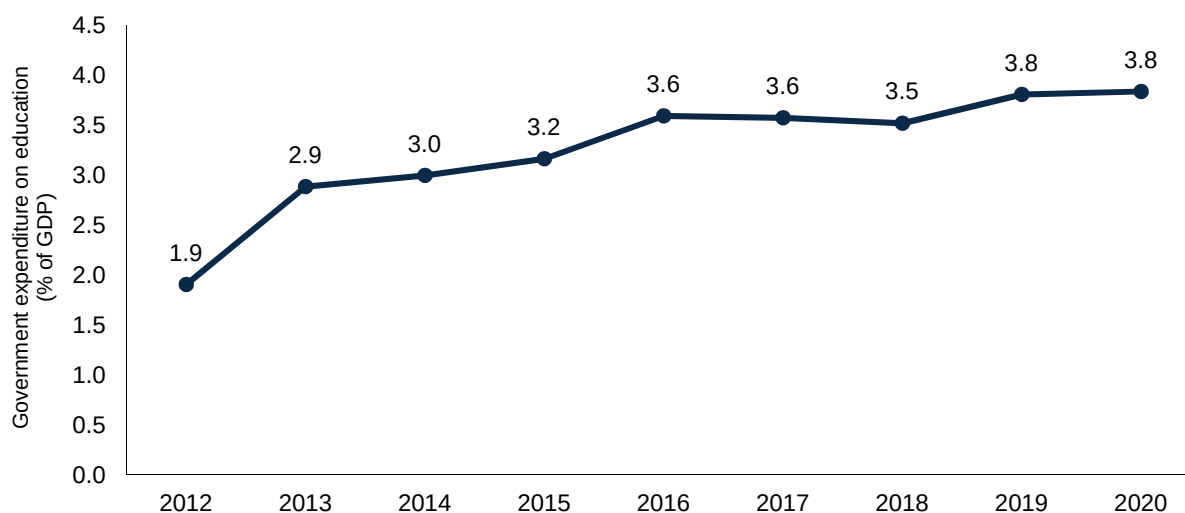
1. Clear Organizational and Financial Architecture

Based on a review of Georgian policy documents, interviews, and a survey with principals in the general education system, organizational and financial architecture ranks strongly. Our weighted contribution analysis places this system accelerator at a 2.5, in the middle of the fair-to-good category. The Georgian education system has established clear roles, responsibilities, and structures to govern the general education system. The MoES has continuously improved the structures by establishing systems to support school autonomy, decentralizing funding to schools, and empowering ERCs and boards of trustees to oversee and manage schools. These entities are in place to scaffold greater school autonomy, but their effectiveness in this realm remains limited. The main structures are in place, but the organizational architecture is weak in terms of communication among stakeholders, and the decentralized system lacks

accountability and capacity for true implementation of school-based decision making. The financing structure remains inconsistent (as noted in OECD 2019), and distribution of funding among schools is inequitable. It is also unclear how school-level funding is used to support schools. The findings below elaborate on the detailed findings from the diagnostic study.

The general education system has a clear financial funding model. Through its Law of general education, the Georgian government adheres to its obligation to provide equal education opportunities to every student. Although Georgia’s public expenditure on education as a percentage of Gross Domestic Public (GDP) has been stable in recent years, it tended to increase from 2012 to 2020 (Exhibit III.2).

Exhibit III.2. Expenditure on education, percentage of GDP



Source: World Development Indicators, World Bank

The share of the education budget is expected to reach 6 percent of GDP in 2023 (Ministry of Finance, 2022). The MoES uses a hybrid funding model where schools are financed through the central MoES Budget, with a voucher amount corresponding to about GEL 1,123 (about USD \$362) per student in 2018 (Maglakelidze et al. 2013). The voucher covers teachers’ salaries and maintenance costs, which are the largest part of the school budgets.

The results of the system diagnostic show that this hybrid voucher approach to school financing is viewed positively by the education community because it decentralizes funding, giving schools more autonomy over how to use resources. However, the voucher system does not improve parental choice in the regions, and it does not promote equality through school financing.

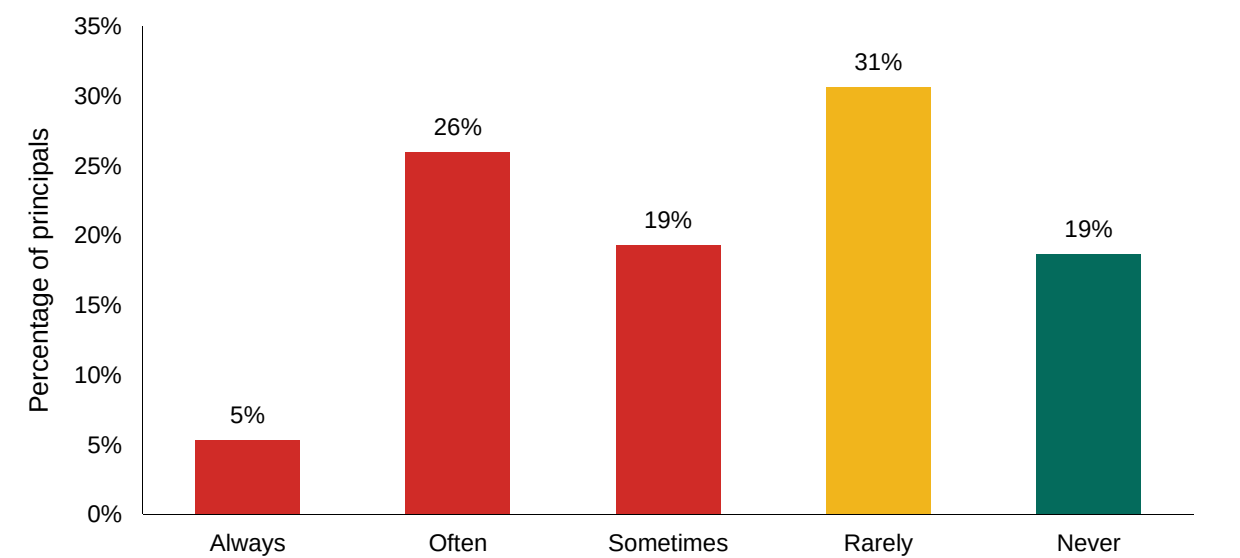
Although a financial allocation model is in place, it is not transparent or equitable. Small schools—almost 60 percent of all public schools in Georgia—are allowed to determine and request their own budget amounts directly from the MoES (Tabatadze and Gorgadze 2017). However, there is no clear system for allocating the budgets that small schools request and receive from the MoES. In fact, research conducted by Tabatadze and Gorgadze (2017) showed that per-student budgets of these schools varied by up to 300 percent in recent years.

Many schools lack resources to cover any expenses beyond basic operation costs and have limited financial independence to administer available funds effectively. Small schools in Georgia (under 170 students) cannot cover their operating costs with vouchers alone (OECD 2019). Moreover, formula-based funding provides only the minimum to schools to cover utility costs and salaries, with little funding remaining for student services, teacher development, school culture development, and extracurricular activities. Our survey of principals identified funding gaps for educational activities across small, medium, and large schools². One hundred principals (67 percent of those surveyed) reported that lack of school-level financing most affected their ability to manage the school. Five percent of principals reported that their school budget was always insufficient to pay for education activities. About 26 percent of principals stated that it was often unable to pay for them, and about 19 percent noted that they were sometimes unable to pay (See Exhibit III.3.). Stakeholders in interviews noted that *“formula-based funding is sufficient to cover utility costs and salaries, but schools have many challenges beyond that. This funding model needs to be diversified to reflect that. We are considering giving quality-oriented schools more resources.”*

“I don’t make purchases without confirming with the Ministry, because I don’t want to end up in the situation where the audit concludes that it was inappropriate spending. I prefer to wait, not make any purchases when I am faced with some need, and get the approval first so that I don’t get reprimanded afterwards. This procurement process really needs to become more flexible to allow schools to be more independent in the procurement process. This is one of the biggest headaches for me as a principal, and it shouldn’t be.”

(Principal, Capital)

Exhibit III.3. How often principals reported that the school is unable to pay for education activities



Source: Principal survey data

² The school sample for the qualitative data collection used maximum variation sampling and stratification by geography, and language of instruction. Additionally, we oversampled schools in minority regions.

The overall amount of school funding is not sufficient to support current activities and learning based on the representativeness of the survey, and the results of the qualitative study. The findings related to school financing were consistent across geographies, languages, and size of schools. Principals also noted that the process for requesting and receiving school funding is inflexible (for example, has strict guidelines for what can be requested) and bureaucratic. It limits the ability of principals to obtain and use funding to meet the actual needs of the school – a characteristic of the WSIA that is critical to improved learning.

The model to allocate funding is not linked to improvements in quality or equity of education.

Interviews with donors in Georgia noted that the voucher-based financing incentivizes schools to increase student enrollment (to receive a higher voucher amount); however, there is no funding attached to quality indicators to incentivize school improvement. Stakeholders across the general education system of limited funds that are available to schools. One education expert noted, *“The more students a school has, the more funding it gets. Schools in the capital and cities have more possibilities than smaller schools in regions because they enroll more students.”* Interview and focus group results found that schools outside urban areas, particularly ethnic minority schools, do not have enough funds to cover many costs, such as utilities and equipment. These schools face difficulties in purchasing equipment and materials, such as computers and projectors. A member of a regional ERC noted that *“bigger schools in urban areas can afford these things; moreover, school boards can plan and implement local projects [because] they have the means and finances to do that.”*

The general education system has a clear organizational foundation that lays the groundwork for decentralized approaches advocated in the WSIA. The general education system in Georgia has come a long way in establishing independent, competent technical agencies such as the Teachers’ Professional Development Center (TPDC), the National Assessment and Examination Center (NAEC), the Education Management Information System (EMIS), and the National Centre for Education Quality Enhancement (NCEQE). The staff at these agencies are highly educated and trained. The technical agencies have strong internal systems and databases to collect, store, and share data, setting the foundation for evidence-based decision making.

Although significant expertise has been accumulated in competent technical agencies such as TPDC, NAEC, EMIS, and NCEQE, their ability to influence the system is limited. Decision making in the Georgian general education system is still a highly centralized process. About half the stakeholders we interviewed (technical agency staff, donors, and others) noted that the MoES rarely draws on the expertise of the technical agencies in designing new policies or initiatives. A technical agency staff member noted, *“We don’t do something on our own. If the MoES says we need to add this, we add it. If they tell us to take it out, we take it out.”* The technical agencies focus on implementing MoES programs and feel that they are rarely engaged in

COVID pandemic and the current funding model.

The existing funding model could not respond to the challenges that the pandemic posed to the system. The pandemic has showed us that the component of school care, hygiene, health, and safety is not considered in the voucher funding model. School cleaning staff, cleaning supplies, and washing facilities became very important during the pandemic, and we have schools where there’s no running water at all. It’s not just blackboard and chalk that schools need, and this multitude of needs should factor into the funding formula. This formula needs to be reviewed considering all these needs, and a new model should be created.

(Education expert)

the actual design process. Stakeholders noted that “*by the time the Ministry consults its technical agencies about a new policy, the major decisions have already been made.*” The central MoES comes to the agencies with an action plan, budget, and even tools to implement the plan. Although the MoES may take feedback, the process is long and burdensome. They come mainly to seek the agencies’ approval. Technical staff from the agencies noted that the MoES is at times “defensive” about any recommended changes to the policy and that some changes entail major amendments after the policy has been implemented. Ultimately, it has been challenging for the agencies to identify their role and contribution to MoES efforts to improve the general education system. Donors and implementers of education reform programs noted similar challenges. Exhibit III.4 presents the perspectives of education stakeholders about the decision-making process. This institutional challenge of collaboration is discussed further under Subsection 5.

These quotes highlight the siloed nature of the general education system—a key barrier to successful implementation of the WSIA. Actors throughout the system seek more transparency and engagement in both the policy and the implementation process. A member of one of the MoES technical agencies highlighted the struggle and the desire for more engagement and transparency with the central MoES to create stability and help link the siloed sectors.

Exhibit III.4. Stakeholder perspectives on decision making in the education system

Stakeholder type	Quotes
External Stakeholders	<i>Decision making at the Ministry is very hierarchical. Even deputy ministers often have very limited ability to make changes in the policy.</i>
Implementers	<i>We are rarely involved in policy design, even when programs have policy components. This lack of engagement can lead to limited buy-in and even antagonism during implementation.</i>
Technical Agencies	<i>The team that works on curriculum design and revision is not actively involved in curriculum implementation.</i> <i>Teacher training is done independently by both the TPDC and the central MoES, but there is no coordination or alignment between the two groups.</i> <i>Textbooks are developed by the general education development department along with ESIDA and EMIS, but there is a lack of input and coordination with the curriculum department, TPDC and NAEC.</i> <i>National assessments are conducted by NAEC without due inputs from the curriculum department.</i> <i>“We [EMIS staff] were struggling a lot, and MoES was constantly putting us in very difficult situations. They often changed requirements, or the way things were measured, and we were always playing catch-up with all these changes from the Ministry. This is bad for development, for stability, and for the system. When you create an [informational] system, its architecture is based on some long-term vision, but when things are changing constantly and unexpectedly, the architecture is not developing coherently and loses stability.”</i>

Establishment of the Educational Resource Centers (ERC) was also an important step towards decentralization of the system, but their effectiveness in school governance remains limited. ERCs have limited decision-making powers and serve primarily the communication between MoES and schools. Many stakeholders see ERCs as redundant links in the system whose roles have been undefined throughout the years of their operation. Currently ERCs support schools in complying with basic safety and sanitary conditions; they function as regional distribution centers for school resources (such as

textbooks, computers); they monitor school transportation services to students, coordinate all correspondence between schools and MoES, and support schools to ensure financial compliance with state requirements. The ERCs also implement any projects in regional schools and accept complaints about a specific school.

Education experts perceived ERCs as a powerful resource that could support the education system in becoming more responsive to schools’ individual needs, but the undefined nature of ERCs’ role and their

"We collaborate closely with MoES and agencies, especially with TPDC. Whatever project or initiative they are implementing and need support, we are there to help coordinate, plan, and implement."

(ERC)

limited authority are a constraint to strengthening the system. There is substantial diversity among schools in terms of capacity, resources, and motivation but the overly centralized system of school governance is unable to take these differences into account. The current system is unable to moderate its mechanisms of control and autonomy to cater to individual schools’ needs and abilities. Stakeholders, including NGOs, education experts, ERC staff, and principals, also noted that there is a link between more capacity to respond to school needs and a more decentralized governance model. Moreover, further defining the role of the ERCs and using these centers to moderate autonomy under clear criteria will help the MoES further strengthen the foundational architecture for

effective school autonomy. Exhibit III.5 highlights the perspectives of education stakeholders around the ERCs.

Exhibit III.5. Stakeholder perspectives on ERCs

Stakeholder type	Supporting quotes
NGO	"We have schools that have very high capacity and motivation to improve. We also have schools that have no ability and motivation. These schools need different kinds of support, the first should be given more autonomy and support to continue functioning independently. The second school should be given more support and guidance. Each school can be placed along the continuums of competence and motivation and provided support according to their conditions."
Education Expert	"What is important is that we listen to schools, but the ministry can't listen to this many schools, and so we need to strengthen ERCs so that they become true intermediaries, so that they don't just relay information (as they are doing now) but take on real responsibilities about schools. ERCs can become advocates of individual schools that want to take a different approach to things, prepare their internal documentation differently or establish internal processes that are unconventional for the system. Right now, schools do whatever the ministry requires and have little freedom to diverge from those administrative requirements, whatever their individual circumstances."
Principal, rural	"We work very well with ERCs. After so many years of collaboration, we have built personal relationships. There's a lawyer in our local ERC who helps us immensely in understanding what the requirements are and what we need to do."

Principals are not involved in the design and planning of policies in the education system; they reported their interest to be involved in early stages of interventions. Almost half the principals (47 percent) who completed the survey expressed that they should be involved in early stages of the reforms or education interventions, including the pre-reform research and the completion of studies that inform the policies. About 49 percent of principals reported that they should be involved in the design and planning of the reform.

The system diagnostic shows that teachers and principals have varied perspectives on whether there are sufficient learning materials and infrastructure to support learning in Georgian schools but agreed on the need for more material for instruction in minority languages. About 35 percent of principals perceive the unavailability of materials and inadequate infrastructure (39 percent) as the top factors affecting the efficiency of the general education system in Georgia. Teachers and principals who participated in interviews, focus groups, and the survey also noted that access to appropriate learning materials continues to be a challenge in Georgia, but the challenge is even greater in the minority schools. These stakeholders all noted a dire need for adapted textbooks, specialized, demand-driven training, and high-quality materials in the ethnic minority languages of instruction. A member of a MoES agency noted that *“there is always this problem that textbooks developers have very little time to prepare the textbook, so they rework the past textbooks in a very short time. The new textbooks and their quality are not good. I remember that at some point the ministry was talking about translating textbooks rather than creating new ones. For example, in the subjects that are the same everywhere—math, chemistry, and physics—you cannot come up with something new. So, I thought that was a really good idea”* (MoES agency).

1. About 85 percent of principals said that there are differences in educational delivery among public schools in Georgia.
2. About 54 percent of principals reported that differences in school infrastructure explain the differences among public schools in the general education system.
3. About 51 percent of principals reported that differences in the availability of resources in the school are a factor to explain differences among public schools.

The transition to distance learning due to the COVID-19 pandemic and digital technology is a challenge for many principals and teachers. Although the MoES, in coordination with EMIS, undertook many important initiatives to support schools with new e-resources and technological infrastructure, 54 percent of the surveyed principals identified the transition to distance learning as the most difficult education policy they have had to implement in their careers. In addition, focus groups with teachers found that many failed to see technology as an important support tool in the instructional process, perceiving it as “something to be done outside the school process.” Their feelings about technology likely stem from reported outdated technology in the classrooms as well as lack of experience using technology, which leads to a lack of confidence in using it as a tool to deliver learning.

Greater use of technology in teaching has been consistently prioritized by the government over the course of past years. Technology use is also at the center of the general education reform (New School Reform). Teachers who participated in our focus groups in 2022 understand that technology is increasingly part of the instructional process. However, teachers have a much weaker understanding of the benefits that come from use of technology and have limited access to it, and some teachers view the use of technology in the classroom as a top-down compliance requirement. Students’ experiences with technology during instruction varied. Students stated that the use of technology was not an integral part of day-to-day instruction. Some students reported using technology only during their ICT lessons, while other students gave examples of how teachers used projectors to better explain the material and provided visual aids. The most frequently cited examples of technology use referred to listening to music during music lessons and using a projector for teacher or student presentations. Students often spoke about the use of technology in relation to the comprehensive tasks, which suggests that comprehensive tasks are an

important motivator for teachers for an increased use of technology in teaching. Teachers and EPL staff are skeptical of the use of technology in the classroom, as captured in their statements in Exhibit III.6.

Exhibit III.6. Perspectives on technology use in schools

Stakeholder type	Supporting quotes
MoES agency staff	"Teachers slowly started gaining more technology skills, but a big persistent problem is a purposeful use of technologies in the classroom. Everybody knows that they should use technology, even if only to gather more credits for career advancement, but very few understand what the use of technology really brings or is supposed to bring to the instruction. We know that technology has a huge potential to transform teaching, but the way it is used today, it is just an addendum to the traditional teaching process."
Teacher, rural	"I prefer to let children prepare materials and homework by hand rather than make them spend even more time in front of computers."
Teacher, urban	"I do send some links to students to see after the class, but I don't think it's worth wasting class time on trying to use technology, it doesn't bring much. I generally think that in this digital age, we shouldn't increase children's exposure to technology even more."
Teacher, rural	"In our school we have computers from 20 years ago, you turn them on, and they are buffering endlessly—it's impossible to accomplish anything. We have an IT specialist, but there's nothing he can do; the equipment is old and useless. We also don't have the infrastructure in classroom so that students could bring their own computers and plug them in and access Wi-Fi. We just don't have the infrastructure to integrate technology use in instruction."
Teacher, rural	"We did have training on the use of technology, but we have only two projectors in the school. Once a month I can take it out, set it up in the classroom, and show something to my students, but I can't do that every day, right? Considering these conditions in schools, I don't know how realistic it is to truly implement the new curriculum in schools."
Teacher, ethnic minority school	"We have received useful materials that would facilitate active interaction in the classroom but we were not able to use these valuable resources as we couldn't access the digital texts in the classrooms. The student do not bring the netbooks to the schools.. In fact, more than a half of the students do not have functional devices by the grade 3 as the netbooks they are granted in grade 1 are of low quality and crash very soon".
Student, rural	"We use computers during IT lessons. In other lessons we only use textbooks. When we have some project to prepare, we go the computer room, and we use the computer and the printer to print out pictures"
Student, urban	Biology teacher would sometimes come in with a laptop and show us additional materials in the laptop. Some pictures that were not in the textbook and were useful for understanding the material"
Student, capital	"We use technology when we have presentations of comprehensive tasks, when we have to make presentations in class."

Some teachers had positives experiences with the transition to distance learning, using the technological resources to increase student engagement. Principals consistently note that teachers' technology skills increased significantly over the past years and especially over the course of the pandemic, which will affect the use of technology in the future. A principal in a rural school noted, *"There's no question that teachers' computer literacy increased exponentially. Many didn't even know how to turn on a computer, and now they can use platforms, PowerPoints, share videos, social media."* With teachers throughout the country, the diagnostic study also uncovered numerous good practices of technology in instruction. Natural science teachers appreciated the integration of technology in teaching because the new infrastructure and equipment allowed them to use internet resources to diversify teaching, increase student engagement, and improve the understanding of complex material. Teachers felt

that being able to access the internet and use new visuals increased student engagement. It allowed teachers to better explain complex topics such as photosynthesis and blood circulation by using videos or pictures to which they previously had no access, especially in rural areas. Experiences of the teachers about the use of technology in the classrooms are presented in Exhibit III.7.

Exhibit III.7. Examples of technology use by teachers

Stakeholder	Examples of the use of technology in classrooms
Teacher, rural	"We use virtual labs to understand the chemical reactions that we are learning about in class. Because obviously we don't have any resources to do these demonstrations in class. When they see it with their own eyes, it really does increase motivation and interest."
Teacher, urban	"When we were teaching online and the lessons were 20 to 30 minutes long, I wouldn't have time to explain the material in sufficient depth, so I would send some videos to my students and give them homework related to them. They would have to answer questions and fill things in based on those videos. This has been a great help for me during this remote teaching, and I think it really increased the quality of learning."
Teacher, urban	"When we were teaching online, I would create PowerPoint presentations and share videos and pictures, and students now tell me that they preferred our lessons online. They say it was more engaging, and they had the PowerPoint slides after the class which they could review. Student motivation to learn natural sciences is extremely low in rural areas and I hope, and I think that this increased use of technology may boost student motivation and make young people more interested to learn."

Use of technology in NSM schools

New School Models have markedly greater access to technology because it is one of the focus areas of the model, but they also struggle to incorporate technology into instruction. Computer rooms were established in schools, and equipment has been set up to allow teachers access to the internet while teaching. However, even with equipment and access, teachers in the NSM schools struggled to incorporate technology effectively into instructional practice. For example, one urban teacher mentioned that *"in terms of technology, our schools are quite well equipped. We are a part of the New School Model, and we received many computers, monitors, projectors. All teachers can access this room, it's not locked away somewhere, they can request and take out whatever they need to use in the classroom."* Despite access to the technology, NSM teachers noted that for teachers to move from rote teaching to student-centered instruction, all classrooms should be equipped with technology, and teachers should be trained in techniques to incorporate it into lesson plans. The comprehensive tasks that were introduced with the NSM require students to use technology more often since they are required to conduct online research and prepare PowerPoint presentations to share with their classes. Through the introduction of comprehensive tasks, NSM increased students' use of technology in classrooms, but technology has not yet become an integral part of teachers' instruction practices.

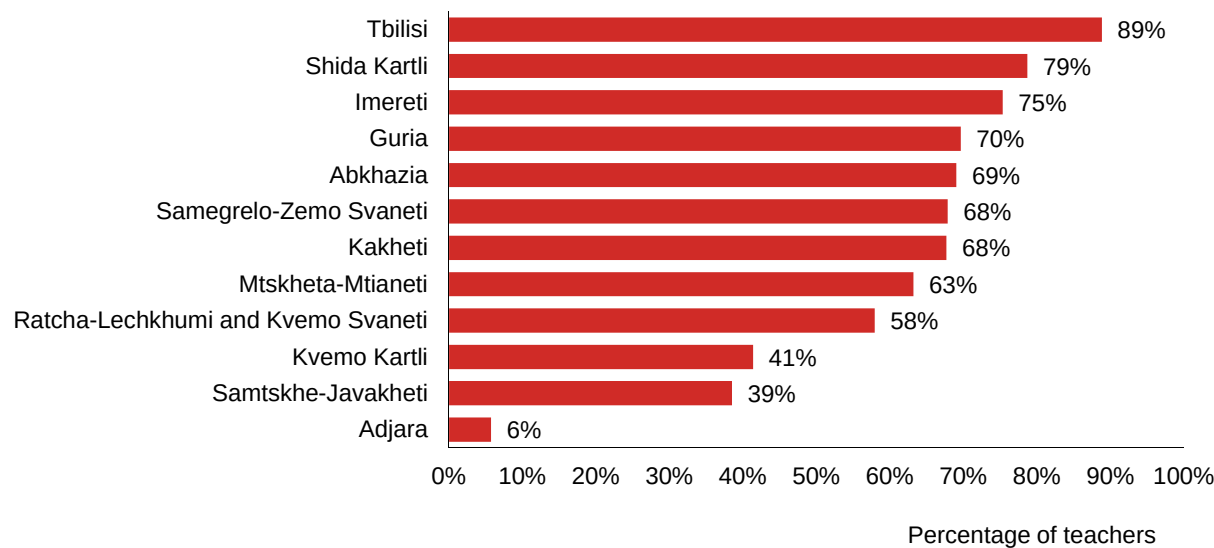
2. Teacher and Principal Effectiveness

Shared capacity is an important factor that contributes to teacher and principal effectiveness. Ensuring that the education workforce has the skills it needs to own and sustain school improvement initiatives is one of the six system accelerators that improve learning outcomes for students.³ In 2021, about 61 percent of teachers in the general education system received training, but there is variation in the percentage of

³ Mourshad et al. (2010)

teachers trained by region. Exhibit III.8 shows that most teachers (89 percent) in Tbilisi received training in 2021, while in Adjara only 6 percent of the teachers were trained.

Exhibit III.8. Percentage of teachers trained by region



Source: TPDC and EMIS data

There are three main routes to building education workforce capacity: pre-service training; in-service training; and school based/peer-led learning. Our weighted contribution analysis places the teacher and principal effectiveness accelerator at 2.7 (in the middle of the fair-to-good category).

The NSM is a promising education model that moves general education towards a WSIA. The NSM, launched in 2019, focuses on the development of a school culture that supports quality teaching and learning using constructivist teaching based on the third-wave curriculum (see Appendix B), school management, use of technology, and a school support system. The NSM is a significant step towards WSIA in that it encourages whole-school collaboration as teachers create active, student-centered lessons with complex real-world assignments, and school leaders manage and support the teaching and learning process. Currently, the NSM is implemented in 597 schools throughout the country as a focused intervention. Schools that are not receiving the full intervention package are able to attend the weekly training workshops and incorporate changes into their schools as they feel is appropriate.

The NSM is supported by stakeholders, but there is no common understanding of its objectives and benefits. Ethnic minority teachers were unfamiliar with the NSM. During interviews and focus groups, teachers, principals, and other stakeholders reported considerable variation in their understanding of the NSM. Some teachers see the NSM as only complex assignments. A few teachers reported that the NSM benefits low-ability students because one topic may be stretched over several lessons. *“If a student does not understand on the first day, we will explain the next day, the third day, the fourth day, until s/he understands, meanwhile the child who understood the first time suffers”* (teacher). And although teachers and principals report appreciating the NSM theory

“The issue is obscure for me. (Teacher, ethnic minority). “It’s a novelty, we need training, I do not know anything about it.”
(Teacher, ethnic minority)

and acknowledging that it supports the development of valuable skills, many feel doubtful that it can be effective in Georgian schools. These stakeholders cite limited skills in technology use as a barrier to advances in student outcomes. Finally, ethnic minority teachers reported that they have limited, distorted, or no knowledge about the NSM.

Stakeholders that have experience implementing – or working with the NSM believe that it (the NSM) can transform teaching and learning. One expert said, *“Changing the National Curriculum is actually about transforming teaching in schools.”* Principals noted that 83 percent of teachers support the introduction of the third wave of the national curriculum and 79 percent support the introduction of the NSM. Moreover, teachers and principals that have implemented the NSM had a clearer understanding of the model describing the new curriculum, the creation of complex tasks, the use of formative assessments (FAs), and the linkages between classroom instruction and the real world. An urban principal noted, *“The previous curriculum focused on the use of textbooks, and knowledge was given to students. With the new curriculum and NSM, students have to seek out information and design their own learning.”* Teachers generally appreciated the flexibility and creativity that the NSM model allows. One urban teacher noted that “the most important thing about this model is that it emphasizes teacher creativity, and I really like that.” Finally, teachers and principals reported that they valued reflection and collaboration about student progress, along with greater freedom to design lessons. However, principals also reported that these two reforms were the most difficult to implement in their schools. About 40 percent of principals said that the third-wave curriculum reform was among the most difficult reforms to implement as part of the NSM reforms.

Stakeholders value complex assignments as a key aspect of the NSM, but they find it challenging to implement in their classrooms.

Complex assignments are student centered: they require that students create a product that entails in-depth learning and critical thinking. Some teachers and students see the benefit of these assignments for learning but creating complex tasks for several subjects is viewed as overwhelming and burdensome by students who must complete them across subjects. Teachers raised concerns that the complex assignments reduce flexibility and autonomy because they require completing a series of forms and documents during preparation. Many teachers copy the complex assignments from their colleagues to avoid the extra work needed to create the activities. These teachers worry that complex assignments—as they are designed right now—could lead to the universalization of teaching rather than to teaching that is adapted to local student needs. Other teachers report that the introduction of complex tasks requires more resources, such as laboratories and the internet. Teachers and principals also report that complex assignments raised equity issues. For example, complex tasks increased involvement for parents who had the time and resources to help their children; however, not all parents have such resources. Exhibit III.9 summarizes the positive and negative views on complex assignments.

“It’s a big challenge to explain complex assignments to students, but it’s an even bigger challenge to help teachers understand it: what this means, how often and in how much time can they be implemented. We struggled to understand and learn all these terms like matrices and such. Many teachers are still very confused about these terms after all these trainings. These trainings were conducted online, and that wasn’t very effective.”

(Teacher, urban)

Exhibit III.9. Variation of perspectives on complex assignments

Positive views of complex assignments	"I would always hear from my colleagues that these [complex assignments] wouldn't bring anything. Every change needs time. and this won't happen overnight either. But I like complex assignments because they teach children to think creatively. I can say, based on my students, that I see progress. I started last year, and this year I'm seeing much better final products." (Teacher, Tbilisi). "Complex tasks are very interesting because we organize discussions, get to know [concepts] better. We learn new words ... complex tasks are more fun and entertaining." (Student, rural)
Negative views of complex assignments	"When the requirement to use complex assignments was introduced for all teachers in all subjects, students had to do this in every class. It would have been good if the people in charge had thought about this in advance and had spaced out the introduction of complex assignments in different subjects." (Teacher, Tbilisi). "When students must do complex assignment in all subjects at once, in almost all 10 subjects, this causes fear in them: Can we do this in all subjects? Will we be able to do everything in time?" (Teacher, urban). "Since only high-ability students can complete these assignments, we should not give complex tasks to [low-ability] students." (Teacher, ethnic minority school).

Coaching is one method of teacher support in the NSM, but teachers and other stakeholders report different experiences with the coaching model. NSM employs more than 500 coaches, many of them trained within the MCC-funded Millennium Challenge Account–Georgia (MCA-G) and USAID G-PriEd projects. MoES, MoES agency staff, and other stakeholders reported that the coaches trained by the donor projects represent a valuable core of qualified coaches for the system. However, MoES staff and principals reported that other support people in the education system, such as other coaches, do not have experience in coaching. They also raised concerns that there are no procedural guidelines or professional development for coaches, and that the impact of coaching on teaching practices depends largely on the quality of coaches.

Exhibit III.10. Varying perspectives of stakeholders about the NSM coaching model

Stakeholder	Quotes
Urban teacher	"I am so satisfied with my coach; I can't even express it. S/he is helping me by explaining everything very clearly, answers my question."
MoES Technical agency staff	"It turned out that many subject coaches knew nothing more than the teacher of that subject, and these coaches were flouted by teachers."
Teacher	"I had both art and music coaches, and I had a very different experience. I prefer attending art. It's more tangible for me. Or s/he is explaining better. I don't want to offend anyone, but art was explained better. I am not satisfied with music."
Rural teacher	"My coach was very supportive, and she wanted me to present at the conference. I guess they also want to show off their work. Just as we teachers like to showcase our success, they do too."
Rural teacher	"What coaches say today, they refuse tomorrow."
Rural teacher	"All coaches should be practitioner teachers."

Teachers and principals report that many teachers are very happy with coaches as they help teachers understand new education requirements, build learning communities during group coaching sessions, and provide constant support. Coaches themselves are motivated to demonstrate that their mentee teachers are

performing well and satisfying the new requirements. However, teacher and principal focus group participants also noted that coaching is focused on helping teachers satisfy the new requirements rather than qualitatively improve instruction. One principal noted, *“Coaches are a support mechanism for teachers for “surviving” the new reform and understanding how to satisfy the new requirements.”*

School-based professional development is another element of the NSM and key to WSIA, but there is no clear understanding of its purpose. Teachers, principals, and other stakeholders explained different purposes for school-based professional development: some view it from a quality assurance (QA) lens, whereby mentor and lead teachers conduct classroom observations and provide feedback to prepare teachers for external observations; others view it as a community of learners, whereby teachers meet to reflect on their practice and learn together. However, teachers and stakeholders reported that there are only a few communities of learning for teachers, and many are not functional. All stakeholders reported that to be engaged in school-based teacher professional development (TPD), teachers must invest personal time, including staying after classes. They see TPD as a priority, but teachers often work in several schools, provide tutoring, and have family responsibilities, so many cannot stay beyond class hours. Moreover, schools do not have the financial resources and/or capacity to offer teachers incentives and opportunities for development.

Lack of coordination and unified vision among institutions are challenges for the rollout of key activities of the NSM. MoES, ERC and other stakeholders explained that NSM coaches are officially hired by the TPDC. However, coaches operate under the supervision of MoES, and there is little coordination between the NSM coaches and TPDC staff. Moreover, MoES staff and other stakeholders reported that activities such as assessments and school authorization are planned independently of NSM and point to a lack of a unified vision and strategy within the education system. The NSM was conceived in the Department of General and Preschool Education (MoES), which also oversees its implementation. However, the roles of other government agencies such as TPDC, EQE, NAEC are not clearly defined. Finally, teachers, principals, MoES agency, and other stakeholders describe the mismatch between the implementation of the curriculum in the NSM and the demands of the UEEs. The NSM places little emphasis on accumulating factual knowledge, but the UEEs require it.

Pre-service preparation programs are in place, but they have not always attracted quality teachers. Attracting quality candidates to the teaching profession, providing pre-service teacher education, and ensuring that teachers have the competence to teach are foundations for effective teacher preparation. To recruit teachers, the MoES introduced in 2017 an integrated bachelor-master academic program for pre-service teachers that included 300 European Credit Transfer and Accumulations system (ECTs) over five years. In 2018, the MoES created a shortcut to the teaching profession. The Education Quality Enhancement Center (EQE) adopted a one-year, 60 ECTS pre-service teacher training program in 20 universities. Stakeholders reported differences in motivation and ability between students of the 5-year 300 ECT pre-service program and the 1 year 60 ECT program. Entrants from the 60 ECT program are more mature, have psychological readiness for the teaching profession, and have passed a subject exam, a requirement for entering the program. In contrast, students enrolled in the 300 ECT program are usually the lowest-scoring students on the UEE, attracted to the program because it is free. Stakeholders explained that universities have the incentive to fill all available spots due to voucher-based funding, therefore, students may not have the requisite skills to succeed. Ilia State University (ILIA UNI) is an exception among 300 ECT programs. The program increased the minimum UEE scores for entrants by 10 to 15 percent and set stringent requirements for graduation. Of 40 students enrolled, fewer than half

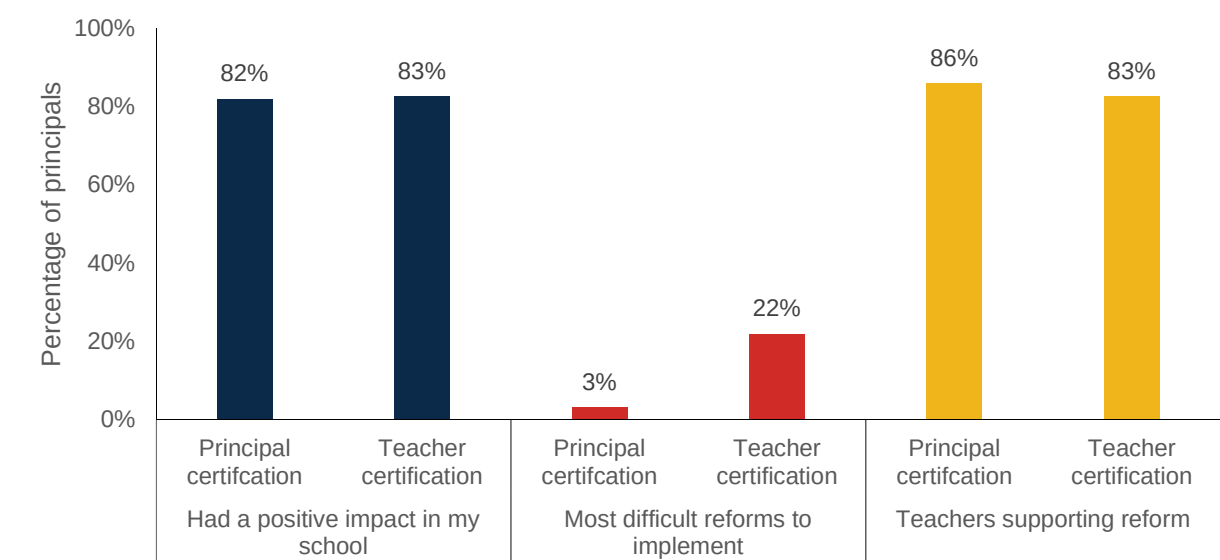
remain in the fourth year of their studies. *“We are filtering students, and only 16 or 17 remained [on 300 ECTS] out of 40.”* (Pre-service program coordinator)

Pre-service programs struggle to implement changes because of ongoing reforms and a lack of flexibility and practicality in the accreditation system. Universities were unable to update the syllabus of 60 ECT programs to mirror educational reforms as result of accreditation regulations for the universities. *“Our programs can’t keep up with the changes. We do not have flexibility to make constant changes in the syllabus, because it is not that easy to change an accredited program.”* (MoES staff). Moreover, university professors explained that the practice component of teacher preparation programs—an element present in effective pre-service programs—is insufficient, because finding skilled classroom teachers to work with these student teachers is difficult, so they lack good mentors from the general education system.

Public schools are not hiring trained teachers. This a result of low teacher turnover and a mismatch in the supply and demand of the subjects in which teachers were trained. Because of low turnover, many graduates cannot find teaching jobs in public schools, so they seek employment in private schools or other sectors. *“More graduates are going to private schools, as public schools are actually closed [for new teachers].”* (Pre-service program coordinator). Although the retirement reward initiative has a positive impact on revitalizing the teaching workforce, the vacancies created by the program continue to be filled by practicing teachers and teachers working in 2 to 3 schools simultaneously. This challenge continues to limit the potential for improved quality in teaching. Moreover, there is a mismatch between the supply of and demand for teachers by subject in which they were trained. Pre-service programs prepare more teachers to teach history, but special education and natural sciences have gaps. *“Thirty to 50 percent of our students teach history. We do not need so many teachers of history and civic education. Only 2 to 4 of them will be employed, because there is no demand for historians. Government does not define what the actual demand is. Which faculties are mostly lacking? For example, cadres in physics, chemistry, and biology. Without STEM subjects, it’s impossible to develop the country, and if we don’t have STEM teachers, who will teach the children? The government should incentivize these directions, make special offers and salaries to increase interest.”* (MoES Agency). MoES is not systematically planning for teachers they will need in the future, whereas private schools’ partner with universities to employ program graduates.

Results from the principal survey reveal that teacher and principal certification are perceived as having a positive impact with only few principals stating it was among the most difficult reforms to implement, but perceptions related to the burden of certification remains mixed across the education system. About 82 and 83 percent of principals reported that principal and teacher certification, respectively, had a positive impact in their school. Only 3 percent of principals identified principal certification as among the most difficult reforms to implement, and 22 percent stated that teacher certification was among the most difficult reforms to implement in their school. Finally, as we show in Exhibit III.11, more than 80 percent of principals reported that teachers support both teacher and principal certification. However, interviews with stakeholders revealed that for some teachers, principals, and other stakeholders preparing for these exams, an enormous investment of time is required, and they argue that preparing for certification exams is not necessarily related to improving classroom practice, nor is it an indication of quality teaching. In 2020, about 88 percent of teachers who registered for the exam took it, and only 26 percent passed the minimum threshold.

Exhibit III.11. Principal perceptions on teacher and principal certification



Source: Principal survey data

There are examples of effective in-service professional development programs. Quality in-service professional development is a cornerstone for teachers’ induction into teaching and their continuous learning. Georgia has successful models of in-service professional development that can be replicated. Overwhelmingly, teachers, principals, MoES agency and other stakeholders reported that the professional development in the G-PriED program was extremely beneficial because it contained three interconnected elements: (1) training that was focused on applicable content, (2) teacher resources, and (3) follow-up coaching.⁴

⁴ These elements are associated with increased student learning outcomes (Sims et al. 2021).

Challenges affecting the effectiveness of in-service teacher professional development:

-)] The in-service teacher development system managed through the TPDC does not utilize the expertise of practicing teachers and relies on centrally prepared trainers to deliver in-service training.
-)] There is no process to identify teacher training needs because there is no student performance or teacher evaluation data. Schools check boxes from a long list of in-service offerings, but there is no process for teacher input.
-)] The rapid change of in-service content (use of e-journals, new assessments, new teaching methods) and the TPD paperwork requirements make teaching more complicated and burdensome.
-)] In-service trainings were mostly direct instruction with little opportunity to practice skills.
-)] Trainings do not have follow-up components to guide teachers through application of new skills. And principals do not have the content skills or the responsibility for follow-up with teachers.
-)] The lack of teacher-trainers / facilitators in the schools limits the opportunity of balancing teachers' professional development between the school-based and TPDC facilitated, centralized in-service activities.

In-service teacher professional development has not improved the low capacity of teachers to implement FAs. Although FA is a key component of the NSM, teachers' capacity to implement it has not improved. Teachers, principals, MoES agency, and other stakeholders noted that there is no evidence on the effectiveness of the professional development offerings, as in-service training programs are not systematically evaluated. Finally, stakeholders reported that ethnic minority teachers have limited access to training, because the offerings are in the Georgian language, and teachers in remote areas have limited access to training as well. An introduction of online training increased accessibility for teachers from remote areas, but the online training workshops were rarely interactive, and participants often experienced technical problems.

Teachers who complied with the rigorous requirements and invested time to advance in the Teacher Development and Advancement Scheme (The Scheme) were frustrated because of constant changes. The MoES implemented The Scheme, a career ladder system whereby teachers can move from "practitioner" to "senior" to "leading" to "mentor" teacher through trainings, exams, and compilation of credits. Teachers, principals, MoES agency, and other stakeholders reported that frequent changes to The Scheme resulted in a sense of injustice and demoralization among teachers: some teachers gained senior status when the requirements were stringent, but

"With one module or with two-hour training or one-day training, it's unrealistic that teachers will learn it, so it needs rigorous training for teachers to be able to perform better (MoES Technical Agency).

"We often hear from teachers that they struggle to implement formative assessments. They learned the theory in training but find it very difficult to implement in practice and so revert to old methods of assessment.

(Donor)

subsequent changes lowered the requirements substantially. Furthermore, requirements for the “mentor” status increased unexpectedly. The credit system was dropped unexpectedly, and many teachers had invested time in accumulating credits. Teachers expressed that they are constantly playing catch-up with the unpredictable policy changes and their grievances sow disagreements with their colleagues.

Principals’ roles in their schools show the need to implement pre-service programs to provide them the tools needed to fulfill their role as instructional leaders. Principals, MoES agency, and other stakeholders reported that school principals lack capacity in instructional leadership and management. Principals see their primary role as managers as opposed to instructional leaders. One expert noted, *“There’s a problem in competence. They [principals] may honestly want to do well, but they lack competence. An absolute majority of our principals have no academic training in school management.”* A principal questioned his role as instructional leader. *“My challenge is classroom observation. Why am I supposed to be in the classroom? Am I supposed to make sure there’s electricity, get firewood for heating, and observe classes? There is this duality [of principal requirements], and this is not good. You can be either one or the other (principal, rural).* The GoG is hoping to address some of these challenges through the new standards that include educational leadership, learning process administration and accountability, self-development, and staff professional development.

There is no established career path for advancing from teacher to principal. Principals are currently elected to their positions at a school. When the election pool is selected, many candidates lack adequate training or knowledge of being a school principal. Stakeholders noted the need to design a career path for teachers and educators to move up through a career ladder to become principals in the general education system. One expert suggested, *“I would invest time in preparing principals and creating a pool of potential principals. There can be teachers who want to advance in their career, and there would be a training program for them.”* Another expert added, *“In many countries, there’s a path from teacher to principal. Teachers can go through a program or get a graduate degree and become principals. Here this career path does not exist. Often other people from the outside become principals.”*

There are limited mechanisms for principal support and guidance. Principals seek guidance from ERCs and other principals, but it’s focused predominantly on legal and administrative issues, not instruction. Principals also have personal connections with other principals and collaboration is frequent. They describe this collaboration as being valuable to their work, but it focuses on management issues. *“I have a lot of experience being a principal, and people ask me things all the time: how to transfer a student, what to do when students do or do not receive netbooks from the government, how much in advance you should warn parents to vaccinate their children, when to suspend a student, and so forth. These I call small things, but on big things like educational outcomes, building collaborations ... It does happen, but it’s rare.”* (Principal, rural).

MCC provided the only leadership training program in Georgia for principals, who found the MCC training valuable and aligned with the NSM. *“The training workshops for principals were quite interesting. MCC introduced us to the Estonian model of school leadership.* The challenge of the principal leadership training is that it was limited to 100 schools and was eventually merged with other professional development training. Principals noted, *“We had five days [of training] on a range of issues: inclusive education, school management during remote learning, collaboration with parents, school culture, safety.* There was no ongoing coaching and support.

The results of this diagnostic also revealed that the MoES does not evaluate or assess principals’ effectiveness in improving school quality. Good principals are not rewarded for their performance, and there are no performance-based incentives for principals to improve. One education expert noted, *“They [principals] are not evaluated as institutions. But school principals can be fired, or their contract not renewed without any real explanation ... and I mean nobody knows why. So, it does not matter whether a school principal is a good, is working on the development*

of teachers or improving teaching and learning quality—nobody knows about their performance and nobody tells them, “You are a good principal.” (Education expert).

3. Collective Accountability

Mourshed et al. (2010) found that two common features of successful education systems include assessing student learning and utilizing student and school-level data to improve instructional delivery. Systems thinkers (Ndaruhutse et al. 2019; Mourshed et al. 2010) also acknowledge the importance of learning loops for continuous improvement. There are two components of collective accountability: processes QA and accreditation/school authorization. The intent of accreditation is to ensure that education provided by licensed institutions lives up to the mission established for each institution or system and guarantees prospective students and parents of an acceptable level of quality (QA). Accreditation entails QA and mechanisms for independent reviews, reflection, and continuous improvement and responsiveness by the institution to the feedback provided by the accreditation process.

The Georgian education system has made progress towards establishing collective accountability.

The MoES and the NCEQE are working on standards, a school authorization process. The UEE remains a high-stakes assessment for admitting students into universities. Classroom FAs are encouraged, though not used consistently in the system, and there is no measure of national student assessment in general education. The lack of assessments, along with the nascent school authorization systems, places the Georgian education system in the category of “fair to good” on our systems framework. The following section presents the findings from this diagnostic of collective accountability in the Georgian education system.

Quality Assurance

QA emphasizes the effectiveness of the school, the community involvement, the curriculum, the resources, the teacher qualifications, and the effectiveness of the Board of Trustees (BoT), the PTA, and the principal. The MoES has started to establish standards and a school authorization system to raise school accountability for results, but the process is still in its nascent stages.

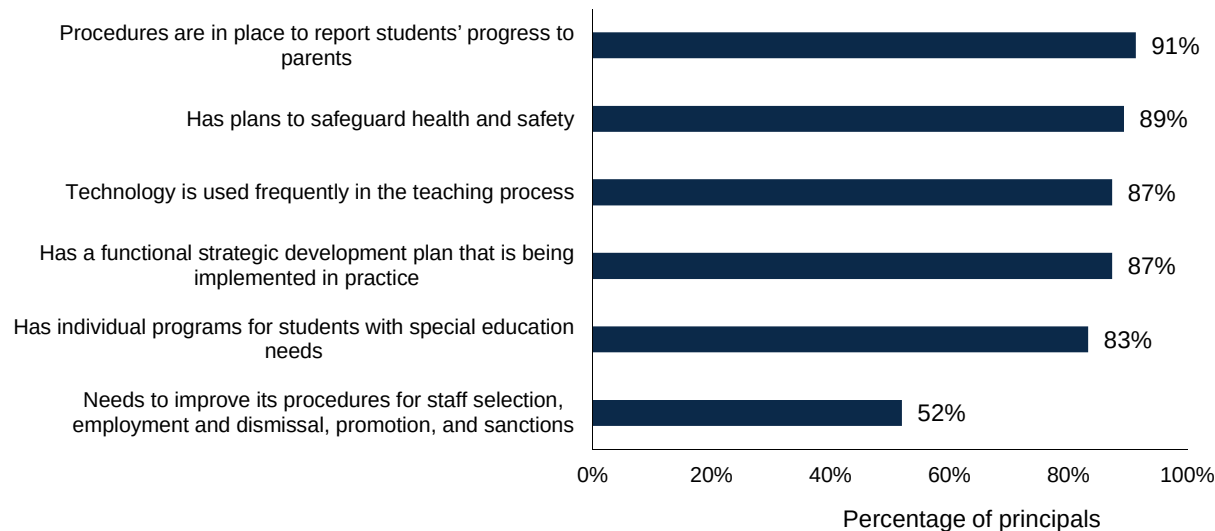
The MoES is renewing the external QA mechanism (authorization) for public schools and is finalizing new authorization standards. The standards are a big step in the right direction, as they focus on education quality. Standards cover four main areas: (1) school philosophy, which includes the school’s mission vision and strategic development for quality education, (2) school curriculum (core and elective), (3) resources, including material, human, financial, IT, and all other resources that are required to support curriculum delivery, and (4) student services, which include extracurricular activities and transportation. The standards are benchmarked with the consideration of the current state of schools and are meant to increase as schools are guided towards improvement. Nearly 80 percent of principals in this study believe that school authorization is necessary to improve the quality of public school.

The new authorization system focuses on improvement as opposed to accountability and punishment. Stakeholders view the system’s focus on improvement as a very positive direction as it offers to school leadership support and guidance on the path to improvement. Realistic benchmarking of standards is also seen as an adequate starting point for bringing all schools up to minimum standards.

Principals perceived authorization as a needed step towards increasing the quality of their schools. Results from the survey suggest that most of the principals (about 80 percent) agree that authorization is necessary to improve the quality of public school. Principals also reported on key school conditions for

authorization (Exhibit III.12). About 91 percent agreed that procedures are in place to report students’ progress to parents. About 89 percent agreed that the schools have plans to safeguard health and safety. About half the principals (52 percent) agreed that their school needs to improve its procedures for staff selection, employment and dismissal promotion, and sanctions.

Exhibit III.12. Principals who agreed to statements about school conditions



Source: Principal survey data

The system puts school self-evaluation at the center and aims to develop the culture of internal QA in schools. As the system prioritizes support as opposed to accountability, the schools’ cooperation, and willingness to critically evaluate its weaknesses is a key prerequisite for progress. Self-evaluations are already required of all schools under the current system, but the process is seen almost unanimously as ineffective. Every three years schools submit self-evaluation forms to the Ministry, but they are not mechanisms of QA: schools never get any feedback on the reports they send, and they are viewed rather as formal documents that are detached from practice. Exhibit III.13 presents some of the challenges principals faced while using self-assessments.

"Now we want to totally change this approach to self-assessment. It's not self-assessment for the center (NCEQE), but self-assessment for my personal development. New standards will say that the school has to have an annual action plan based on self-assessment, which means that the self-assessment process becomes an annual process."

(LEPL)

The standards will require schools to develop annual action plans based on self-assessment. An online school management platform will be created where 360-degree school evaluation data will be aggregated. Trend data will be collected on school progress which will be visible to schools as well as to the MoES and NCEQE. This process increases the transparency of the self-assessment process. The availability of the data also means that principals can target action plans based on school needs, which is more likely to lead to improved educational quality. This step empowers local education staff, moving the system closer to functional school autonomy.

Exhibit III.13. Principal perspectives on school self-assessments

Stakeholder type	Supporting quotes
Principal, rural	"I may have written something there [in the self-evaluation report], but I am not really able to follow the procedures that I put there. Some things work and some don't, and in these reports, you embellish the reality. The reality is different from what we [principals] write in the reports."
Principal, rural	"I am skeptical about the word self-evaluation. I may praise my school, and teachers may do the same, but who checks what is going on in practice?"
Principal, urban	"I have probably sent these self-evaluation forms more than six times and I have not received any feedback or acknowledgement even once. We don't know whether we're filling the form correctly or whether what we're doing is correct."

Many principals are not open about the challenges they face in school governance because they fear retribution from higher authorities. The new system of external QA (authorization) is designed to build collaborative practices, but schools lack the culture of QA that is necessary for a support-based system to yield results. Many principals see internal QA as "monitoring," that is, ensuring that teachers conduct online/offline lessons, lessons start on time, attendance is high, etc. There are quality management groups within subject departments in all schools. Although in some schools, quality management groups are seen as important in improving instruction quality, in many schools, they are mere formality. Because of close relationships between teachers, honest criticism is rare.

NCEQE is developing a cohort of certified QA professionals who will support schools in self-evaluation and in development and improvement of action plans. The two key questions remain: how can the new system of school authorization cultivate a self-critical attitude in schools and develop the culture of QA? And what supportive mechanisms are necessary to guide schools towards improvement after self-evaluation? The results of this study show that principals often struggle to understand the challenges that their school is facing and the core reasons behind students' underachievement. This finding suggests that in addition to the lack of self-critical attitude and principals' fear of retribution, principals' lack of expertise in school management is an important impediment to improving the climate and overall learning levels of students. In light of this finding, NCEQE's focus on the development and provision of outside expert support for principals is a justified strategy for supporting school improvement.

Accountability

Accountability of the school system rests on schools' acceptance of responsibility for the quality of education, student performance, and an agreement to act on that responsibility.

There are no current reliable data on the quality of individual schools and no system for keeping individual schools accountable. Principals themselves often do not have good knowledge about the quality of teaching and learning in their schools. Principals' most mentioned metrics for school quality evaluation are achievements in a student TV quiz game (Etaloni), achievements in academic olympics, UEE scores, university admission rates, the proportion of students getting government scholarships for university attendance, and classroom observations. Education experts and principals support the implementation of accountability systems, and several are excited about the prospect of having data to diagnose their own school. Principals in particular want to understand what they are doing wrong so they can improve student achievement. Principals and an education expert expressed their interest in

measuring quality of education but stated some of the challenges in measuring quality, as captured in their statements in Exhibit III.14.

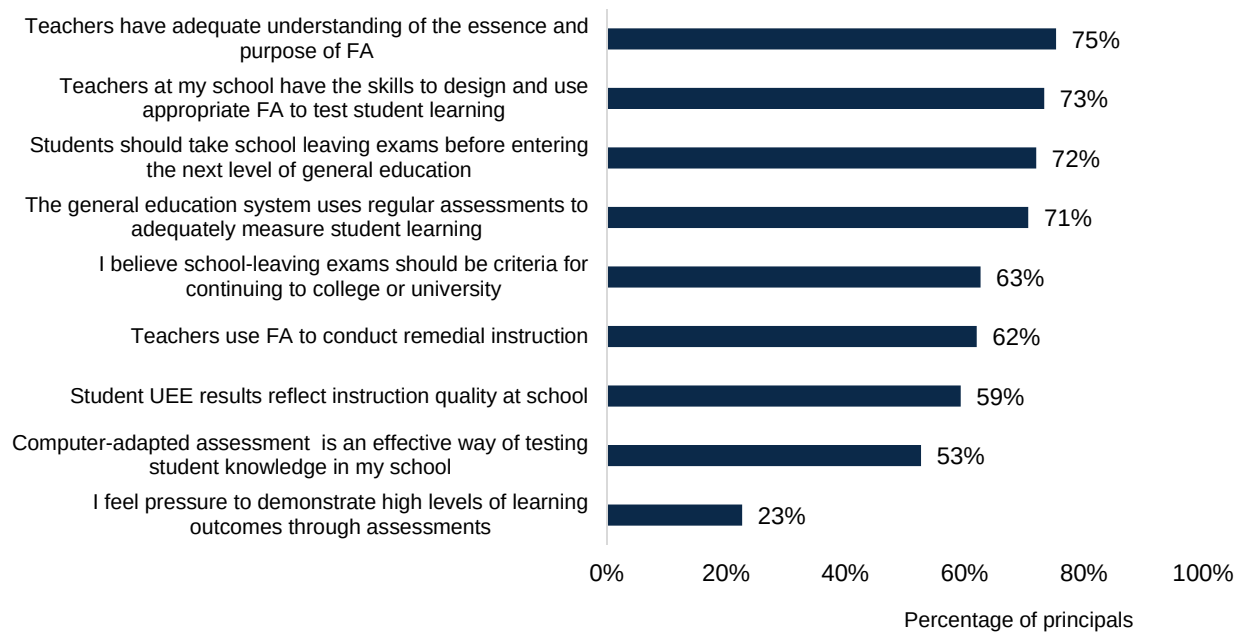
Exhibit III.14. Principal perspectives on the implementation of accountability mechanisms for schools

Stakeholder type	Supporting quotes
Education expert	"We want to measure quality, and standards are a way to do that. The government set standards for what type of schools it wants to have, and then we see where each school is in relation to these standards. This has never been done before in Georgia; no one has measured school quality. School quality assessment must also include student assessments, and this will be the case once diagnostic assessments are introduced in the system."
Principal, urban	"We should have some feedback so that we see and know what we are doing wrong. I definitely don't know how I am erring and why I don't have high achievement."
Principal, rural	For some years NAEC had testing at the end of basic education [9th grade]; we had to pay to participate, but I paid every time. I didn't regret spending on that, it wasn't much, and I was doing that every year so that my students would be more motivated and driven, so that they could get experience in testing and so that we could have information on our achievement. We received great feedback, achievement was broken down by criteria and we could see where our students struggled."

Principals perceived the benefits of assessment for their schools and teachers supported the introduction of assessments. Survey results show that principals perceived benefits from assessments in general. More than 80 percent cited (1) the introduction of FAs in each grade, (2) the school participation in national assessments in Georgian language and math, (3) the introduction of universal regular national assessments in school subjects for fourth- and sixth-grade students, and (4) the regular internal school-based assessments for each grade as having positive impacts on their school. In addition, about 82 percent of principals also noted that teachers supported these assessments.

Additional survey results show that on a six-point Liker scale, where one is strongly disagree and six is strongly agree, more than 70 percent of principals agreed (chose values equal to five or six) that teachers in their school understand the essence and purpose of FAs and have the skills to design and use them to test student learning. Most of the principals also agree that (1) students should take leaving exams before entering the next level of general education (72 percent), (2) regular assessment should be used to measure student learning adequately (71 percent), (3) school-leaving exams should be the criteria for continuing to college (63 percent), and (4) teachers should use FA to conduct remedial instruction (62 percent). Exhibit III.15.

Exhibit III.15. Perspectives on formative assessments



Source: Principal survey data

There is demand from some principals and teachers to have, at the end of each grade or level, assessments that would demonstrate students' knowledge, show gaps, and inform parents and teachers about students' needs. Such tests might also increase parents' engagement in student learning, as they will have clearer understanding of a student's underachievement and goals for improvement. One member from a MoES Agency noted that *"the project aims not only to assess students and provide scores but to provide useful information to all stakeholders so that they can use this to make informed decisions. [It will help] teachers at the classroom level decide what pedagogical interventions to plan and the principal at the school level what type of interventions to plan to improve the school's outcomes."*

The new diagnostic assessment introduced by NAEC is seen by some as an important source of information on school quality. Although there is a unanimous agreement that test data should not be used for high-stakes and accountability purposes, they are still seen as a mechanism for diagnosing and improving schools. Exhibit III.16 highlights perspectives on assessments and school quality.

Exhibit III.16. Perspectives on assessments and school quality

Stakeholders group	Quote
Principal, rural	"The only correct mechanism is the assessment of student knowledge to determine the quality of the instructional process. We do have classroom observations, but the overall achievement still is not very high."
Education expert	"Schools should have a clearer idea on where they stand in relation to standards, and student assessments will be an important component of that. These diagnostic assessments will show how students perform relative to curriculum standards and identify needs for specific interventions. Crucially, this won't be an accountability mechanism but rather a diagnostic one."
Education expert, donor	"At this stage, schools really struggle to understand whether they are reaching results. They look at "academic olympics" and whether they managed to send a student to the United States [with an exchange program], but they don't know how well their average students are doing. This information would greatly help school principals and school leadership to define priorities."
Education expert, donor	"Schools do not have any understanding of where they are in terms of teaching and learning and where they want to be in three or five years."
Education expert	"International assessments have a different function. They benchmark Georgia against other countries, but national assessments are based fully on the Georgian curriculum, and the information we receive from national assessments can be used to support school improvement if of course it is analyzed and used correctly. We will know where teachers struggle to implement the new curriculum."
Teacher, urban	"I would welcome it if there were assessments in math at the end of each level. These tests shouldn't determine whether a student progresses to the next grade, but they would allow parents to know where their children are in learning and motivate them to get more involved. If they see in test results that their child is getting behind, I think they would engage more to make sure they don't fall farther behind."

NAEC is piloting a census-based, computer-based, low-stakes national diagnostic assessment that is designed to give formative feedback to schools and support improvement in quality of education. Although the new diagnostic assessment is not a high-stakes assessment, fears persist that the results may be misused for high-stakes purposes. Principals have endured a long history of political pressure and unduly exercised accountability, which left a fear that nationwide diagnostic test results may be unfairly used for school/principal evaluation purposes. Some experts are skeptical about the tacit assumption behind the new assessment policy that if schools are given diagnostic test results, they will realize their shortcomings and plan how to increase their education quality. Given the history of the education system in Georgia, school leaders might become worried about the punishment from MoES for bad test results, and if failing to show high achievement, might act in ways detrimental to students. See Exhibit III.17.

Exhibit III.17. Stakeholder concerns related to student testing

Stakeholder Group	Quote
Education Expert	"The experience shows that in other countries where they tried this, it ended with some politician asking for a ranking of all schools, and then they start rewarding and punishing schools. The illusion that we can schools' test results and then someone can analyze them rationally to plan how to improve them is just not supported by evidence. When you show people information, they don't necessarily look at it the way NAEC wants them to. Their reaction does not have to be this at all. Bad test results may signal that their career is in danger, not that their students need better education. If their career is more important to them than children's education, they will start caring for their career, which is not always the same as caring for education quality."
Education Expert	"When a school sees that it had worse results on some standardized scale and cannot find an answer as to why, they may decide to improve the results through means that are not necessarily beneficial to students. For example, they may expel students, which they have done in the past. We experienced this in 2010 when SGE was introduced. The Ministry started punishing schools, and principals got scared, ERCs got scared, and they decided to make sure that underperforming students did not take the test. The rate of students who dropped out before 12th grade jumped in those years. They just expelled students from school instead of teaching them better."
MoES Technical Agency	"We know how politicized our education system is, so of course we see those risks and from the beginning tried to design the project to mitigate them. We prefer that the MoES see only aggregated data at the system level [so they are aware of] what problems exist, where students struggle, where the gaps are..."
Principal, urban	"The first year I was a principal, there was a case. We were conducting internal school exams back then together with ERC representatives, and students had very bad results. So, there was a lot of pressure on me from the community, which said the principals must not be performing well. I had been working in the school for only a year or year and a half and so that certainly wasn't justified."

There is a hope that a small number of active schools and principals, who are excited about the new assessment, will voluntarily use it formatively to improve their schools (though mandatory tasks might supersede their ability to try the assessments). The new diagnostic assessment is low stakes and use of assessment results for formative improvement is voluntary (though having students take the assessments is mandatory), so it reduces the perceived risk to the principal giving them incentive to "try it out." The MoES hopes that if a few principals begin using the assessments, it will motivate others to implement it at their schools. Ambiguities remain about the incentives that will make the new assessments and the authorization process into a mechanism of school accountability and improvement. MoES will have to overcome several technical and cultural/behavior change barriers to implement a school QA system successfully.

Interviews with representatives throughout the MoES, including principals and teachers, also revealed that they are concerned that the QA system will be too focused on student performance. It is important to have a more holistic system for QA, including indicators of school culture, collaboration, and local governance; however, many stakeholders do not have information on how the MoES will collect these elements.

With the abolishment of the School Graduation Exam (SGE), there is no national student outcome data linked to the general education curriculum, nor is it clear that students have mastered the skills necessary for a diploma upon graduation from school. Data-

driven decision making is a characteristic of good to excellent school systems and a critical piece of successful WSIA. Student outcome data reveal gaps in student outcomes, inform instructional and curricular decisions, and help policymakers direct resources to those schools that need assistance. Moreover, since the elimination of the SGE, students graduate from school without clearly demonstrating that they have mastered the curriculum, and teachers, parents, and school leaders have little information on curricular effectiveness.

Formative Assessments

The elimination of student graduation examinations shifted the focus of measuring student outcomes to the classroom level, a key component of the NSM and the WSIA. The current

educational strategy of MoES includes increasing efforts to integrate FAs in instruction and increase teachers' competence in their use. A variety of tools for FAs have been developed under the USAID-funded G-PriEd program, which aimed to develop primary school teachers' skills in data-driven instruction. Despite multiple donor-funded interventions aimed at increasing the use of FAs in the classroom, progress in this direction has been limited. Teachers see the role of assessments largely as issuing summative judgements about students' knowledge and perceive FAs as narrative feedback (as opposed to a score), but they know little about the utility of assessments for informing further instruction (Li et al. 2019; Gorgodze and Chakhaia 2021).

Teachers perceived that the goal of assessments is to motivate students to learn. Very few teachers think of assessments as a tool for instruction. Because teachers viewed assessments as a process that is independent from learning, they complained about formative assessments and comprehensive tasks taking away valuable instruction time. A prominent issue in the use of formative assessments was teachers' limited ability to use assessments to guide and improve instruction and identify student gaps in knowledge. Many teachers reported being overwhelmed by the obligation of using formative assessments in the classroom because they needed many hours to prepare the assessment, administer it in class,

"Abolishment of SGE means that a student who does not have relevant competencies still receives a school diploma."

(Teacher, Tbilisi)

"Some students do nothing in school and then still become university students. In our school, we sometimes have to laugh because some don't even know the multiplication table, and still they graduate and become university students."

(Principal, rural)

"Based on the national curriculum, we [schools] have the right to administer internal exams in higher grades. So, when we create our school curriculum, we indicate that from 7th to 11th grades, we administer school exams [...] We agreed on the exam format internally. [...] We consider the student's grades also; we add the exam result to the grades from the two semesters, and the average grade is the student's final grade for the class. This is very good, because it increases students' motivation. We change the test format too, and include items that are like the UEE test items, which helps them to prepare for the test."

(Principal, rural)

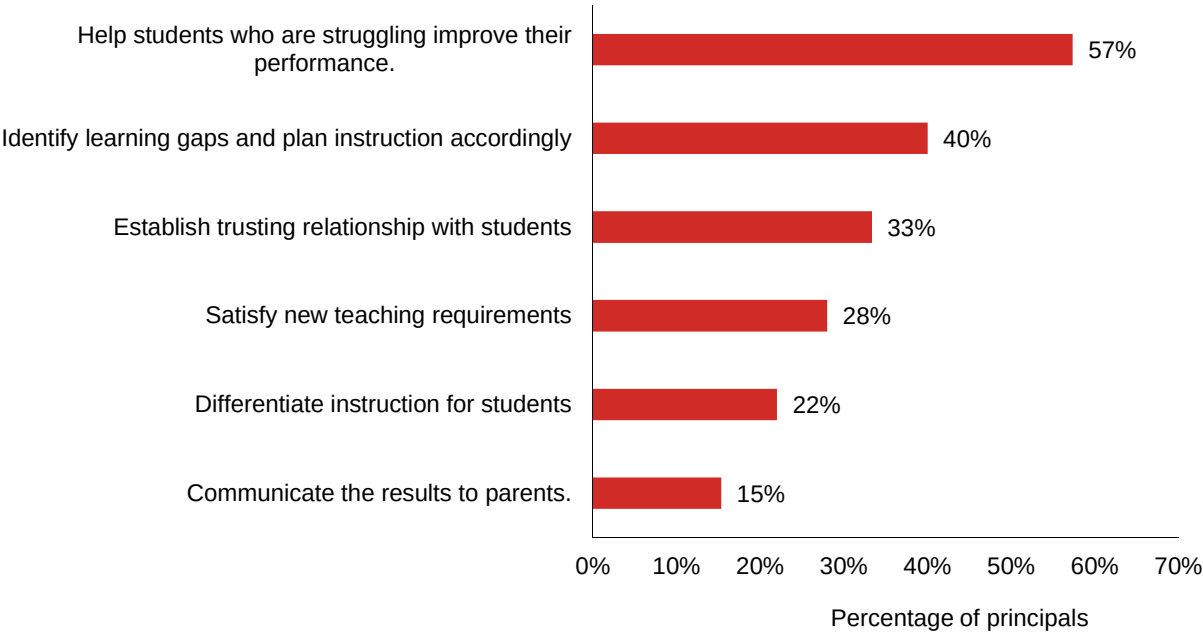
analyze students' responses, and provide individual feedback. Based on research findings, pre- and in-service teacher training should dedicate more time to time-efficient use of formative assessments in the classroom. Feedback from university staff also suggests that the time dedicated to formative assessments in pre-service programs is insufficient and cannot adequately prepare teachers for their use in the classroom. Because many teachers don't see FAs as part of the instructional process and struggle to use them effectively, FAs are often viewed as an imposed burden which impedes rather than supports the learning process.

Another challenge to greater use of formative assessments is parents' expectations. Parents want to see grades so they can understand how their child is performing in school compared to other students and are often unsatisfied with formative feedback from teachers. The findings suggest that additional efforts are needed to show parents the benefits of formative assessments so that they can become teachers' allies in the use of formative assessments to improve learning. Staff in the MoES need to focus on understanding the deviations that exist between the declared objectives of the National Curriculum and real needs of the students, provide more training on the use of FA in classrooms, and support teachers through peer or learning circles and coaches to implement and use FA.

Measuring student learning is a critical part of systems thinking and the WSIA. Despite the debates about the efficacy of national and formative student assessments, the MoES is currently supporting new FAs, which are anticipated for the 2021-2022 school year. NAEC, with the support of the World Bank, is developing census-based standardized assessments for fourth- and sixth-grade students in Georgian Language and mathematics. The test is designed to provide useful information on the learning needs of individual students, classrooms, and schools (Gorgodze 2021).

About 58 percent of principals who replied to the online survey indicated that half to 95 percent of teachers in their schools implement FAs. About half of the principals (57 percent) reported that teachers use FAs to help students who are struggling improve their performance; about 40 percent of principals reported that teachers use FAs to identify learning gaps and plan instruction; accordingly, and a third of principals (33 percent) stated that teachers use FAs to establish a trusting relationship with students. Forty-two principals (28 percent) reported that teachers use FAs to satisfy new teaching requirements. Exhibit III.18 summarizes these findings.

Exhibit III.18 Principals reported common use that teachers make of FA



Source: Principal survey data

The UEE negatively affected teaching in the classroom and furthermore moved the instructional process from schools to private tutors. Tutoring for UEE has become an important source of income for teachers, but it leaves limited time for them to plan classes and even engage in professional development. NGO participants, education experts, and even MoES staff noted that the focus on UEE (rather than school graduation) encourages a different kind of corruption. They noted that tutoring is increasingly becoming a teacher’s main source of income, which leads to a shift in their priorities away from the school and classroom. A member from MOES AGENCY noted that *"the teachers try to save energy for the evening, when they have private tutoring lessons, and the student engages more in the teaching with the tutor. So, the teaching process in the classroom becomes more social in nature, which should be a part of instruction also, but it comes with less focus on academic instruction."*

Teachers complain about the lack of motivation among students and the diminished role of schools due to tutoring. Students increasingly expect to learn the material they need for exams from private tutors and therefore, pay little attention in class. Teachers recognize that high-stakes exams are the reason for increased tutoring in the country, but at the same time, some teachers see high-stakes school graduation exams as a way of increasing schools’ role and student motivation to pay attention in the classroom. Notably, high-stakes school graduation exams were introduced specifically for that purpose but ultimately, the exams also increased the practice of tutoring as students prepared for school graduation exams using private tutors instead of relying on schools.

High-stakes testing

Teaching and learning have been significantly influenced by the test-based university admissions process and drive teachers and students to focus on the tested subjects. Teachers across Georgia note that students do not feel motivated to learn subjects not tested on the UEE. In higher grades, students shift their attention to the UEE test, sometimes at the cost of developing higher-order skills. Teachers, principals, and education experts see the UEE as increasingly detached from the ongoing reforms in the general education system. As the general education curriculum evolved to focus on higher-order skills, UEE has not kept up with it, which leaves teachers in a problematic situation of having to teach the curriculum and at the same time prepare students for UEE. Although UEE could be changed to reflect higher-order skills, schools' inability to develop these skills effectively in students makes such a high-stakes test untenable. Experts from MOES agency noted that even if NAEC created a new, more-aligned assessment, many students would still not be able to pass it, since they are not acquiring the knowledge through the general education system. Principal focus groups have consistently noted that the UEE needs to align better to vocational and general education. One urban principal noted that *"the system should be better coordinated, and general education should be aligned with vocational and higher education. On the one hand, I always tell my geography teachers that students don't need to memorize the height of Shkhara mountain, but any student who wants to continue studying at a university will have to memorize the height of Shkhara."*

UEE has increased access to higher education for those who can afford to pay for tutoring, but it has placed students from low-income households at a disadvantage. Families pay large sums for private tutoring in higher grades to ensure that their children pass the UEE and get into a university. As a result, attendance in secondary school drops, and their interest in learning (beyond UEE preparation) decreases. According to principals and teachers, some schools try to support their students in preparing for university entrance exams, as few succeed without tutoring.

"When you reach higher grades, you start thinking about UEEs and the subjects that you will take, and then other subjects just aren't that interesting to you any more, because they are not helping you plan your future."

(Student, rural)

"It starts from the 11th grade: students focus on the subjects that they have to pass on UEE, and the subjects that are not tested on UEE are given much less attention. Grades stop mattering to them. Students study well for 10 years, and then their grades start dropping."

(Teacher, Tbilisi)

Exhibit III.19. Increased shift to tutoring

Stakeholder	Quotes
Principal, rural	"We all know this very well, and it's time to face the truth: a very high percentage of students who cannot afford tutoring do not pass UEEs and cannot enter universities. We must finally acknowledge this to deal with the problem and take steps towards improving the situation. If everything's well in schools, and we have all these teachers with high statuses, why should students and parents be spending this much money to access postsecondary education? There are extremely few cases when students pass UEE without tutoring."
Student, urban	"If schools were preparing us well for the exams, students wouldn't need tutoring to get into a university."
NGO and Education Expert	"If schools reclaim their function in the education system, these funds [money spent on private tutoring] will be directed to different purposes. On the one hand, we are saying that the education system lacks funding, but at the same time, families' out-of-pocket payments on education are enormous. Changing the culture of tutoring will create large savings in families and open up new opportunities."

4. Coalitions for Change

The systems literature posits that the ability to solve complex problems must be distributed among a multiplicity of stakeholders. Finding solutions to seemingly intractable problems requires collaboration and the negotiation of outcomes rather than a technocratic approach. Change coalitions play an important role in the reform process, and without creating readiness among a mass of stakeholders to contribute and lead change, systems reform can fail.

Collaboration and engagement among stakeholders at all levels is a critical component of WSIA and education systems that rank in the great-to-excellent category. Based on the data analyzed for this diagnostic, coalitions for change in Georgia rank in the poor-to-fair category (1.7 on a 4-point scale). Elements of this criteria are present in the Georgian education system, including (1) the establishment of multiple technical agencies, (2) movement towards school autonomy, (3) engagement of ERCs in education management, and (4) engagement of stakeholder groups in the design and development of the new education strategy. However, it is an area that must be strengthened over time. The following section highlights the strengths and weaknesses of the Georgian coalitions for change. It begins with a broad presentation of the status of the coalitions, then presents specific findings related to school collaboration, school culture, parental engagement, and the role of the BoT.

Stakeholders believe that ambitious goals can be achieved in the system if the MoES becomes more active at rallying large-scale support and coordinating the activities of multiple parties. Stakeholders recognize that the MoES, the cornerstone of education, must coordinate the initiation of education stakeholders. Study participants felt that the MoES should establish regular coordination meetings (which rarely occur in the current system) with all active donors, technical agencies, and midline education managers (including ERC staff and principals). The regular meetings would help eliminate the existing redundancy of activities and keep initiatives and programs in synergy.

The systems diagnostic showed that technical agencies and departments within the MoES continue to be siloed, which reduces the effectiveness of education reform. Participants in this study consistently mentioned the lack of coordination among all actors in the general education system. They noted that the decoupled system leads to inefficiencies in the use of resources, redundancy in program design and implementation, and confusion about the roles and responsibilities of certain actors. Exhibit

III.20 highlights some of the institutional barriers and examples of how the current system does not effectively use their coalitions for change.

Exhibit III.20. Examples of coordination challenges

Issue	Stakeholder with Mandate	Stakeholder often implementing	Quotes
Design and implementation of the curriculum	Curriculum department	TPDC conducts training independently Textbook department develops textbooks NAEC develops assessments The agencies do not coordinate with one another in the process	"I see that the curriculum implementation is ongoing, but I cannot see supportive systems right now. This is a tiny department that is running the process of new school model and the process, and the concept is less connected with other institutions, agencies, not in terms of cooperation to implement something, but in terms of sharing concepts and ideas about how the system should go further." (Education expert) "The problem is that the people who create the curriculum don't have the mechanisms for its implementation: textbooks, coaches, teacher training, or assessments. The curriculum development department is not directly involved in textbook development anymore. They create criteria at the outset but do not engage in development. Assessments are also decoupled from the curriculum development process. Assessments are created based on the curriculum but not on the needs of the curriculum development department. The frequency and research focus may not be aligned with what the curriculum department needs to learn." (Education expert)
Teacher professional development	TPDC	Both MoES and TPDC	Teacher professional development currently involves three separate efforts by TPDC, NAEC, and MoES. TPDC is providing trainings according to its own list while NSM department of MoES is conducting coaching for the implementation of the new curriculum. NAEC is conducting trainings for teachers on the use of data from the new national assessments. The abundance of uncoordinated trainings leads to confusion and the overburdening of teachers.

Donors' involvement has brought long-term vision and capacity building into the system, but stronger collaborations are needed between donors for more sustained impact. Donors have been instrumental in moving the system towards long-term planning and strategy. They have also brought important financial and human resources and capacity building (especially in project management, evidence-based planning, monitoring, and evaluation). Examples of the most successful and impactful educational interventions highlighted by principals and teachers are consistently those implemented by donor-led programs. Many educational resources, as well as teacher and principal training materials, have been created within donor-led initiatives and have contributed to the development of the system. MoES can play a more active role in coordinating the multiple international actors engaged in Georgia's education system to ensure that initiatives build on each other and contribute to the achievement of the shared long-term vision.

The Parliament does not effectively fulfill its role of influencing education policy and overseeing quality in implementation, but communication between the Parliament and MoES has improved significantly in recent years. Improved collaboration is attributed to greater openness on the part of the ministry as well as greater interest from the Parliament. Still, challenges remain because the Parliament oversees education policy through the budget and thus does not have a key role in reviewing MoES interventions. In addition, the Parliament lacks the capacity to identify correctly the most important issues in education policy, which require greater attention. The Parliament also lacks effective instruments to evaluate policy effectiveness and support evidence-based policymaking.

“In addition to financial resources, donors’ involvement includes building local capacity and investing in human capacity that benefits the education system. Local actors also benefit from donors’ involvement by replicating best practices in monitoring education activities.”

[Donor]

School culture and school-based collaboration

Teachers value the collaborative culture among school staff. In rural and small schools, relationships between students and teachers are personal and friendly, as if in a “family.” Teachers expressed positive experiences from the collaboration and support of their peers. *“When faced with a problem, we support each other: young teachers get advice from older teachers. We have very friendly relationships among teachers, students, and parents.” (Teacher, rural).* In large and multiethnic schools, there are more challenges related to student conflicts, but the collaborative spirit is also present. *“What I value most in our culture is the collaborative environment among teachers. I think it is the most important part of school culture.” (Principal, urban).* Data show that one third of principals surveyed (36 percent) agreed on the need to improve the relationship among staff at their school. About 34 percent of principals agreed on the need to improve relationships among students and staff at their school.

Teachers have also created networks to share good practices and request support using technology. They noted that these online environments have given them new opportunities to exchange ideas, materials, and learning strategies. They indicated that online collaboration may be an innovative way to create learning communities in the future.

The general education system encourages curricular adaptation in the NSM, which is a critical part of WSIA. Some principals and teachers greatly appreciate the flexibility that the third-wave curriculum introduced into the schools. They support the values and ideas that underlie the third wave curriculum and see improvements in student outcomes because of the new curriculum. This statement from an urban principal highlights the positive themes that came out during focus groups and interviews. The principal noted, *“The previous curricula were more focused on declarative knowledge, and the focus was on individual lessons as opposed to long-term learning goals. The new curriculum introduced important changes in this regard. These comprehensive tasks that guide instruction are oriented to long-term learning objectives, and it’s no longer essential to cover specific material in a particular class. Teachers can focus on relating the knowledge to real-life uses and can adapt their teaching speed and content as necessary.”*

Exhibit III.21. Curriculum Adaptation Case study

Adapting the curriculum to school and classroom realities

Many teachers in the schools that had been a part of the New School Model speak about their positive experiences in adapting the curriculum to their local context. Rather than speak about school curricula, teachers focus on the possibilities to adapt teaching to individual classrooms and students. Teachers value the ability to swap and rearrange the material to adapt to the reading levels and needs of students, the focus on long-term learning objectives as opposed to short-term lesson goals, and the freedom to prioritize student learning as opposed to covering the material in full. Teachers see positive results in student motivation as students engage in more constructivist modes of instruction and become collaborators in the construction of knowledge as opposed to passive recipients of information from teachers.

"Previously as a teacher you felt as if you had a plan in the classroom, and you had to complete it no matter what. You had to cover the program in full. Some would learn, some would not, and that was common practice. But now this approach has changed, and I really welcome it." (Teacher, urban)

"I can shift topics around without even looking what follows what in the curriculum, and that ability is very good. This makes it easier to adjust teaching to a classroom. I teach Georgian in primary grades, and I can switch texts if I think that I will not reach my learning goals with the current text. This gives so much freedom to a teacher to adjust teaching to students' needs." (Teacher, rural)

"I really like this new curriculum as compared to the old one. It is oriented to students, their needs, and their abilities. I build the curriculum and lesson plans based on that. I remember previous years, when all teachers cared about was covering the material, so there was no time to let students arrive at conclusions on their own. We would give them the information straight away. Now I am able to motivate students more by engaging them in the process." (Teacher, urban)

Schools do not have the tools to identify the challenges students might face, including out-of-school factors that might affect students' performance. They also lack a collaborative relationship with parents. Schools do not have whole-child approaches. They lack the necessary services and support to understand and address out-of-school factors that might be affecting student performance. *The school does not have the readiness to identify social factors that affect student performance and respond to these challenges. The school does not have that caring component, and that is very important.* (Education expert.) In addition, the dynamic between principals, teachers, and parents seeking student progress is not collaborative. An education expert noted that when a school calls a parent to discuss student performance, school authorities scold the parent: *"Your child is behind in learning," "Your child is breaking classroom rules." It's all about scolding and not with the attitude of "Your child is behind, and let's work together to help the student improve. Let's plan together what we need to do." It's a completely different attitude that you never see, the calls are all with the tone of reproaches and reprimands. School is not an advocate for the child.* (Education expert.)

Many schools don't have school psychologists, and teachers are not equipped to deal with the challenges of adolescent students. Some teachers struggle to keep order in the classroom, because methods to manage children's behavior are outdated. In schools with no psychologists, teachers are left with the burden to manage children's behavior on top of providing instruction. *"In grades 7 through 9, it's very problematic because we don't have school psychologists, and management of children's behavior is left up to teachers. Teachers must be everything because there are no professionals in the school to support them. This generation of kids needs different approaches. They obey neither teachers nor their parents, and it's very difficult."* (Teacher, rural.) *"To improve education in grades 7 through 9, there needs to be psychologist in the school and more psychological support for students."* (Teacher,

urban.) Students and teachers noted that having a psychologist in schools would benefit the entire community. *“A psychologist would be good not only for students but for teachers, too. If we have questions how to approach a specific child, we should have some support available in the school. Maybe we think we became tolerant and inclusive but in specific circumstances we still may have biases and may be treating some students unfairly.”* (Teacher, urban.) *“If we have situations in the classroom where students become confrontational, teachers try to deal with it on their own, but if they can’t, they call the school officer and speak to the student in a different tone.”* (Student, rural.)

“Our school was always open, and students could come and join lessons from the school's computer lab.” (Principal, rural)

“Because online classes were so short, teachers would give us additional classes. We would agree on a time and instead of two we would have three or four classes a week.”

(Student, rural)

Effects of COVID-19 pandemic on collaborative efforts in schools

COVID drove schools to understand students' out-of-school challenges and come up with collaborative efforts to keep students engaged in learning. The COVID pandemic was especially challenging in rural areas, where poverty rates are higher and access to internet technology is scarcer. Teachers and principals of rural schools showed remarkable examples of collaboration and support as they helped their students remain engaged in learning. Schools made their computer rooms available to students during distance teaching to help them stay engaged even in the period of total lockdown. Some teachers taught individual students through phone, others personally visited students to give them materials and take their homework. Some teachers gave money out of their own pockets to students to cover their internet costs. Some teachers conducted additional classes because 20-minute online classes were not enough. In families with multiple children, students could not join classes at the same time, so some schools readjusted their schedules and taught in 3 or 4 shifts to allow all students to participate.

Parental Engagement

There are few collaborative efforts or opportunities for parents to influence schools and the education system. The MoES does not consider parents to be an interest group whose opinions should be considered and engaged in consultative and implementation processes. Engagement of parents in the discussions of school reforms tends to be minimal. *“Decisions in general education are made unilaterally, and parents are engaged only when the decision had already been made and policymakers were seeking validation and support.”* (Education stakeholder.) This lack of engagement from parents also held for schools implementing the NSM, despite its focus on community engagement. *“When the NSM was starting, Parents Association of Georgia was newly established, and obviously no one approached the association members. The members themselves took the initiative to reach out and ask what the reform entailed and what role would parents have in it.”* (Education stakeholder.)

School boards can be effective mechanisms to collaborate for change in schools and have the legislative foundation to exercise that power, but they are not able to fulfill that role. Stakeholders noted that the level of engagement from school boards and parents often depends on principals' personal qualities and their willingness to delegate power. Most principals do not delegate any responsibilities to school boards and largely fulfill school boards' duties themselves. Principals often do not trust that school board members have sufficient capacity to support management, so they advocate for policies to improve

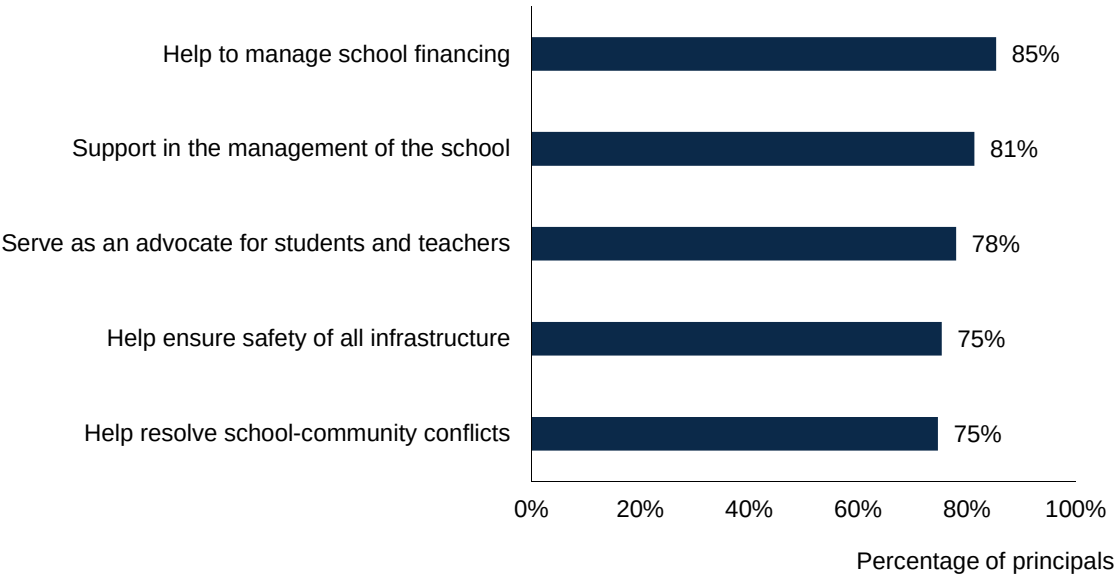
quality of education. Ultimately, because principals are held accountable for the decisions of school boards, principals may be wary to delegate decision making.

Principals also noted that more participation from the BoT could improve school management. *“The BoT should demand more of the school management, so that principals have monitors and collaborators on site with whom they can improve how schools are managed. In my case, I can tell you that the school board plays a very important role in school management. On issues that should be discussed at BoT meetings, I am very careful and make sure I come prepared.”* (Principal, rural.) Exhibit III.22 shows that most of the principals agree with this collaborative view. The results show that 85 percent reported that their BoT is important in helping to manage school financing. About 81 percent of principals reported that their BoT is important in supporting the management of the school. Eighty-six principals (78 percent) stated that their BoT is important in serving as an advocate for students and teachers. Finally, three quarters of the surveyed principals (75 percent) reported that their BoT is important in helping to ensure safety of all infrastructure and to resolve school community conflicts.

“At first, school boards thought they should fight the principal on everything. Then they thought they should leave everything up to the principal. But in truth, school boards are not accountable for anything: it’s still the principal who will be held to account. This is the fate of poor principals.”

(Principal, capital)

Exhibit III.22. Principal-reported importance of the Board of Trustees for activities in schools



Source: Principal survey data

Lack of transparency in the selection of members of the BoT discourages parents from collaborating with schools. Stakeholders perceived that principals choose mostly loyal and satisfied parents and teachers to participate in elections for the BoT. *“They usually directly tell satisfied and loyal parents to take part in the elections. There are all kinds of parents in the school who are not satisfied, who have questions, who have critical opinions. But as a rule, they are not let onto school boards—the management will do everything it can to discourage such parents from participating. And to be honest, as*

a rule these parents are themselves reluctant to engage, because they should see some value in it, right? Perhaps their child had improved somewhat, but they don't see that. The Ministry just announces elections, but they don't care whether these elections are actually helping schools" (NGO). Critical parents may be passively discouraged from participating (not sharing information about school board elections, making participation difficult, etc.). In some cases, the news about the election of school boards is not sufficiently spread, and community engagement in elections is very low.

Teachers and principals struggle to engage parents in instruction and get them to take responsibility for their child's performance.

Teachers reported that communication with parents is the most difficult part of their job. Although parents are somewhat engaged in primary grades, they often become disengaged in higher grades, where their interest revolves primarily around students' grades and causes disagreements with teachers. As noted earlier in the report, the lack of a collaborative relationship between school authorities and parents is another factor that may prevent further engagement. During COVID, the MoES added an E-journal whose purpose was to engage parents in overseeing student performance.

"I think the biggest problem is grades. They create discomfort and tension among parents, teachers, students, and school management. In higher grades, all parents care about are grades and not about education quality. I would eliminate these grades to improve relationships."

(Teacher, urban)

5. Vision and Leadership

Ndaruhutse et al. (2019), Mourshed et al. (2010), and others have noted that vision and leadership are among the most important components of education systems. When such systems have strong leaders who can rally people around a vision, countries move from having fair education systems to having great ones. Although the Georgian education system has made progress in establishing a shared vision through the new General Education Law, it remains in the fair-to-good category (2.1 on a 4-point scale) based on the criterion used for this diagnostic.

The presence of a unified and shared vision in education is widely seen by stakeholders as a foundation for sustained progress. In previous years, the lack of such vision impeded coherent development of schools, principals, and teachers, but the system is moving in the right direction. The system did not have a defined vision of what a good schools should look like and what effective education management and leadership represented. In 2021, an important step was made towards the development of a shared vision in the system with the elaboration of the new 10-year education strategy. The development of the strategy engaged international donors, education experts, and multiple stakeholders. These groups met with the MoES to discuss the shortcomings of the previous education strategies and designed a new document to encapsulate the long-term vision for Georgian General Education. This was the first time such collaboration took place. The creation of the 10-year strategy was accompanied by the development of a range of concept documents designed to guide the implementation of specific policy directions. The development of these concepts was also a participatory process that engaged a wide range of governmental and nongovernmental actors. The MoES understands how various components of the system work together, and their willingness to engage multiple stakeholders in the strategy for designing the process brings together a shared vision and helps put critical pieces in place to move towards a whole-school improvement model. However, there are concerns that the current education strategy is not clear about stakeholders' roles and responsibilities in the implementation process. As a result, each agency and

the curriculum department try to adapt the curriculum to their own needs as a way of proving its prevalence in the system.

Example of collaboration across the education system.

The NCEQE is working on the development of new standards and indicators to bring schools up to minimum level of quality and guide them towards improvement. They are working on developing concept papers related to TPDS, school leadership, and the role of ERCs in decentralized education. A MoES staff member noted that a large group of stakeholders is involved in the development of both the quality standards and the concept documents for teachers. The process is also being supported by external partners. A donor noted:

“Before this strategy, there were no strategic objectives, no direction. The system’s development was completely dependent on people in power. Now we have a 10-year strategy, and the process of its development was like the strategic planning process in European countries. There was a concept first based on international trends and our local experience, then there was feedback from experts, ministry representatives, and nongovernmental organizations. There were focus group discussions with a wide range of stakeholders.”

Although the approval of a 10-year strategy document is a sign of progress, maintaining the shared vision in a coherent manner over the next 10 years is the biggest challenge faced by education stakeholders, including the MoES. McAleavy and Elwick (2017) suggest that successful education systems always work to develop future leaders that can support the sustainability and continuity of reform efforts. Establishing this continuity over time is the key challenge for the MoES as they move into the new 10-year strategy.

The Georgian education system has seen numerous reforms and initiatives that were abandoned because of shifts in leadership. Frequent changes in MoES leadership reinforce the focus on short-term, popular initiatives that show quick results rather than long-term strategies. One education expert noted, *“There’s no consistency in the system, everything is tied to specific individuals. The change of the Minister can derail and turn upside down everything that was being implemented under the previous Minister. A new Minister can bring new people who have different ideas and opinions, and all the resources and effort that were invested in specific initiatives can be just lost.”* Other participants in the interview and focus group process also noted that it is generally perceived negatively if an incoming administration continues the previous government’s policies. Even members of Parliament discussed how policymaking in Georgia is often tied to elections, which affects the ability of the MoES to pursue long-term policies. Although this challenge is not uncommon in other countries as well, it continues to be a particularly difficult one in Georgia.

The frequent change in leadership also means that staff who understand the reforms and initiatives also leave. Turnover leads to “brain drain” in the MoES as new leadership must invest large amounts of time to learn about the system. Education experts explained that they often spend time educating new staff, and when they leave, the process starts again.

This diagnostic identifies several challenges that the MoES and education stakeholders will have to overcome in their quest to become a great education system. Exhibit III.23 highlights these key institutional challenges.

Exhibit III.23. Examples of institutional challenges related to vision and leadership

Key institutional challenge	Supporting quotes
The need for stronger M&E and oversight mechanisms to measure and show progress, which is lacking in the current system.	“There are two main problems with ensuring accountability in the implementation of the strategy. One is that there should be some consequences if the strategy is not implemented, and the goals are not achieved... there are no mechanisms for that [right now]. The second is that the Ministry has very scarce resources for M&E. These resources make it impossible to evaluate the effectiveness of an initiative, if it reached the goals, and what were the reasons. These mechanisms need to be strengthened. The EU is providing support for that, and it is crucial for the system’s development.” (MoES)
Keeping the shared vision alive and not allowing the strategy to become “another document on a shelf,” which has happened with other strategies and initiatives.	“Substantial work will have to be done so that this strategy does not become a “document on the shelf” and actually informs decisions in the future. This is one of the primary challenges. There are some documents that have so much engagement from the broader society that its signing is equivalent to taking the responsibility of implementation and being accountable to them.” (MoES) “Programs and initiatives are given a very short time to demonstrate results and gain people’s favor. It’s not enough time for the program to be adequately rolled out, evaluated, and adapted as necessary.” (Education expert) “There are some systemic interventions in various directions, but there’s no conceptual understanding of where we start and what we do exactly. We need to get where we want to go. How should processes and actors align to result in the desired outcome. This structure and approach to planning is still not present in the Georgian education system, and that is one of the biggest challenges.” (Education expert)

Staying the course on the new education strategy: Contributions of the new school model (NSM)

The NSM is being scaled to schools around Georgia. MoES officials, NSM staff, and education experts believe that several NSM practices are already institutionalized into teaching practice, which may help the MoES maintain more stability in the reform process over the next 10 years. One MoES member notes, “*I don’t think it’s likely that such drastic changes will happen in Georgia to bring a conceptual change to the new school model. That is, it’s unlikely that new leadership will claim that the Soviet-style education was the right way to teach. The 10-year strategy of course does give some confidence and stability, as well as obligations taken on by different donors.*”

6. Evidence-Informed Policy and Decision Making

A data-driven decision-making system is critical to developing and implementing effective education policies (Ndarhatse et al. 2019). Although there is no linear relationship between education inputs and future outcomes, it is important to start with an evidence base to understand what works and what does

not (Ndarhatse et al. 2019). Georgia's education system has made significant progress in the past two decades in improving their data systems. The technical agencies collect data on a regular basis, they keep up-to-date databases where just-in-time data can be extracted, they have accumulated substantial expertise and experience in data management, and they have provided reliable support to MoES in digitizing various components of the education system.

Based on the contribution analysis conducted for this system diagnostic, Georgia's ability to develop and use evidence to inform policy and decision making is ranked in the fair-to-good category (2.3 of a possible 4) based on our adapted framework that utilizes the Mourshed (2010) criterion. The following findings detail the status of this systems accelerator based on data collected through our interviews and focus groups with principals, teachers, members of the BoT, students, government officials, and experts, as well as data collected through surveys and administrative data.

The technical agencies, including EMIS, NAEC, TPDC, and NCEQE, have established themselves as competent and reliable centers. A substantial amount of data and research accumulated within the organizations that could inform policy and intervention development. Education data analytics requires specialists, and education stakeholders believe that Georgia has the technical specialists and education experts to design, produce, and use data. The World Bank is currently working with staff in EMIS to strengthen their ability to develop and use data analytics so that the technical agency can begin to translate their data into concrete findings that provide recommendations to policymakers. At a local level, school staff, including principals, use data to inform administrative processes. About 95 percent of principals who replied to the online survey suggested that schools have the resources to provide inputs to the EMIS and use the information generated through the agency. Moreover, 97 percent of principals agreed that their schools receive valuable information through EMIS systems for decision making.

Despite the resources described above, the challenges facing the Georgian education system are the lack of a data-driven culture and the lack of experience using data and research to understand what is happening across the education system, connecting data from various agencies, and then condensing those findings into effective policies and interventions. Exhibit III.24 highlights some of the challenges that stakeholders identified across the system as preventing the adoption of decision making that is more data driven.

"The use of data in general education is at a purely practical and administrative level. It was always data that you needed urgently for some administrative processes, but there was very little long-term planning based on data analysis."

(Education expert)

There is a small community of researchers and specialized experts who could support policymakers in the design and evaluation of initiatives. Education experts and MoES staff acknowledge that there are strong researchers in Georgia, but because their work is often not highlighted in public settings, they can be difficult to locate. Several interviewees noted that *"there are no education conferences, events, or academic publications in Georgia to highlight research that people are conducting."* The lack of visibility related to new research makes it difficult for policymakers to find research when they need it and for researchers and practitioners to share their knowledge with policymakers. Even then, their format (such as long reports) makes it difficult to digest quickly and apply to current problems. There is a documented need for easily digestible infographics and briefs that synthesize data quickly and show policymakers how to apply them to system challenges.

Exhibit III.24. Institutional challenges to data use

Finding	Supporting quotes
Data are collected by various agencies, but staff throughout the education system do not know how to use them to make decisions. There is a lack of capacity to synthesize and apply data in a formative manner.	"One of the objectives of National assessments is to understand how we are progressing in terms of the implementation of the national curriculum. But I need to confess that when I was working at NAEC, I did not quite understand how we could help the national curriculum team with our data with our reports that we were producing and we invested a lot of time and effort in producing those reports, but they were not very helpful in terms of understanding what is it that we need to improve or change in national curriculum implementation." (Education expert)
Policy decisions are often dictated by current problems rather than research or historical evidence and lessons learned. Use of data (administrative or research) is ceremonial and often used to justify a policy decision already made.	"Many initiatives are dictated by current problems and consider less the evidence of what has worked and what has not in previous years." (Donor) "Research often has a ceremonial characteristic in the Georgian education system to demonstrate to donors and international partners that the system is evidence based." (Education expert)
The MoES lacks a culture of evaluation. Initiatives start and end without warning, and evaluations are not conducted on these initiatives to determine "what worked."	"A huge number of resources have been directed towards teacher development, and numerous projects have been implemented in this area, but to this day, no one has measured the impact of these initiatives, the extent to which teachers have transferred their knowledge from trainings to the classroom, and to what extent have they used this knowledge to plan and conduct lessons differently. Enormous resources have been spent, and we still don't know whether this benefited children in the end." (Education expert)
Although government strategies are mandatorily evaluated, the MoES allocates minimal funds to research and evaluation. Funding is usually allocated to monitoring activities.	"There are two problems: one is that if an evaluation finds that some objectives were not reached, there should be real consequences, which do not exist. The second problem is that the resources that are available at the Ministry for monitoring are so meager that they couldn't cover any substantive review of the implementation process to see whether an intervention was effective and whether it reached desired goals. So, M&E mechanisms need to be strengthened at MoES. We're currently working with the EU on this issue." (MoES)
Like many countries, Georgia struggles to link university research to practical and applicable results that can inform actual policy.	"In other countries, universities are hubs for research where research is conducted, articles are written, and expertise is accumulated. In Georgia, universities don't serve that purpose. They are observers rather than creators. The bulk of research is produced by people who are associated with a particular educational reform in one way or another." (MoES) "Students and staff in university teacher preparation programs should be more engaged in the research that is conducted by the Ministry. I think this would increase the quality of the research quality." (Teacher pre-service program representative)

IV. Conclusion

Although education in Georgia has been improving over the past two decades, the education system is still a long way from meeting the criteria for a great education system and from systematically applying a WSIA.

What is the status of general education sector regarding quality, equity, and efficiency?

Many factors affect the quality of general education factors in Georgia. We summarize the most pressing factors based on the six accelerators to great education systems.

1. *Clear organizational and financial structure.* The funding model in Georgia allows parents to have some school choice, particularly as it relates to the public education system. However, the voucher amount given to parents does not cover the costs for small schools, and there is no clear process for schools to submit requests for additional funding. The lack of clear processes allows funding to vary across these small schools, exacerbating existing inequalities. The MoES has a clear organizational structure that includes competent technical agencies to support educational programming. However, MoES has not built a strong working relationship with these agencies and therefore does not consistently draw on their expertise when formulating policies. Another challenge of this model is that it does not gather information about parental priorities or identify the aspects that make schools successful.
2. *Teacher and principal effectiveness.* The Georgian education system has established systems and models in place to continue to build the quality of education and to support teacher and principal effectiveness. However, teachers and principals still lack the capacity to implement the NSM and school-based professional development effectively. There is also a need to build the capacity of the BoT to support school-based decision making.
3. *Collective accountability for improvement.* Several factors affect the collective accountability for the improvement of the general education system.
 - Teacher professional development in Georgia focuses on helping teachers learn how to create complex assignments and FAs. However, the results show that many teachers still fail to implement any systematic instructional assessment program, rarely utilize test information to guide instruction, do not measure their instructional effectiveness, and end up relying on rote learning rather than student-centered, complex cognitive instruction.
 - There is no comprehensive assessment scheme that measures student learning based on the goals of the system and current reforms (such as the third-wave curriculum). The development and use of student national assessments and graduation exams are controversial, and that challenge limits the MoES and schools' abilities to measure student learning and use the data to improve the system.
 - Although the MoES has developed a school authorization framework, which is an important step, the framework has not been implemented, because public schools do not satisfy the minimum criteria of school quality. The MoES also lacks the resources to implement the school authorization process across all 2,000 schools in the public education system. The lack of a positive accountability framework makes it difficult to hold schools accountable for meeting the needs of students.

4. *Coalitions for change.* The MoES made positive steps forward when they engaged the donor community, technical agencies, education experts, and other stakeholders in the design of the new 10-year education strategy. However, technical agencies, the ERCs, and departments within MoES remain decoupled, with agencies and the central MoES often working separately without consulting or working together on policies. Principals and teachers are rarely consulted or included in the design of education initiatives. Further, ERCs have been given decentralized responsibilities to support school autonomy, but the MoES has not empowered them to make decisions about the schools that they support.
5. *Vision and Leadership.* Long-term, sustained vision and leadership is needed to ensure that reforms, initiatives, and interventions have a long-term impact on education quality. Currently, policies *change* with each new administration because of a short-term, project-based vision. The MoES must maintain a stable, long-term vision for reforms to be successful.
6. *Evidence-informed decision making.* The technical agencies hire highly qualified staff and collect and analyze data across the system. Their databases could produce data to inform policy decisions at a moment's notice. However, the MoES lacks a culture of using data to drive the design of policy and new initiatives. This challenge is coupled with the problem that data is often produced in long reports that go unread by the intended target stakeholders. The lack of easy-to-access briefs and infographics to communicate data quickly to policymakers inhibits evidence-informed decision making.

The learning experiences and effectiveness of teaching differs for students of different socioeconomic and ethnic status. Education equity in the general education system continues to be a major challenge. Although the Constitution of Georgia explains that Citizens of Georgia “shall be equal in social, economic, cultural and political life irrespective of their national, ethnic, religious or linguistic belonging” (38.1) and “Everyone shall have the right to receive education and the right to free choice of a form of education” (35.1), little progress has been made under the current reforms to achieve more equity among schools. Students in ethnic minority communities consistently underperform. A study of preschool education quality (UNICEF Georgia and NAEC 2017) revealed several inequities concerning early and preschool education in the country. For example, there is relatively low inclusion (69.5 percent) in preschool programs in Georgia as compared to other European countries. Preschool education is less accessible to most vulnerable children living in poor conditions: only 40 percent of socially disadvantaged children, 33 percent of children from ethnic minority families, and 47 percent of children in villages go to kindergarten. Because of physical, social, or institutional barriers, children with special needs are unable to get preschool education together with their peers (UNICEF 2018). Children in Kvemo Kartli and Samtskhe-Javakheti, areas that are densely populated by the Azerbaijani and Armenian ethnic minority communities, have the lowest indicator for accessibility to preschool in Georgia, and their teachers are the least qualified (UNICEF 2020). The result is that ethnic minority students enter school lagging behind their counterparts.

Ethnicity, language, and region contribute to differences in educational equity. The system diagnostic found that there is a lack of qualified teachers who speak the same language as students in the ethnic minority regions along with a lack of materials (such as textbooks, workbooks, and reading books) in children's first language. Participants in this study also noted that more focus needs to be placed on Georgian as a second language, because without becoming fluent in Georgian, students from minority regions will not have access to better employment.

The NSM is catalyzing teachers to develop complex tasks and move away from rote learning. Teachers have shifted their focus to improved student learning using FAs. However, education experts are

concerned that FAs are used sporadically. These experts also worry that teachers lack the proper skills to design effective classroom assessments. Teachers do collaborate and draw on each other's expertise, and the Georgian MoES has made many positive steps towards improving the quality of teaching in the general education system. Schools still lack school-based professional development, curriculum adaption, FAs, and coaching support. Moreover, teachers are critical of rapidly changing approaches and feel that they are constantly trying to catch up and understand new reforms. Many teachers and principals noted that constantly adapt to new requirements from MoES is fatiguing.

The school community generally perceives recent reforms in a positive manner. Principals and teachers feel that the new third-wave curriculum is strong; that the new TPD scheme and career ladder will help further professionalize the teaching force; and that the NSM has many positive elements that move towards a WSIA, many of which have already been institutionalized in Georgia. However, principals and teachers expressed a need for additional support implementing school-based professional development. The NSM coaching model is a positive example of how to better support teachers across Georgia. However, coaching is expensive, and it is unclear whether the MoES will be able to continue paying coaches for all schools as the model goes to scale. Education stakeholders also noted that coaches vary significantly in their knowledge and ability to support teachers. Finally, student testing remains contentious, with varying perspectives related to the value of end-of-grade or end-of-cycle testing. The UEE has contributed to a rise in the tutoring culture, and many educators fear that adding additional high-stakes, national tests will exacerbate the problem.

What is the status of the current school situation related to management and school climate?

Educators in the general system believe that schools in Georgia have a positive school climate, which they associate with safety and a collegial culture. Throughout the interviews and focus groups we conducted for this study, teachers, principals, NGOs, and donors emphasized that most educators in NSM schools enjoy working with each other and that schools are safe. They enjoy the collaboration that comes with the NSM and school autonomy reforms that push schools to adapt the curriculum to local needs and build FAs to measure learning.

School autonomy is beginning to spread through the system. The MoES has established a framework for the ERCs to oversee schools, and these entities currently conduct inspections and provide textbooks and transportation. However, the ERCs are not empowered to make decisions about the schools they support. They simply pass down mandates from the MoES. The study also finds that schools are still micromanaged by the MoES; no differentiated approaches to improving school-level quality are in place; and the motivation to improve schools varies across the system.

Education management is improving; however, principals lack skills in school management and leadership. In some cases, principals need to be replaced because they do not meet the position requirements stated by the MoES. Principals and teachers also need more demand-driven training that focuses on school-based professional development, support for teachers with constructivist pedagogy, and adaptation of the curriculum. Across the board, parental and community engagement is not taking place in the schools.

How have the reforms for achieving whole school improvement contributed to changes in General Education?

Our document review showed that a WSIA integrates technical interventions (such as teacher professional development, new textbooks, new curriculum) into daily practice and school culture while engaging all staff to reinforce skills both inside and outside the classrooms. The implementation of these interventions can be bolstered by parental engagement with the schools and extensive and systematic coordination with outside agencies (Barry et al. 2017; Jones and Bouffard 2012; Weare and Nind 2011; Ttofi and Farrington 2011; Adi et al. 2007a, b; Wilson and Derzon 2003). WSIA uses the entire school community as the unit of change and coordinates actions among three interrelated components: (1) curriculum, teaching, and learning; (2) school culture and environment; and (3) family and community partnerships (WHO 1998). The WSIA moves beyond a set of interventions: it provides a framework that schools can use to integrate activities and support students (Goldberg 2020).

The NSM model is helping the Georgian MoES move towards a WSIA. As noted above, a framework for professionalizing and upgrading the teacher workforce is in place, and curricular adaptation is taking place among the NSM schools (supported by teachers and principals alike). School autonomy could further help move schools towards WSIA by encouraging school-based professional development, learning communities, and locally driven decisions about how to best support students. Teachers and principals that participated in the diagnostic study support the NSM model. Successfully scaling the NSM in a clear and consistent manner will help improve general education. However, several elements need to be addressed in the NSM—and education in general—to institutionalize WSIA in Georgia.

How has the COVID pandemic affected the General Education System in Georgia?

The COVID pandemic has had both positive and negative effects on the Georgian education system. From a positive perspective, the closing of schools and the move to online learning forced the education system to outfit schools with a better technological infrastructure and pushed teachers to use technology in new ways. The pandemic helped improve the use of digital technology, which in many cases led to increased student engagement and interest in school, particularly in the sciences. A surprising pattern mentioned by teachers across different schools was that some students became more engaged during online learning because they felt safer participating and answer questions without the usual stress of "telling the lesson" in front of the class. The opportunity to demonstrate their technology skills became a source of self-confidence for some students, which led to an increase in their motivation and engagement. Previously disengaged tech savvy students markedly increased their performance in the classroom. Further, computer literacy increased greatly among teachers as well as students. This contributed to an increase in the use of technology and online resources in teaching. Students became more independent in their use of technology to obtain additional information. However, as in so many countries worldwide, COVID affected student learning.

Teachers had never used technology and online platforms to deliver instruction. Although the MoES and TPDC provided training, it was not sufficient to truly help create an engaging environment where students wanted to learn. Many students felt "online fatigue and isolation." For low-achieving students, the lack of individualized support from teachers and other school staff exacerbated the learning gap. The experiences of teachers and principals suggest that the negative effects of remote teaching were much more severe on the students who were already underperforming in school, and COVID likely exacerbated the inequality. Out-of-school factors such as family income, parental engagement, teacher quality, access to technology, and the internet became even more important for students' success. Students whose parents were not able

to support and encourage learning at home fell farther behind; students from poor households who had limited or no access to technology or the internet were sidelined from the educational process; students in rural areas who had teachers with limited access to computers and low computer literacy received lower-quality instruction. Ethnic minority students and teachers struggled as virtual instruction was offered in Georgian. In several schools, teachers were not able to organize distance lessons depriving students of any educational opportunity. In addition to academic problems, teachers reported a sharp increase in behavioral problems and worsened communication skills among students. Stakeholders agree that the true impact of COVID will become visible in the years to come, as remote teaching was very challenging in primary grades and children's underachievement at this age is likely to expand in later schooling. Moreover, the tutoring culture and focus on the UEE led teachers to focus even more on their student clients, leaving other students to flail in the new online learning environment. As in other countries, it likely will take years for student learning to return to pre-COVID levels.

Despite stakeholders' shared concern for the learning loss, little evidence exists to allow further quantitative analysis of the issue. Stakeholders worry that teachers lack adequate capacity to diagnose learning gaps in their students and the system is not able to provide relevant assessment data to support them. Furthermore, teachers are not adequately equipped to conduct remedial education, and there is no state strategy on how to address the learning loss in students, whether through after-school programs or summer remedial instruction.

V. Opportunities to foster improved general education in Georgia

As mentioned throughout this report, systems thinkers capture complexity by recognizing how multiple components within a system influence each other in different ways.⁵ Contrasted to a linear or technical approach to education reform that looks at individual parts in isolation and employs best practices from elsewhere, systems approaches look at the interdependencies among the multiple components of a system and how they affect each other. They understand that change is embedded within the context, the organizational and financial architecture, the effectiveness of teachers and principals, the collective accountability for improvement systems, the coalitions for change, the vision and leadership, the use of evidence to inform decisions, and the communication patterns. Systems thinkers acknowledge that the responsibility to achieve education reforms is distributed among stakeholders, and they understand that buy-in, capacity, and readiness must be nurtured through structures that enhance collaboration and communication among stakeholders.

This diagnosis of the Georgian education system focused on the perceived needs of the stakeholders within the system because stakeholders are key to the success of education reforms. Staff in the MoES, donors, and implementing partners need to dig deeply into the system to help teachers find ways to respond to the current teaching and learning challenges, particularly the challenges related to the culture of tutoring and the pandemic. The more that the MoES can engage agency staff and international partners in the decision-making process, the quicker the reforms and changes will happen. This section presents action-oriented recommendations based on the systems framework. Exhibit V.1. summarizes Mathematica accelerators linked to our recommendations and the I2Q strategic objectives.

One observation about these recommendations: there have been several prior internal and external reviews of the Georgian Education system. And many of the recommendations below will be familiar—some of them already tried. However, the challenge for Georgia is to address these recommendations within the complexity of education reform and engage in comprehensive and coordinated solutions that are necessary for system improvement. Our interviews revealed a muddled view of direction, inconsistent leadership, unpredictable mandates, and isolated actions that were not evaluated. We suggest that these recommendations are the details that could shape the dialogue among education institutions and stakeholders. Ongoing consultations among educational institutions and stakeholders is the key to improving education in Georgia.

⁵ Ndarhutse, S., C. Jones, and A. Riggall. “Why Systems Thinking Is Important for the Education Sector.” Education Development Trust: UK, 2019. www.educationdevelopmenttrust.com

Exhibit V.1. Recommendations based on the systems framework linked to I2Q strategic objectives

Mathematica Accelerators	Focus of the recommendations	I2Q Component 2 Strategic Objectives
1. Improving the organizational and financial architecture	- Improve the decentralization process - Strengthen school autonomy and decision making	Subcomponent 2.1. Improving the educational infrastructure to support learning Subcomponent 2.3. Supporting capacity building of teachers and school leaders to adapt, develop, and implement school-based curriculum
2. Improving teacher and principal effectiveness	- Improve teacher recruitment and selection - Develop selective pre-service teacher programs - Develop in-service and school-based PD for teachers focused on student learning - Focus principal preparation on strengthening school leadership development	Subcomponent 2.3. Supporting capacity building of teachers and school leaders to adapt, develop, and implement school-based curriculum
3. Establish successful collective accountability systems	Strengthen the national and classroom assessments	Subcomponent 2.2. Supporting the scaling up of the whole-school improvement pilot Subcomponent 2.4. Development of a national assessment framework
4. Coalitions for Change	- Improve the coordination across technical agencies and other entities - Increase parental engagement	Subcomponent 2.3. Supporting capacity building of teachers and school leaders to adapt, develop, and implement school-based curriculum
5. Vision and Leadership	- Engage stakeholders in executing the vision for the 10-year education strategy - Change Management	
6. Evidence-based decision making	- Encourage the use of data driven decisions - Break down barriers between research and practice - Use policy briefs and infographics to convey data in easy-to-read formats - Identify and empower champions of evidence-informed decision making	Subcomponent 2.4. Development of a national assessment framework

1. Improving the organizational and financial architecture

School-based decision making, and school autonomy are key features of education systems that have successfully improved their functioning. Georgia is establishing a strong organizational and financial structure for its system. The recommendations below focus on improving the decentralization process to further strengthen school autonomy and decision making.

1. **Policy level Recommendation: Determine what decisions should be made at what level of the education system.** There is no one way to decentralize educational authority (McGinn and Welsh 1999). Countries around the world vary in the distribution of decision making. For example, in Zimbabwe, 81 percent of educational decisions are made at the national level, and 16 percent are made at the local level. In contrast, in the United States, only 6 percent of educational decisions are made at the national level, and 36 percent are made at a regional level (states); 33 percent are made at the district; and 24 percent are made locally at the school. OECD countries distribute decision making as follows:

Exhibit V.2. Decentralization of decision making in 14 OECD countries⁶ (by percentage)

Category of decision	Central	Regional	District/lower level	School
Organization of instruction	28	2	5	65
Planning and Structures	23	27	22	28
Personnel Management	15	20	29	36
Resource Allocation	5	10	38	47

The MoES in Georgia needs to work with the technical agencies, ERCs, and schools to determine which decisions should be made at what level and clearly establish a policy document that delineates these responsibilities. Functions in the decentralized system should be detailed, distinct, and clearly defined, and should be assigned to no more than one person (Healey and Crouch 2012). The process must be collaborative and consider the context, goals, and capacities of the education system. Decentralizing authority is best applied when a ministry wants to reduce variations in quality and equity among schools while maximizing school effectiveness (McGinn and Welsh 1999). The resources cited in this section (Healey and Crouch 2012; McGinn and Welsh 1999) provide detailed steps to guide the MoES in the decentralization process. While the resources are older, the content still applies today.

2. **Policy-level Recommendation: Empower the BoT to set the broad policy direction for their school.** The MoES can establish regulations through Subcomponent 2.4 of the I2Q program that delegates and clarifies the authority of the BoT to oversee and help implement school improvement plans. Empowering the BoT creates horizontal accountability within the system and creates a distinction between governance and management (Healey and Crouch 2012).
3. **I2Q Implementation Recommendation: Train Principals and BoT members to develop school improvement plans (SIPs).** As part of both I2Q subcomponents 2.1 and 2.2, implementing partners should create training workshops that teach principals and BoT members how to develop, implement, and assess SIPs. The SIP⁷ should define academic priorities for the school along with clear strategies for reaching the goals. It should include a budget that is developed along with the BoT, and the plan should be revised annually.

⁶ McGinn, N., and T. Welsh. "Decentralization of Education: Why, When, What, and How? Fundamentals of Educational Planning." Vol. 64. Published by the United Nations Educational, Scientific and Cultural Organization, 1999. UNESCO 1999. <http://www.unesco.org/iiep>

⁷ Development of SIPs should be part of the principal training that we suggest in teacher and principal effectiveness.

- 4. I2Q Implementation Recommendation. Train staff at the ERCs in the use of school report cards.** As a part of subcomponent 2.1, 2.2, and 2.4, the MoES should work with NAEC and the ERCs to develop school report cards that link broadly to SIPS. Report cards are a key component of school-based management and support schools by providing formative feedback on an ongoing basis. ERCs can use the cards during their inspection of the schools. The cards should be linked to the current school authorization and accountability processes. Implementing partners can then train ERC staff to use the report cards as a formative assessment tool that supports the change process.

2. Improving teacher and principal effectiveness

The MoES has made significant progress in establishing clear strategies and frameworks for improving teacher and principal quality. The strategies and frameworks include the TPD framework introduced in 2006, TPD hiring policies, teacher standards, National Certification exams (NCE), and a TPD scheme. The following recommendations will help the MoES and TPDC build on the foundation that they have established.

Teacher Recruitment and Selection

- 1. Policy-level and I2Q recommendation: Control entry into the teaching profession while simultaneously recruiting the strongest candidates.** Education systems that improved the quality of incoming teachers use rigorous selection procedures at the earliest stage possible by making entry into pre-service training demanding (Barber and Mourshed 2007). This approach has shown to affect the quality of people who become teachers. TPDC, in collaboration with the MoES and universities, should develop clear criteria for admitting teachers into pre-service teacher programs, which increases competition for places and elevates the status of teaching. In Georgia, there is a shortage of teachers in minority and less urban areas. As part of the upcoming I2Q projects, the MoES and implementing partners should pilot test a program that provides incentives for young people from these areas to pursue teaching, with a guarantee of being placed in a school where teaching shortages exist in their regions. Using targeted recruitment strategies can help reduce shortages since it allows teaching candidates to return home after their programs with employment.
- 2. Policy-level Recommendation: Continue to make teaching attractive through competitive compensation packages and a strong career ladder.** Improving teacher prestige is another key to attracting a pool of qualified teaching candidates. Teachers in OECD's top-performing countries (such as Korea and Singapore) feel valued as teachers, and higher teacher status is correlated with better student performance (Beteille and Evans 2019). Teacher compensation policies that raise earnings through competitive base salaries, benefits, and bonuses will likely attract the ablest graduates to the profession. The GoG has raised starting teacher salaries, which is a good start. Under I2Q, the MoES, its agencies and implementing partners should continue to strengthen the Scheme by stabilizing the requirements for

Examples of rigorous teacher selection processes

Teachers in Malaysia, Singapore and China take a national examination at the completion of secondary school.

Pre-service programs in France, New Zealand, and Canada administer their own exams.

Selection criteria in some parts of Europe include a review of secondary school qualifications and interviews in addition to exams.

advancement, providing increased benefits and bonuses for advancement, and creating opportunities for teachers to advance into the principal role will increase professional prestige.

- 3. I2Q Implementation Recommendation: Shift the perception of teaching from low status to one that is professional and rewarding.** Implementing partners for the I2Q project, regardless of the activities, need to include the development of media campaigns that help change the perceptions of the teaching profession. They should use social media to communicate the importance of teaching and publicize teacher salaries. This strategy will amplify the status of teaching and help attract the best candidates. This strategy has been used effectively in England, India, and other countries.

Pre-service Teacher Preparation

Successful pre-service teacher education programs where there is evidence of student learning contain three characteristics (Beteille and Evans 2019): (1) the programs are highly selective and screen candidates through multiple methods; (2) the curriculum includes a practical component that is linked to school life and current reforms (World Bank 2019); and (3) the programs are connected to universities.

- 1. Policy-level and I2Q Implementation Recommendation: Make pre-service programs highly selective.** The current teacher candidate selection process focuses on the number of students enrolled, because universities receive vouchers based on enrollment. Georgia needs to shift the focus away from enrollment to increased quality by using multiple mechanisms to assess candidates, including written exams, observations in clinical settings, and interviews.
- 2. Policy-level Recommendation: Evaluate pre-service teacher training programs.** These programs must be monitored and evaluated. The evaluations should be aligned to the national teaching standards whereby a set of specific indicators monitor the usefulness and fidelity of coursework and the teaching practicum. To provide important insights for continual strengthening of pre-service programs, the evaluations should also collect student teacher perceptions of their pre-service experience and schools' perceptions of teacher graduates (Muzzafar et al. 2011). Currently, accreditation is the only mechanism for controlling the quality of preservice programs, but there are large time gaps between accreditation processes (six years). The MoES needs to consider shortening the length of time between accreditation cycles or adding additional, smaller evaluations in between the main accreditation cycles.
- 3. I2Q Implementation Recommendation: Clearly link pre-service teaching and curriculum to school life and reform efforts through student teaching experiences.** Interviews with stakeholders and a review of documents revealed that many pre-service courses are theory-based, and the teaching practicum is ineffective because it's difficult to find school placements for these prospective teachers. Countries with strong pre-service programs require teacher candidates to complete six months to one year of student teaching, where they are placed in the classroom with experienced teachers and can apply their learning under the watchful eye of teachers and university faculty. This process helps link university classroom learning to the realities of working with children in a school setting. Georgia needs a

In Finland, only 1 in every 12 applicants enters a pre-service program, as the selection process eliminates weak candidates through a written exam, observations in classroom settings, and interviews.

In Finland, Korea, and Shanghai, a 6-month practicum is part of the curriculum for most primary and secondary teachers.

student teaching component to pre-service education that pairs student teachers with high quality classroom teachers. As part of subcomponents 2.2 and 2.3 of the I2Q program, implementing partners should use the scale-up of the WSIA and capacity building activities to help pre and in-service teachers make a clearer link between the curriculum and teaching practices. This means that training workshops could provide teachers with examples to use in the classroom, model applying the curriculum during the workshops, and extend student teaching opportunities. Implementing partners and the MoES should also consider using senior teachers who are retiring as mentors to support younger teachers in the classroom during the process.

In-service and school-based PD for Teachers

If a professional development focused on student learning; (1) targets specific content; (2) incorporates active learning; (3) supports collaboration and peer learning; (4) incorporates teacher expertise; (5) includes follow-up through coaching; and it is sustained over time. It can result in improved outputs and outcomes for students (Darling-Hammond 2017; Allier-Gagneur et al. (2020). The current in-service professional development does not adhere to these characteristics, particularly the alignment to teacher needs and coaching support.

- 1. Policy-level and I2Q Implementation Recommendation: Establish regular consultations and meetings with MoES, TPCD, ERC, NAEC, education institutions, school leaders, and other stakeholders to ensure that in-service offerings are aligned to education reforms.** Adhering to a systems approach to teacher professional development requires ongoing collaboration using advisory committees, task forces, and informational meetings whereby educators coordinate all aspects of in-service teacher professional development. I2Q should have as part of its overall mandate to convene monthly meetings that brings together these stakeholders along with implementing partners to share progress and discuss challenges. The MoES should lead these meetings, including scheduling them over the life of I2Q.
- 2. Policy-level Recommendation: Evaluate the effectiveness of professional development programs.** Along with the recommendation for pre-service training, the MoES and TPDC should create a set of clear indicators to evaluate the effectiveness of in-service and school-based professional development programs. As part of I2Q, the PMU and MoES should hire external, third-party evaluators to measure the impact and performance of the World Bank and MoES investments in I2Q.
- 3. I2Q Implementation recommendation: Draw from existing materials to inform in-service training under the I2Q subcomponent 2.3.** MCC recently developed teacher training guidebooks that support teacher professional development. The modules associated with the book includes training on formative assessment, a key objective of the I2Q program. Implementing partners should train facilitators using the modules to then deliver content in a training-of-trainer model in their own schools. Using existing materials would reduce the cost of content development (implementers could just adapt existing modules) and using a trainer of trainer model will reduce the time it takes to conduct professional development across Georgia.
- 4. I2Q Implementation Recommendation: Model in-service professional development offerings on effective programs.** Georgia has excellent examples of effective in-service programs that were implemented by the donor community. G-PRIED incorporated many of the characteristics of strong in-service training and should be used as a model for reforming the current MoES programs. The shift towards school-based professional development through the NSM is also promising, as it includes

many of the professional development design principles, such as the cultivation of peer learning and collaboration for teachers as they develop complex tasks and FAs, as well as the use of coaches to support teachers as they implement the new teaching and assessment strategies.

- 5. I2Q Implementation Recommendation: Provide more resources and training to institutionalize these effective in-service programs.** High-achieving nations, including Finland, Sweden, Japan, South Korea, Singapore, the United Kingdom, and Australia, build time into teachers' work hours for professional learning and collaboration (Wei et al. 2009). As I2Q implementing partners consider the best practices for improving and scaling the WSIA approach, they should work closely with the MoES to see how new school policies can be created that mandate TPD during work hours. The caution with this recommendation is that using work hours for TPD may affect the number of hours students receive instruction. Careful analysis needs to be done to balance the trade-offs of institutionalizing in-service programs.
- 6. I2Q Implementation Recommendation: Consider adding demand-driven teacher training options.** Training of trainer or large training programs are strong at building the capacity of broad skill sets among teachers. These types of programs are particularly effective when Ministries want to update the curriculum a teacher delivers or provide general training on student-centered approaches. However, these approaches rarely address more localized challenges faced at a regional or school-level. Demand-driven training is an approach that develops specific training programs or workshops for smaller groups of teachers that focus on specific challenges they face at school. For example, under the USAID-funded Education for a Knowledge Economy program (2004-2008), implementers conducted a needs assessment of teacher needs throughout the country. Based on the needs, they created a menu of training options and shared those with teachers. The smaller, more contextualized training workshops were offered regionally based on the number of teachers interested in the topic. We recommend that the MoES and TPDC take a similar approach. For example, the COVID pandemic is likely to exacerbate inequality. Specific training focused on the effective use of formative assessments and remedial education (pullout lessons, targeted afterschool instruction, etc.) could contribute to alleviate its negative effects. Using the existing materials developed under G-PRIED or the MCC education program, I2Q implementing partners could offer online or in-person workshops throughout the country in a more demand-driven process.
- 7. Implementing partners for the I2Q program should consider how the ERCs could become regional training hubs.** While TPDC currently provides some demand-driven training, it is not systematically implemented across the country. ERCs, which are regionally located, could be adapted to provide demand-driven training that is region and need specific in a more cost-effective manner. This additional responsibility for ERCs will likely require policy or regulation changes, so implementing partners pursuing this option will need to work closely with TPDC and the MoES to incorporate such a responsibility into ERC mandates.
- 8. I2Q Implementation Recommendation: Design a better training program for coaches.** In line with the previous training recommendations for I2Q, implementing partners need to develop (or adapt existing training programs) to build the capacity of WSIA coaches as part of subcomponent 2.2. Successful school-based professional development that includes coaching requires (1) that the coaches themselves have deep content knowledge, the ability to build trust with teachers, and an understanding of the coaching process, and (2) that school leaders develop schedules that provide time for coaching and encourage teachers to work together. Training modules for coaching should focus on bringing deep content knowledge (subject-specific training), how to be an effective coach, and management of coaching programs. The ideal ratio for coaches to teachers is 1:10.

Principal Preparation and Support

School leaders are essential to the success of school improvement and are a critical factor in student outcomes (Day and Sammons 2014; OECD 2013; Louis et al. 2010). The leadership practices most related to improved student outcomes include school leaders that (1) set and communicate clear learning goals; (2) target resources aligned to achieving the goals; (3) maintain a focus on teaching and learning; (4) learn with teachers to enhance the quality of teaching, and (5) maintain a safe and orderly school (Robinson 2010). Principals in Georgia spend most of their time attending to administrative issues as opposed to teaching and learning (Pont et al. 2008).⁸ We recommend the following policy levers for strengthening school leadership development: redefine school leadership responsibilities; distribute school leadership among staff and teachers; build school leader capacity; make school leadership an attractive profession by offering a career ladder and other incentives.

- 1. Policy-level recommendation: Consider revising the teacher scheme to allow senior teachers to become principals (with added training).** Principals and other stakeholders recommended providing opportunities for senior teachers to become school leaders to incentivize teachers to improve their teaching practices and become school leaders. This is in line with current literature that suggests that leadership development should begin with teachers and continue for prospective, beginning, and longstanding principals.⁹ Implementing this recommendation will require policy and institutional level work between the MoES and the implementing partner on I2Q. It could be incorporated with the capacity-building activities related to subcomponent 2.3.
- 2. Implementing Partner recommendation: Convene MoES, university faculty, and principals to conceptualize/plan a pre-service leadership program for practicing principals that is aligned with the current reforms/NSM.** The implementing partner selected to carry out Component 2 of I2Q should begin the design process by convening these stakeholders to understand the NSM program and how practicing principals can better align with current NSM reforms. Interviews with stakeholders from this study revealed that there are limited pre-service programs that would prepare a pool of qualified principals. The new standards for public school principals, approved in 2020, can serve as the foundation for course development as they include four areas: (1) educational leadership, (2) learning process administration and accountability, (3) self-development, and (4) staff professional development. Moreover, examples of pre-service leadership programs can be found in the United States, Finland, Northern Ireland, and Slovenia. The modules for this course could be developed as part of revising and upgrading school principal recruitment and capacity, under subcomponent 2.2.
- 3. I2Q Implementing Partner Recommendation: Provide ongoing support for practicing principals.** The same requirements for effective teacher professional development apply to principals too. Most important is that principal support is tailored to the realities of the principal's work and differentiated for those principals that are new or longstanding. As part of the blueprint for public schools, the Ministry in Victoria Australia (2007)¹⁰ set out differentiated strategies to improve school leadership: a mentoring program for first-time principals and a coaching support program for experienced principals; an accelerated development program for high potential leaders; and a

⁸ Pont, B., D. Nusche, and H. Moorman: [Improving School Leadership, Volume 1: Policy and Practice, OECD Publishing, Paris](#), 2008.

⁹ <https://gpseducation.oecd.org/revieweducationpolicies/#!node=45556&filter=all>

¹⁰ "School Leadership Development Strategies: Building Leadership Capacity in Victoria, Australia. A case study report for the OECD activity improving school leadership. Improving School Leadership Activity Education and Training Policy Division. <http://www.oecd.org/edu/schoolleadership>

development program for high-performing principals. In addition, those providing the support need expertise. To mine the expertise of practicing principals, Flemish schools created a systematic approach for school leadership support through creating communities of schools. These collaborative partnerships of between 6 and 12 schools provide opportunities for principals to share resources and expertise. Finally, those principals that participated in the donor funded-MCC principal leadership academy reported the value in their participation. This leadership training model holds promise and can be revised to include the new principal standards and align with the current reforms/NSM.

3. Establishing successful and collective accountability systems

A key feature of successful education systems is putting student learning and the use of student assessment data at the core of school improvement (Ndarhatse et al. 2019). Establishing feedback loops from assessment data at multiple levels helps schools target local weaknesses and helps policymakers understand where the system may need additional support. These recommendations are intended to help strengthen the feedback loops and overall accountability in the General Education system.

National and Classroom Assessments

Based on this diagnostic study, we recommend that the MoES pursue a more diversified approach to university entry requirements, rather than implementing a high-stakes standardized assessment. A diversified approach that examines the students grades, extracurricular activities, and leadership in addition to an entrance. A more diversified approach will help improve student incentives to attend classes and remain in school, while helping to reduce the tutoring culture that often develops around high-stakes tests. This approach will also encourage universities to look at the “whole student” recognizing that not all students perform well on standardized tests since people learn and process in different ways (such as visual, auditory, and kinesthetic learning). The following recommendations focus on how subcomponent 2.4. Development of a national assessment framework can support improved motivation, learning, and quality of university entrants.

- 1. Policy-level Recommendation: The MoES should host a series of regional consultative conferences with teachers, parents, and education officials to develop a comprehensive scheme for evaluation, assessment, and accountability that will meet the many needs of the education system for a useful and constructive testing program.** Georgia needs a testing scheme that is comprehensive and that will be systematically implemented with full support from those stakeholders who rely on the quality and information that both national and student assessments provide at all levels. Consultative meetings will help to organize the collaboration and cooperation needed to ensure support and implementation.
- 2. Policy-level recommendation: Continue to participate in international assessments like TIMSS and PIRLS but establish committees to discuss the results.** These committees should include teachers, principals, and members of the technical agencies who can discuss the implications of the results and begin to initiate additional consultations or actions to address those findings.
- 3. Widen the subjects targeted by the new Adaptive System Diagnostics test and use a sample-based assessment.** NAEC is currently piloting a nationwide census-based diagnostic assessment for fourth and sixth grade in Georgian language and mathematics. A census-based assessment includes every student at each grade level. This introduces unnecessary stress for students and has been used to evaluate schools and principals unfairly. Sampled assessments would target needs for program improvements rather than function for accountability purposes. Expanding the subjects covered by the

assessments supports the notion that every subject is important and encourages students' focus on more holistic learning. A similar, sample-based assessment in grades 11 and 12 would yield the adaptive information without excessive costs and lower stress to students and teachers. For this work, we recommend a consultative committee made up of participating schools, curriculum subject areas assessed, relevant teacher professional development personnel, and regional ERC representation for additional local support in school reform. NAEC would lead all consultative committees in the assessment area.

4. **Policy-level and I2Q Implementation Recommendation: Diversify and expand the requirements for university entrance exams.** The UEE enables universities to ensure their objectivity and to avoid the costs of admissions offices. However, sole reliance on this entrance credential means that the single-day assessments judge the full range of a student's personality, aptitudes, skills, and accomplishments in a highly stressful one-time event. Georgia needs to expand the UEE to include subjects other than math, Georgian language, foreign languages, and history, to encourage more participation in general education subjects. The MoES also needs to expand entrance criteria, weighting high school grades as some portion of the entrance criteria. This wider assessment process could also be included in the determinations for government scholarships.
5. **I2Q Implementation Recommendation: Provide fixed assessments for each unit of the new curriculum to improve classroom FA processes.** One of the lessons from the COVID pandemic is that the traditional ways that Georgian teachers use to assess their students is stressful and often leads to disengagement from learning. When students understand that formative assessments are low-stakes and provide continuous feedback that teachers can use to help them, it reduces the stress and allows students to demonstrate knowledge. The new curriculum gives schools considerable flexibility in the design of their assessment processes, but few schools have the technical talent or time to develop school-based assessment approaches. One solution is to provide fixed assessments for each section of the curriculum along with rich examples of complex assignments that can be used in the classroom and are also adapted for remote learning. The teacher can use the assessments at the designated time, reducing the need for extensive and costly national training on the development of national assessments. NAEC could engage teachers in the development of the fixed assessments so that they have input into making the assessments link to classroom practice. The act of engaging teachers in the process would also have the side-benefit of increasing collaboration, a key need within the overall general education system. NAEC could also develop an FA item bank so that teachers can select unique items based on the adapted curriculum for their grade and school. Student assessments are complex. Understanding the complexity of the examinations and assessment domain is critical so that any policy, change concept, or intervention adjustment recognizes the interdependencies of needs inherent in the education system. Without addressing the entire assessment system, a singular reform will increase the number of issues to address.
6. **Policy-level and I2Q Implementation Recommendation: Consider strategically using technology to reduce inequalities among schools and regions.** Teachers and principals have improved their ability to use technology and the MoES has invested in outfitting schools throughout the country with infrastructure to support digital learning. The MoES should draw lessons from the COVID pandemic experience, including findings from this diagnostic to create an action plan for how the use of technology can reach underserved populations and help mitigate learning inequalities.

If the MoES would like to pursue school leaving exams, we recommend that I2Q implementation staff consider the following processes to develop and implement the sub-activity.

Schools should administer school leaving examinations every year to the senior class, with the examinations based on standardized exams provided by the Ministry every year. The purpose of school-leaving examinations is to provide a school-based assessment of the quality of the local program. School staff should administer the school-leaving exams to grade 12 students on an annual basis to ensure standardization across schools. These school-based and administered assessments should be administered in language arts, mathematics, and science and used by the school. Schools can add additional subjects to the school-leaving exams based on the curriculum-provided criterion-referenced tests. The results should be used for school planning, reviewed by the school planning committees or BoT and internally with school staff, under the guidance of the principal. The results and discussion about the results are the input to the school improvement plan (SIP).

The MoES should ensure that national school assessments are kept separate from the school-leaving exams and used for system progress and policy planning only. Accordingly, national assessments may not have to be administered every year (for example, the MoES could decide to administer these tests every three years). The regularity of the exams would depend upon system evaluative and policy questions but should be administered to students in grade 11 in language arts, mathematics, and science. These assessments are sample-based school tests used for third-year high school student assessment, not for a specific student or school information. National assessments test the system, system progress, and policy evaluation. MoES (NAEC) would administer these assessments on very limited samples (about 5% of schools). Sampling would be based on the kinds of system and policy questions that need evaluative information.

I2Q implementing partners should consider the following initial steps to develop school-leaving exams as part of the subcomponent 2.4 activities:

- a. Activate the school improvement planning groups and BoT. If these groups do not exist, create an internal teacher committee.
- b. Determine expectations and outcomes for the exam.
- c. Conduct dialogues on school performance and future needs and plans.
- d. NAEC should develop standards of performance and link the curriculum objectives and standards by creating a clear set of measurement criterion.
- e. NAEC should develop a rubric that clearly defines the standards and criteria.
- f. NAEC should develop an item bank that schools can use to create the leaving exams.
- g. NAEC should pilot test the items and adjust accordingly.
- h. NAEC should build the exam and share it with schools each year.

The process and steps are similar for the national assessments, but not necessarily completed on a yearly basis, as noted above.

4. Improving the effectiveness of coalitions for change

Coalitions for change are about helping a central actor engage and draw on collective expertise across many stakeholder groups to reduce silos and improve the uptake and buy-in of policies. Coalitions for change are the “glue” that can help institutionalize systems reform and a WSIA.

Improving coordination across technical agencies and other entities (e.g., ERCs) in the general education system

1. **Policy-level Recommendation: Create task forces or technical working groups.** These working groups should draw on staff from across the technical agencies, ERCs and schools that a particular activity or policy will affect. The task forces encourage collaboration and will help ensure multiple perspectives inform the design and implementation of the policy, initiative, or activity. When possible, include principals and teachers in the process because it will help strengthen school-based management approaches.
2. **Policy-level and I2Q Implementation Recommendation. Use collaborative platforms and technology to encourage communication.** Today's technology allows people to collaborate across time and space. Platforms such as Mural, jamboards, google documents, Microsoft teams, and others allow people to co-create documents and brainstorm without having to be in the same location. Using these technologies allows the task forces to include people from throughout the country – and internationally, if so desired. These collaborative platforms can be designed to also encourage cross-school collaborations. For example, once the QA process is established, strong schools with high quality teaching could be linked to lower performing schools where staff can work together on these shared platforms to mentor struggling teachers. This recommendation could be pilot tested as part of the STEM work planned for Component 2 of the I2Q program.

Parental engagement

1. **I2Q Implementation Recommendation: Increase parents' involvement in the Board of Trustees by giving them a clear role in overseeing or helping to implement the school improvement plan.** In El Salvador, USAID interventions in the early to mid-2000s developed the school's capacity to create improvement plans. School management committees, which included parents, were given school report cards and trained on how to engage with the school to oversee the action plans. This process gave the committees a clear role and opportunity to engage because they had concrete tasks to complete based on a specified timeline. A similar process could be used to engage parents and help the Board of Trustees take a more prominent role in school-based management.
2. **School-level Recommendation: Host family nights or other fun events at the school to help parents become more comfortable in the school environment.** In the Latin America and the United States, schools often host events that encourage families to come to the school and engage with teachers, principals, and the administrative staff. Events range in scope and purpose from “back to school nights” where parents come to the school to meet their children's teachers and review the curriculum for the year, to carnivals, and dances. Events such as these move the focus away from just coming to the school to be “scolded” and help parents get to know the teachers and school culture.
3. **School-level recommendation: Encourage volunteer opportunities.** Teachers everywhere in the world have a huge job to do. In many countries, teachers engage parent volunteers as room parents and tutors for students at the school. The parents spent one to two hours helping the teachers with administrative tasks (e.g., putting children's artwork on the wall), reading with students who are struggling with foundational skills, or even tutoring math. Parents are come to secondary classrooms to share information about their careers and help students think about career options as they near graduation. In some countries, schools even hold career fairs for the community and private sector to share requirements, expectations, and career paths with students.

While these recommendations are ways to increase parent engagement, we recognize that Georgian lacks a culture of engaging parents in the school system. It will take time to shift cultural practices and depend on the capacity of the school (and willingness of parents) to take these steps.

5. Ensuring a consistent and sustained vision and leadership

- 1. Policy-level Recommendation: Continuously engage stakeholders in executing the vision for the 10-year education strategy through a change management process.** Similar to previous recommendations, we encourage the MoES to create a multi-agency task force whose responsibility is to oversee implementation of the 10-year education strategy (once it is approved). The task force should include lower level MoES staff including representatives from the ERCs. Donors should also be represented. The MoES should also develop a clear action plan for implementing the strategy with key milestones that the task force can monitor over time.
- 2. Policy-level Recommendation: Change Management.** The recommendation of change management in the examinations and assessment area is (1) to study, vet, and understand thoroughly the intended changes, including how they will be achieved and why; (2) through consultative processes, to ensure support, plan the change, fully articulate who needs to be involved, how, and what can be done to improve buy-in opportunities; (3) carry out the plan so that all involved know what they're doing and commit to its accomplishment, as well as ensure the support needed to enable implementation as intended; (4) communicate the change so that attitudes are enthusiastic, support is provided along the change journey, and everyone understands how to achieve success; and (5) monitor the change process and when possible, evaluate and adapt policies and operational actions to ensure success or enable adaptive adjustments. Change management entails the leadership of the Deputy Ministers and their departments, and once again, emphasizes participation and consultation with those implemented and affected by the changes. This approach to school management also draws on a more diversified system of supervision that comes from the MoES down to the ERCs and then to the schools. The MoES would need to clarify roles and responsibilities for each entity in the supervisory chain, making clear who and what each organization is responsible for doing.

6. Improving the use of evidence to inform decision making

- 1. Policy-level Recommendation: Break down barriers between research and practice.** There is a huge divide between researchers and policymakers. Systems around the world often struggle to help convert research and evidence into practical applications that can help design and implement reforms. There are two ways to overcome this challenge. First, invest in training workshops that help teach staff throughout the system how to use data to help target weaknesses identified through the research or data collection process. Second, make sure that key decision makers know who to go to or how to access data that links to key reform initiatives.
- 2. Policy-level and I2Q Implementation Recommendation: Identify key people in the system who understand evidence-informed decision making and empower them to help connect good research and data to the policy process.**
- 3. I2Q Implementation Recommendation: Enhance the use of school-based evidence and tools to encourage the use of data-driven decisions.** Train staff in the ERCs, BoT, and schools to use school report cards to refine their school improvement plans and support them annually to develop strategies that help continuously improve student learning.

- 4. I2Q Implementation Recommendation: Use policy briefs and infographics to convey data in easy-to-read formats.** One major concern raised in this system diagnostic was that researchers and technical agency staff create reports with a lot of information that goes unread by decision makers because the reports are long and difficult to understand. When providing reports to policymakers or even principals and teachers, create accompanying briefs or even two-page infographics that convey the main information in an easy format that people can absorb quickly.

Recommendations to improve the NSM

The goal of the NSM is to move Georgian schools closer to whole-school improvement. Contrasted with rote learning, the new third-wave curriculum emphasizes active teaching and learning, critical thinking, and interconnecting and organizing knowledge. Georgia has made progress on the changes needed to move towards a WSIA. This study shows that the NSM has the potential to help improve general education system, but three conditions need to be fulfilled under the I2Q project for the NSM to realize its potential.

- 1.** Implement the suggested recommendations regarding decentralization and school decision making and focus on building the capacity of teachers of teachers and principals through the different types of general and demand-drive options discussed in this section. I2Q activities emphasize the establishment of effective assessment systems, which is also critical to improving and scaling the NSM model.
- 2.** Conceptualize school profiles through the school report cards as a part of subcomponent 2.2. These school profiles can help identify strengths and weaknesses of schools, helping the MoES and implementing partners further refine their interventions to support and strengthen weaknesses.

Additional ways to improve and strengthen the NSM model during the I2Q program include:

- 1. (Continue to) engage stakeholders about the vision, objectives, and benefits of the NSM (change management) and strengthen coordination among education institutions and school personnel.** Our data revealed that although there is support for the NSM, there is wide variation in how stakeholders understand the model. Moreover, stakeholders reported that a lack of coordination among education institutions resulted in some confusion at the school level. Using the change management model (noted above: consistent and sustained vision and leadership), engage stakeholders frequently through consultations, feedback sessions, role clarification, and information sharing. Finally, using social media, showcasing teachers/students/schools, and publicizing elements of the NSM can build a shared understanding of the NSM.
- 2. Provide ongoing resources and training for all stakeholders responsible for NSM implementation and evaluation.** Adapting curricula, implementing complex tasks and FAs, coaching teachers, providing instructional leadership, and managing NSM implementation and evaluation requires ongoing resources, training, and support. Resources should include time for teachers and school leaders to meet in school-based teams, appropriate school/coach ratios, and upgraded technology to implement complex tasks. And teachers, principals, and coaches need ongoing training and support in NSM teaching approaches and evaluation methods.

Appendix A

Detailed Methodology

Mathematica employed a mixed-methods systems diagnostic that included three components: **a literature review, a qualitative study, and an online principal survey** to answer the Georgia Ministry of Education and Science (MoES)’s research questions. This appendix describes the details of our approach to assessing the performance and status of the general education system in Georgia.

Research questions

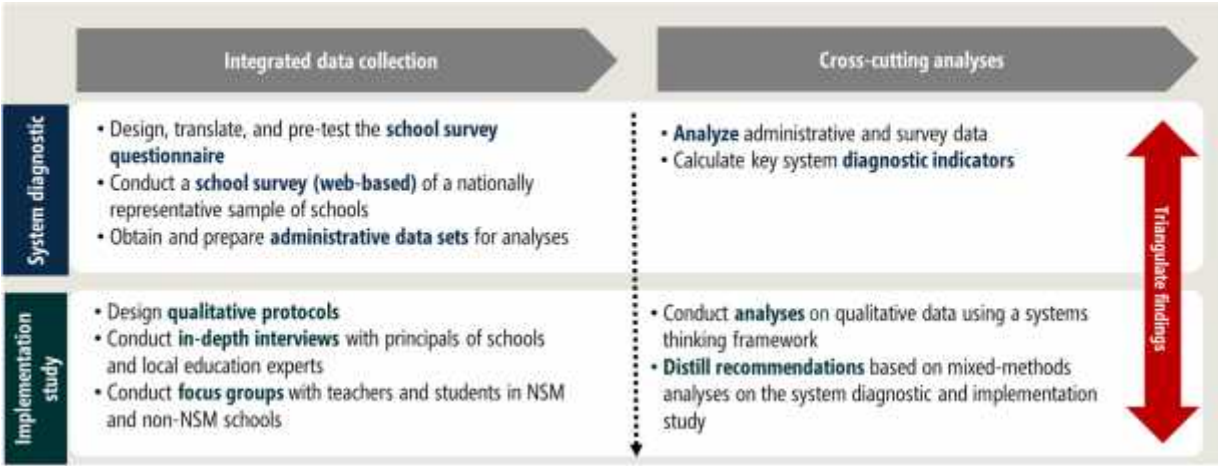
The MoES, World Bank, and the Project Management Unit (PMU) identified the key research questions in the scope of work for this evaluation. The research questions include:

-) What is the current situation in the general education sector regarding quality, equity, and efficiency?
 - What factors explain the differences among schools (e.g., geography, ethnicity, languages) in the general education system?
 - What are the major factors affecting the quality of education delivery in schools?
 - How do the learning experience and effectiveness of teaching differ for students of different socioeconomic and ethnic backgrounds?
 - How have recent reforms affected the quality of teaching in schools?
 - What types of problems or issues affect the efficiency of the general education system?
 - How does the school community perceive these reforms?
-) What is the current school situation related to management, school climate, and students’ learning gains?
 - What are differences (if any) related to region, ethnicity, and languages?
-) How have the reforms for achieving whole school improvement contributed to changes in the assessment of students’ learning outcomes, school climate, and management?
 - What can we learn about the New School Model (NSM) pilot implementation that contributes to improvements in the general education system as a whole?
 - How has NSM affected teachers’ instructional practices? School management practices and school climate?

Data collection

The first phase of this evaluation focused on developing an action plan and relevant instrumentation to collect data that informed the systems diagnostic. Exhibit A.1 presents our approach to data collection.

Exhibit A.1. Evaluation approach



The following section describes the data collection outcomes.

1. Consultative meetings with the PMU and MoES

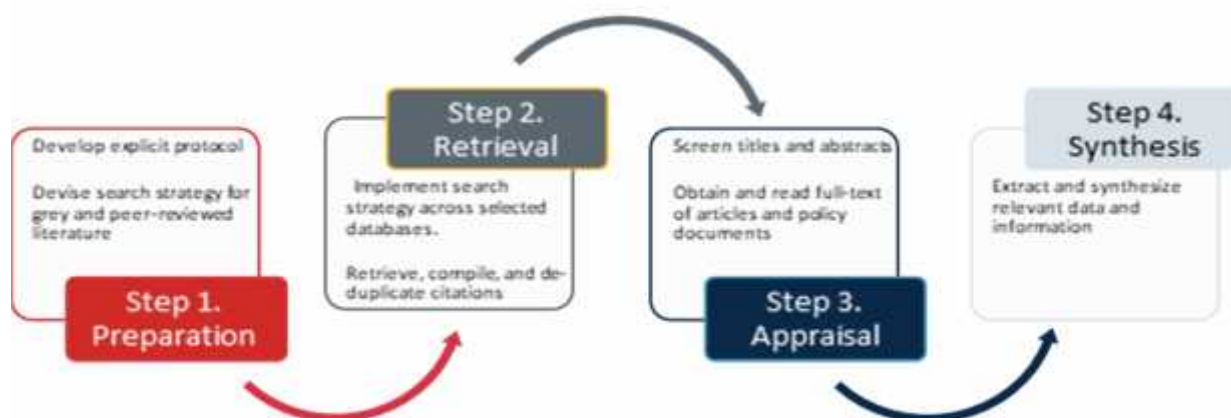
The research team held an initial meeting with members of the PMU in September 2021. The meeting helped us understand the needs and expectations from the PMU, including the focus on how findings from this study inform the implementation of the future Innovation, Inclusion, and Quality Project (I2Q) programs; the desire to use best practices to inform those programs; and the status of activities in Georgia. Our team continued to meet and coordinate with government staff, key stakeholders, and relevant donors throughout the data collection process to gather information about the status of the current system and share preliminary themes and findings with the PMU for discussion. This information helped us ensure a shared vision and common understanding of the learning goals and research design and helped increase our response rates for the survey and qualitative participation.

2. Literature review

The objective of the literature review was to (1) establish an understanding of education policy in Georgia and how it has changed over the past 20 years, (2) demonstrate how the MOES has aligned its education policies to international best practices. (3) highlight how current international trends may influence the whole school improvement approach, and (4) offer policy recommendations that link to the MoES-funded Systems Diagnostic of general education in Georgia.

Exhibit A.2 outlines the steps taken throughout the review process.

Exhibit A.2. Literature review process



Search concepts and strategy

We adhered to an adapted version of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Campbell Systematic Review guidelines. The team searched six databases and collections maintained by international development organizations and donors. Search terms were grouped into three broad categories: (1) teacher professional development, (2) assessments, and (3) quality assurance (Exhibit A.3).

Exhibit A.3. Search strategy and databases

Category	Search terms combined with AND
Teacher professional development	Teacher professional development* OR professional development OR teachers* OR teacher training OR teach*
Assessments	Assessments* OR test* OR formative assessments* OR formative* OR standardized* OR Standardized tests* OR classroom assessment* OR class test* OR national assessment* or student testing*
Quality assurance	Accountability* OR school accountability* OR quality assurance* OR school management* OR management* OR accountability criteria*
Target population	youth* OR adolescent* OR student* OR young OR young people* OR young person* OR minor*
Location	Low and middle income OR international OR Africa OR Asia OR Southeast Asia OR Caribbean OR West Indies OR South America OR Latin America OR Central America OR Middle East OR all countries classified as low- and middle- income following the World Bank Classification list ¹
Databases	Education Research International Clearinghouse (ERIC), Google Scholar, International Development Research Centre (IDRC), United Nations (UN) Digital Library, World Bank publications library, USAID publications library

¹ World Bank Country and Lending Groups – World Bank Data Help Desk. Accessed June 26, 2020. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>. In

addition to these databases, the MoES provided all policy and locally relevant educational materials to the team for review. A full list of resources is included in Section VI: References.

Eligibility criteria

As noted in Exhibit A.2, our review included policy documents and grey and peer-reviewed literature. We excluded publications if the documents:

-) Provided insufficient information (e.g., abstracts only or conference papers).
-) Were published before 2005;
-) Were published in a language other than English;
-) Did not refer to the concepts of teacher professional development, quality assurance, accreditation, or assessments; or
-) Did not focus on primary and secondary student populations between the ages of 6 and 18.

Retrieval, appraisal, and synthesis

The initial search was conducted between October 20, 2021, and January 15, 2022. After reviewing and appraising the documents, the team reviewed 12 key policy documents provided by MoES; 26 education research or evaluation reports conducted in Georgia; and 25 articles that were identified as critical contributions to the whole school improvement approach, systems thinking, or one of the three technical pillars. A summary of the main findings from the literature review is presented in Section III. The detailed findings from the literature review are in Appendix B: Detailed Literature Review.

1. Systems diagnostic

Our comprehensive measurement framework includes a sound, mixed-methods analytic approach that effectively answers the research questions specified for the system diagnostic and descriptive implementation study. Exhibit A.4 shows a high-level overview of our approach and the primary data sources to address each research question.

Exhibit A.4. Research questions and the analytical approach

Research questions	Analytic approach
7. What is the current situation in the general education sector regarding quality, equity, and efficiency? – What factors explain the differences among schools (e.g., geography, ethnicity, languages) in the general education system? – What are the major factors affecting the quality of education delivery in schools? – How do the learning experience and effectiveness of teaching differ for students of different socioeconomic and ethnic backgrounds? – How have recent reforms (see Exhibit 3)) affected the quality of teaching in schools? – What types of problems or issues affect the efficiency of the general education system? Z How does the school community perceive these reforms?	System diagnostic study Quantitative analyses of administrative and survey data to identify trends of enrollment, completion, education system internal efficiency, and out-of-school children; and to assess supply, demand, and equity issues on access and retention. J <i>Secondary data:</i> Education Management and Information System (EMIS), the MoES school monitoring data (for example, enrollment, completion, infrastructure), data such as students and teachers' examination results; register of TPD activities from TPD and NAEC datasets. Desk review of legal and policy documents, research reports, evaluation reports of educational interventions, teacher preparation programs, etc. J <i>Primary data:</i> Diagnostic school survey of a nationally representative sample that will assess system problems and progress, governance, financing, school culture, and student outcomes. The final report will complement the quantitative diagnostic assessment by integrating qualitative findings from the descriptive implementation study.
8. What is the current school situation related to management, school climate, and students' learning gains? – What are differences (if any) related to region, ethnicity, languages?	System diagnostic study J Quantitative analyses of administrative and survey data to identify trends in public education spending, system capacity, management practices, school climate, and students' performance with an emphasis on differences by region, geography, and sociodemographic composition. <i>Secondary data:</i> EMIS and the MoES school monitoring data. J <i>Primary data:</i> Diagnostic school survey of a nationally representative sample that will reveal schooling concerns and needs. Qualitative information from interviews with key stakeholders, consultative meetings, and workshops will be integrated with the quantitative data in the final report.
9. How have the reforms for achieving whole school improvement contributed to changes in the assessment of students' learning outcomes, school climate, and management? – What can we learn about the NSM pilot implementation that contributes to improvements in the general education system as a whole? – How has NSM affected teachers' instructional practices? School management practices and school climate?	Descriptive implementation evaluation Qualitative contribution analyses of key stakeholders' perceptions on the effects of reforms on school management, school quality and climate, and students' performance trends. J <i>Secondary data:</i> Desk review of policy documents, including reports of the implementation of NSM and assessment results. J <i>Primary data:</i> (1) Qualitative interviews of key MoES and PMU informants, principals in NSM and non-NSM schools, and national and international education experts; (2) focus groups with teachers and students in NSM and non-NSM schools; (3) focus groups with members of the education resource centers; (4) focus groups with heads of the university in-service programs; and (5) systems change workshop with key representatives of the stakeholder groups.

Administrative Data

Our first step to assessing the general education system was to map the constructs and indicators of interest to the data sources. The mapping process enabled us to describe the education system's

quantitative performance, including enrolment capacity, coverage of different age groups, completion of cycles, academic performance, equity, inclusion, and efficiency (World Bank and United Nations Children’s Fund 2014). Once we identified the constructs and indicators, we worked with the PMU and the MoES to identify and obtain the most reliable data sources to create a comprehensive picture of the general education system.

We recognized early in the process that there was limited availability of data on students’ learning outcomes in Georgia. To examine these outcomes, we analyzed data from the students’ performance and academic progress using results of school-leaving Common Admissions Test (CAT) assessments from 2011 to 2019, national assessment data from 2014 to 2018, Unified National Examinations, and international assessments and commercial assessments performed by NAEC as requested by individual schools, and national performance on TIMSS and PISA.

The research team contacted NAEC, EMIS, TPDC, MoES ESIDA, and the MoES to collect the administrative data needed to analyze the proposed indicators for the systems diagnostic. Exhibit A.5 summarizes the final status of our administrative data collection process.

Exhibit A.5. Status of administrative data collection

Administrative data set	Status of data request
EMIS	
Statistics on the use of the teacher’s pension award in 2019–2020 by school, subject, year of award use	Received
Teacher vacancy filling rates in 2019–2020 according to age, gender, subject(s), status of teachers in each school	Received # of the first lessons undertaken by the teachers in 2019-2020
Information about principals by age, gender, school, appointment or election, year of tenure, certification (2015–2021)	Received data by age gender, school, and position. Data on year of tenure and certification were not provided.
Statistics of students’ attendance, absenteeism and chronic absenteeism per school, grades, sex and disability/SEN status (2018–2020)	Not received
Statistics of students’ online attendance per region (2020–2021)	Received
Student repetition and advancement data per school, grade, sex and disability/SEN status (2015–2021)	Received repetition and retention per school, grade, sex and disability status
Statistics of out-of-school children per district, age, sex and disability status (2012–2021)	Not received
Number of students per school, region, sex and grade (2015–2021)	Received
Data about the students’ accessibility to technology (internet, PC, smartphone) in 2019–2021	Received data on usage of TEAM by the teachers and students
Gross enrollment rate per level and year (2015–2021)	Received
TPDC	
1. Complete list of teacher professional development activities (trainings, seminars, workshops, etc.) organized by TPDC in 2012–2021,	Received

Administrative data set	Status of data request
Complete list of professional development activities for school teachers (trainings, seminars, workshops, etc.) that were associated with credit score gathering in 2012–2021	Received
Complete list of professional development activities for school principals (trainings, seminars, workshops, etc.) organized by TPDC in 2012–2021	Received data on # of principals who attended the MCC organized training modules in 2016–2019
Number of teachers per subject and school who participated in TPDC-organized professional development activities in 2012–2021	Received # of teachers per school who participated in TPDC organized training in 2017–2020
Randomly selected portfolios of 30–50 teachers (with different status), allowing us to qualitatively analyze the data	Not received
NAEC	
1. Students' raw scores by subject in 11th and 12th grade on CAT by unique student code (2011–2019), allowing us to compare data by years	Received by region for the period 2011–2018
Students' raw scores on the national assessment of subjects in 2015, 2016, and 2018 by unique student code and unique school code, allowing us to synchronize it with other databases for comparison	Not received
Results of director certification exams in 2014–2015 and/or at any subsequent stage indicating the passing score of the results	Not received
Teacher Certification Exam Results for professional skills and subject examination (2012–2021), indicating unique teacher code allowing us to synchronize databases for comparison	Received (general statistics without the unique code).
Raw scores of the entrants (2012–2021) per subject and the passing score for each year	Received
ESIDA	
1. Information about the condition of school buildings (FCI Index), indicating the school code, city/village, municipality, and region ¹¹	Not received

Web-based Principal Survey

In addition to using administrative data, we conducted an online principal survey. The survey was based on the essential features to create a sustainable, effective, and efficient education system (Ndaruhutse et al. 2019; McKinsey 2010). We administered the web-based survey to principals from a representative sample of 241 schools that represented the 2,078 public schools in Georgia for the 2020–2021 school year. We used EMIS data to identify all public schools in each region, whether the school was in a village (compared to a city or small town), and whether the school included any instruction in a minority language (Armenian, Azerbaijani, and/or Russian). We conducted stratified random sampling to ensure representation of these key characteristics, drawing schools from each combination of strata in proportion to the percentage of the overall population of schools in that combined stratum (for example, with a minimum of one school drawn per stratum). In addition to stratified random sampling, we purposefully selected 18 additional schools to collect perspectives from a select group of schools whose distinct

¹¹ The only information received was that the MoES constructed 174 public schools since 2013, 257 public schools have been fully rehabilitated, and partial rehabilitation works have been carried out in about 1,800 public school buildings.

profile¹² and instructional practices are of interest for the purposes of the diagnostic study. Exhibit A.6 shows all public schools in Georgia and our proposed sample, with characteristics such as the percentage of schools teaching each of the three minority languages taught in Georgian public schools and the average number of students enrolled in the 2020–2021 school year for the sample.

Exhibit A.6. Comparison of characteristics from all public schools with schools in our sample

	All public schools in Georgia in 2020–2021	Evaluation sample
Number of public schools	2,078	238
Average number of students per school	265	292
Percentage of students in Azeri language schools	6%	11%
Percentage of students in Armenian language schools	3%	2%
Percentage of students in Russian language schools	7%	13%
Percentage of students in mountain or village schools	33%	34%
Regional distribution of schools (percentage)		
Abkhazia (located in a GE-controlled territory)	0.6%	0.8%
Adjara	11.0%	11.3%
Guria	4.6%	4.2%
Imereti	18.8%	16.8%
Kakheti	8.6%	8.8%
Kvemo Kartli	11.8%	12.2%
Mtskheta-Mtianeti	4.1%	3.8%
Racha-Lechkhumi and Kvemo Svaneti	3.2%	2.9%
Samegrelo-Zemo Svaneti	11.8%	11.3%
Samtskhe-Javakheti	9.1%	9.7%
Shida Kartli	7.7%	8.4%
Tbilisi	8.6%	8.5%

We reached out to the participants in our target sample via email with the initial link to the survey and a letter of support from the MoES. Our team then called each principal requesting their participation in the survey. When we received a low response rate (33 percent), the MoES personally contacted each principal in the sample, requesting their participation in the survey. The final response rate was 63 percent. Exhibit A.7 provides an overview of the characteristics of the survey respondents.

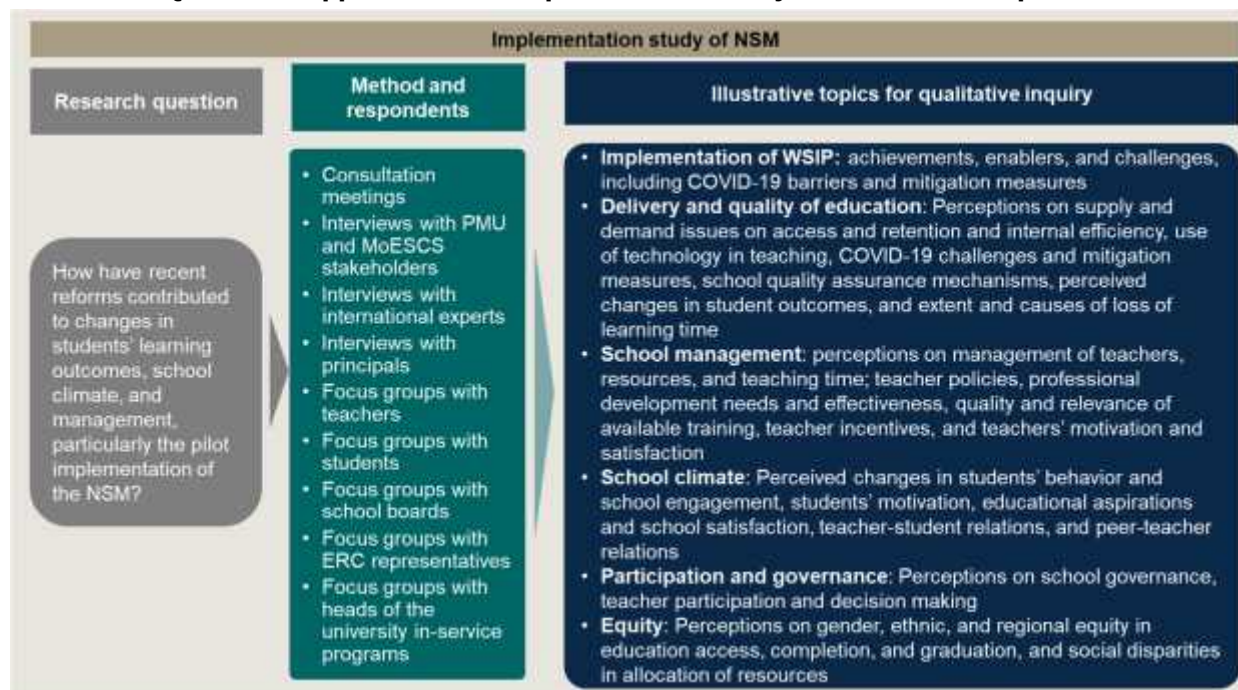
¹² The profile of these schools includes: schools of mountainous Adjara, schools located in the villages across the de-facto borders, and ethnic minority schools, which are across the borders to Azerbaijan and Armenia.

Exhibit A.7. Characteristics of survey respondents

	Percentage/average (all schools)	Percentage/average (sample)
Gender		
Male	27%	25%
Female	63%	65%
Age		
31–40	7%	8%
41–50	28%	27%
51–60	36%	39%
61 or more	28%	26%
Highest level of education		
Bachelor's degree	n.a	7%
Master's degree	n.a	90%
Ph.D.	n.a	3%
Total years of experience	n.a	13
Number of observations	2,044	150

2. Qualitative study

We used qualitative methodology to explore how recent reforms have contributed to changes in students' learning outcomes, school climate, and management, particularly the pilot implementation of the New School model. The qualitative interview and focus group protocols gathered in-depth information on (1) effective approaches and alternatives for improving instructional practices; (2) enabling factors for the implementation of the whole school development model; (3) changes needed to introduce high-quality continuous teacher professional development; (4) opportunities to integrate technology in teaching practice and student learning, including technology for self-learning and remote learning; (5) mechanisms to maintain a school quality assurance system; and (6) mechanisms to promote equality in the access to quality education and inclusion for all ethnic and vulnerable groups in Georgia. Exhibit A.8 details the approach and topics of interest that we elaborated during the interview process.

Exhibit A.8. Qualitative approach to the implementation study and illustrative topics


We conducted interviews and focus group discussions (FGDs) in a sample of 35 schools (15 NSM, 15 non NSM, and 5 minority schools). The sample ensured equal representation of schools with varying degrees of experience participating in NSM activities. To select the schools, we examined variations in the number of teachers and students so the sample included small to large schools. An additional five schools were chosen from the schools delivering instruction in minority languages and piloting the bilingual educational program. This purposive sampling technique enabled us to explore potential heterogeneity in principals', teachers', school boards', and students' experiences across schools and key demographic groups. We recruited principals, teachers, school board members, and students from these schools and invited them to participate in in-depth interviews and FGDs. We also conducted FGDs with staff from the education resource centers and the heads of the university in-service programs to better understand the quality of teaching in Georgia. Exhibit A.9 presents the number of key informant interviews (KIIs) and FGDs in NSM and non-NSM schools as well as the other KIIs carried out with government officers, representatives from international organizations, and experts.

Exhibit A.9. Qualitative sample

Stakeholder group	Number of KIIs/FGDs
FGDs and KIIs in NSM and non-NSM schools	
School directors (stratified sample)	35 KIIs
School directors (purposive sample)	1 FGD
Teachers (stratified sample)	35 FGDs
Teachers (purposive sample)	1 FGD
Students	35 FGDs
School boards	2 FGDs

Stakeholder group	Number of KIIs/FGDs
Other KIIs	
University staff	2 FGDs with sampled institutions implementing 300-ECTS and 60-ECTS pre-service programs, 1 KII with the head of the 300 ECT and 60 ECT program
ERCs	2 FGDs with sampled ERCs
MoES	7 KIIs
Parliament	2 KIIs
NAEC	2 KIIs
NCEQE	1 KII
TPDC	2 KIIs, 2 FGDs
EMIS	1 KII
I2Q	1 KII
ADB	1 KII
USAID	2 KIIs
World Bank	1 KII
MCC	1 KIIs
UNICEF	1 KII
Coalition Education for all	1 KII
Association of parents “Parents for Education”	1 KII
Local technical experts	11 KIIs

Given the high number of COVID-19 cases in the country, the data collection process was conducted remotely through WebEx, Zoom, or other online platforms.

Mixed-methods data analyses

Quantitative analyses for the system diagnostic

Our team calculated key indicators using administrative data and data collected through the nationally representative school survey and administrative data. Exhibit A.10 shows key constructs for the system diagnostic we used to measure the access, equity, and quality of the general education system.

Exhibit A.10. Key constructs for the system diagnostic

Key constructs	Measurement aims	Potential administrative data sources
School coverage	Calculate first-year access, intracycle retention, cycle completion, average number of years of education received	EMIS
School access	Compare school coverage with supply (for example, number of schools or teachers per population)	EMIS
School retention	Estimate the share of children who start school and remain in school until the end of the basic education cycle in Georgia	EMIS

Key constructs	Measurement aims	Potential administrative data sources
Enrollment	Calculate the gross enrollment rate as a measure of the share of children that GoG can enroll relative to the total number of children enrolled in the country (an indicator of the system's physical capacity)	EMIS
School completion	Calculate the primary and secondary completion rate, a measure of the number of children in the final grade of primary as a percentage of the population of the target primary graduation age	EMIS
Internal efficiency	Calculate dropout and repetition rates, and estimate the proportion of children who complete a given education cycle in a given number of years as a share of those who access it Identify factors associated with dropout and repetition	EMIS
School management	Identify mechanisms for managing teachers and education resources, monitoring effective teaching and teacher incentives, and teacher professional development	TPDC
Students' performance	Map historical trajectories in students' performance up to 2019 (or as available data permits)	NAEC, EMIS, ESIDA, TIMMS, PISA
Equity	Measure equity in the distribution of public education resources and identify determinants of social disparities in the allocation of education resources	ESIDA, EMIS, TPDC

Qualitative analyses

Qualitative interviews and FGDs were conducted in Georgian, Armenian, Azerbaijani and English languages. We recorded all interviews for which respondents granted consent, and produced transcripts that were then coded for data analysis. We followed four steps to extract, synthesize, and analyze the qualitative data (Creswell 2009):

- A. Raw data management.** Raw data management is the process of organizing raw data into formats usable for analysis (that is, from audio files to transcripts). During raw data management, we checked for any data that were incomplete and required follow-up with participants.
- B. Chunking and initial coding.** Often referred to as data reduction, chunking and initial coding allowed us to read through the interview and FGD transcripts several times and obtain a holistic view of the data. We documented potential themes, linkages among results, and potential findings.
- C. Detailed coding.** Detailed coding involved refining the coding scheme and recoding of data as we examined the data in greater depth. We used MAXQDA software to review and code the transcripts based on the initial codes developed during the chunking process. Using NVivo to assign codes to the qualitative data enabled us to quickly access data on a specific topic and organize information in different ways to identify themes and compile evidence supporting the themes. We expanded and refined the codes during coding and analysis in an iterative process as additional themes emerged. The team met several times during the coding process to discuss preliminary findings and group similar themes together.
- D. Contribution analyses and interpretation.** Our team developed an analytic framework using McKinsey's (2010) intervention cluster criteria and the systems accelerator (Ndaruhutse et al. 2019) frame. Exhibit A.11 defines each education system accelerator, links the intervention cluster criteria, and shows how each accelerator links to Georgia's technical pillars of interest.

Exhibit A.11. System accelerators, cluster criteria, and technical pillars

Technical pillar	System accelerator	Definition	Intervention clusters
Governance and management	Vision and leadership	Vision and leadership require:) A shared vision of inclusive and equitable quality teaching/learning) An understanding of how the different components of a system work together) Strategic thinking) Adaptability and resilience in response to unforeseen outcomes) Horizon scanning to see how the education system might be impacted by changes) The ability to work across organizational boundaries) Ability to deal with ambiguity	System-sponsored experimentation and innovation across schools, including the provision of additional funding for innovation and sharing innovations across schools. A focus on developing leadership capacity for the future. Sustained vision and strategy over time.
Governance and management Teacher professional development	Coalitions for change	The capacity to solve complex problems is distributed across many stakeholders who rely on collaboration and negotiation of outcomes to find solutions and actions, rather than a technocratic approach. Requires creating a collective desire and capacity among a critical mass of stakeholders, with a focus on teachers and principals to foster positive change.	Central Ministry works closely with other education agencies to develop and implement policies. The system cultivates peer-led learning for teachers and principals, including collaborative practice and decentralized pedagogic rights. Parents and community members are engaged with schools.
Governance and management	Delivery architecture	The education system has clear structures, roles, and responsibilities; effective communication between stakeholders; and allows for school-based decision making.	System has strong financial and organizational foundations including the optimization of school and teacher volumes, decentralized financial and administrative rights, clear funding allocation models, and clear organizational structure. Schools have the learning materials and infrastructure needed to support learning across all schools. Decentralized entities (for example ERCs, school boards) are engaged in decision making.

Technical pillar	System accelerator	Definition	Intervention clusters
Quality assurance and accountability Classroom and national assessments	Data for collective accountability and improvement	The use of shared data systems, including student assessment data for formative feedback and learning loops at all levels of the education system to foster a culture of continuous improvement	The system has a clear data and accountability foundation including the provision of transparent data to schools and/or public on school performance, school inspections, and school formative and summative tests (including EOG tests). System has a quality assurance mechanism, including school self-assessments and minimum standards for quality and outcome targets. The system provides support to low-skilled teachers including scripted lessons, coaching, and incentives for good performance. Data on access, student learning, equity, and quality are used continuously to inform decisions.
Teacher professional development	Teacher and school effective leadership	Building the capacity of the education workforce, so that staff own change and have the skills to lead and sustain improvement over time.	The system has an effective and inclusive education model and language of instruction that are appropriate for all students including minority students. The system is raising the caliber of entering teachers and principals through effective recruitment programs, pre-service training, and certification requirements. The system is raising caliber of existing teachers and principals through effective in-service training programs, coaching, clear career ladder steps, and teacher/community forums. School staff have administrative support so they can focus on the technical aspects of teaching.
Governance and management	Evidence-Informed policy and learning	The use of evidence and data to inform the planning, budgeting, and decision-making process.	The system has information systems in place to provide data to decision makers in a timely manner. Policymakers use data to develop, implement, and update policies and regulations for all students.

The first step in the contribution analysis process involved compiling evidence around the different accelerators based on the focus of this systems diagnostic (i.e., the technical pillars). The next step focused on examining the strength of the evidence supporting each of the intervention cluster criteria, giving considerable weight to stakeholders' perspectives on teacher professional development, governance and management of education, assessments, and quality assurance. The team also added administrative data and principal survey results under the various criteria and determined the strength of

the result based on the “Improvement Journey scale¹³” detailed in McKinsey (2010). The contribution analysis allowed the team to (1) look at stakeholder activities and results from a systems perspective; (2) identify where the contribution was appropriate based on the criteria; and (3) identify shortcomings in the design, implementation, and achievement of educational policies in General Education. We prepared recommendations using a strengths-based approach, which supports education leaders in Georgia to understand how to move forward on the improvement journey.

¹³ McKinsey (2010) uses the intervention cluster criteria to place countries into four categories: (1) poor to fair; (2) fair to good; (3) good to great; and (4) great to excellent. We assigned numeric values to each criterion and estimated where Georgia is on the improvement journey. The numeric values were weighted based on the amount of quantitative and qualitative evidence collected during the evaluation.

Appendix B

Literature review

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Introduction

This literature review examines the change in Georgian education policies over the past 20 years and grounds the approaches in the international literature. We begin by presenting the purpose, objectives, methodology, and limitations of the literature review. We then discuss the findings of our review, using the three education pillars to organize our presentation. We conclude by presenting recommendations for future policy and programming based on international best practices. This literature review provides the foundation for the recommendations we offer in the systems diagnostic of the general education system.

Findings of the literature review

The whole school improvement approach leads to a more integrated educational system that supports student learning. UNESCO, the International Bureau of Education, and others define a “whole school improvement approach” (WSIA) as an education system where all parts of the school work together to improve student learning and well-being. The WSIA is a partnership among senior leaders, teachers, principals, school staff, parents, and the community. Many researchers over the past decade have recommended moving to this integrated approach as a way of strengthening the learning and well-being of the student population (Weare and Nind 2011; Seligman et al. 2009; Bolier et al. 2013; Dix et al. 2012 as cited in Goldberg 2020). The WSIA integrates technical interventions (such as teacher professional development [TPD], new textbooks, new curriculum) into daily practice and school culture while engaging all staff to reinforce skills both inside and outside the classroom. The implementation of these interventions is further bolstered by parental engagement with the schools and extensive and systematic coordination with outside agencies (Barry et al. 2017; Jones and Bouffard 2012; Weare and Nind 2011; Ttofi and Farrington 2011; Adi et al. 2007a,b; Wilson et al. 2003). The entire school community is the unit of change and involves coordinated action between three interrelated components: (1) curriculum, teaching, and learning; (2) school culture and environment; and (3) family and community partnerships (WHO 1998). The WSIA moves beyond a set of interventions to provide a framework that schools can use to integrate activities and support students (Goldberg 2020). A review of the evidence on WSIA suggests that a whole school approach is more likely to result in enduring positive change than classroom-based interventions because of its holistic and systemic focus (Weare and Nind 2011; Adi et al. 2007a,b; Tennant et al. 2007; Jane-llopis et al. 2005; Wells et al. 2003 as cited in Goldberg 2020).

The New School Model may help the Georgian education system move toward a whole school improvement approach. The MoES launched the New School Model (NSM) in 2019 as part of the general education Reform Program. The goal of NSM was clear—to move toward whole school improvement. Grounded in a constructivist approach to teaching and learning, the new third-wave curriculum focuses on active teaching and learning, building on students’ previous knowledge, learning to learn, interconnecting and organizing knowledge, and developing critical and creative thinking instead of rote memorization (Concept of the NSM). According to Andghuladze (2020), the NSM is a concept-based approach that helps students “to build their own understanding from real-world examples” (Andghuladze 2020) and to structure knowledge that is represented as an evolution of facts to topics, then concepts, principle generalizations, and theories (Erickson et al. 2017, p. 42). Through the goals of improved teaching and learning, the new curriculum encourages problem-solving, promotes cooperation and meaningful communication, adheres to high ethics, acknowledges the importance of orientation in space and time, evolves accountability, strengthens literacy (including information and communication technology literacy), and integrates it into the learning process. The NSM also encourages autonomous learning and research-based decisions by showing how real-world initiatives can transform into actions

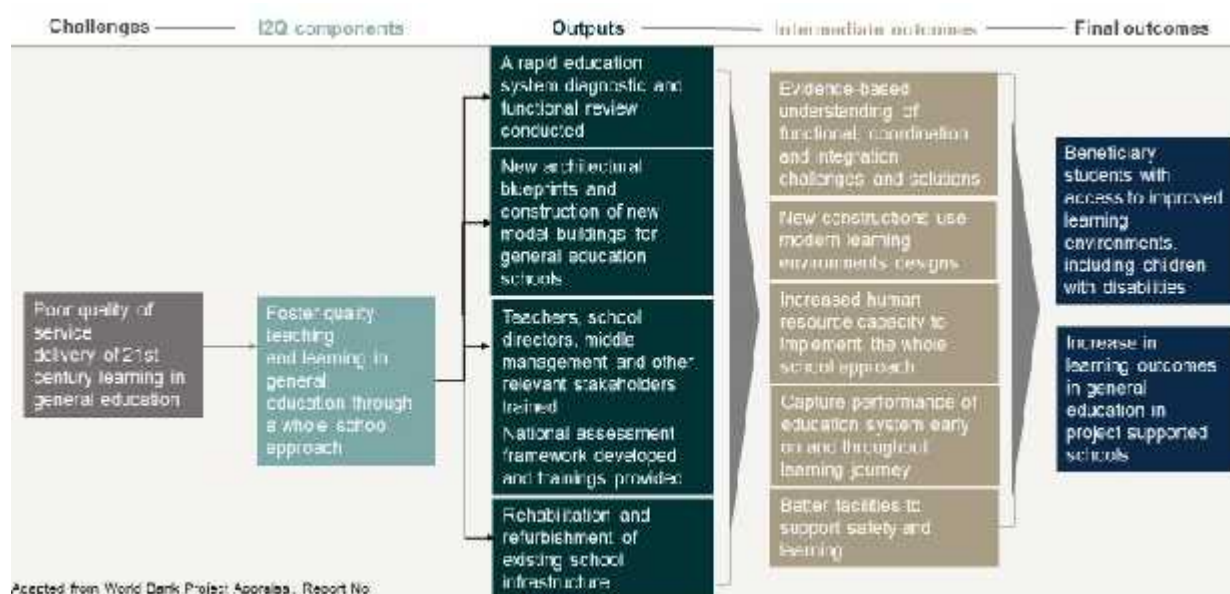
(New National Curriculum 2016). The third edition (2016–2024) of the National Curriculum has used the NSM as a way of introducing new principles and concepts to teaching and learning objectives (Andghuladze 2020). The NSM uses the new curriculum as a way of meeting four main objectives:

1. **Adapting the third-wave curriculum at the school level to integrate constructivist educational principles.** Our review of the Georgian policy documents (Order N40/N 2016; Order 100/N 2020) showed that allowing schools to develop their own curricula that align with the National Curriculum, adhere to the required and elective classes, and use approved textbooks leads to an increase in school autonomy. The adapted school curriculum should be grounded in the constructivist principles, which enhance the students’ desire to investigate and discover new things based on previous experience and knowledge of everyday life contexts. The approach also helps to develop their complex, critical, and creative thinking skills (Concept – “General Education Reform Support 2019”).
2. **Advancing school management approaches to draw in the broader education community.** According to Andghuladze (2020), one of the approaches that the NSM model uses is to introduce regional support groups, called “national curriculum adoption support groups” (MoES 2020), to help strengthen teacher and school management competencies. These groups assist school administrators in identifying school-level problems and support them in improving the school and assist teachers to integrate student-centered teaching approaches. The support group consists of specialists who are selected and prepared by the Preschool and General Education Development Department of the Ministry of Education with the help of the Teacher Professional Development Center (TPDC). The specialists include: (1) a school curriculum development expert and assistant curriculum expert; (2) a technology expert to help teachers integrate digital technology into the studying processes; (3) an educational leadership expert, who works with the school administration to create a healthy school environment; (4) an inclusive education expert who supports schools to adopt principals of inclusive education, and (5) adoption coordinators who support the adoption process (MoES 2020). The regional support groups work in different municipalities to support a subset of schools. A total of 24 support groups are distributed throughout the country. The NSM is currently active in 597 schools in Georgia, but ripples of the intervention reach many more schools as teachers learn about and adopt new practices.
3. **Integrating digital technologies in teaching and learning to improve equity.** The NSM school communities have better technical infrastructure and more capacity to lead online instruction than other schools (Kadagidze 2021). The model sees digital technologies as a tool to facilitate teachers’ preparation for student-centered teaching. Digital technology under NSM takes place in two ways: (1) integrating digital technologies into teachers’ routines (i.e., planning the learning process, communicating with colleagues) and (2) effective use of e-learning resources in teaching-learning processes. Teachers support students to learn how to use digital technologies (i.e., search engines, Microsoft cloud services) to acquire knowledge, store information, and exchange information. Students also master the integration of learning resources such as Minecraft Education Edition and Scratch. This process helps students develop both digital competencies and algorithmic and creative thinking. The NSM model includes (1) an electronic diary that facilitates administration of the educational process and communication between school community members (students, parents, teachers, school administration); (2) equipment for schools including laptops and projectors; (3) MoES-modified netbooks for first graders to facilitate a smooth operation of e-learning resources; and (4) MoES-developed educational electronic resources (MoES 2021).
4. **Expanding the assessment system to understand student progress** (Concept – “General education Reform Support 2019”). The NSM model created an internal and external assessment system at the

school level to elaborate school-based assessment design. This process is intended to support teaching/learning by helping teachers track student progress. The system has two components: (1) learning about school culture and (2) assessing student achievement and progress. The data from the system contribute to a school-level development strategy, which enables the MoES to support schools individually based on their needs. NSM schools will also administer national tests to students in grades 4 and 6 in the key subjects of literacy and math. Other subjects like social studies and sciences will be assessed every other year (Aptarashvili interview, 2022).

Exhibit B.1 highlights the expected results chain for the NSM.

Exhibit B.1. NSM results chain



Teacher professional development in Georgia continues to evolve. The legislative foundation established by the MoES in the past two decades has helped professionalize teaching, a key element of successful WSIA. It is well documented that high-quality teachers have a positive impact on student learning despite the lack of consensus about the best ways to measure teacher effectiveness and support teacher learning (Hanushek 2011; Rowe 2003; Oppen 2019; Wiswall 2013). Ensuring quality teachers in every classroom requires a system-wide effort; a set of complementary policies that impact the lifespan of teachers from recruitment through pre-service and in-service development and retention (Darling-Hammond and Rothman 2011). Moreover, policies must be in place to recruit, train, and support school leaders who create a school culture where teacher learning is valued, thus allowing teachers time to improve their practices (Sentocnik et al. 2016).

Teacher professional development (TPD) in Georgia is regulated by legislative documents that stipulate teacher functions, rights, responsibilities and accountability, status, certification, professional development, and career advancement. The MoES has been moving toward the whole school approach over the past decade by putting in place several legislative policies and reforms that improve teacher recruitment, retention, and career path. Substantive changes to TPD began in 2005 with the issuance of the Law on general education. This law defined the core components of general education, including TPD. A 2006 resolution (GoG No. 29) placed further emphasis on TPD by introducing a new TPD

framework. It defined the requirements for TPD including hiring policies, mentorship programs, teacher standards, National Certification exams (NCEs), and a TPD scheme. The resolution also established the Teacher Professional Development Center (TPDC) as a technical agency (Order of the President No. 389) within the MoES. The TPDC would lead teacher training and development moving forward.

MoES investments in pre-service education are contributing to a more qualified teaching force.

Effective pre-service teacher education that includes recruitment, preparation, and teacher induction are important components of a system to ensure high-quality teachers in every classroom (Darling-Hammond and Rothman 2011). Moreover, building the technical skills of teachers is one of six core common features across 20 countries that demonstrate excellent levels of education (Nadarhutshe et al. 2019; Mourshed et al. 2010). While there is variation among pre-service teacher education programs, programs that focus on the work of the classroom—what teachers will actually do—produce teachers who are more effective in their first year of teaching (Boyd et al. 2008). An independent evaluation of World Bank support for pre-service programs revealed characteristics for effective pre-service programs include screening, coursework, practicum, and quality assurance; however, most World Bank pre-service programs are limited to coursework with less emphasis on screening candidates, practice teaching, and quality assurance (World Bank Independent Evaluation 2019).

Several studies (TEDS-M¹⁴ 2008; World Bank Policy Review 2014) outline a series of key challenges within the Georgian general education system. These challenges include (1) low Unified Entry Examination (UEE) scores for students entering teacher programs at universities; (2) a lack of highly qualified university professors; and (3) weak linkages between university programs, impeding the opportunities for prospective (student) teachers to get practical experiences while studying. Andghuladze (2020) added other concerns including students' unpreparedness for university programs and the low research capacity of the university faculty. TEDS-M (2008) also noted that teaching is one of the least desired professions in Georgia, teaching materials are outdated, and there are no quality assurance mechanisms in place to improve the teaching programs.

To overcome the deficit of qualified teachers and attract teachers to the profession, the MoES through the New Teacher Professional Development Scheme launched an integrated bachelor's-master's degree academic program that included 300 European Credit Transfer and Accumulation System (ECTs) hours over five years. The New Teachers' Professional Development Scheme set up a framework to develop 300 ECTs over five years (Order No. 163/n 2011, Resolution of GoG No. 68 2015). The program focused on generating an effective workforce and overcoming the deficit of qualified teachers. The program began during the 2018–2019 academic year and the first graduates will enter schools in 2023. Based on the integrated program, in 2018, EQE adopted a one-year, 60 ECTs Program for Teacher Training (Resolution of GoG No. 241 2019). Serving as a shortcut for entering the teaching profession for people who hold a bachelor's diploma, this program has been implemented in 20 universities across Tbilisi and six regions. After graduation, alumni are entitled to the status of senior teacher and can begin working in schools.

Alternate routes into the teaching profession have not only helped mitigate teacher shortages and draw prospective teaching candidates to the profession, but also shown positive impacts on student outcomes (Muijs et al. 2010; Wright et al. 2019). For example, Teach First (UK) and Teach for America (USA), programs with 5- to 8-week summer training and continued support, place new teachers into disadvantaged and underserved communities. The MoES also created the Teach for Georgia program

¹⁴ See <https://www.iea.nl/studies/iea/teds-m>.

to encourage young people to enter the teaching profession, though the program needs to be advertised more broadly to effectively recruit new teachers.

The MoES also introduced a teacher retirement scheme in 2019 to increase the flow of new teaching candidates into the profession. The Teacher Seekers Program opened the door to a wide spectrum of potential teachers who hold a bachelor's degree in any field. After entering the system, seekers take a distance training course and pass the subject exam during a two-year period. The Seeker's Program has had a positive impact on teachers' age and reversed the annually declining percentage of young teachers in the system (Bochorishvili and Peranidze 2020). Former teachers who worked in schools without an official status due to failing the certification exams were also entitled to seekers' status and were given one more chance to take the certification exam and prove their competence.

The MoES has continued to put in place standards to improve teacher quality. Teachers in Georgia hold a bachelor's degree and TALIS (2018) showed that 93 percent of teachers participate in at least one professional development activity a year. Order of the MoES No. 1014 on the approval of teacher professional standards set the foundation for initial and continuous TPD. It introduced and defined four teacher qualification categories, set out training themes, and identified skills that teachers need to master to teach. Moving more toward the establishment of high-caliber teachers, MoES Order No. 1101 (2009) set the conditions for conducting a teacher certification exam. All teachers were required to pass the NCE by 2014. The deadline for passing the NCE was extended several times because low numbers of teachers passed it. In 2010, 10,003 teachers took the first NCE and only 1,147 obtained teaching certificates (Chanturia et al. 2020). Since 2014, the certification process has been slow and many teachers failed to obtain their certification. Those who did not pass the exam lost their professional status, though teachers in Georgia are continuing to study and try to pass the exam.

The MoES continued to refine and invest in TPD, and by 2020 it passed Order No. 67/N, which implemented new standards to expand the list of minimum competencies for all teachers and remove the subject-specific competencies. This version of the TPD scheme also defined teacher statuses for special education teachers and defined their competencies per level. A further Ordinance also added an amendment allowing special education teachers to become a part of the TPD scheme.

In-service teacher training has also improved, though more coordination among TPDC and the central MoES to align training would further professionalize the workforce. There is consensus that effective professional development results from design principles that: (1) focus on student learning; (2) focus on content; (3) build on teachers' existing knowledge and expertise; (4) incorporate active learning; (5) support collaboration, reflection, and peer learning; (6) use models of effective practice; (7) provide coaching and expert support; (8) are sustained over time; (9) ensure support from school leaders; and (10) are part of a coherent policy environment (Darling-Hammond 2017; Allier-Gagneur et al. 2020). Most of the TPD studies focus on whether teachers adopt the teaching strategies they are taught. However, a growing body of research in the experimental impact evaluation literature has revealed that overall professional development has consistent, small, positive effects on student learning, and that lesson study, instructional coaching, and teacher learning communities increased student learning outcomes (Sims et al. 2021). Similarly, Popova et al. (2018) found that linking participation incentives such as salary to professional development, having a subject-specific focus (such as math, literacy), and incorporating lesson practice with face-to-face training yielded increased student outcomes.

In Georgia, the TPDC bears the primary responsibility for in-service teacher professionals. TPDC has taken several steps to professionalize the teaching force since 2006 including developing an accreditation

system for training providers and funded training through vouchers, developing 139 training modules, and conducting 1,320 training workshops with nearly 26,000 teachers (Andghuladze 2016). Furthermore, Order of the MoES No. 1014 on the approval of teacher professional standards set the foundation for initial and continuous TPD. The MoES introduced and defined four teacher qualification categories, set out training themes, and identified skills that teachers need to master to teach.

Despite these improvements, the quality of teaching remains low. According to the World Bank (2014), the content and structure of TPDC training workshops are not effective and follow a “chalk and talk” format that limits teachers’ ability to bring their experiences into the training. Similarly, the State Audit Office of Georgia (2021) found that TPD lacks a consistent training plan, resources are not spent productively, and teachers are not given equal opportunity to participate in training. During 2017–2019, approximately one-third of teachers did not participate in training organized by TPDC. Moreover, an analysis of TPDC training attendance revealed that fewer teachers from Adjara, Samtskhe-Javakheti, and Kvemo Kartli participated in TPDC training in contrast to teachers from other regions.

The donor community in Georgia provides numerous examples of effective TPD programs. For example, the TPDC partnered with the MCC-funded Millennium Challenge Account – Georgia to develop training modules on learner-centered classrooms and subject content and trained approximately 24,000 teachers. The USAID G-PriEd Project and TPDC developed teacher training materials in contemporary methods of teaching reading and math and trained 7,944 primary teachers of the Georgian language. Mathematics and Georgian as a second language teachers were retrained throughout the project, reaching 585 schools and 121,000 students. In 2020, the USAID-funded project “Achieving Student-Centered Education for a New Tomorrow (ASCENT)” focused on literacy, numeracy, problem solving, and critical thinking skills in addition to strengthening mother tongue instruction in minority languages for primary school teachers (MoES 2020). All of these programs involved strong, sustained, and coherent TPD and evaluation components and measured the impact of the interventions.

School-based TPD is an established mechanism for increasing teacher quality worldwide. However, the general education system in Georgia needs to provide more support, training, and resources to institutionalize this approach. School-based TPD allows teachers to focus on student learning and collaborate to solve classroom and school-based problems (Madalinski-Michalak 2019). It rests on the idea that teachers are engaged in professional learning every day as they design and deliver lessons, assess student learning, and collaborate with peers. School-based TPD assumes that teachers hold expertise as they implement the curriculum and their time is better spent working with peers and coaches to improve instruction. Furthermore, it is an essential component of the WSIA approach, which includes cultivating peer-led learning for teachers and principals along with collaborative, school-level practices (Mourshed et al. 2019).

School-based TPD is a key feature of the NSM. In 2020, the MoES hired 20 to 30 coaches per subject, to work with NSM schools throughout Georgia, supporting them to develop and adapt school curricula through thematic matrixes, complex tasks, and formative assessments.

Principal professional development has significantly evolved over the past two decades, but more leadership and education management training is needed to help these leaders connect all aspects of the WSIA. A significant body of research suggests that school leaders make a difference in overall school improvement efforts and student outcomes (Day and Sammons 2014; OECD 2013; Louis et al. 2010). School leaders play a vital role in establishing the school’s direction and creating a positive school culture including developing a learning community, enhancing teacher quality, improving teaching conditions

and the learning environment, managing resources, and building and maintaining positive relationships and partnerships inside and outside of the school. School leaders contribute to the creation and promotion of a successful inclusion program (Cohen 2015). According to Robinson (2010), the leadership practices that are most related to improved student outcomes include school leaders who (1) set and communicate clear learning goals, (2) target resources aligned to achieving the goals, (3) maintain a focus on teaching and learning, (4) learn with teachers to enhance the quality of teaching, and (5) maintain a safe and orderly school.

The reforms in Georgia recognize the role and responsibilities of the school principal through both legislative and regulatory documents that have changed over time from a competitive process for principal selection in 2006 (MoES Order No. 929) to the development of Standards for Public School Principals (MoES Order No. 115/N) in 2010. Certification examinations were centralized in 2006–2007 and administered electronically. Special commissions established by the MoES also conducted interviews with principal candidates. The Ministry then nominated a maximum of three candidates to the schools per vacant position based on the pool of certified persons willing to participate in elections in a given school. The MoES amended the regulations for the competition in 2009 and assignment of the candidates to schools became fully dependent on the MoES (Kitiahsvili 2016).

Order No. 929 (2006) was repealed in 2011 and a new procedure for selecting public school principals was approved (MoES Order No. 25/N of February 24, 2011). This new selection process included two stages: (1) certification/interview, and (2) nomination of principal candidates by the public school board of trustees. Despite these amendments, this literature review showed that principals feel a lack of school management and leadership capacity (Sentočnik et al. 2016). Bregvadze (2017) also noted that the existing principal assessment instrument lacks validity and reliability (Bregvadze 2017).

The 2012 elections, which replaced the ruling party, changed many strategic directions in Georgia, including the education improvement strategy. Changes included the “depoliticization of the general education system, freeing schools from political pressure, and ensuring the transparency of processes” (Governmental strategy 2014). However, there is limited evidence that these changes are improving school autonomy and the professional qualifications of principals (Chanturia et al. 2020). An OECD report (2019) noted that the current policy was not conducive to providing schools with strong leaders who understand and support the implementation of new instructional strategies. The report notes that the principal selection policy does not align with WSIA and allows teachers who lack any management and leadership training to become principals. Sentočnik, et al. (2016) also note that the current principal policy does not align with the standards for public school principals.

In 2020, the new standards for public school principals were approved (No. 15/N, January 31, 2020), consisting of four areas including educational leadership, learning process administration and accountability, self-development, and staff professional development. Principals also receive training on maintaining relationships with the community, institutions, and stakeholders. The MoES announced a principal selection process in March 2020, but it was postponed indefinitely due to the COVID-19 pandemic.

Similar to TPD, the donor community in Georgia has led a number of successful principal professional development programs. The Millennium Challenge Account was one of the few donors to offer a complex training program to school principals in Georgia. Under the Teacher and School Director Professional Development Project, implemented by the National Center for Teacher Professional Development, approximately 2,048 school principals were trained between 2016 and 2018—including

principals of the ethnic minority schools. The program modules include: (1) Characteristics of the school of the 21st century; (2) Effective principal: from theory to practice; (3) Management and administration of finances, human resource and time management, issues of legislation; (4) Shared leadership and adult education; (5) Education mentorship; (6) Leadership and supervision; (7) Development of learning community; (8) Characteristics of the classes of the 21st century; (9) Quality issues; (10) Support of the students through assessment and technology; and (11) Leadership and group dynamic. The Leadership Academy included regular communication among the school principals through professional meetings where more than 1,500 principals participated in training. The program facilitated the establishment of a professional periodical called *School Management* and initiated two international conferences for school principals (*School Management*, 3(9) 2019, pp. 28-36). It also launched teachers' learning groups in each school to encourage positive school-based cooperation among teachers. Sentocknik et al. (2016) cite the critical role of principals in whole school change, but focus groups with education stakeholders revealed that school leaders lack the capacity to support teachers as they implement student-centered teaching approaches required by the third-wave curricular reform. Principals are also struggling to support school-based cooperative practices in the learning groups.

Assessments are a critical component of the WSIA that helps identify systemic weaknesses in the education system. Examinations and assessments are important components of a quality general education system. They serve many purposes, particularly in developing and evaluating policies and programs, teaching effectiveness, and achievement of academic objectives; selecting entrants into programs and universities; assessing students' aptitudes and skills; and attainment of educational goals. Georgia's testing activities include teacher (classroom) achievement assessment, national tests developed by the National Assessment and Examinations Center (NAEC¹⁵) of MoES, and participation in international testing programs in mathematics, science, and reading (TIMMS, PIRLS, and PISA).

NAEC has led the development and implementation of national assessments in Georgia. In addition to identifying systemic weaknesses, they contribute to increases in tutoring and a focus on math, science, and language. The use of national centralized examinations in Georgia began in 2002 with the introduction of NAEC. NAEC was established to systematically monitor educational outcomes among students and conduct national summative assessments for students in the ninth and final grades of school (Chanturia et al. 2020). Three years later, NAEC rolled out the Unified Entry Examination (UEE), which became the prerequisite for entering higher education. UEE was a standardized test administered by NAEC, which eliminated rampant corruption in higher education and transformed the university admissions process into one of the most transparent educational processes in the country (The World Bank 2012). The intent of the UEE was to increase access to higher education and open university doors to students of the highest merit (NAEC 2018). Along with subject tests in the Georgian language, mathematics, and a foreign language, the UEE included a mandatory general aptitude test that was designed to assess test takers' logical reasoning skills. This process was viewed as an equalizer for students who had varying academic achievements or who had not received quality subject matter instruction at school. However, the goal did not fully materialize (Chankseliani 2013).

Although UEE increased access to higher education for those who were not able to pay steep bribes for university admission, it reproduced the inequality present in the country along socioeconomic and geographic divides. Higher-income households were able to invest in the preparation of university entrants, which put students from poorer households at a disadvantage. At the time, government grants for higher education were solely determined by scores on the general aptitude test. However, an analysis of

¹⁵ The initial name of the agency was National Centre for State Examinations and Assessment.

test results showed several trends that put this assumption under question. First, there was a high correlation between the scores on the subject matter and general aptitude tests (Chanturia et al. 2020). Second, general aptitude tests had the lowest predictive power when it came to students’ performance at the university (Chakhaia 2019) and the test scores were highly malleable to tutoring. The result was that these factors reproduced the inequalities in access. The fact that government grants were also distributed based on test scores meant that a large portion of state funds went to students from higher-income households (Chankseliani 2013; Chanturia et al. 2020). This finding contributed to the removal of the general aptitude test from the mandatory UEE tests in 2019.

The UEE was the focus of national assessment efforts and no centrally administered examinations were conducted for high school students until 2011 (Gorgodze and Chakhaia 2021). The UEE assessment decoupled university admissions from students’ performance at school, leading students to focus on preparing for the UEE as they entered the upper grades. The result was a decline in school-level student performance as students shifted their focus to university admissions (Chanturia et al. 2020). Schools also operated without any standardized testing, which created concerns over school accountability. To fill this gap, the Ministry of Education introduced a computer-assisted Secondary Graduation Examination (SGE) in 2011 (Bakker 2014). The SGE was supposed to replace the UEE and serve the dual goal of school graduation and university admission qualification (Li et al. 2019). Studies indicated that administering two high-stakes tests greatly increased the practice of tutoring in the country among those who planned to attend university as well as those who did not plan to continue to tertiary education. The use of the SGE for graduation and university admission was supposed to diminish the role of tutoring in the university admission process, reinstate the role of schools, increase student attendance rates, and ameliorate inequality in the system (Chakhaia 2019; Chanturia et al. 2020).

The introduction of the SGE was not uniformly supported by education stakeholders. Notably, NAEC representatives were apprehensive that the SGE would become an accountability mechanism for schools and instead stressed the importance of providing better support, personnel, infrastructure, and textbooks to schools (Gorgodze 2017). The effectiveness of the SGE towards the intended goals came under further question in subsequent years. Exhibit B.2 summarizes the challenges encountered by the SGE.

Exhibit B.2. Challenges faced by the SGE

Challenge/Concern	Example
Need for accountability	200 school principals were dismissed after the scores of the first examination cycle were published, due to low performance of their students on the test (Gorgodze and Chakhaia 2021)
	Decline in lower-achieving students completing the SGE to avoid unfavorable test scores on schools’ records (Gorgodze and Chakhaia 2021; Chanturia et al. 2020)
Increased student dropout	Increased dropout rates in the 10th, 11th, and 12th grades after the introduction of the SGE seem to point in this direction (Chakhaia 2019)
Need to assess higher-order knowledge and skills	The test was not able to assess higher-order competencies included in the national curriculum
Increased reliance on tutoring	The demand for private tutoring increased after the introduction of the SGE (Chakhaia 2019)

A trends analysis of the SGE results showed that a substantial share of students failed to pass the threshold to graduate (e.g.,14.4 percent in 2011, 27 percent in 2017, and 24.5 percent in 2018). The likelihood of failure was significantly higher for students in rural areas, public schools, and schools with

less qualified teachers (Chakhaia 2019). It has been argued that, given the widespread inequality in education delivery across the country, the test penalized students who were already disadvantaged by the system and precluded future academic prospects for them. While the test had very limited benefits for increasing school accountability and education quality, it put an additional burden on students (Chakhaia 2019). The SGE was also criticized for its content and measurement constructs. Although the national curriculum of Georgia was oriented to the development of competencies, the SGE was composed solely of multiple-choice items that did not adequately measure students' higher-level skills. Hence, these tests could not be used to determine graduation decisions based on the claim that it was not aligned with the national curriculum (Chakhaia 2019).

The SGE was abruptly ended in 2019. The Ministry justified the decision on their desire to focus more on teaching quality than on testing. They hoped that the shift would reduce the rampant tutoring practices and alleviate the financial burden of test preparation on families (Liberali 2019). Although many experts were skeptical about the SGE, the move was broadly seen as insufficient for moving the system towards these objectives (Gorgodze and Chakhaia 2021).

The elimination of student graduation examinations led to an increased focus on classroom formative assessments. Frequent formative assessments at the classroom level are widely recognized as a key part of an effective teaching and learning process (Black and Wiliam 1998). According to a 28-country review of evaluation and assessment systems (OECD 2014), there is a high level of interest in formative assessment within OECD countries but the use of innovative approaches is limited. Classroom-based assessments have focused mainly on reproducing knowledge and basic skills that may not capture the learning of skills and competencies in constructivist curricula. Many OECD countries have policy frameworks that promote formative assessment. Some (such as Australia, Korea, and Mexico) include formative assessment in pre-service teacher education. Some mandate formative assessment in TPD. Despite the interest in formative assessment, there is little guidance on effective implementation at the classroom level and little information on how teachers in OECD countries use formative assessment data. To ensure policy commitments are matched with classroom-based assessment practices, sustained investment in teacher capacity is necessary.

The current educational strategy of MoES includes increasing efforts to integrate formative assessments in instruction and increase teachers' competencies in using them. Various tools for formative assessment have been developed under the USAID-funded G-PriEd program, which aimed to develop teachers' skills in data-driven instruction. Despite multiple donor-funded interventions aimed at increasing the use of formative assessments in the classroom, progress in this direction has been limited. Teachers largely see the role of assessments as issuing summative judgments about students' knowledge and perceive formative assessments as narrative feedback (as opposed to a score), but they know little about the utility of assessments for informing further instruction (Li et al. 2019; Gorgodze and Chakhaia 2021).

The third wave of the national curriculum (developed in 2016 and implemented in 2018) took a more holistic approach to learning. It focused on creating a student-oriented curriculum aligned with 21st-century competencies, where education objectives would move beyond fact and skill acquisition and focus on developing a deeper understanding among students about the structure of knowledge (Andghuladze 2020).

Formative assessments were key to implementing the new curriculum; this was reflected in the New School Model, which was designed to support the rollout of the curriculum. The NSM was intended to help teachers and schools develop their own curricula for each grade based on statutory education level

stipulations—giving teachers more freedom to plan and deliver instruction. Teachers’ competencies continue to be a significant roadblock for integrating formative assessments in teaching. The development of teachers’ competencies was one of the primary objectives of the project launched by the Millennium Challenge Account in 2016. MCC helped the MoES develop and implement a series of formative assessments, for example, in mathematics in 2015 and 2018, in the sciences in 2016, and in Georgian as a Second Language in 2018 (Li et al. 2019). The project trained approximately 18,000 teachers at the lower and upper secondary levels and emphasized improving teachers’ competencies to use formative assessments in the classroom. However, the irregularity and varying nature of assessments limited the ability of MoES to evaluate specific interventions and allowed little opportunity for longitudinal comparison and policy analysis.

The MoES is currently supporting new formative assessments, which are anticipated for 2021–2022. NAEC, with the support of the World Bank, is developing census-based standardized assessments for 4th-, 6th-, and 10th-grade students in Georgian language and mathematics. The test is designed to provide useful information on the learning needs of individual students, classrooms, and schools (Gorgodze 2021).

The Georgian government and the MoES have a clear school financing model, though it continues to evolve over time. The Georgian government is committed to providing equal education opportunities to every student. This process begins with the system for school financing. According to the Law on general education, schools are financed from the MoES central budget, based on a per-student voucher system (Maglakelidze et al. 2013).

This model was seen as an essential part of the complex education reform that sought to create fundamental system changes and integrate liberal economic principles. The funding model satisfied three main preconditions: (1) transparency, (2) efficiency, and (3) justice in response to previous practices of corruption and protectionism (Janashia 2016). The introduction of the new financing formula resulted in a significant decentralization of power to the schools. The process required schools to become independent entities and establish a bank account and a governing body (a board of trustees consisting of teachers, parents, and students). Georgian society saw this model as a way for the schools to retain managerial power and promised new hopes for educating future populations. These hopes included:

-)] School free choice for parents. Parents would be able to choose schools and use the state-funded voucher to take their children to the private or public school of their choice (Paragraph 22, 2005).
-)] Vouchers would strengthen and incentivize the private sector to invest in education.
-)] The funding model would encourage competition among schools, which would lead to increases in educational quality.
-)] Greater financial efficiency by optimizing expenditures in and for the schools.
-)] Equal and fair distribution of education resources among students (Tabatadze and Gorgadze 2014).

The school funding model has been modified multiple times since its introduction. The original formula established a simple proportional link between the number of students enrolled in the schools and the standard voucher. Public and private schools received universal vouchers per student. The schools received funding twice a year based on the number of students multiplied by a coefficient for geography (such as a city, village/borough, or mountainous settlement) (Janashia 2016). The coefficient for location was abolished in 2007, and the number of vouchers per location was defined by the MoES. This funding formula revealed multiple challenges, including financial inequality among schools, which led to

overfunding large schools and underfunding small schools. Despite efforts to ensure students' equality regardless of the school characteristics, the funding system failed to correctly capture the differences based on students' geography, demographics, and social needs (Giorgobiani 2008).

In 2009, the MoES amended the funding model. The amendment transformed the financing per capita into a hybrid funding model by integrating the school-size coefficient (based on number of students) into the funding formula and determining two school size categories. In 2011, a further revision of the model introduced a mixed funding formula. According to the new formula, small schools (less than 160 students) were financed through a need-based process, while larger schools were categorized into six groups of schools based on the number of students. The per-student vouchers varied depending on the size of the school. In 2012, the financing volume and school clustering rule changed again, categorizing small schools as those with up to 169 students. Private schools were still financed through a universal voucher approach with a considerably lower amount per student regardless of school size or location.

In 2012, the schools with a language of instruction other than Georgian also began receiving additional funds based on a special coefficient to provide aid for strengthening state language competencies among students of the ethnic minority. Funding for students with special educational needs was also added to the model in 2013. Schools serving students with special needs received extra funding based on the number of students.

The financing system ensures an almost equal distribution of funds across the schools based on enrolment, number of classes, and location (Education for All 2015). Approximately 61 percent of schools in Georgia are considered small. These schools are located predominantly in villages and mountainous settlements and they serve about 20 percent of the student population but require nearly 42 percent of the funding for general education. However, multiple amendments and rising investments in education have not significantly addressed equity issues in Georgia. The reform of school financing failed to ensure free school choice for parents even in urban locations and it has not accelerated investment in education in the regional centers due to the particularity of the Georgian context and irrelevant categorizations of the schools (Tabatadze and Gorgadze 2014, 2017; Janashia 2016). In fact, Georgian households spent approximately GEL 300 million on education for their children—nearly 85 percent of government expenditure (Machabeli et al. 2011).

In sum, the government resolution "On determining the financial norm per student for the financing of general education and the amount of its corresponding standard voucher" changed six times between 2015 and 2021. Modifications to the funding model included an increase in basic funding, a coefficient amount for different schools and grades, basic funding amount, and financing of ethnic minority students and students with special education needs. At the same time, the amendments regulated teachers' additional remuneration per upgrade in professional seniority level, set the retirement award sum, ensured school security, and established first aid offices in the schools. The per student voucher amount also increased twice, rising from GEL 554 per student in 2011 to GEL 1,123 in 2018. To fulfill the parameter defined through the strategy "Education with the National Idea," the annual funding amount needs to double from its current allocation, increasing to nearly GEL 3.49 billion in 2022 (MoF 2021). This funding amount translated into about GEL 2,000 per student—an increase of nearly GEL 900 per student (or GEL 529 million) to provide regular education services (Namchavadze 2018).

There is an important difference between accreditation (school authorization) and quality assurance. The intent of accreditation is to ensure that education provided by licensed institutions lives up to the mission established for each institution or system and guarantees prospective students and parents an

acceptable level of quality (quality assurance) as promised by the public general education institutions. Accreditation entails quality assurance and mechanisms for independent reviews, reflection, and continuous improvement and responsiveness by the schooling institution to the feedback provided by the accreditation process. Because public schools are provided by the government, the focus of accreditation is improvement rather than licensing. Accreditation ensures a basic level of quality for schooling opportunities through peer review and self-correction. It serves both the public and the institution, and generally includes:

-) Setting standards (for general education, these can be standardized across schools and are available) based upon the mission statement of the school, or in the case of public schools, their general mission statement.
-) Self-study with the principal and teachers that examines the school activities and plans in terms of the established standards.
-) Documentation and on-site review of the school (possibly utilizing the ERC in collaboration with the school board) to amplify and verify the information in the self-study and probe deeper into potential problems and benefits of the programs that make up the school.
-) Formal release of the findings to make the Ministry, community, and school aware of strengths and weaknesses that require attention, continued monitoring of the program and institution, and eventual re-evaluation.
-) Follow-up to the procedure is institutional improvement planning and action so that the school is as strong as possible and continues to improve.

The literature establishes two basic types of school accreditation: institutional and programmatic.

Institutional accreditation documents the school quality in terms of its governance, management, capacity, and record of meeting the overall mission of the school. Programmatic accreditation attests to the professional standards of the specific set of activities that constitute the school curriculum. These two types of accreditation are equally important. The literature establishes that quality education requires strong institutional support, and a good school is ultimately made up of quality instruction and leadership. Each school also has a distinctive character, traditions, and vision for its future, and these reflect the context of the education experience for that school. Together the school effectiveness and programmatic quality add up to the value of the institution to those who work at, attend, and graduate from that school. Similar to other facets of a comprehensive assessment system, a continuous accreditation process and its successful outcomes should provide the community and parents confidence that the school is operating effectively.

A review of Georgian policy documents shows that the MoES understands the role accreditation plays in school quality and is establishing policies that extend accreditation processes to general education. The law of general education states: “Basic goals of the state policy in the field of general education” are to develop “a national assessment program, national curriculum and accreditation systems that include planning and management of the general education process by identifying and evaluating the quality of education” (article 5 3d). In 2010, the Law on Development of Education Quality was adopted by the MoES to focus on providing guidance related to implementing quality education. The same year, the MoES approved the regulation on the authorization of educational institutions. The standards presented in the regulation defined key criteria including (1) program resources, (2) material-technical resources, and (3) human resources (Order No. 99/N, October 1, 2010). Authorization to the general educational

institutions was granted for a five-year period, and the authorization process for the public schools was to begin in 2015–2016.

The MoES also developed the concept of school branding in 2010, which was approved in 2011 by the Ministry (No. 184/5, August 11, 2011). This process encouraged schools to undertake a proactive role in creating a competitive environment and ensuring system transparency. The branding criteria encompassed several components, including (1) having a minimum number of certified teachers and (2) measuring the attainment of the students in the school-leaving certification. The idea of school branding was viewed positively since it moved towards an authorization process. However, the inadequacy of the assessment criteria and the lack of a unified approach to school assessment contributed to an unequal distribution of opportunities for the schools. The MoES also used the branding criteria as a way of overseeing school administration, which raised some concerns among communities (Chanturia et al. 2021).

General education schools are not prepared to undergo an accreditation or school authorization process. Because schools were unprepared to meet the existing authorization criteria, an amendment in the Law on general education allowed the schools established or reorganized by the MoES before January 1, 2014, to carry out their education activities until the 2020–2021 academic school year (Article 59). In 2020, the authorization process was postponed again so that the MoES could align the processes with an ongoing reform of the general education system. The MoES explained that, “it is purposeful to start the process of authorization of public schools stage-by-stage, in parallel with the process of rehabilitation of public schools to decrease to a minimum the circumstances preventing schools from meeting the standards of authorization.”

The school authorization (accreditation) process in Georgia includes the following criteria: (1) a safe and caring environment; (2) compliance of schools with new infrastructure improvements; (3) a new, innovative method of teaching and learning; and (4) the establishment of a student-centered school culture. According to the Ministry, all public schools should be prepared to meet the authorization criteria by 2026 (per interview with D.M. Dgebuadze, Publikage 2020).

Establishing a minimum level of safety for students is a key criterion of the accreditation process. The student-centered, safe environment in Georgian schools is mainly associated with physical protection, which can be achieved by assigning resource officers, installing observational cameras, and introducing regulations such as physical protection measures (Gorgodze and Janshia 2012). The safe environment policy had weak linkages with the emotional welfare of the students. If effective, the safe environment policy should embody a caring environment as its main feature, where the school community is engaged in building students’ socio-emotional support system. The Master-Teacher’s Hour, which has been functioning since 2014, is one of the positive attempts to integrate a student-centered, protective, and caring approach into the school culture and establish a minimum standard of safety. However, the state audit service in 2018 reported that half of the schools do not meet the minimum criteria of physical safety. The center for psycho-social services at the office of resource officers of educational institutions does not have affiliations in every region and the number of staff is not in compliance with the existing needs and referrals (State audit report, 2018). In 2017, the Centre for Protection of Child Rights at the Office of Public Defender reported widespread child abuse and bullying practices in secondary schools, pointing out that these practices were common among both peers and adults. This report questioned the effectiveness of the safety criteria developed by the Ministry. The policy document created in 2018, in line with the Eastern Partnership, underlined the necessity of replacing the punishment-inclined policy with preventive measures. It urged the empowerment of the school directors to take necessary steps to

promptly reveal violations. Another amendment targeting general education made school principals more accountable for selecting and dismissing the resource officers. A year later, the Ministry approved the safety and public order rule in the schools (Order 606 /n, January, 29, 2019). This rule defines the required security measures, stages of the measures, and the roles of the sides engaged in school operation. The schools committed to establishing advisory boards to ensure school safety issues and to cooperate with the resource officers. This process defined the safety mechanisms and preventive measures more clearly; however, the MoES needs to do more to meet the authorization criteria (Chanturia et al. 2020). While there has been substantial progress towards school rehabilitation, the number of schools that fail to meet the infrastructure and resource criteria remains high (Kordzadze 2020).

Georgian general education is trying to move towards increased school autonomy and accountability.

School autonomy and accountability are two components of school-based management that complement each other to increase the operational and pedagogical efficiency of schools and lead to systematic and consistent decentralization of authority and responsibility from higher levels to the school level (Osorio et al. 2009; Robertson and Kwong 1994). School autonomy is a key component of the WSIA process and helps schools respond to students' needs and improve education outcomes (Heredia-Ortiz 2007). The core idea of school-based management is that schools should enjoy autonomy in decision making on matters related to their functions and operations (Gargallo 2013). Having sufficient operational autonomy allows schools to manage their financial and human resources, and ensure they are more accountable to their students and their families, leading to improved student learning (Barrera et al. 2009).

School autonomy allows principals and teachers to develop their own student assessment systems, select appropriate textbooks, determine subject content, hire and fire teachers, decide what type of professional development is needed at the school level, promote teachers, govern and manage the school, and release school principals. School autonomy also includes the freedom to manage school budgets and to plan and execute teacher remuneration policies. According to Georgian legislative documents, principals are authorized to manage their schools; however, principal autonomy has many limitations in the Georgian context.

The literature emphasizes the need for a diversified approach to school autonomy based on factors such as the qualifications of the school administration and teaching personnel and their ability to plan and execute policies and activities that facilitate student learning (Arcia et al. 2010). In contrast to the international literature, school autonomy in Georgia—particularly the principal's role—is not clearly defined. School management is based on a “top to down” strategy, school principals have no mandate to make decisions in the schools that facilitate any institutional changes, and principals lack incentives to strengthen their management capacity (OECD 2019). The reforms aimed at increasing school autonomy have several pre-conditions, including the collective competence of the school community; grouping schools by student achievement level; indicating readiness for more autonomy; and using metrics such as student ability, social conditions, family, background information, and peer impact to determine the quality of schools (Andghuladze 2017).

The Georgian school financing system also limits school autonomy. The existing model of school finance does not support equality, social integration, or the efficiency, effectiveness, and competitiveness of the schools (Tabatadze and Gorgadze 2017). While school financing has more than doubled since 2011 and continues to increase, it is not reflected in education quality (Namchavadze 2018). All schools regardless of their size, location, needs, and performance still lack funds for institutional development and organization of context-adopted, student need-based interventions (Schools' survey).

There is a strong European influence in accreditation and school authorization, which may support the school authorization process in Georgia. The European Union Monitoring Mission has been operating in Georgia since 2009. Because of recent regional events, the ruling Georgian Dream party chairman, Irakli Kobakhidze, announced the party's decision to immediately apply for EU membership, for which Georgia has been preparing since 2021. Georgia has been actively studying and applying accreditation procedures from the European higher education "Bologna Process," and subsequent developments show its early rationalization of higher education provision and its attempt to meet international standards that would enable recognition of degrees and provide for connecting students with European institutions for further study. Many of those principles and procedures have been adopted for general education recommendations in establishing accreditation processes in Georgian schools. In 1980 the European Commission established Eurydice, a network of EC and member states (about 37 countries) to support European cooperation in the field of education, with the mission to explain how European schools are organized and how they function. As Georgia becomes associated with the EU, it will face further international scrutiny and expectations of regularly administered nationally standardized tests, reports on achievement, use of performance data in school evaluation, attention to student under-achievement, and support to schools for disadvantage students. Although there is no universal EU accreditation process as yet, there are standard indicators and benchmarks for effective education, early childhood, basic skills, drop-out, and higher education. As of the 1994 Convention Defining the Statute of the European Schools, public schools could apply to be Accredited European Schools, and an established accreditation process has been in effect. The "audit" consists of a self-evaluation (including achievement assessments), expert analysis of the report, and in-school inspection carried out under the auspices of the Joint Board of Inspectors. The purpose is to ensure consistently (checked every three years) high standards of European education across all EU member countries. It has had modest influence but Georgia will face comparisons with EU countries and is expected to follow the monitoring guidelines. If Georgia joins the EU soon, there will be an expectation to focus on school equity and quality issues immediately.

Education equity continued to be a challenge in the general education system. Education equity is a complex term that has changed and evolve over the past 20 years. International researchers (Santos et al. 2020) conceptualize "equity" in two ways. First, "equity" is based on two principles: (1) that quality education for all citizens develops the individual, social, intellectual, cultural, and emotional capacities of all people within a framework of effective equality of opportunity; and (2) the entire education system and community shares in caring for the diversity of students (Santos et al. 2020). Second, some researchers believe that the term is related to social well-being, based on the idea of individualized and universal education, so equity and quality are "two sides of the same coin."

Education equity is at the core of Georgia's education reforms and the NSM. The Constitution of Georgia explains that Citizens of Georgia "shall be equal in social, economic, cultural and political life irrespective of their national, ethnic, religious or linguistic belonging" (38.1) and "Everyone shall have the right to receive education and the right to free choice of a form of education" (35.1).

The education of ethnic minorities is reflected in all laws of the Early and Preschool, General, Higher, and Vocational Educations and Law of Georgia on State Language (July 2015). Georgia is a member of multiple international conventions on the rights to education of national minorities, among them the European Framework Convention for the Protection of National Minorities. Articles 6, 12, 13, and 14 pay special attention to the rights to education of minorities. The International Covenant on Economic, Social, and Cultural Rights and Convention on the Rights of a Child also deal with educational issues.

Civic integration is one of the highest priorities for the country. The first strategy for civic equality and integration was approved in 2009. The approved plan emphasizes the strategic goal to “provide accessible high-quality education at all levels and improvement of the state language knowledge.” Additional strategies and action plans were developed and approved in 2009–2014, 2015–2020, and 2021–2030. In parallel with these policies, the MoES has implemented a series of reforms in the last 15 years to improve education for minority students. These reforms include introducing bilingual education in ethnic minority schools, bilingual textbooks and textbook translation programs, including a mother tongue standard in the National Curriculum, providing TPD in the native language of ethnic minorities, assigning consultant and assistant teachers in ethnic minority schools, and introducing a quota system for the graduates of ethnic minority schools to enroll in Georgian universities.

Despite multiple positive shifts, gaps in the general education of ethnic minorities remain a pressing issue, reflected in minority students’ lower attainment and hence limited opportunities for post-school education. Students in ethnic minority communities have been consistently underperforming. A study of preschool education quality (UNICEF Georgia and NAEC 2017) revealed several inequities concerning early and preschool education in the country. For example, there is relatively low inclusion (69.5 percent) in preschool programs in Georgia as compared to other European countries. Preschool education is less accessible to most vulnerable children living in poor conditions: only 40 percent of socially disadvantaged children, 33 percent of children from ethnic minority families, and 47 percent of children in villages go to kindergarten. Due to physical, social, or institutional barriers, children with special needs are unable to get preschool education together with their peers (UNICEF 2018). Children in Kvemo Kartli and Samtskhe-Javakheti, areas that are densely populated by the Azerbaijani and Armenian ethnic minority communities, have the lowest indicators for accessibility to preschool in Georgia and their teachers are the least qualified (UNICEF 2020). The result is that ethnic minority students enter school lagging behind their counterparts.

Conclusion

The Government of Georgia and the MoES have made a lot of progress towards establishing foundational elements of the WSIA. These elements, including the TPD scheme, the teacher career ladder, teacher recruitment and retention policies, and initial quality assurance and standards are all in line with education systems that have been ranked as exemplar systems (Ndarahutse et al. 2019). The movement towards school autonomy, decentralized management, and financing systems, and support for school-based collaboration further align with the Morshed et al. (2010) criteria for an exceptional education system. However, the document review also sheds light on several critical areas that must be addressed to help the MoES reduce technical silos that prevent a systems approach such as WSIA from taking hold in Georgia. These barriers and gaps include the need for more collaborative design, planning, and implementation across technical agencies and the central MoES; a clearer process for allocating vouchers and financing to schools, particularly small schools; more support and leadership training to help guide further school autonomy efforts; and efforts to change the school authorization mindset, ensuring the process is not punitive but focused on elevating quality. The systems diagnostic conducted by Mathematica sheds additional light on the accomplishments of the MoES to date, offers insight into these identified challenges, and provides a series of actionable recommendations to help Georgia apply systems thinking and integration while moving towards whole school improvement.

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