



Kurdistan Regional Government
Ministry of Planning • Ministry of Education

Initiatives to Improve Quality of Education in the Kurdistan Region—Iraq

Administration, School Monitoring, Private School Policies, and Teacher Training



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Preface

The Ministry of Education (MoE) of the Kurdistan Region—Iraq (KRI) has been investing in improving the quality of K–12 education. In support of its many initiatives to develop its education system, the Kurdistan Regional Government asked the RAND Corporation to advise on improving quality through several analytic efforts: assessing ongoing teacher training, designing a quality assurance program for schools, advising on monitoring and incentivizing the private school sector, and proposing a new MoE administrative structure that can best support MoE’s multiple growth initiatives. This report fulfills that request building on two previous efforts:

- Georges Vernez, Shelly Culbertson, and Louay Constant, *Strategic Priorities for Improving Access to Quality Education in the Kurdistan Region—Iraq*, Santa Monica, Calif.: RAND Corporation, MG-1140-1-KRG, 2014, and
- Louay Constant, Shelly Culbertson, Cathleen Stasz, and Georges Vernez, *Improving Technical Vocational Education and Training in the Kurdistan Region—Iraq*, Santa Monica, Calif.: RAND Corporation, RR-277-KRG, 2014.

This report was prepared by RAND Education for the KRI. The findings of this study should be of interest to persons involved in education in the KRI as well as to others elsewhere involved in quality improvement efforts in school systems.

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Contents

Preface	iii
Figures	ix
Tables	xi
Summary	xiii
Acknowledgments	xix
Abbreviations	xxi
CHAPTER ONE	
Introduction	1
Background	3
Economy, Population, and Workforce	3
Education	4
Basic and Secondary Education	4
Higher Education	5
Adult Training	6
CHAPTER TWO	
Reorganizing the KRG Ministry of Education	7
Literature on Organization Design	7
Hierarchy of Authority and Decisionmaking	8
Division of Labor	9
Summary	10
Organization of Ministries of Education in Six Countries	11
Levels of Senior Management	11
Hierarchy of Authority and Decisionmaking: Role of the Vice Minister	12
Grouping: By Programs and Functions	13
Linking: Few Formal Mechanisms	15
Summary	16
Why Reorganize the KRG's Ministry of Education?	16
Changing Vision and Priorities	16
High Level of Centralization	17
Broad Span of Control at the Top of the Organization	18
Unclear Roles and Responsibilities	18
Weak Coordination	18
Changing Roles and Responsibilities	19

Staffing Challenges	19
Missing Functions	19
Proposed Organization for the KRG’s Ministry of Education	19
Overall Structure	19
Groupings of Education and Support Functions.....	21
Assignment of Responsibilities for the Proposed Organizational Structure	22

CHAPTER THREE

Developing a School Quality Assurance System	27
Current Approaches to Quality Assurance in the KRI.....	27
Limited Scope of Data Collected	27
Concern About the Quality of Principal and Teacher Evaluations	27
Lack of Transparency.....	28
Independent Efforts Under Way to Evaluate and Monitor Schools.....	28
Characteristics of Effective School Quality Assurance Systems	28
School Performance Indicators.....	28
School Performance Targets	28
Support Structure and Interventions	29
School Capacity.....	30
Capacity of the Ministry of Education.....	30
Proposed School Quality Assurance Framework.....	31
School Performance Indicators.....	33
Implementing School Monitoring	36
Phase 1: Preparing for Implementation	37
Phase 2: Engaging in School Monitoring.....	42
Recommendations	47

CHAPTER FOUR

Monitoring Quality and Encouraging Growth of Private Schools in the KRI	49
Overview of the KRI’s Private School Sector, Law, and Practice	49
Private Schools Play a Small but Growing Role.....	50
Laws, Regulations, and Governance: The Regulatory Regime Is a Solid Framework but Could Be Clarified.....	51
Licensing and Opening: Obtaining a License to Open a New Private School Can Be Challenging.....	51
Supervision: Complex and Not as Effective as Desired	52
Teachers and Staff: Policies Needed for Managing Them.....	54
Managing Student Outcomes: Lack of Data in Private Schools	55
Offering Support: Limited Assistance Is Available to Private Schools.....	55
International Approaches to Managing Private Schools.....	56
The Role and Proportion of Private Schools in K–12 Education.....	56
Models for Regulating Private Schools.....	57
Focus of Monitoring.....	59
Meeting National Goals and Promoting Social Cohesion	59
Monitoring Steps.....	61
Management of Private Schools with Nonnational Curricula.....	64

Balancing Oversight with Autonomy.....	64
Support for Schools.....	65
Recommendations for Managing KRI’s Private Schools.....	66
Set Principles for Managing Private Schools.....	66
Streamline Policies and Procedures.....	66
Make Private School Monitoring Compatible with Public School Monitoring.....	67
Gather and Communicate Additional Data About Private Schools.....	67
Enable Kurdish Private School Children to Fully Operate in KRI Society.....	68
Clarify Policies and Procedures for Hiring Teachers in Private Schools.....	68
Decide on a Desired Level of Support for Private Schools.....	68

CHAPTER FIVE

Assessing Teacher Training	69
Governance and Management of Training.....	70
Approaches to Training Planning and Delivery.....	71
Current Process for Determining Training to Be Offered.....	71
Training Delivery.....	72
Training Programs, Participation, and Alignment with Needs.....	74
Training Programs.....	74
Length and Frequency of Training.....	74
Training Participation.....	74
Training Participation, by Program Type.....	76
Teacher-Reported Training Priorities.....	77
Teacher-Reported Training Compatibility with Classroom Conditions.....	79
Implications of the Lack of Alignment.....	80
Recommendations.....	80
Link In-Service Training to a Broad Ministry Strategy to Improve Education Outcomes.....	80
Use Full-Time Trainers to Provide In-Service Training.....	81
Prioritize Curriculum Content Training.....	81
Account for Current KRI Classroom Conditions.....	81
Assess Training Needs Regularly.....	82
Assess Effectiveness of Training Programs to Make Improvements.....	82

CHAPTER SIX

Conclusion	83
Quality Improvement Recommendations.....	83
MoE Administration.....	83
School Quality Assurance.....	84
Monitoring and Incentivizing Private Schools.....	84
Ongoing Teacher Training.....	85
Next Steps for Improving KRG K–12 Education.....	85
Continue to Implement Strategic Education Priorities.....	85
Develop Curriculum Standards.....	85
Build Capacity in Data Analysis.....	85
Improve Secondary School Preparation.....	86
Revise University Admission Policies.....	86

APPENDIX

Job Descriptions for the Proposed Organization Structure	87
Bibliography	137

Figures

S.1.	Proposed Organizational Structure for KRG's Ministry of Education.....	xiii
S.2.	Monitoring System and Components.....	xiv
1.1	Current Kurdistan Regional Government's Geographical Boundaries.....	3
1.2.	Student Enrollment, by Education Level, 2007–2012.....	5
2.1.	Levels of Senior Management in Other Ministries of Education (Notional Depictions).....	11
2.2.	Current Organizational Structure of the KRG's Ministry of Education.....	17
2.3.	Proposed Organizational Structure for KRG's Ministry of Education.....	20
3.1.	Proposed Monitoring System and Components.....	31
3.2.	Actions in Phase 1: Preparing for Implementation.....	39
3.3.	Overall Monitoring Process.....	43
3.3.a.	The Monitoring Process Begins with Schools Implementing the School Development Plan.....	44
3.3.b	The SQA Office Provides Monitoring and Support Throughout the School Year.....	44
3.3.c.	Schools Review Themselves Throughout the School Year.....	45
3.3.d.	The PRE Office Provides Step 1 Indicator Information and School Classifications.....	45
3.3.e.	SQA Assess Schools' Self-evaluations and Plans.....	46
4.1.	Number of Private Schools and Students, by Type, 2010–11 to 2012–13.....	50
4.2.	Proportion of K–12 Students in Private Schools in Selected Countries.....	57
4.3.	Steps in Private School Monitoring.....	63
5.1.	Organizational Structure of the General Directorate of Institutes and Training and Relationship to Schools.....	70
5.2.	Number of Trainees in Erbil, Duhok, and Garman Governorates Receiving Training at the Training Institutes, by Year.....	75
5.3.	Percentage of All Participants, by Type of Training Offered in Erbil, Duhok, and Garman, by Year.....	76
5.4.	Percentage of Teachers Reporting That Training Received in Selected Training Area Was Sufficient to Meet Their Needs, by Grade Level.....	78

Tables

2.1.	Span of Control, by Number of Levels of Management and by Country	13
2.2.	Ministry of Education General Directorates, by Program Type and Country	14
2.3.	Reporting Line, by Selected Function and Country	15
2.4.	Proposed Education Groupings and Functions for the KRG MoE.....	21
2.5.	Proposed Support Groupings and Functions for the KRG MoE	22
3.1.	Features of the Proposed School Quality Assurance and Monitoring System.....	32
3.2.	School Domains and Step 1 Indicators	34
3.3.	Notional Illustration of School Classification on a Subset of Year 1 Domains	36
3.4.	Examples of Step 2 Indicators.....	37
3.5.	Illustrations of Rubrics to Guide Measurement of Two Level 2 Indicators.....	38
4.1.	Regulatory Models for Private Schools.....	58
4.2.	Inspection and Self-Evaluation Models for Private Schools	59
4.3.	Agencies Responsible for Monitoring Private Schools.....	60
4.4.	Elements of Aspects to Monitor for Private Schools.....	61
4.5.	Indicator Domains, by Country	62
5.1.	Percentages of Teachers Who Reported Having Received Some Training in the Last Two Years and the Proportion of Teachers Receiving Training Who Found It Sufficient, by Subject.....	77
5.2.	Percentage of Teachers Reporting Training as a Top Three Priority Area and Reporting That They and Their Peers Are Prepared in This Area.....	79

Summary

Since 2008, the Kurdistan Regional Government (KRG) has undertaken an ambitious reform of the kindergarten through grade 12 (K–12) education system of the Kurdistan Region—Iraq (KRI). This has included developing a more rigorous curriculum, compulsory education through grade 9, national exams in grades 9 and 12, and requiring that all new teachers hold a bachelor’s degree. It has also included launching an ambitious school building program, developing teacher training institutes, and planning an expanded secondary vocational education program that meets the needs of the labor market.

In 2010, the KRG asked RAND to assess the status of K–12 education and its incipient reforms. We then made three strategic recommendations to improve access to and quality of K–12 education: build as many as 2,000 new schools to meet growing enrollment and reduce overcrowding; improve the curriculum content knowledge of practicing teachers and reform the preparation of new teachers, while increasing instructional time for their students; and strengthen incentives and accountability by redesigning the current system for evaluating and reporting on teacher and school performance and increasing the role of school principals in instruction (Vernez, Culbertson, and Constant, 2014). In a follow-up study, we proposed a major expansion and reorganization of the KRI’s Training and Vocational Education and Training (TVET) system (Constant et al., 2014).

To build on these initiatives, the KRG asked for RAND assistance with the four issues addressed in this report: developing a proposal to reorganize the KRG Ministry of Education (MoE), developing a framework and implementation plan for a school quality assurance system, reviewing the effectiveness of the monitoring and support of private schools, and assessing the content and quality of in-service training. We summarize our findings and recommendations for each issue below.

Reorganizing the KRG Ministry of Education

Several senior managers of the MoE believe that its current organizational structure can no longer effectively support the educational program, policy, and other changes being made, especially as the MoE seeks to launch and implement new initiatives. To assess current and potential structures for the MoE, we interviewed MoE staff, reviewed relevant literature on organization design, conducted in-depth case studies of organizations of ministries of education in six other countries, and reviewed the current organization of the KRG MoE and alternative organizations under discussion.

Organization design requires defining the hierarchy of decisionmaking authority, grouping functions, and linking requirements across functions. Organizations are designed to help

pursue, as effectively as possible, their specific vision and strategic objectives, taking into account the capacities of their staff. There is no one best design, as every distribution of decisionmaking authority, groupings, and linking of activities has strengths and weaknesses. Most of the countries reviewed have four levels of senior decisionmaking authority, with a vice minister in charge of day-to-day operations. The number of managers (span of control) directly reporting to the minister is small. Also, most countries group their activities by programs (e.g., higher, general, vocational education) while grouping supporting functions (e.g., human resources, finance, legal affairs) common to all programs in one or two support groupings.

We found that the KRG MoE organization has an excessive number of senior managers reporting to the minister, effectively limiting his ability to engage in policy setting because of the excessive demands stemming from the day-to-day management of the organization. This leads to a high level of centralization and weak coordination across directorates. The organization of the ministry by functions (e.g., curriculum development, student examinations, teacher training) further contributes to poor coordination. The ministry also would benefit from additional qualified staff, especially for statistical analysis, planning, research and evaluation, curriculum development, and quality assurance.

We propose an organization that minimizes the number of people reporting directly to top managers; establishes clear lines of executive authority; divides the responsibilities of the minister and a newly created vice minister, thereby limiting the day-to-day involvement of the minister in routine matters; and ensures complementary divisions and groupings of functions facilitating linkages and coordination between complementary activities and functions (Figure S.1).

The proposed organization integrates the functions related to basic and secondary academic education and those related to secondary vocational education into two separate general directorates, while the cross-cutting functions of planning, research and evaluation, supervision and quality assurance, and support services are grouped in a minimal number of general directorates. It also proposes adding new functions to ensure a well-functioning ministry including directorates for student counseling, employer relations, research and development, inspector general, and international affairs.

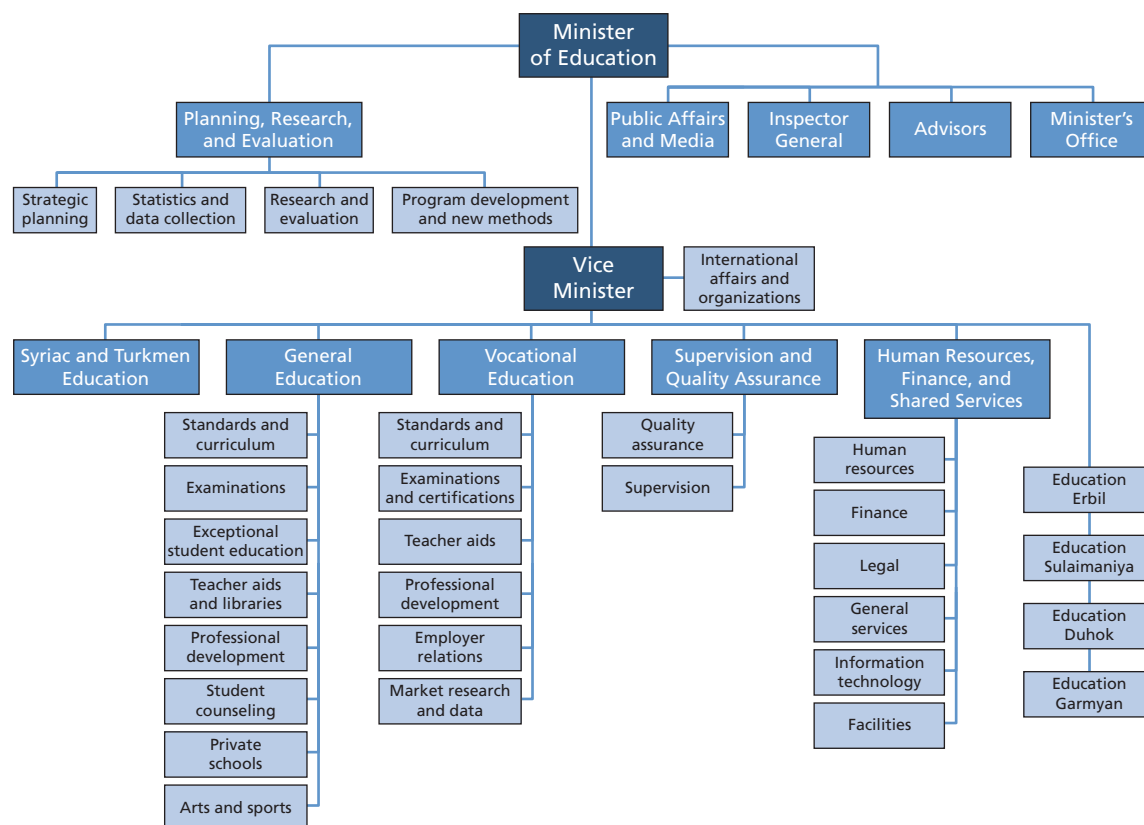
Developing a School Quality Assurance System

The KRG MoE's current system for monitoring school performance and ensuring its improvement is not as effective as it needs to be to further develop high-quality K–12 education. As we found in our earlier study (Vernez, Culbertson, and Constant, 2014), the scope of the data the MoE collects is limited, the quality of the data that are collected on principal and teacher effectiveness is insufficient, and principals and teachers have limited access to the data that are collected.

To develop our proposed school quality assurance system, we reviewed the literature to identify the characteristics of effective school assurance systems and reviewed school assurance systems in other countries.

Ideally, an effective school quality assurance system should include school performance indicators, school performance targets, support structures and interventions, and MoE capacity building. Currently, several independent pilot initiatives commissioned by the MoE are seeking to develop competing frameworks of quality assurance domains and indicators.

Figure S.1
Proposed Organizational Structure for KRG's Ministry of Education



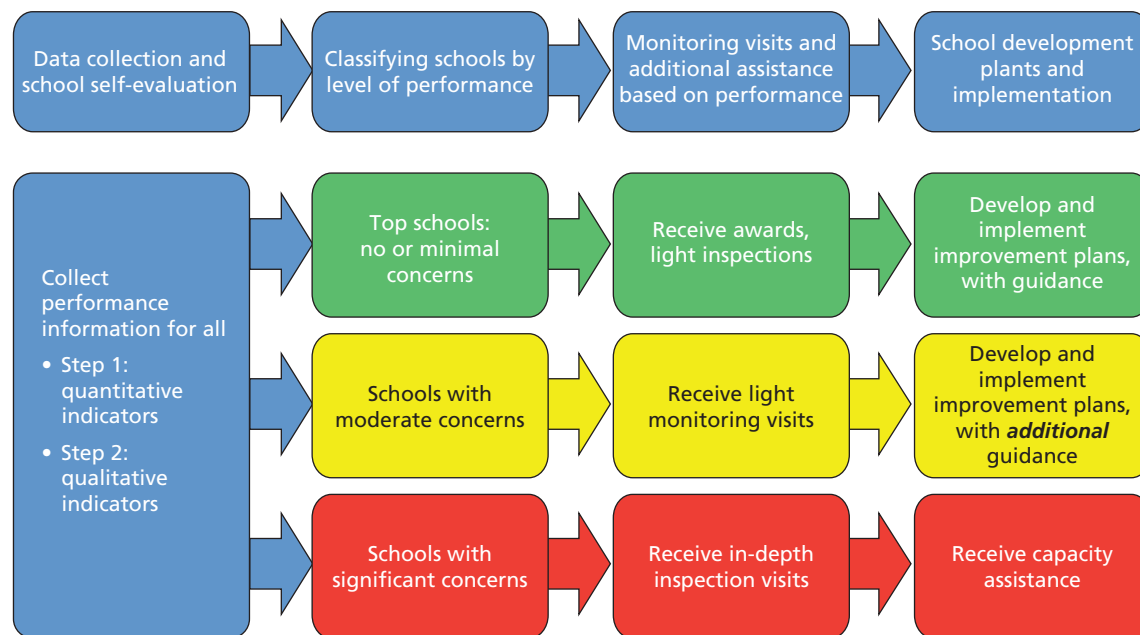
RAND RR960-S.1

We propose a two-step quality assurance system and priorities for implementing it. The quality assurance system (Figure S.2) would be an ongoing effort, with updated indicators and self-evaluation of schools helping to prioritize efforts in the subsequent year. Indicators would be both quantitative (e.g., student achievement, attainment, and attendance) and qualitative (e.g., leadership and teaching quality). Schools would be classified by varying levels of concern to help prioritize resources on weaker schools. Monitoring visits and additional assistance would be provided depending on a school's level of performance. The proposed system incorporates a collaborative approach between MoE staff and supervisors and school staff in the development of improvement plans.

Monitoring Quality and Encouraging Growth of Private Schools in the KRI

The KRI private school sector is small, yet growing quickly in size and importance. Private schools could alleviate some of the pressure on public schools by reducing the school space shortage and also provide models for high-quality education. They can also offer education for returning members of the Kurdish diaspora whose children have started education in other systems, as well as for international expatriates whose presence is necessary for growth in some economic sectors. From 2010 to 2013, the number of private schools, as well as student enroll-

Figure S.2
Monitoring System and Components



RAND RR960-S.2

ment in private schools, more than doubled, with the proportion of all KRI students in private schools increasing to 2.5 percent.

A new private school law and supporting regulations adopted in 2013 improve the policy infrastructure for private schools; however, licensing and opening a new private school can be challenging, and there are concerns that quality may not be consistent across private schools. To address these concerns, we interviewed officials, supervisors, and private school staff about private schools, current practices, and MoE goals and reviewed international policies and practices for monitoring and supporting private schools in ten countries. The proportion of students in private schools varies broadly across countries—from 1 to 64 percent in the countries studied. Some countries lightly regulate schools, whereas others have strict requirements, such as requiring that private schools teach a national curriculum or offer certain subjects of national interest. Countries with stricter regimes may do so to ensure consistency in the quality of education, equality of opportunity, and the teaching of national values. Monitoring approaches range from simple self-evaluation by schools to inspections of schools by an outside evaluator to accreditation, which involves a combination of both of these approaches. Finally, countries also vary in the way they provide support to private schools, with some paying partial or full tuition of students in private schools and others providing no or limited support, such as free textbooks or bus transportation.

To improve the management of private schools and provide incentives for growth in the KRI private school sector, we recommend that the MoE

- better communicate policies and procedures through the preparation of a private school policy manual that includes the law, policies and regulations, application requirements, steps, points of contact, and forms

- use the same quality assurance system to monitor private schools and public schools based on school self-evaluation and development of improvement plans, with in-depth inspections conducted for schools with poor performance
- require that Kurdish children in all private schools take subjects of importance to the region including Kurdish, Arabic, civics, and human rights; in addition, they should be required to take the same 12th grade ministerial exam as Kurdish children in public schools
- clarify hiring policies and requirements for private school teachers including certification of a bachelor's degree from an accredited university or teacher college and a certified copy of a criminal background check from the teacher's home country; we also recommend phasing in a requirement restricting teachers to one job (currently many hold teaching positions in both a public and private school)
- consider options for public incentives or subsidies for private schools, such as loans for land, building, and start-up operations; paying tuition for KRI children in private schools; and providing textbooks and other educational materials.

Assessing Teacher In-Service Training

To assess the content and quality of in-service training, we reviewed administrative data in training programs, interviewed MoE staff involved in in-service training and principals and teachers in 16 schools, and analyzed the results of a 2010 survey of teachers about their experience with in-service training and training needs.

The KRI has six types of in-service teacher training programs: subject-specific (curriculum) training, capacity-development training, school leadership and management training, training for supervisors and training in administrative matters, contractor-specific training, and other training programs. Training programs vary from five to 20 days, though some can be as short as two or three days and others as long as 30 or 40 days. Training-of-trainer (TOT) is the primary mode of in-service training delivery. Trainers are recruited from supervisors who serve on a part-time rotational basis, doing so in addition to their regular school inspection duties. In interviews, teachers questioned the adequacy of the preparation of trainers.

The number of training participants has increased sharply in recent years, to nearly 17,000 in 2013, spurred over time by adoption of a new curriculum and, more recently, by offerings from international organizations. Yet a large number of teachers have not received recent training, and many of those who have received training found that it has not prepared them or their peers well. Teachers reported that their greatest training need was for curriculum subject matter content, developing lesson plans, and using curriculum materials and frameworks. They also complained that current classroom conditions (large class size and insufficient class time) do not allow them to implement the student-centered instruction methods and instructional technologies they are encouraged to use. Training is complicated by the fact that many teachers are teaching outside their area of specialization, because of growing enrollments and new curriculum demands, but they are typically not eligible to take training in those areas.

Among other recommendations, we suggest that the MoE

- link in-service training to a broad strategy to improve the ability of teachers to effectively deliver curriculum content, plan lessons, and use instructional practices appropriate to large classrooms
- replace part-time in-service trainers with professional full-time trainers
- prioritize in-service training on the content of the curricula in the sciences, mathematics, and languages; teachers would also benefit from more consistent supervisory advice and modeling of teaching in support of new curriculum implementation
- account for current classroom conditions in in-service training in the use of instructional methods; classrooms in the KRI are large with limited space making it difficult to use some new student-centered instructional methods, such as student groupings and technology, in the classroom
- assess training needs regularly using, for instance, a bi-annual survey of teachers; the newly implemented self-evaluation of teachers, as well as the teacher evaluation by supervisors and principals, could also provide a useful regular measure of training needs
- assess the effectiveness of training programs regularly for needed improvements in their design and implementation.

Next Steps for Improving KRG K–12 Education

In addition to the priorities noted above, the MoE may wish to continue its progress in developing quality and expanding access in education. The MoE is implementing a large number of new initiatives, but these will take time and continued effort to be sustained. The MoE does not currently have detailed curriculum standards, but it might assess its regional achievement exams in relation to international standards for developing such standards. To increase its capacity in data analysis necessary for quality assurance efforts, the MoE might establish a research and evaluation office. Given the rapid increases in secondary school enrollment, the MoE might also wish to assess the quality of such education to assure its relevance to the labor market or to university preparation. Finally, the MoE may wish to assess the effectiveness of current university admission policies and revise these as necessary to account for student and school preferences.

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Abbreviations

ADEC	Abu Dhabi Education Council
CPE	Council for Private Education
D	directorate
DG	director general
ECRI	European Commission Against Racism and Intolerance
GD	general directorate
IES	Institute of Education Sciences
K–12	kindergarten through grade 12
KRG	Kurdistan Regional Government
KRI	Kurdistan Region—Iraq
MoE	Ministry of Education
MOHESR	Ministry of Higher Education and Scientific Research
MOLSA	Ministry of Labor and Social Affairs
NAEQAA	National Authority of Educational Quality Assurance and Accreditation
NYSAIS	New York State Association of Independent Schools
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education
PD	Professional Development
PISA	Programme for International Student Assessment
PPP	public-private partnership
PRE	Planning, Research, and Evaluation
RFP	request for proposal
SDP	School Development Plan

SQA	Supervision and Quality Assurance
TIMSS	Trends in International Mathematics and Science Study
TOT	training-of-trainer
TVET	Technical and Vocational Education and Training
UAE	United Arab Emirates
U.K.	United Kingdom
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development

Introduction

Since 2008, the Kurdistan Regional Government (KRG) has undertaken an ambitious reform of the kindergarten through grade 12 (K–12) education system of the Kurdistan Region—Iraq (KRI). The KRG introduced a more rigorous curriculum, especially in the sciences and mathematics. It required teaching English from grade 1, made education compulsory to grade 9 rather than grade 6, instituted two national exams at grades 9 and 12, and required that all new teachers hold a bachelor’s degree. It transferred preservice teacher education from teacher institutes under the Ministry of Education (MoE) to newly established teacher colleges under the Ministry of Higher Education and Scientific Research. It restructured the system from three levels (primary for grades 1 to 6, intermediate for grades 7 to 9, and secondary for grades 10 to 12) into two levels, basic (grades 1 to 9) and secondary (grades 10 to 12). Finally, it instituted policies to reduce the rate at which students had been held back in early grades, abandoning a requirement that students pass a 9th grade exam to continue to secondary education.

The KRG asked the RAND Corporation for assistance with several initiatives. In 2010, it asked RAND to assess the current status of the K–12 system and its reforms and offered options for meeting the goals of increasing access and improving the quality of education (Vernez, Culbertson, and Constant, 2014). We identified three strategic priorities for improving the KRI’s K–12 system.

First, the region needed to build enough schools to meet the demand for new school spaces and reduce overcrowding. We projected that the KRG will need to build as many as 2,000 new 18-classroom schools in the next decade. Now, the KRG is launching an ambitious school building plan for an initial batch of 500 new schools to meet this demand.

Second, we found that the region needed to improve the knowledge and preparation of practicing teachers, while increasing instructional time for their students. We found that fewer than 40 percent of teachers said that they were well prepared to use the new curriculum’s materials and framework, and one-third of teachers reported teaching outside their academic subject of specialization. KRI schools also did not provide enough instructional time to teach the new curriculum, with most schools having 250 fewer hours each year of classroom instruction than schools in many countries of the Organisation for Economic Co-operation and Development (OECD). In response, the KRG is planning regional training centers for teachers and considering lengthening the school day and year.

Third, we found that the KRG needed to strengthen incentives and accountability by redesigning the current system for evaluating and reporting on teacher and school performance and progress, increasing the role of school principals, and measuring student achievement and progress while making results public. RAND has developed a management information system to manage data about education system performance in support of this.

Following this initial effort, the KRG asked RAND in 2012 to assess its Technical and Vocational Education and Training (TVET) system, in support of plans to improve technical and vocational education at the secondary level by building three new vocational centers and two technical centers for adults wishing to gain new skills, while consolidating technical education into three polytechnic universities (Constant et al., 2014). We found that the KRG may wish to establish a TVET-governing council to better coordinate policy and align occupational curricula across levels of education. Second, we recommended expanding the role of vocational education and training at the secondary level to better meet the needs of the KRI economy. Third, to better match TVET programs with employers' needs and provide job seekers the skills that are in demand, we recommended that the KRG involve employers in establishing occupational standards and qualifications requirements and in designing curricula. Fourth, to improve the quality of vocational programs, we recommended upgrading the general course curricula, teaching language and information-technology user skills, promoting team work and customer handling, and providing practical experience through workshops, structured internships, and apprenticeship programs. Fifth, we recommended that the MoE develop a counseling and guidance system to help students make decisions about which academic or vocational secondary school path to take and to also help students graduating and seeking jobs.

At the request of the Minister of Education, the work presented in this report builds on our previous research for the KRG and the MoE, by addressing four discrete quality improvement issues.

- *Reorganizing the KRG Ministry of Education.* Several senior managers of the MoE believe that its current organizational structure can no longer effectively support the educational program policy and other changes being made, especially as the MoE seeks to decentralize operations to the governorate level. In Chapter Two, we review the organizational structure of the MoE and propose a new one.
- *Developing a school quality assurance system.* Our first study of the K–12 system documented the lack of comprehensive assessments for the performance of individual schools. Such public assessments are necessary to support school improvements. In Chapter Three, we propose a school-quality assurance monitoring system and outline steps required to implement it.
- *Monitoring quality and encouraging the growth of private schools in the KRI.* Although private schools are a small component of the K–12 education system, their number is growing rapidly. The KRG recently passed a new law to support and guide the development of private schools and wants to ensure their quality. In Chapter Four, we review the growth of private schools, identify issues with the new law and regulations regarding them, and recommend ways to monitor and support the expansion of such schools.
- *Assessing teacher training.* Our initial study found that teacher content knowledge of the new curriculum and instructional skills for it were significant problems in the K–12 system. In Chapter Five, we assess past in-service training and recommend ways to improve and restructure it.

We begin by providing a brief background on the Kurdistan—Iraq Region.

Background

The KRI is a semi-autonomous region in northern Iraq, bordering Iran to the east, Turkey to the north, and Syria to the west. It is comparable in size to the Netherlands or Switzerland. The KRI is divided into three governorates—Duhok, Erbil, and Sulaimaniya—each with a capital city of that name (Figure 1.1). Each of these governorates is divided into districts, for a total of 33 districts. Each district is divided into subdistricts. Each district and subdistrict has a district center.

Economy, Population, and Workforce

The KRI economy is dominated by government employment, construction, wholesale and retail trade, and agriculture. It also has a growing oil industry. The relative security and stability of the region has allowed the KRG to improve the region's housing, transportation, and power infrastructure and to upgrade and expand services in recent years.¹ The KRG currently

Figure 1.1
Current Kurdistan Regional Government's Geographical Boundaries



RAND RR960-1.1

¹ Since 1991, about two-thirds of the 4,500 villages destroyed by Saddam Hussein's regime have been rebuilt.

receives 17 percent of Iraqi government revenues after deductions for defense and other nationwide services.²

KRI had an estimated population of 5 million in 2012.³ The population of the region is young, with 50 percent under the age of 20. Illiteracy is relatively high: 11 percent of males and 27 percent of females aged 20 to 29 are illiterate, as are 28 percent of males and 43 percent of females aged 30 or older.⁴

Among the adult population aged 15 and older, participation of the adult population in the labor force is low, at about 38 percent. About two-thirds of men are in the labor force, but only 12 percent of women are. These gender differences are mirrored in unemployment rates. Male unemployment is about 5 percent, and female unemployment is four times higher at 20 percent. Joblessness among youths is more than twice the 7 percent unemployment rate of the entire population.

About half of the employed population work for the government. Thirteen percent of employed persons work in construction, 11 percent in wholesale and retail trade, 6 percent in agriculture, 6 percent in transport and communications, and 1 percent in manufacturing (Kurdistan Region Labor Force Survey, 2012).

Education

Three ministries and some private establishments provide education in the KRI. The MoE is responsible for basic and secondary education, including secondary vocational education. The Ministry of Higher Education and Scientific Research (MOHESR) is responsible for tertiary two-year and four-year technical and academic education as well as for postgraduate education. And the Ministry of Labor and Social Affairs (MOLSA) is responsible for postsecondary nontertiary adult training.

Basic and Secondary Education

The Ministry of Education introduced a number of major K–12 education reforms in the 2008–09 school years. Education had been compulsory through grade 6 but is now compulsory through grade 9. A new, more rigorous curriculum has been implemented across the grades. The three previous levels of primary (grades 1 through 6), intermediate (grades 7 through 9), and secondary (grades 10 through 12) have been restructured into two levels, basic (grades 1 to 9) and secondary (grades 10 to 12). At the secondary level, students may choose one of two tracks, vocational or preparatory education, with most students choosing the latter.

Teachers are required to complete higher levels of education than before the 2008 reforms, with new teachers now required to have a bachelor's degree. Previously, teachers could have degrees from teaching institutes, which were five-year programs that started after grade 9 and continued through to the equivalent of the second year of tertiary education. The MoE also

² This percentage is presumably equivalent to the share of the KRI population in the total population of Iraq. However, the actual relative population size of the KRI remains unknown, because there has not been a national census conducted in decades.

³ This estimate is based on the Kurdistan Region Labor Force Survey of 2012. No census of the population has been made in recent times.

⁴ Illiteracy is defined as not being able to read and write in one's primary language.

instituted policies to reduce the rate at which students are held back in the early grades and instituted two new national exams.

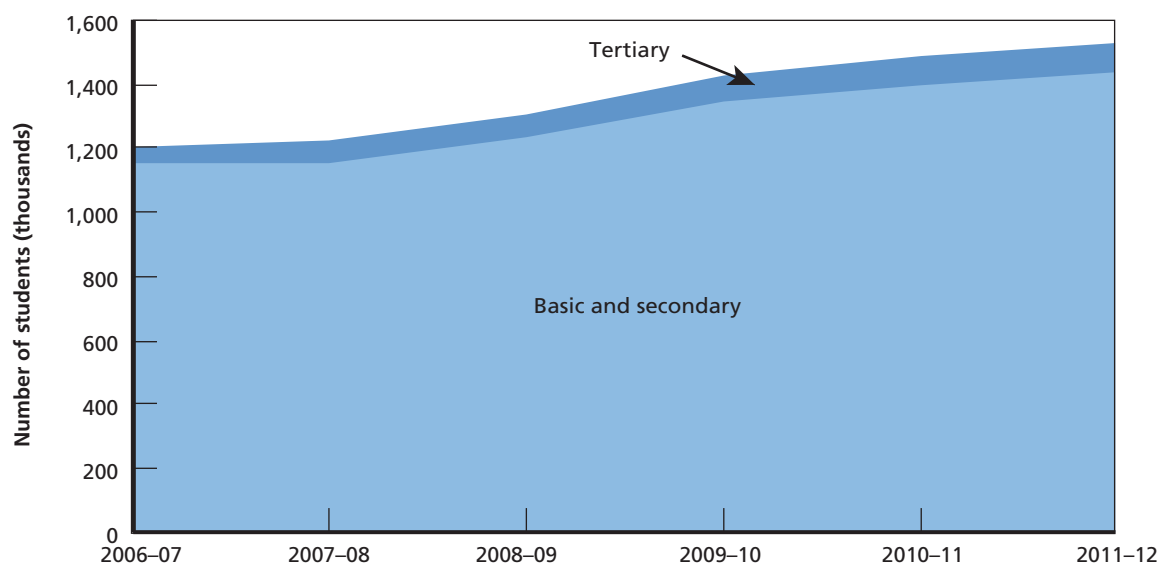
In 2011–12, there were 356 kindergarten schools, 4,598 basic schools, 816 secondary schools, and 32 secondary-level vocational schools. Altogether, these schools served some 1.5 million students, an increase from 1.1 million in 2004–05 (Figure 1.2), and were taught by 98,000 teachers, an increase from 60,000 in 2004–05. The average student-teacher ratio is now about 15 to 1. School infrastructure has not kept pace with growth. Schools at all levels are crowded and in poor repair and often operate in double shifts.⁵ This rapid growth of the number of students in the school system has put increasing pressure on the limited number of school buildings and trained teachers.

Higher Education

Higher education also has grown rapidly in recent years (Figure 1.2). Before 2004, there was one public university in each of the capitals of the three governorates; since then, an additional seven public universities have been established, one each in the district centers of Koya, Soran, Garmyan, Halabja, Zakho, and Raparin, along with a second one in Erbil. Several private universities also have opened since 2003, including the American University in Sulaimaniya and six such institutions in Erbil. The MOHESR also administers 23 two-year technical institutes and two newly established four-year technical colleges.

In 2012, 90,000 students attended public universities and technical institutes and colleges, an increase from 55,000 in 2006. Students in public universities and technical education are assigned to institutions and academic and technical programs based on their scores on the KRG's secondary-school ministerial exam. According to the hierarchy of professions and

Figure 1.2
Student Enrollment, by Education Level, 2007–2012



SOURCES: MoE and MOHESR.

RAND RR960-1.2

⁵ For a recent assessment of basic and secondary education in the KRI, see Vernez, Culbertson, and Constant (2014).

academic specialties, the highest scorers are assigned to medical schools, the second-highest to engineering schools, and so on. Students assigned to technical education are among the lowest scoring.

Adult Training

Vocational skills training for individuals aged 18 or older who did not complete compulsory education or who want to obtain some professional training is provided in three training centers operated by MOLSA. Because of space and resources constraints, these centers enroll only a small number of adults at a time.

Reorganizing the KRG Ministry of Education

The reforms of and improvements to the Kurdistan Region—Iraq education system have raised questions on how to best organize the Ministry of Education to support the implementation of these efforts. The Minister of Education asked RAND to review the current organizational structure of the MoE, develop goals for a new structure, and propose alternatives that meet the needs of the MoE's current initiatives and long-term plans.

To conduct this analysis, we use multiple approaches. First, we reviewed the relevant organization design literature. Second, we studied the organizational structure and characteristics of the ministries of education in six countries. Third, we assessed the current organization of the KRG's Ministry of Education conducting interviews with 10 directors general and 11 directors of the Ministry of Education to assess their functions, staffing, and responsibilities for the purpose of identifying challenges, bottlenecks, gaps, and opportunities for improvement. We also conducted a workshop with the Minister of Education and his leadership team to solicit feedback on options for reorganization.

Literature on Organization Design

The literature suggests that effective organization design should consider three interrelated elements: (1) hierarchy of authority, (2) division of labor, and (3) rules and procedures (Weber, 1947; Rainey, 1997; Wyman, 1998; Bridgespan Group, 2009). Organizations can be classified by how they handle these three elements in terms of their centralization, i.e., where decision-making authority within the organization lies; complexity, i.e., the extent to which there is division of labor in the organization; and formalization, i.e., the degree to which rules and procedures guide organizational behavior (Robbins, 1979).¹ Organization design focuses on the top two to four levels of an organization, with particular emphasis on the roles and the structure of governance and the processes that should be used in making top-level decisions (Wyman, 1998).

The purpose of organization design is to help the organization achieve its vision and strategic objectives (Deloitte, 2008). Organization design can shape staff behavior by motivating, enabling, and empowering people to do the necessary work. According to Wyman (1998), the success of an organization relies on getting the right information to the right people at the right time.

¹ In this analysis, we focus on the first two elements. The development of rules and procedures was beyond the scope of this study.

Ineffective organizational design, with poor consideration of how decisionmaking authority, complexity, and formalization affect effectiveness, can create performance problems often typified by lack of coordination, excessive conflict, unclear roles, poor workflow, and reduced responsiveness (Wyman, 1998; Bridgespan Group, 2009). The KRG MoE will need a hierarchy of authority, division of labor or groupings of programs and functions, and rules and procedures tailored to its functions, goals, and initiatives.

Hierarchy of Authority and Decisionmaking

This element asks what decisions are critical and who should be responsible for making them. It requires defining roles and responsibilities down the organizational hierarchy. Centralized structures concentrate authority at the top, whereas decentralized structures allow authority and decisionmaking to cascade down. In allocating authority and decision responsibilities, it is also useful to distinguish between types of decisions: initiation of policy or proposal and choice of policy to be implemented on the one hand and implementation and monitoring of policy on the other hand (Hosek and Cecchine, 2001).

Reviewing the literature of more than 150 studies on organizations in both the public and private sectors, Hosek and Cecchine (2001) identified the following factors to consider in allocating decision authority in an organization:

1. *Location of specialized knowledge.* If unit managers have important knowledge that cannot be easily communicated to higher levels, then decisionmaking may be decentralized.
2. *Benefits of rapid decisionmaking.* Centralized decisionmaking tends to make large organizations slower because it requires more communication.
3. *Training and motivation (incentives) of workers and managers.* Decentralized management requires well-trained and motivated unit managers.
4. *Requirements for and costs of coordination across subunits.* If information transfer is poor, then central managers will not be able to make well-informed decisions and communicate them effectively. If substantial coordination across units is required, then decisions may be made at higher levels.
5. *Ability to monitor decisions and outcomes.* If managers cannot easily observe decisions made at lower levels, then they may prefer to keep more decisionmaking authority. This is especially true of government institutions because of their requirements for public accountability.
6. *Technological change.* Unless knowledge of new technologies can be easily transferred to lower-level managers, decisions involving choices of technology should be centralized.

One of the most critical decisions in determining the hierarchy of decisionmaking is the decision on the size of the *span of control* at the top of the organization (Woodward, 1965; Guadalupe, Li, and Wulf, 2012; Bandiera et al., 2014). Span of control refers to the number of staff who report directly to a single manager; it affects the entire organizational structure, how decisions are made throughout the organization, the effectiveness of interactions among the executive team, and the allocation of the fixed amount of time the head of the organization has (Mintzberg, 1979). Time allocation is all-important in determining the effectiveness of top management (Drucker, 2006). The fixed time available to the head of an organization may be allocated to (1) internal affairs (interactions with executive team, other staff, planned internal

meetings), (2) external constituencies (interactions with cabinets, other ministries, unions, and parental organizations; and building support for education), and (3) personal or individual time (vision setting, strategic thinking and planning, and dealing with unpredictable issues requiring attention as is often the case in public institutions).

Empirical evidence on the relationships between the size of the span of control and time allocation is relatively thin. Bandiera et al. (2014) found that organization heads with smaller spans of control allocate more time to personal or individual activities and less time to internal affairs, with no change in the time they allocate to external affairs. Adding a chief operating officer focusing on decision management gives an organization head more time for individual activities and for external affairs (Wulf, 2012). Smaller executive teams more frequently interact and exchange information (Hambrick, 1994). Studies that have sought to determine the optimal size of the span of control and minimize overall costs (money and time) have concluded that the span of control should increase at lower levels of organizational hierarchy (Keren and Levhari, 1979).

Division of Labor

Division of labor refers to how an organization's activities, functions, or jobs are differentiated, aggregated, and integrated. It requires considering two elements: grouping and linking (Wyman, 1998; Bridgespan Group, 2009). These two elements form the so-called organization structure.

Grouping

Grouping refers to how similar activities are differentiated and grouped under one leader or manager. Activities may be grouped by function (e.g., professional development, curriculum development), by output or program (e.g., general education, vocational education), or by user or customer (e.g., students needing special services). Grouping optimizes coordination and information flow within the group but typically creates barriers with other groups (Wyman, 1998; Bridgespan Group, 2009). Three kinds of grouping approaches may be used: a *functional structure*, a *product or program structure*, and a *matrix structure*. Each involves making trade-offs or compromises, as noted below.

A *functional structure* is organized around key functions or departments and is most appropriate when an organization has only a few programmatic focuses. Ministries of education organized by functions might have separate general directorates for curriculum development, teacher professional development, and student counseling. Grouping helps each directorate understand and be accountable for its core responsibilities. It also can promote depth of skills in a particular function as well as functional innovation and lower costs. However, lack of linkage across functions may result in poor coordination, and cross-functional decisions are often pushed up the hierarchy for centralized decisions.

Product or program structure is most appropriate when activities within an organization are very different from one another, as may occur when members of an organization require different skills, serve different customers, or have differentiated products. Ministries of education organized by program may have separate general directorates focusing on different constituencies (levels) of students, such as for preschool, basic, secondary, and vocational education. This structure can promote depth of understanding within a particular program, promote coordination between functions related to the program all pulling toward one end, and provide clear focus of accountability for program results. This type of structure often requires

strong skills in program heads and may lead to some functional duplication. It holds the risk that the organization may become heterogeneous rather than unified.

Typically, public organizations, such as ministries of education, need to manage multiple programmatic, functional, and even geographical dimensions, resulting in a so-called *matrix structure*. Such a structure may involve some activities organized along programmatic lines and some other activities organized along functional lines cutting across programs. In such organizations, trade-offs among clarity in lines of decisionmaking, accountability, and duplication of functions are often inevitable.

The negative consequences of grouping, noted above, can be minimized by linking.

Linking

Linking refers to a way to integrate to coordinate and share information across programs and functions, enabling leaders to provide guidance and direction across the organization. In many organizations, the responsibilities of senior leaders include the linking of units together and the encouragement of collaboration (Bridgespan Group, 2009). Beyond that, desirable linkages can be established by the following:

- *Liaison roles.* In a liaison role, an individual ensures cross-communication, such as when information technology or budget personnel are assigned to organizational group.
- *Cross-unit groups or committees.* Subsets of members of each organizational group constitute a standing or ad hoc committee focusing on a particular process, program, or function, such as when a curriculum-development committee is given overarching responsibility for all levels of education from preschool to higher education.
- *“Dotted lines.”* These link individuals who are doing similar functions in different groupings of the organizations, such as individuals developing curricula for different levels (basic, secondary, university) or types of education (general, vocational).

Summary

Organization design requires defining the hierarchy of decisionmaking, including the span of control at the senior levels of management, grouping of functions, and linking requirements. The literature provides few guidelines to help in the design of an organization other than it should help meet the organization’s vision and objectives and consider the capacity of the staff, specialization requirements, coordination needs, and accountability requirements in defining the hierarchy of decisionmaking. An important lesson from the literature is that there is no one best organization design. Every distribution of decisionmaking authority, grouping, and linking of activities has strengths and weaknesses. Rather, organizations are designed to help pursue as effectively as possible their specific vision and strategic objectives taking into account the capacities of their staff.

To help inform choices that the MoE may have to make when reorganizing, we turn in the next section to an examination of organizations adopted by ministries of education in other countries.

Organization of Ministries of Education in Six Countries

In this section, we describe how other countries have organized their ministries of education. We conducted six case studies: Austria and Singapore, chosen for having a population size similar to that of the KRI; Turkey and the United Arab Emirates (UAE), chosen for their cultural affinity with and proximity to the KRI; and Finland and Korea, chosen for having, like Singapore, a high ranking on Programme for International Student Assessment (PISA) tests. The case studies drew primarily from ministry of education websites and available documents on description of changes in their organizations.

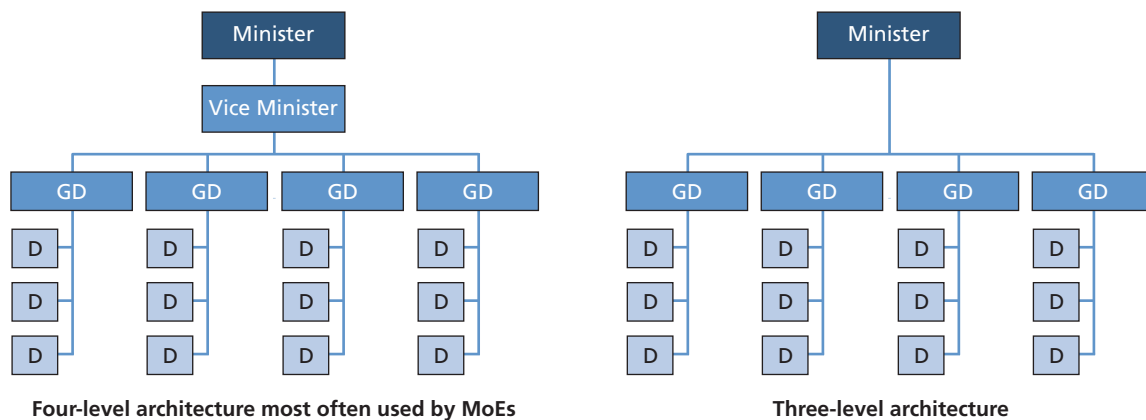
Although the organizations of the six countries differ from one another in hierarchy of decisionmaking, the size of the span of control at the top, and grouping by programs and functions, they have many common features. These include similar levels of senior management, shared decisionmaking authority with a vice minister, a low span of control for the minister and vice minister, mixed grouping by programs and functions, and few formal linking mechanisms.

Levels of Senior Management

The countries we reviewed have different levels of senior management for their ministries of education, as shown in Figure 2.1.

The first organizational structure, shown on the right side of Figure 2.1, has three senior managerial levels: ministerial, general directorate, and directorate levels. This structure is used in only one of the six other countries we reviewed, Austria. This structure has a large number of staff directly reporting to the minister, i.e., it gives the minister a large span of control. This may overburden the minister by requiring more attention to daily internal administration, in addition to the tasks of developing education policy, tending to outside constituencies, and leading strategic initiatives (see above). In Austria’s MoE, the directors general have deputy directors, presumably to assist them in overseeing their multiple functions.

Figure 2.1
Levels of Senior Management in Other Ministries of Education (Notional Depictions)



NOTE: GD = General Directorate and D = Directorate.

RAND RR960-2.1

The second, more common structure, shown on the left side of Figure 2.1 and used in all the other countries we studied, has four senior management levels: ministerial, vice ministerial, GD, and D.² This structure offers two important advantages. First, placing the vice minister in charge of day-to-day operations frees the minister to focus on building political and public support for education, making key policy decisions, and leading strategic initiatives. In all five countries, the vice minister is in charge of operations, the so-called administrative head. Second, this structure also helps limit the span of control at all managerial levels, in part by grouping complementary functions under directors general, thereby facilitating coordination between complementary activities.

Hierarchy of Authority and Decisionmaking: Role of the Vice Minister

These two structures differ in how they assign decisionmaking authority. In the four-level structure, the minister and vice minister share decisionmaking, as noted, providing the overall strategic vision for the ministry and attending to outside constituencies, whereas the vice minister is responsible for day-to-day operations. The vice minister is also responsible for ensuring coordination (linking) across the general directorates. Although the minister can still manage the general directorate or lower levels as necessary, this structure frees the minister's time for other activities (see the previous section).

By contrast, in the three-level structure, decisionmaking is centralized with the minister, who is also responsible for coordination across a large number of general directorates. This forces the minister to spend much time on internal relations, as noted.

Span of Control: Variations by Level

The span of control at senior management levels depends greatly on the overall organizational structure adopted in the countries we reviewed. The greatest difference is by whether a ministry has a vice minister—those without give the minister a larger span of control—but there are still variations within ministries of similar structure.

Minister's Span of Control

Where the ministry has a vice minister managing daily operations, the minister has relatively few directly reporting to him. In the four-level structures we reviewed, the number of persons directly reporting to the minister ranges from one to eight (Table 2.1). In Finland and Singapore, the only person reporting to the minister is the vice minister. In Korea, in addition to the vice minister, a group of advisors and personnel in the office of public relations report to the minister. In Turkey and the UAE, the minister oversees not only the vice minister but also policy-setting (curriculum) and oversight bodies (inspectorate and school monitoring), as well as specialized offices such as public relations and consultants.

Where the minister is also responsible for day-to-day administration, as in Austria, the span of control is much greater. In Austria, the minister has a span of control of 11 units, including eight operational units and three other units for internal inspections, legal affairs, and a staff unit for European affairs.

² Titles for these positions vary across countries. Vice minister is referred to as undersecretary in Turkey and the UAE and permanent secretary in Singapore and Finland. General directorate level is referred to as deputy secretary in Singapore, as directorate in Austria, as department in Finland, as office in Korea, as deputy undersecretary in Turkey, and as assistant undersecretary in the UAE. We use the title "vice minister" to designate this position, second in authority only to the minister.

Table 2.1
Span of Control, by Number of Levels of Management and by Country

	Four Levels of Management					One Level of Management
	Turkey	UAE	Singapore	Finland	Korea	Austria
Minister	6	8	1	1	3	11
Vice minister/under secretary	7	10	3	7	8	NA
Director general/deputy under secretary	3–4	5–7	3–5	4–5	3–4	6–15

NOTE: NA = not applicable.

Vice Minister's Span of Control

A vice minister's span of control varies from three to ten in the countries reviewed, with some overseeing three to six operational units. Some add cross-general-directorate functions to their portfolios, such as internal audit/inspector general (in three countries), public relations (in two countries), international relations (in two countries), and technical bureau, human resources, education board, and general services division in one country each.

In general, the functions that most frequently report directly to either the minister or vice minister are public relations, inspector general, and quality assurance/internal audit.

Directors General Span of Control

At the director general level, the span of control is typically low, ranging from two to five in the countries reviewed with four levels of management, well within the number necessary for efficient and effective leadership and coordination within a grouping.

In Austria, where directors general report directly to the minister, the span of control for each director is larger, ranging from five to 15.

Grouping: By Programs and Functions

All the ministries we reviewed have a mixed organizational structure. They grouped their policy-development activities into several general directorates, some with responsibilities for education programs serving differing constituencies of students and some with responsibilities for supporting services cutting across education programs.

Education Programs

Typical programmatic groupings within the ministries reviewed included the following:

- higher education policy
- general education policy (K–12)
- vocational and lifelong learning education policy
- culture, arts, sports, or youth policy.

Korea, Turkey, the UAE, and Austria have a general directorate of general education and one for vocational education/lifelong learning. The UAE and Austria also have one or more general directorates for culture, arts, and sports, and Korea has a general directorate of higher education. Finland and Singapore each have a single general directorate that combines general and vocational education, with Finland adding a directorate of culture, sports, and youth

policy. Finland and Singapore also have a general directorate of higher education. Table 2.2 indicates the specific groupings or general directorates in each country.

This programmatic organizational approach minimizes the need for coordination across general directorates, as each general directorate supervises directorates with similar functions but does not eliminate them. For instance, a programmatic organizational approach would still need to coordinate curricula and content courses across basic, secondary, and higher education as well as across general and vocational education. Similarly, such an approach would need to coordinate teacher preservice preparation between general education and higher education teacher colleges.

Within these program groupings or general directorates, activities may be further divided into directorates by constituencies or levels of education, such as preschool, basic education, and secondary education activities, as well as by such functions as curriculum development, teacher professional development, and student guidance services.

Supporting Services

Services that support education program activities include human resources, budgeting, finance, legal affairs, facility construction and maintenance, information technology, and such general services as printing, furniture, and materials. In the education ministries of the six countries reviewed, these services are grouped in a small number of general directorates, typically ranging from one to three (Table 2.2).

Table 2.2
Ministry of Education General Directorates, by Program Type and Country

Grouping	Finland	Korea	Singapore	Turkey	UAE	Austria
Education grouping						
Higher education	✓	✓	✓			
General education	✓ (a)	✓	✓ (a)	✓	✓	✓
Vocational education/lifelong learning		✓		✓	✓	✓
Culture, arts, sports, youth	✓				✓	✓ (b)
Supporting grouping						
Human resources, finance, legal, other	✓	✓	✓	✓	✓	✓ (c)
Support services, construction				✓		
Planning and coordination		✓				
Planning, educational technologies, statistics				✓		
Information and statistics		✓				✓
Education support, curricula, statistics					✓	

SOURCE: RAND case studies of the ministries of education in six countries.

^a Finland and Singapore include general and vocational education in a single grouping.

^b Austria has two groupings covering this area: a general directorate of culture and a general directorate of general arts.

^c Austria divides these supporting services between two general directorates.

Three ministries—in Finland, Singapore, and the UAE—group all administrative and support services under one general directorate. The UAE also has a supporting directorate general for curricula, exam development, and educational materials—activities that other ministries include under their education programs.

Turkey and Austria divide support services between two general directorates along with a third general directorate dedicated to planning, education technologies, and statistics for Turkey and information technology and statistics for Austria. Korea has a separate general directorate of information and statistics and one for planning and coordination. Other ministries also have planning and information statistics units, but they are integrated as directorates in their education programs.

Placement of Selected Key Functions

Table 2.3 shows the level to which key functions report. Most of the key functions listed in the table have been elevated to report either to the vice minister or the minister.

Public relations most frequently reports directly to the vice minister or the minister, as in Finland, Korea, Turkey, and the UAE. Inspection and quality assurance also frequently reports directly to the vice minister or the minister, as in Korea, Turkey, and the UAE, and so does inspector general/auditor in Korea, Turkey, and Austria. Curriculum development reports to the vice minister in Finland and to the minister in Turkey. International relations reports to the vice minister in Finland and Turkey.

Linking: Few Formal Mechanisms

There are few formal linkages to facilitate coordination across groupings in the ministries we reviewed. This is a responsibility of the vice minister in the five countries that have one. In addition, the UAE also has a formal council of directors general that reports to the minister. Also, Turkey's minister of education sits on the higher education council to ensure coordination of general education with higher education. In Finland, Korea, and Singapore, general and higher education are part of the same ministry and coordination is ensured through the vice minister who oversees both.

Linking within program and support groupings is the responsibility of the directors general heading these groupings.

Table 2.3
Reporting Line, by Selected Function and Country

Function	Finland	Korea	Singapore	Turkey	UAE	Austria
Curriculum development	VM	DG	DG	M	DG	DG
Planning	DG	NA	DG	DG	M	DG
School quality assurance and inspection	DG	VM	DG	M	M	DG
Information and statistics	DG	DG	DG	DG	DG	DG
Inspector general/auditor	DG	VM	DG	VM	NA	M
Public relations	VM	M	DG	M	VM	DG
International relations	VM	NA	NA	VM	NA	NA

SOURCE: RAND case studies of the ministries of education in six countries.

NOTES: M = minister, VM = vice minister, DG = director general, NA = not applicable.

Summary

This section reviewed the organizations of ministries of education of six countries. Their key common characteristics can be summarized as follows:

- Most countries reviewed have four levels of management, with a vice minister in charge of day-to-day operations.
- The minister's span of control is typically small, ranging from a low of one to a high of eight.
- The vice minister's span of control is typically larger than that of the minister, ranging from seven to ten.
- Most countries reviewed group their activities primarily by programs (e.g., higher, general, and vocational education) while grouping supporting functions (human resources, finance, and the like) common to all programs in one to three support groupings.
- A few specialized functions are elevated to report either to the minister or the vice minister. They include public relations, inspector general/auditor, and school quality and inspection.

Why Reorganize the KRG's Ministry of Education?

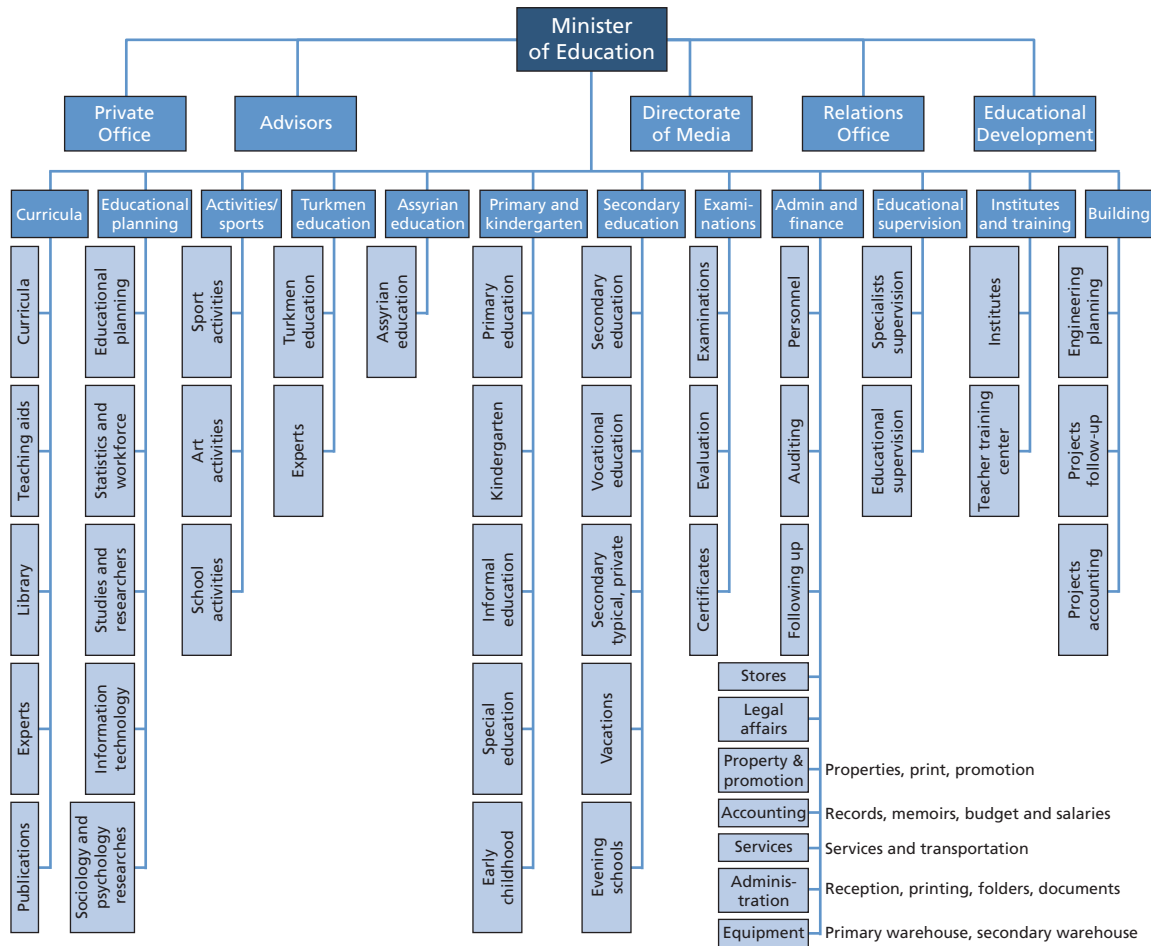
The current organization of the KRG's Ministry of Education is shown in Figure 2.2. It has three levels of management like Austria but is unlike the five other countries reviewed, which have four levels of management. The Minister of Education has an unusually large span of control with 16 managers reporting to him, including 12 operation groupings. Unlike most of the countries reviewed, the KRI's MoE is primarily organized by functions. Although it has two programmatic groupings, basic and secondary education, these two groupings do not operate as such but are limited to conducting human resource functions (see below). Such key functions as curriculum development, examinations, teacher training, and sports are grouped separately reporting to directors general.

Before suggesting a new organization for the KRG's Ministry of Education, this section discusses findings from our assessment of the functioning of its current organization. For this assessment, we interviewed the minister, 10 directors general, and 11 directors about their functions, responsibilities, and staff capabilities to identify issues, gaps, and opportunities for improvement.

Changing Vision and Priorities

The KRG's MoE mission is changing and is being expanded. Until 2008, the Ministry of Education was on maintenance mode. Since then, however, it has engaged in a number of reforms to improve access and the quality of education ranging from introducing a new more rigorous curriculum to mandating education from grade 6 to grade 9, increasing requirements for teacher preservice education, setting new policies for student promotions, and developing new national student achievement examinations. The MoE is further considering devolving more authority to the school level, introducing a new school quality assurance system, and upgrading in-service teacher training. Implementation of these numerous and ambitious reforms is proving slow and difficult—for a detailed assessment of the implementation of the first set of reforms listed above, see Vernez, Culbertson, and Constant (2014). Part of the problem is a

Figure 2.2
Current Organizational Structure of the KRG's Ministry of Education



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lack of clear lines of responsibility for implementation and for coordination across the various reforms.

In addition to the changes described above, the MoE has initiated a reorganization and expansion of its secondary vocational education, which until recently had been neglected and viewed negatively by students. As a result, a large number of secondary school graduates are leaving school without sufficient preparation to compete in the labor market—for an assessment of the TVET system in the KRI and plans for its expansion, see Constant et al. (2014). At present, secondary vocational education is administered by a directorate within the General Directorate of Secondary Education with a small staff that has neither the visibility, authority, nor full capabilities to implement the expanded role envisioned for it.

High Level of Centralization

Nearly all key decisions including policy and operational managerial decisions—and even many smaller ones, such as approval for a new private school or appointment of a new teacher—are made by the minister. Directors general we interviewed said that they could not implement an initiative of their own without approval from the minister. Even requests for data from within

the organization may have to be approved by the minister. Similarly, directors cannot make decisions without approval of their director general. This centralization of decisionmaking pervades all levels of the education system, including the governorates and schools, resulting in bureaucratic behavior that discourages initiative and improvement. It also slows decision-making and leads to lack of accountability for implementation of management decisions. Even the hiring of teachers by governorates must be cleared by the MoE. However, we note that some efforts are being made to decentralize some operational decisions to the governorates.

Broad Span of Control at the Top of the Organization

As noted above, the KRG Minister of Education has a large span of control, with 16 direct reports, plus the staff in the minister's office. With so many direct reports, the minister must oversee all activities, including vision setting, external relations, day-to-day operations, and the management of the various reforms and special initiatives. Given the rapid pace of change and implementation of several improvement initiatives, having someone else manage daily operations might allow the minister to spend time more effectively on vision setting, external relations, and special initiatives. By contrast, the span of control at the director general level in the KRG MoE is low, ranging from two to five reports per director general, although the General Directorate of Administration and Finance has a span of control exceeding 10. The broad span of control at the top of the organization, coupled with narrower span of control at lower levels, differs with research, noted above, which showed that the span of control should increase at lower levels of organizational hierarchy.

Unclear Roles and Responsibilities

Missions and responsibilities within the KRG's MoE are unclear. Most directors general appear to interpret their functions narrowly and as uniquely operational (e.g., daily administration) rather than as strategic (e.g., policy development). For instance, the General Directorates of Basic and Secondary Education's current function is limited to the review of the qualifications of new teachers and other human resources functions related to teachers as noted above. The General Directorate of Supervision's mission is to oversee school administration and teachers, but its mission has been expanded to include providing logistics to field the national exams, serving as ad hoc teacher professional development trainers, serving on investigation committees, and even allocating teachers to schools. The result is lack of clarity on supervisory core functions and a lack of time for assessing and improving teacher instruction and school leadership. Part of the problem is a general lack of written mission statements for general directorates and directorates and job descriptions for directors general and directors.

Weak Coordination

Centralized decisionmaking, in combination with the allocation of key complementary functions—curriculum development, examination development, arts and sports activities, and teacher training—are located in different general directorates, resulting in weak coordination and follow-up for implementing reform and new initiatives. As noted above, any activities that need to be coordinated or any conflict may need to be elevated to the ministerial level for a decision, often leading to delays, or to each general directorate, which is pursuing its own agenda. This particularly is an issue when teachers must be retrained to meet changes to the curricula.

Changing Roles and Responsibilities

The ongoing devolution of some functions from the Ministry of Education to the education directorates of the governorates and to MOHESR requires evaluating the allocation of the functions remaining with the MoE. With the decentralization of teacher recruitment to the governorates, the functions of the General Directorates of Basic and Secondary Education have been reduced to mainly human resources oversight and administrative functions. Such tasks may be better located in an office of human resources.

The transfer of responsibility for the initial preparation of basic education teachers from the MoE's General Directorate of Institutes and Training to MOHESR's teacher colleges has led the remaining MoE institutes to focus on vocational education. Responsibility for the institutes might be best relocated within the Directorate of Vocational Education.

Introduction of a school quality assurance system may require adding the function of supporting schools that need improvements to the essentially administrative functions of the General Directorate of Supervision.

Staffing Challenges

Finding and allocating enough staff with the right qualifications, our respondents said, is a challenge across all levels of the MoE, most particularly for implementation planning, curriculum development, school quality assurance, and research and development.

Missing Functions

Some important functions are missing from the current organizational structure. For example, there is no human resources function dedicated to the hiring, processing, and assignment of MoE staff.

International organizations are working on various projects with directorates of the MoE. Most are working independently and without coordination across directorates, even when providing similar services, such as teacher training or school quality assurance materials. The MoE needs a coordinating unit for such efforts.

In addition, in our previous studies (Vernez, Culbertson, Constant, 2014; and Constant et al., 2014), we identified several needed functions that are presently not included within the current organization of the MoE. They include providing student counseling services, assessing the performance of current and new programs, and ensuring that basic teacher preparation in the new teacher colleges is aligned with the new curriculum and future changes in it.

Proposed Organization for the KRG's Ministry of Education

Overall Structure

Given the current vision and objectives of the KRG's MoE, our assessment of the current functioning of the MoE's organization, and guided by our review of the organization design literature and case studies, we propose an organizational structure that meets the following goals:

- provides greater visibility for and emphasis on secondary vocational education
- minimizes the number of direct reports (span of control) to top managers
- establishes clear lines of executive authority

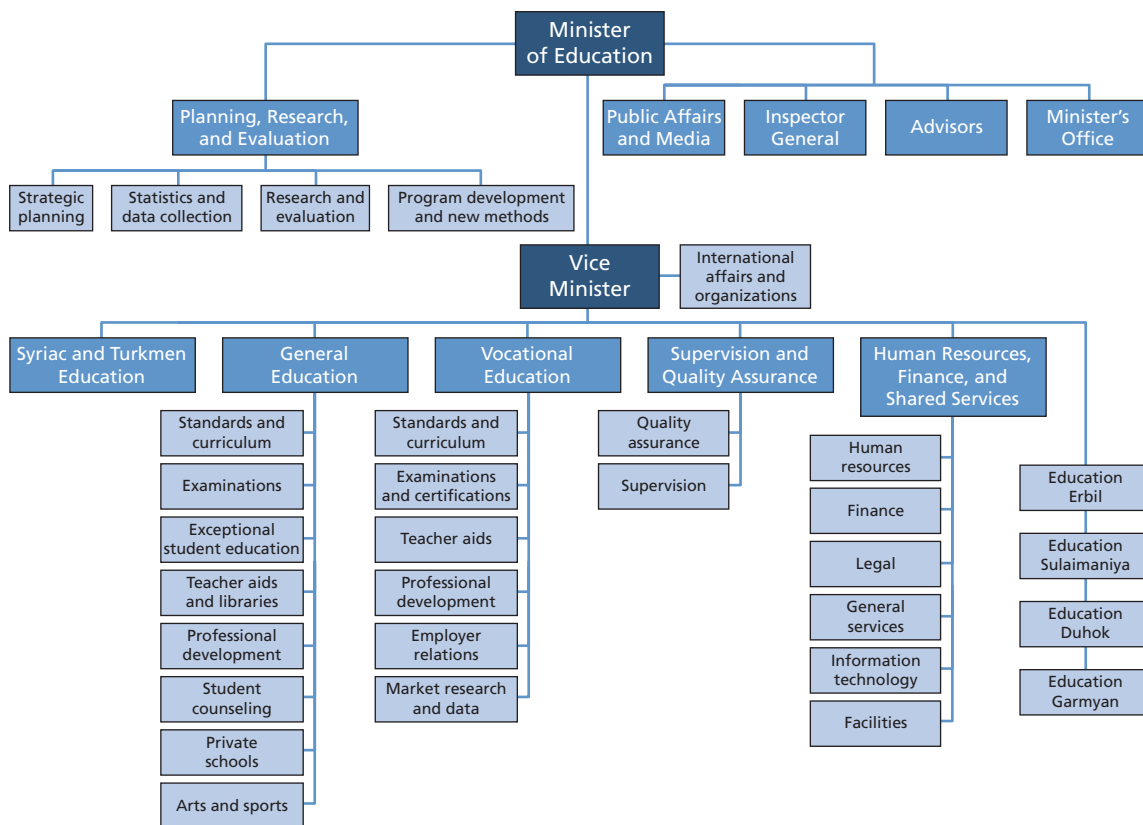
- divides the responsibilities of the minister and a newly created vice minister between vision setting, strategic planning, and external affairs on the one hand and internal affairs and management, including implementation management of reforms, on the other
- limits the day-to-day workload of the minister with respect to routine matters, so that he or she can focus on vision setting, strategic management, and external relations
- ensures complementary divisions and groupings of functions to promote coordinated management and decisionmaking across general directorates (through a vice minister) and within general directorates (through grouping complementary functions within the same general directorate)
- facilitates linkages and coordination between complementary activities and functions.

The proposed organizational structure, shown in Figure 2.3, contains several features that should help ensure its success.

First, this structure reduces the span of control for the minister, presenting a more manageable workload. This allows the minister more time to focus on developing a strategic vision as well as on external and public relations in support of education, and managing strategic initiatives. The span of control for the vice minister is also minimal, with six direct reports.

Second, this structure makes the vice minister primarily responsible for daily operations, ensuring constant and coordinated attention to implementing the education vision and strat-

Figure 2.3
Proposed Organizational Structure for KRG’s Ministry of Education



egy and establishing a clear line of executive authority.³ If necessary, a deputy to the vice minister could help oversee and coordinate the General Directorates of Human Services, Finance, and Shared Services.

Third, this structure consolidates complementary general education and vocational education functions into two general directorates, while grouping the cross-cutting functions of planning, research and development, quality assurance, and shared services in a minimal number of general directorates.

Fourth, the groupings of complementary functions under general directorates facilitate and encourage communications and coordination across them.

Groupings of Education and Support Functions

The proposed structure includes three education general directorates. We show these and their functions in Table 2.4.

We proposed two separate general education and vocational education groupings to give more visibility and importance to secondary vocational education, which heretofore has been neglected. The MoE is seeking to improve and expand the role of secondary-level vocational education, given that many students do not pursue postsecondary education but do need to be better prepared for the labor market (Constant et al., 2014).

The proposed organization also included three support general directorates. We show these and their functions in Table 2.5.

We suggest adding to the current ministry's functions several new functions or directorates to ensure a well-functioning ministry. Specifically, we propose:

- Within the proposed General Education General Directorate, a *Directorate of Student Counseling* to develop policies and requirements to provide academic and career guidance to students

Table 2.4
Proposed Education Groupings and Functions for the KRG MoE

Education Grouping	Function
General education	All policy-development functions related to general education, including kindergarten, basic, and secondary academic education, and including directorates for standards and curriculum, examinations, special education, teacher aids and libraries, teacher professional development, student counseling, private schools, and arts and sports
Vocational education	All policy-development functions related to secondary vocational education and the institutes, including directorates for standards and curriculum, examinations and certification, teacher aids, occupational teacher professional development, employer relations, and labor market research and data
Syriac and Turkmen education	Maintenance of special consideration for these minorities

³ We originally proposed that the General Directorate of Planning, Research, and Evaluation be placed under the vice minister so that all general directorates would report to the vice minister. However, the Minister of Education preferred that this function report to him to support his responsibility for developing the ministry's strategic vision. He also suggested the need for two vice ministers—one for general education and one for vocational education—rather than one, saying that the size and workload of these general directorates justified it. This would require that the supporting units report to two different vice ministers, weakening the coordinating function across groupings that the single vice minister structure provides.

Table 2.5
Proposed Support Groupings and Functions for the KRG MoE

Support Grouping	Function
Planning, research, and evaluation	Strategic planning with all associated functions, including directorates for strategic planning, data collection and statistics, research and evaluation, program development and new educational methods
Supervision and quality assurance	Oversight to assess compliance and effectiveness of school leadership and instruction and support for school improvement, including directorates for quality assurance and supervision
Human resources, finance, and general services	Comprehensive support services including directorates for human resources (recruitment, evaluation, promotion, and benefits), finance (including budgeting), legal affairs, general services (procurement, contracts, information technology, and facility oversight and maintenance)

- Within the proposed Secondary Vocational Education General Directorate, a *Directorate of Employer Relations* to develop relations and create partnerships with employers to help develop occupational standards, curricula, and apprenticeship programs, and a unit for *Market Research and Data* to help determine current and future labor market needs.
- Within the proposed General Directorate of Planning, Research, and Evaluation, a *Directorate of Research and Evaluation* to analyze trends and to assess performance of current and new programs, and a *Directorate of Program Development and New Methods* to follow new research on international development in education and teaching and to implement its findings in the KRI.
- Within the Directorate of Professional Development of the General Education Directorate, a unit for *Relations with Teacher Colleges* to help ensure the adequacy of basic teacher preparation and support ongoing in-service professional development.

We also included two new independent directorates. These are:

- A *Directorate of Inspector General* to provide oversight on MoE internal activities as well implementation activities delegated to the governorate and district education offices. Establishing this directorate would free the MoE from time-consuming and unnecessary double-checking of teacher recruits.
- A *Directorate of International Affairs and Organizations* to coordinate the programmatic activities and assistance provided by international organizations.

Assignment of Responsibilities for the Proposed Organizational Structure

We briefly describe below the broad responsibilities and mission for all general directorates and directorates for the proposed reorganization. The appendix provides more detailed descriptions of the missions of directorates and of general directorates and job qualifications for all senior management positions.

General Education

This general directorate would include policy development and day-to-day operations related to kindergarten, basic, and secondary education and have eight directorates.

- *Standards and Curriculum.* Sets and updates academic standards and defines the content of the curriculum for each academic subject and grade.
- *Examinations.* Develops, oversees the administration of, and reports the results of the region-wide annual standardized tests.
- *Exceptional Student Education.* Develops policies and supporting materials for students with special educational needs and for gifted and talented students.
- *Teacher Aids and Libraries.* Develops tools and materials and selects books to support teacher instruction of the curriculum.
- *Professional Development.* Develops policies and courses and identifies needs and provides for the ongoing professional development of teachers, principals, supervisors, and counselors.
- *Student Counseling.* Develops policies and materials to support student counselors.
- *Private Schools.* Develops policies for the expansion and operations of private schools and monitors their quality.
- *Arts and Sports.* Develops policies for the teaching of arts and sports; organizes and oversees arts shows and sports competitions.

Vocational Education

This general directorate would include policy development functions and day-to-day operations related to secondary vocational education and institutes, and it would have six directorates.

- *Standards and Curriculum.* Sets and updates student vocational standards and professional certification requirements and defines the content of the curriculum for each vocational subject and grade.
- *Examinations and Certifications.* Develops, oversees the administration of, and reports the results of the region-wide annual vocational tests and ensures certification requirements are met.
- *Teacher Aids.* Develops tools and materials and selects books to support vocational teacher instruction of the curriculum.
- *Professional Development.* Develops policies, identifies needs, and provides for the ongoing professional development of teachers, principals, and supervisors.
- *Employer Relations.* Develops and maintains relations with employers and other social partners to encourage their participation in developing vocational standards and curriculum and in providing opportunities for practical experience to vocational education students.
- *Market Research and Data.* Collects, analyzes, and disseminates labor market data to determine future labor market needs and skill requirements.

Planning, Research, and Evaluation

This general directorate would include MoE-wide strategic planning, education data collection and analysis, and evaluation of academic and vocational education program effectiveness, and it would have four directorates.

- *Strategic Planning.* Assists in the development of the region-wide education vision, manages the long-term region-wide education planning process, and ensures that individual unit activities contribute to the implementation of the master plan.

- *Statistics and Data Collection.* Collects student-, teacher-, school-, and parent-level data and prepares and distributes regular statistical reports.
- *Research and Evaluation.* Evaluates the efficiency and effectiveness of education programs and assesses needs and requirements to improve educational processes.
- *Program Development and New Methods.* Keeps abreast of educational research and new development and develops and tests new educational programs.

Supervision and Quality Assurance

This general directorate would assess school quality, teacher instruction, and principal leadership effectiveness; provide support for school and instruction effectiveness; and have two directorates.

- *Quality Assurance.* Develops and maintains school and staff quality assurance systems.
- *Supervision.* Conducts school quality assurance assessments and supports school improvements.

Human Resources, Finance, and Shared Services

This general directorate would provide all support services for the MoE, including human resources, finance, legal affairs, information technology, procurement, and facilities, and it would have six directorates.

- *Human Resources.* Recruits, motivates, and retains a highly qualified and committed staff able to support the needs and mission of the MoE.⁴
- *Finance.* Prepares the budget, allocates resources, and exercises oversight over expenditures.
- *Legal.* Develops contracts and provides general counsel on legal issues across the MoE.
- *General Services and Procurement.* Provides materials and logistical support to enable all components of the MoE to meet their responsibilities effectively.
- *Information Technology.* Purchases and maintains the information technology that supports all components of the MoE.
- *Facilities.* Plans and maintains all MoE facilities.

Inspector General

The inspector general would plan and conduct financial and administrative audits for compliance with KRG laws and MoE policies and regulations.

Public Affairs and Media

This organization would be responsible for public outreach and relations with all media and for ensuring that consistent, high-quality messages and external communications reflect the positions and interests of the MoE.

International Affairs and Organizations

This organization would coordinate and communicate with international organizations, foreign governments, and contractors.

⁴ This directorate would be responsible for hiring and managing MoE staff exclusively. Teacher hiring and management has been delegated to governorates.

Advisor

Advisors would provide the Minister of Education with specialized expertise and advice in selected areas of education.

In the next chapter, we outline a proposed framework and implementation plan for a school quality assurance system.

Developing a School Quality Assurance System

The KRG's Ministry of Education does not currently have a coherent system for monitoring school performance and ensuring its improvement. It has undertaken several efforts to collect partial data on student performance, school characteristics, and principal and teacher performance. Although the ministry could use some of these data for monitoring schools, the data are not coordinated and do not address all critical school aspects.

To help implement an effective school quality assurance system in the KRI, the Ministry of Education asked RAND to provide a monitoring framework and outline the steps to implement it. This chapter describes our efforts to do so.

First, we describe current approaches to quality assurance in the KRI. Second, we identify the characteristics of effective quality assurance systems, drawing from previous research on school quality assurance and monitoring systems and reviews of school assurance systems in other countries. Third, we outline the key features of our proposed school quality assurance system for the KRI. We conclude by describing the decisions and steps the KRI must undertake and the responsibilities and roles schools and various MoE directorates must assume to implement the proposed system.

Current Approaches to Quality Assurance in the KRI

In our previous study (Vernez, Culbertson, and Constant, 2014), we documented various issues with school monitoring practices and capacity. We briefly summarize these issues below.

Limited Scope of Data Collected

Using a school survey, the ministry collects basic data on enrollment, staff education and experience, student demographics, and facility conditions. The ministry also assesses individual principals and teachers through MoE supervisor evaluations and grade 9 and grade 12 grade students through national exams. Although the ministry could use some of the data it collects to monitor schools, it is not doing so, and the data it does collect do not include such critical characteristics as student attendance and absenteeism, student discipline, and parent and student satisfaction.

Concern About the Quality of Principal and Teacher Evaluations

The quality of the data that are collected on principals and teachers may be lacking, and supervisors therefore may not be able to properly judge the quality of school staff. The teacher and principal evaluations are too brief for accurately assessing performance or suggesting improve-

ments. In addition, they focus on administrative matters, such as whether teachers are using ministry textbooks or whether principals complete appropriate forms. Most supervisors spend little time observing teacher instructional practices or examining such documents as lesson plans. Supervisors may lack a common understanding of specific criteria for judging teachers and principals, leading to varying ways of judging of their performance.

Lack of Transparency

Principals and teachers have limited access to the information the ministry collects, particularly the information on how their performance compares to others, reducing their abilities to improve. There are no structures for comparing performance information or communicating it to schools and communities. Teachers do not receive adequate feedback regarding their instruction or curriculum implementation, nor do they receive structured guidance for improving their practices. Supervisors have not been provided adequate training to assume a school supporting role (nor are they expected to assume such a role). They are also responsible for such a large number of personnel that they do not have adequate time to spend with individual teachers.

Independent Efforts Under Way to Evaluate and Monitor Schools

The MoE has commissioned several independent pilot initiatives, led by such organizations as the British Council, Birmingham College, and the United Nations Children’s Fund (UNICEF), to evaluate schools. These initiatives vary in the school domains and indicators monitored, the processes used for collecting data, the criteria used to judge school performance, and the way the information is used to help schools. These multiple efforts may cause confusion among the schools and lead to conflicting policies unless they are coordinated and aligned with an overall design of school quality assurance that provides one common framework for evaluating schools.

Characteristics of Effective School Quality Assurance Systems

Previous research suggests five key components to include in a school quality assurance system. These are (1) school performance indicators, (2) school performance targets, (3) support structures and interventions, (4) school capacity, and (5) capacity of the Ministry of Education. How each component is designed and implemented will determine how well the system will measure school performance and support schools.

School Performance Indicators

A school quality assurance and monitoring system should include indicators related to school outcomes, inputs, and processes for identifying underperforming schools and monitoring their progress. The indicators should align with the nation’s educational goals and theory of action for improvement or at least align with a general theory of school improvement (Hamilton and Stecher, 2010; Rennie Center for Education Research & Policy, 2005; Ogawa and Collom, 1998). Many school quality assurance and monitoring systems around the world (e.g., England, Hong Kong, New Zealand, Scotland, Singapore, and Thailand) include indicators for common key areas such as management processes, teaching processes, and academic and nonacademic student outcomes (Whitby, 2010).

The number of indicators in the system should not be excessive but should be adequate for showing how schools operate and the context in which they function (Ogawa and Collom, 1998; Shavelson, McDonnell, and Oakes, 1991). Including too many indicators is likely to lead to a burdensome data-collection system, confusion from too much information, complications in decisionmaking, and data that are not timely or useful for prioritizing (Blank, 1993; Ogawa and Collom, 1989; Porter, 1991). Other considerations for selecting indicators include cost and capacity in collecting data and reliability and validity of the measures (Hamilton and Stecher, 2010).

Experience in other countries points to a number of promising practices for selecting school performance indicators. These include practices related to

- *Aligning indicators with education goals.* The choice of indicators should reflect the MoE's current education goals and theory of school improvement. In the absence of specific education goals, the choice of indicators should reflect a general theory of school improvement.
- *Breadth of indicators.* There are a limited number of indicators deemed important for school improvement. These include inputs, processes, and outcomes.
- *Decisionmaking.* The selected indicators should allow efficient decisionmaking for improving education at particular schools.
- *Ensuring adequate data-collection capacity.* The selected indicators should be available for collection and analysis in a timely manner.
- *Indicators of performance that are reliable and valid.* Indicators should focus on school characteristics that can be measured reliably and consistently.

School Performance Targets

Any school quality assurance and monitoring system should have performance targets. School performance targets could be set relative to the performance of other schools or at an absolute level (Springer and Balch, 2009). Deciding which approach to take depends largely on the availability of resources and capacity to provide support. For education systems with limited resources and capacity, relative performance targets allow the authority to distribute its support to schools with the greatest needs (Springer and Balch, 2009).

School performance systems may combine indicators and targets (Gong and Blank, 2002). Previous research suggests that indicators should be reported both separately and combined into indices. Altogether, the best practices we identified for school performance targets are

- Setting performance targets for schools on several indicators. Where practical, the targets may account for improvement over time or in differing contexts.
- Aligning targets to resources, with performance targets identifying the number of schools that the Ministry of Education could support.
- Combining indicators to judge school performance, with weighting as necessary.

Support Structure and Interventions

Quality assurance and monitoring systems to improve schools should incorporate effective support structures. Although there is no consensus on which structures are most effective, support structures may include professional development for school leaders and teachers, on-site educa-

tion management organizations or improvement consultants, personnel from the Ministry of Education to help school leaders design improvements and manage performance, and specific curricular or noncurricular programs for improvement. The selection and the implementation of the interventions should involve collaboration between both the Ministry of Education and the schools (Le Floch, Boyle, and Therriault, 2008a; 2008b; Finnigan and O’Day, 2003).

Regarding the type of interventions, there is some evidence that incremental reforms or strategies tend to be less effective for improving chronically underperforming schools (Institute of Education Sciences, 2008). Rather, these schools require multipronged interventions or comprehensive school-wide reforms, starting with major changes in leadership practices or leadership personnel. Furthermore, the type, extent, and intensity of support and interventions should be differentiated by school performance.

Among the best practices in supporting interventions are the following:

- *Recognize differences in performance.* An assessment system should differentiate among levels of school underperformance. For example, it might categorize schools as being seriously below targets, moderately below targets, and at or above targets.
- *Align support to level of performance.* A monitoring system should vary the type and extent of support and interventions for schools by their performance.
- *Provide support from different entities,* such as the MoE, nongovernment support organizations, individual consultants, and experts.
- *Encourage collaboration between schools and the Ministry of Education* to determine the types of support and interventions.

School Capacity

Building school capacity is essential to sustaining improvements over time (Chubb, 2004; Purkey and Smith, 1985). School capacity includes school leaders’ skills in developing and implementing plans and policies, using information to manage performance of personnel, and aligning curriculum and resources to student learning goals. School capacity also involves teachers’ skills in implementing appropriate instructional strategies. There is some evidence that data-driven decisionmaking is effective for building school capacity (Chubb, 2004; Feldman and Tung, 2001; Massell, 2001).

Self-evaluation, during which school leaders assess their own strengths and weaknesses and develop plans for improvement, can help build school capacity. School self-evaluation allows school leaders and teachers to continuously monitor their performance and use the data to identify areas for improvement and thereby increase capacity (Whitby, 2010). In addition to school self-evaluation, providing tools and training to schools is another best practice to build capacity. The Ministry of Education could offer training, and external consultants could use data and information to help schools implement plans and conduct self-evaluations.

Capacity of the Ministry of Education

Previous research indicates that characteristics affecting the capacity of any ministry of education or school to manage performance include leadership quality, number of staff, staff expertise, funding, and technology (Le Floch, Boyle, and Therriault, 2008a; 2008b). Most ministries of education lack sufficient capacity to monitor and support all schools, leading them to adopt a tiered system to align support with school performance.

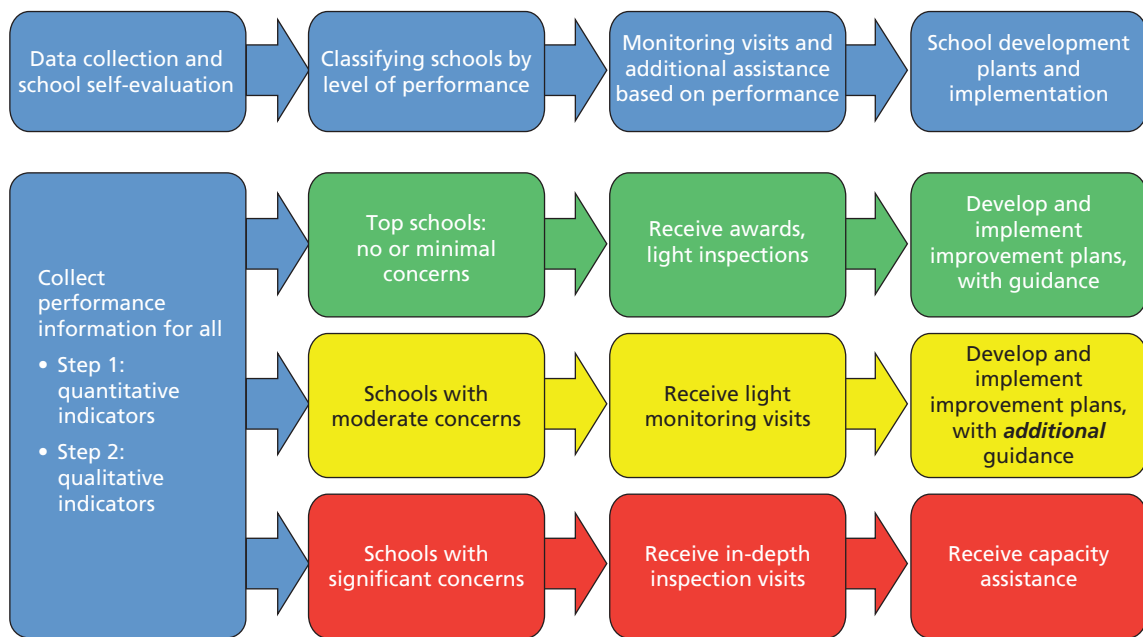
Among the best practices suggested by previous research for building ministry capacity are ensuring that the ministry has an adequate number of staff to monitor and provide support to schools and that these staff are qualified to monitor and support schools. The effective implementation of the practices identified above will depend on the capacity of this staff.

Proposed School Quality Assurance Framework

Altogether, a monitoring and improvement system should have the following components: data collection and self-evaluation, classification of schools by performance, monitoring visits and additional assessment based on subsequent performance, and future development plans and implementation. Figure 3.1 summarizes these components.

This system would monitor all schools annually. At the beginning of each school year, the system would use a limited number of Step 1 or quantitative indicators to categorize schools by three levels of concern. This categorization would reflect the degree to which schools met their previous targets and indicate the intensity of monitoring and support needed for the subsequent year. Schools with no or minimal concern would receive light monitoring (e.g., one visit per year) and appropriate support as necessary. The MoE might also provide awards to these schools or otherwise recognize them publically. Schools that are categorized as being of moderate concern would receive monitoring more frequently (e.g., two to four visits per year) and would receive targeted support to address the areas in which they are deficient. Schools that are of significant concern would receive frequent visits (e.g., every two weeks) by supervisors and intensive support to improve the overall capacity of schools.

Figure 3.1
Proposed Monitoring System and Components



All schools would be responsible for self-evaluation during the year and for developing and implementing their annual school plans. The self-evaluations would help schools identify their needs and develop plans that aligns with needs. The MoE and external consultants would guide all schools in their self-evaluations and development of school plans. They would also provide schools with moderate or significant concerns more assistance to ensure that plans align with self-evaluation results and address deficiencies.

Table 3.1 displays the key features of the proposed school quality assurance system. First, a key characteristic of the proposed system is that it monitors school input, process, and output and incorporates a *manageable* number of meaningful indicators. The indicators selected are aligned with a general theory of school improvement.

Second, the system uses two-step indicators to keep the system efficient. Each step focuses on the same aspects of schooling but uses different indicators. Step 1 quantitative indicators have predefined performance targets to classify all schools into three categories of monitoring and support needs. Step 2 indicators are more qualitative, allow for more in-depth analyses of school weaknesses and potential school improvements, and apply to a smaller number of schools shown by Step 1 indicators to have concerns.

Third, the proposed system incorporates a collaborative approach between MoE staff and supervisors and school staff. The external monitoring by MoE supervisors provides schools with clear direction and effective strategies for improvement. The school's self-monitoring builds its capacity over time and helps sustain improvements, giving the school an important role in the quality assurance and monitoring system. All schools are required to conduct annual self-

Table 3.1
Features of the Proposed School Quality Assurance and Monitoring System

Feature	Description
Structure of the system	Annual monitoring of school input, process, and output, using two-step indicators to assess school performance
School performance indicators	Step 1: Quantitative classification of schools as having: No/little concern Moderate concern Significant concern Step 2: More qualitative indicators covering six key domains of quality standards and targeting schools with "moderate" or "significant" concerns
Approach to monitoring	Collaborative approach between supervisors and schools using: School self-evaluation External inspection (with level depending on school performance) School self-development plans developed with assistance
School self-evaluation	Schools engage in self-evaluation annually using Step 2 indicators
Support structure and interventions	Support varies by school classification Uses collaborative process between supervisors and school staff to identify support needs Support offered through the MoE, nongovernment support organizations, and individual consultants
Incentive structure	Emphasizes rewards based on Step 1 indicators and improvement
School capacity	Builds schools' ability to manage performance through training and school engagement in self-evaluation and determination of needed support
MoE capacity	Aligns monitoring intensity and staff with school level of concern

evaluations using Step 2 indicators. The proposed system would hold schools responsible for monitoring and reviewing themselves and developing a list of actions that they discuss and share with MoE staff and supervisors to maintain strong performance.

Fourth, the school quality assurance and monitoring system aligns depth of monitoring and type of services with school classification. For example, schools classified as being of moderate concern would receive targeted support addressing deficient areas. Schools classified as being of significant concern would receive multipronged interventions to address multiple areas. Such schools might be matched with a support entity or organization to improve their performance. Such organizations might provide ongoing support and training to school leaders and teachers and advise them in such areas as formulation and implementation of strategic and educational plans, management of day-to-day activities, and teaching. Schools classified as being of no or minimal concern would also be provided with support if they request it. The type of support would be targeted and designed to further build excellence and ensure continued high performance.

Fifth, the proposed school quality assurance and monitoring system would provide positive incentives to schools that perform well on Step 1 indicators and improve over time. Schools that are classified as being of no or minimal concern would, as noted, receive few visits from MoE supervisors. This in itself is an incentive and will indicate to the high-performing schools that the MoE has confidence in them. Other incentives might include recognition awards and career-advancement opportunities for teachers.

Sixth, the school quality assurance and monitoring system would use the capacity of MoE staff effectively. As noted above, it would allow supervisors to prioritize which schools should receive more attention and support. Staff could then allocate their time in proportion to school needs, providing schools with appropriate monitoring and support.

Finally, the recommended system would require that all educational stakeholders (e.g., MoE staff, school staff, service providers) use the same Step 1 and Step 2 indicators. This would ensure common understanding and consistency among stakeholders regarding what to examine, how to assess school performance, and how to help them build their capacity over time.

School Performance Indicators

Critical to the design of a quality assurance system is defining which domains of school activities to include when measuring performance. The domains that are included and how they are measured set the vision of what the MoE and, through it, Kurdish society deem most important in the education of its people. It also defines where school staff and students need to focus their efforts.

Step 1 Indicators

For Step 1, we propose using indicators covering six school domains: leadership quality, teacher and teaching quality, student achievement and attainment, student behavior and attendance, facilities, and client satisfaction. The proposed domains are based on common practice in measuring the most critical aspects of schooling as well as analysis of the KRI education system. Since the MoE does not currently collect quantitative data on all six domains, we recommend prioritizing them and Step 1 indicators within them and gradually integrating such indicators into the evaluation system.

Table 3.2 lists the proposed school domains, the Step 1 indicators for them, and their prioritization. Previous studies on school improvement, school effectiveness, and school account

Table 3.2
School Domains and Step 1 Indicators

Domain Name	Indicator	Prioritization		Data Source	Status
		Year 1/ Year 2	Subsequent Years		
Leadership quality	Supervisor total score	X	X	Supervisor evaluation	Collected by GD supervision
	Education level		X	School survey	Data managed by GD planning
Teacher and teaching quality	Supervisor total score	X	X	Supervisor evaluation	Collected by GD supervision
	Proportion of inexperienced teachers/new teachers		X	School survey	Data managed by GD planning
	Education level		X	School survey	Data managed by GD planning
Student achievement and attainment	Kurdish performance	X (9th and 12th)	X (6th, 9th, 12th)	National assessment	Data managed by GD examinations
	English performance	X (9th and 12th)	X (6th, 9th, 12th)	National assessment	Above
	Math performance	X (9th and 12th)	X (6th, 9th, 12th)	National assessment	Above
	Science performance	X (9th and 12th)	X (6th, 9th, 12th)	National assessment	Above
Student behavior and attendance	Student absenteeism rate		X	School survey	Does not exist yet; to be collected by GD planning
	Student discipline incidences		X	School survey	Above
Client satisfaction	Parent satisfaction with school		X	Parent survey	Above
	Student satisfaction with school		X	Parent survey	Above
Facilities	Availability of electricity, sewage, and potable water	X	X	School survey	Data managed by GD planning
	Existence of a library, science laboratory, and computer laboratory		X	School survey	Data managed by GD planning

ability have identified those domains as proxies for school quality. Although student academic achievement is a primary goal of public schools, it is not the only one. Public schools are also designed to help students to become good citizens (Wolf, 2005; Hamilton and Stecher, 2010). This suggests that such outcomes as student discipline and attendance should not be overlooked for inclusion in a school monitoring system.

Other school aspects that have been identified in the literature to be associated with the performance of schools are leadership quality, teacher quality, and quality of the school environment (facilities) (Institute of Education Sciences [IES], 2008; Hamilton and Stecher, 2010; Neilson and Zimmerman, forthcoming). Parent satisfaction has been associated with school performance in the literature (IES, 2008). High levels of parent satisfaction and engagement may serve as indicators that schools are responding to and meeting the diverse needs of students.

Initially, we recommend using only indicators for which data are currently collected. These are principal and teacher evaluations and national grade 9 and grade 12 student achievement test results in language, math, and science. Data for the other proposed indicators—grade 6 student achievement, student attendance behavior, and parent/student satisfaction—do not exist yet and should be introduced incrementally in coming years.

Classification of Schools by Level of Concern

To classify schools by level of concern, the MoE must set targets for each of the Step 1 indicators. This will ensure that identification of schools in need of support is systematic and does not vary widely by school or supervisor. Initially, we recommend establishing targets for each Step 1 indicator based on school performance *relative* to all other schools. Those schools in the top 50 percent could be classified as being of no or minimal concern, those in the third quartile could be classified as being of some concern, and those in the fourth quartile could be classified as being of significant concern. Eventually, target setting should account for school improvement over time, especially in indicators pertaining to academic achievement.

After several years of experience with measuring school performance, targets could become absolute, with a specific rather than relative values or scores for each level of concern and indicator. For example, the MoE may determine that schools with an average of 80 or more on a 100-point scale for the grade 9 achievement test in math would be of no or minimal concern, those with an average between 60 and 79 would be of some concern, and those with an average of less than 60 would be of significant concern. Each indicator would then be given a score of 0 if labeled of minimal or no concern, 1 if labeled of some concern, and 2 if labeled of significant concern.

Individuals' scores for each indicator could be aggregated to generate a school-wide score for concern. Table 3.3 illustrates how this might be done during years of implementation. As indicated above, we propose during year 1 to monitor four of six domains on which data are available. In this illustration, the total score for the school is 10, with a maximum possible of 14. To assign a level of concern for the school as a whole, we recommend initially that schools with total scores between 0 and 3 be categorized as being of no or minimal concern with their overall performance, that those with scores between 4 and 8 be considered to be of moderate concern, and that those with scores from 9 to 14 be considered to be of significant concern.

The classification system we propose would expand as other school domains and Step 1 indicators, such as those related to student attendance and behavior and client satisfaction, are integrated over time.

Step 2 Indicators

Step 2 indicators are more numerous, comprehensive, and detailed than Step 1 indicators. They examine the performance of schools in the same school domains as Step 1 indicators but in greater depth. They help determine the causes of underperformance on Step 1 indicators.

Table 3.3
Notional Illustration of School Classification on a Subset of Year 1 Domains

Domain Name	Indicators	Level of Concern	Value
Leadership quality	Supervisor total score	Significant	2
Teacher and teaching quality	Supervisor total score	Some	1
Student achievement and attainment	Kurdish performance	None	0
	English performance	Significant	2
	Math performance	Significant	2
	Science performance	Some	1
Facilities	Availability of electricity, sewage, and potable water	Significant	2
Overall	Overall score (10)	Significant	2

If a school is underperforming on a Step 1 indicator, then the MoE should evaluate it using Step 2 indicators in the same domain, as well as those in other domains that may affect it. For example, if a school is underperforming on Step 1 indicators measuring academic attainment, the school should be evaluated using Step 2 indicators on achievement of students during the school year, as well as other Step 2 indicators, such as teacher and teaching quality and leadership quality, pertaining to other domains that affect student achievement.

School staff should also use Step 2 indicators to guide their self-evaluation, and supervisors and outside evaluators should use them to assess the performance of schools.

Step 2 indicators are more qualitative than Step 1 indicators. Table 3.4 presents all Step 2 indicators for the domain of school leadership and selected Step 2 indicators for the other five domains.

As noted above, several consultants, including Birmingham University, British Council, and UNICEF, have been piloting school evaluation instruments that consist primarily of the Step 2 indicators shown here. Each of these organizations is focusing on slightly different domains and measuring different aspects of school activities within these domains. These differences will have to be reconciled to develop a single unique set of domains and Step 2 indicators to ensure uniformity of performance assessment across schools.

In addition to defining the Step 2 indicators for each domain, the MoE will need to prepare a rubric of best practices. Table 3.5 illustrates two rubrics for two of the Step 2 indicators listed in Table 3.4. Developing such rubrics for each indicator is necessary to maximize the uniformity of assessment across different evaluators.

Implementing School Monitoring

The implementation of school monitoring should take place in two phases: preparing for implementation and engaging in the monitoring process. Below we detail the activities and steps for each phase.

Table 3.4
Examples of Step 2 Indicators

Domain Name	Step 1	Step 2
Leadership quality	School leaderships index Educational level Supervisor total score	School is a well-organized place. MoE vision, mission, and school goals are effectively developed and communicated to staff and parents. MoE vision, mission, and goals are effectively managed. Finances and teacher resources are used efficiently. Leadership is efficiently distributed with clearly defined roles, responsibilities, and expectations for staff. Required MoE policy statements are understood and disseminated. Policies and procedures are in place to guide day-to-day management, planning, communication, and decisionmaking. School has a plan based on assessment results that identifies areas of weakness and strategies for improvement. School provides high-quality assessments and data reports to teachers. Staff performance is effectively evaluated and monitored, including provision of useful feedback to staff. Staff is provided with high-quality professional development opportunities, including support for areas of weakness.
Teacher and teaching quality	Teacher quality index Educational level Proportion of inexperienced/new teachers Supervisor total score	Teachers are proficient in their subject. Instruction uses a variety of teaching and learning strategies to meet student needs.
Student achievement and attainment	Kurdish performance English performance Math performance Science performance	Student achievement improves during the year.
Student behavior and attendance	Attendance rate Proportion of disciplinary problems	Students have positive attitudes toward learning. Students enjoy classes. Students have high educational aspirations. Students are safe from bullying and violent behavior.
Client satisfaction	Client satisfaction index (parents and students)	Clients are satisfied school prepare future citizens. Clients are satisfied with quality of school program. Clients are satisfied with quality of teacher instruction. Clients are satisfied with quality of curriculum.
Facilities	Facility quality index: Availability of electricity, sewage, and potable water Existence of a library, science laboratory, and computer laboratory	Buildings, classrooms, and grounds are maintained and in good repair. The size of the school's outdoor spaces is adequate for the number of students enrolled. The library has a sufficient number of items for learning needs. The school has a sufficient number of computers for learning needs.

Phase 1: Preparing for Implementation

Before implementation of monitoring, the MoE needs to establish new structures, define the roles and responsibilities for these structures, and agree on monitoring indicators as well as

Table 3.5
Illustrations of Rubrics to Guide Measurement of Two Level 2 Indicators

Domain: 1 Leadership quality		
Level 2 indicator: The MoE vision, mission, and school goals are effectively developed and communicated to staff and parents.		
Best practices (check all that apply)		
<input type="checkbox"/> School adopts the MoE vision and mission and develops explicit school goals. <input type="checkbox"/> All stakeholders were involved in developing the school goals. <input type="checkbox"/> Global and local trends in education and the broader society are considered in formulating the school's goals and aims. <input type="checkbox"/> School leaders clearly communicate the MoE vision, mission, and school goals to staff. <input type="checkbox"/> School leaders clearly communicate the MoE vision, mission, and school goals to parents and community members.		
Minimal Implementation	Partial Implementation	Full Implementation
<input type="checkbox"/> The school implements less than half of the best practices consistently.	<input type="checkbox"/> The school consistently implements at least half of the best practices. <input type="checkbox"/> The school implements all or almost all practices, but inconsistently.	<input type="checkbox"/> The school consistently implements all (or almost all) of the best practices.
Rating justification:		Evidence guidelines: (check all that apply) <input type="checkbox"/> Vision, mission, and goal statements <input type="checkbox"/> Meeting minutes/records <input type="checkbox"/> Communication with staff <input type="checkbox"/> Communication with parents and community members
Domain: 1 Teacher quality		
Level 2 indicator: Instruction uses a variety of teaching and learning strategies to meet individual student needs.		
Best practices (check all that apply)		
<input type="checkbox"/> Tasks and materials are well matched to student abilities and needs. <input type="checkbox"/> Teaching and learning activities are differentiated to address all ability groups and special needs population. <input type="checkbox"/> Instructional strategies include opportunities for cooperative and group activities as well as independent inquiry. <input type="checkbox"/> A range of student group structures and forms of classroom organization is used to engage students and address learning goals.		
Minimal Implementation	Partial Implementation	Full Implementation
<input type="checkbox"/> The school implements less than half of the best practices consistently.	<input type="checkbox"/> The school consistently implements at least half of the best practices. <input type="checkbox"/> The school implements all or almost all practices, but inconsistently.	<input type="checkbox"/> The school consistently implements all (or almost all) of the best practices.
Rating justification:		Evidence guidelines: (check all that apply) <input type="checkbox"/> Review of lesson plans <input type="checkbox"/> Classroom observations <input type="checkbox"/> Supervisor reports

policies and guidelines for monitoring. Figure 3.2 depicts the order of all necessary actions for implementation.

Establish Supporting Structures and Assign Roles and Responsibilities

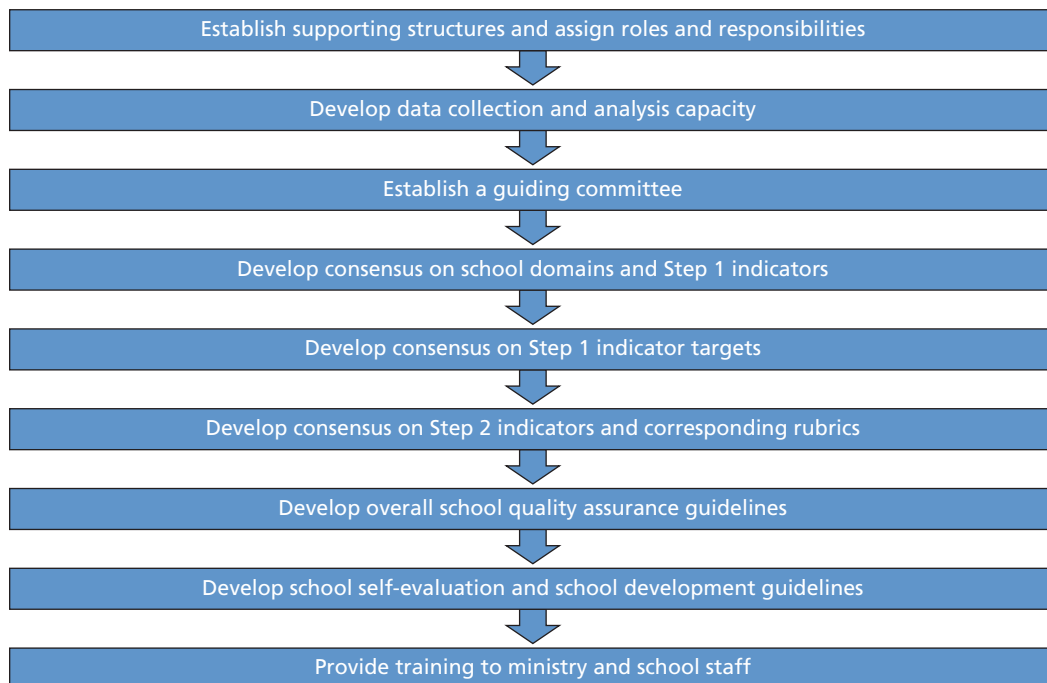
Four MoE units need to be actively involved in the implementing and maintaining the proposed school quality assurance system.

Supervision and Quality Assurance General Directorate. This general directorate would combine the current General Directorate of Supervision and the newly established Directorate of Quality Assurance and have overall authority and responsibility for ensuring the implementation and ongoing operations of the school quality assurance system (see Chapter Two). The Supervision and Quality Assurance (SQA) office would be responsible for

- validating school self-evaluations
- monitoring closely schools that do not perform well on Step 1 indicators
- helping schools put together and monitor their school development plans based on their self-evaluations
- providing schools with suggestions on how to correct school problems
- supporting schools to address areas that need improvement.

Many of these functions would be new to the current supervisors who would largely staff the SQA. To ensure that they are carried out effectively, the job responsibilities of current

Figure 3.2
Actions in Phase 1: Preparing for Implementation



supervisors have to be revised and expanded and training on the new functions provided. Alternatively, and initially, these functions could be entrusted to a contracted consultant.

Planning, Research, and Evaluation General Directorate. The functions of the Planning, Research, and Evaluation (PRE) office should expand to include

- gathering data on Step 1 indicators collected by other MoE offices (e.g., student achievement data, teacher and principal evaluations)
- conducting primary data collection (including survey development) on other Step 1 indicators for which data are not currently collected
- classifying the schools into the three categories of concerns
- generating school classification reports and providing them to the SQA and other appropriate staff so that they can take necessary actions with the schools.

Professional Development Directorate. Before implementing the system, training on the new school monitoring functions should be provided to supervisors and school principals and teachers who will be responsible for the process. Such training should focus on the use of school evaluation rubrics and the development of school improvement plans based on Step 1 and Step 2 indicators. This training could initially be contracted out until PD trainers become proficient in these items.

The PD office would also work closely with SQA staff in providing the needed support to schools. For example, if the school quality assurance and monitoring system were to identify a school with a deficiency in instruction, then the Professional Development (PD) office, in collaboration with the SQA staff, could work closely with the teachers at the school by providing them with classroom observations and immediate feedback as well as with professional development customized to their needs.

Schools. School staff are central to the proposed school quality system. They are responsible for monitoring and assessing themselves, identifying issues, and developing actions for improvement. Principals and teachers will use the school self-evaluation process annually to identify areas of strengths and weaknesses and to develop school plans addressing their needs. They are also responsible for producing written school self-evaluations and school development plans that are then shared with the SQA staff for validation and joint determination of school support needs. School staff will need pre-implementation as well as continuing training to effectively carry out these new functions.

Develop Data Collection and Analysis Capacity

The proposed school monitoring design requires collecting and analyzing data on various school domains. The MoE would need to establish a data management structure that can collect, store, and disseminate school monitoring information in a timely manner. The MoE would need to hire appropriate staff or train existing staff on data analysis to ensure that all involved in the school monitoring process receive relevant information for decisionmaking.

Establish a Guiding Committee

For many decisions and steps, we recommend that the MoE establish a committee to guide the process. The committee could include directors and designated staff from each of the General

Directorate of SQA and Supervision, the General Directorate of PRE, and the Directorate of PD, as well as other designated staff from other directorates as appropriate. Below, we refer to this group as “the committee.”

Develop Consensus on School Domains and Step 1 Indicators

The committee should review domains and Step 1 quantitative indicators and adjust them as necessary before finalizing them. RAND could facilitate these discussions and provide input and feedback regarding the relevancy of the domains and indicators and their prioritization.

Develop Consensus on Step 1 Indicator Targets

The committee should review and discuss the proposed approach to setting performance targets for Step 1 indicators. RAND could assist in analyzing existing data on Step 1 indicators (e.g., student academic achievement and attainment and principal and teacher evaluation) to facilitate the discussion and help the committee reach a final decision regarding performance targets.

Develop Consensus on Step 2 Indicators and Corresponding Rubrics

As noted above, several organizations are piloting various sets of domains and Step 2 indicators. The committee, along with the organizations involved, should review and compare these domains and Step 2 indicators to develop a final single list of domains and Step 2 indicators. RAND could facilitate committee meeting discussions and assist committee members in reaching consensus regarding Step 2 indicators to ensure their cultural relevance, alignment with the proposed school quality assurance and monitoring system and Step 1 indicators, and consistency with other evaluation tools used by the MoE, such as principal and teacher evaluations.

Once domains and the list of indicators are finalized, the MoE should develop a written rubric for each Step 2 indicator. A consultant organization could help complete this task.

Develop Overall School Quality Assurance Guidelines

The committee would need to produce school quality assurance guidelines. The guidelines should set out the MoE approach to assessing school performance and supporting schools in implementing improvement. The guidelines should

- outline the purpose of the system as well as its design and components
- describe the main activities of the system
- delineate system indicators, how data are to be collected, how indicator targets are to be set, and how schools are to be classified by performance
- define types of support and their provision
- identify the roles and responsibilities of MoE offices and schools.

Develop School Self-Evaluation and School Development Guidelines

These guidelines are to provide practical support to SQA, PD, and school staff in undertaking self-evaluations and developing school plans. The guidelines should

- provide a step-by-step approach to starting self-evaluation
- present good practices for each domain included in the system in a coherent way
- outline standards for making judgments about the quality of each domain

- describe evaluation approaches and methods that schools and supervisors can use to gather evidence needed for self-evaluation
- provide guidance for developing a school improvement plan, including how to set goals and targets to meet them based on the self-evaluation results.

The guidelines should also include school self-evaluation rubrics and tools, as well as other tools (e.g., classroom observation protocols) that schools may use to help complete the self-evaluations.

Provide Training to Ministry and School Staff

Training is one of the most critical pre-implementation activities. It should include future PRE and SQA data analysts, supervisors, and other staff, as well as principals and teachers. Given the large number of staff to be trained, the MoE should consider proceeding incrementally, training staff from a subset of schools each year. It should also consider partnering with external organizations that have experience in providing such training. Initial training should cover the design of the overall system and its components to help staff develop a common understanding of the goals of school monitoring and of the quality assurance process, including the use of Step 1 and Step 2 indicators and school classifications. Subsequent trainings should be differentiated by staff roles and responsibilities.

Training may include

- workshops to build SQA supervisor skills on how to review self-evaluation reports and improvement plans, monitor schools, and use data to make judgments about schools
- workshops targeting PRE office staff on how to use data collection instruments, collect primary and secondary data on Step 1 indicators, analyze the data, and classify schools
- workshops targeting SQA and PD office staff on how to help schools develop annual school plans aligned with monitoring results
- sessions for SQA and PD staff on ways to support schools based on monitoring data
- placement of SQA supervisors in schools to practice the school evaluation rubrics while being “shadowed” by experts (from external organizations) providing immediate feedback
- workshops targeting principals and teachers on how to conduct self-evaluations, understand user rubrics, interpret results, and use results to develop annual school plans.

Phase 2: Engaging in School Monitoring

The implementation of the school quality assurance process requires involvement from both the MoE and schools. The process in the first year of implementation, when data will be collected for the first time, differs from those for subsequent years.

Year 1 of School Monitoring

At the beginning of the first implementation year, every school whose staff has been trained would receive help in their self-evaluation from SQA staff, with an external organization providing expert support. SQA supervisors would help school staff establish their first school development plan as well.

During the first school year of implementation, the PRE will also collect Step 1 indicator school data on leadership and teacher quality as well as student achievement and attainment (refer to Table 3.2 for Step 1 indicator prioritization across years of implementation).

Subsequent Years of School Monitoring

In the summer before the second year of monitoring, the PRE will classify schools into the three categories of concern. At the same time, SQA supervisors (with help from an external organization) will review the school classifications, self-evaluations, and development plans submitted by the schools. Using these reviews, SQA should prepare a plan of supervisory visits to schools identifying those that should be visited for in-depth evaluation, depending on their level of concern.

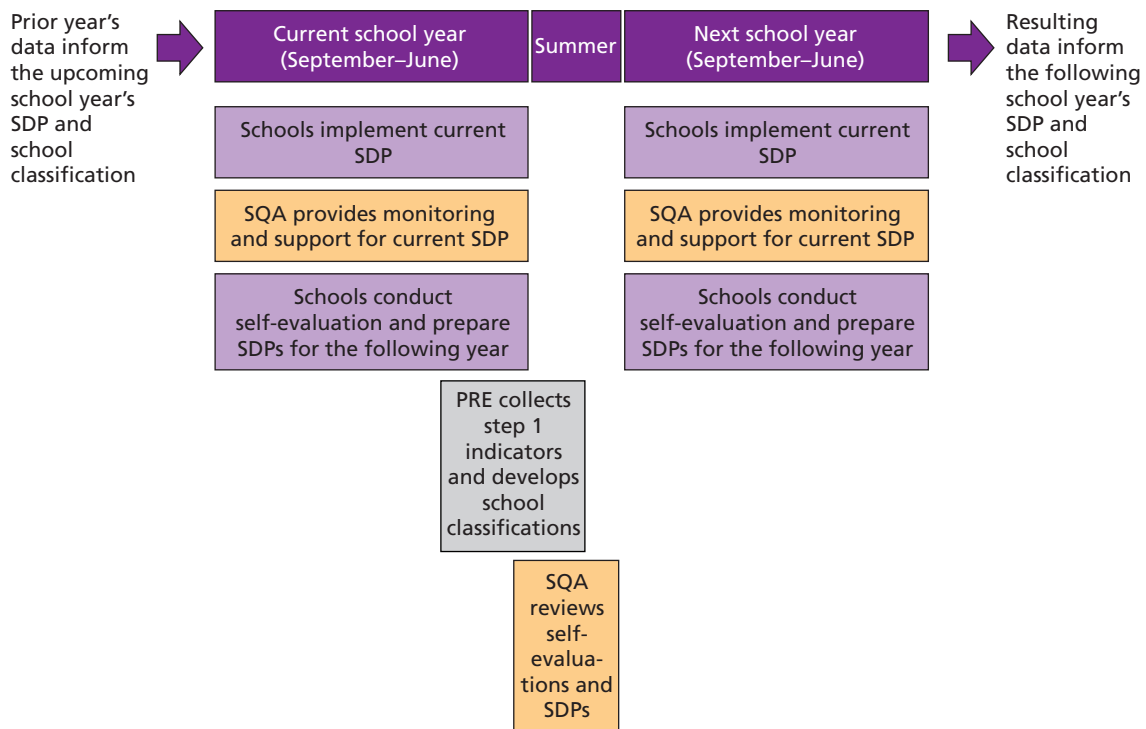
Starting with the second school year of implementation, the school quality assurance process will include several activities, some of which occur simultaneously. These are the following:

- Schools implement development plans.
- SQA monitors and supports schools.
- Schools engage in self-evaluation and develop next year’s development plan.
- PRE collects Step 1 indicator data and develops school classifications.
- SQA reviews school self-evaluations and development plans.

Monitoring in the second year would still include a subset of Step 1 indicators, with the number of indicators gradually expanding over time as the MoE expands data collection efforts and national assessments.

Figure 3.3 diagrams the overall process of school monitoring in subsequent years. We discuss each step below, with figures focusing on each component of the overall plan as we discuss it.

Figure 3.3
Overall Monitoring Process

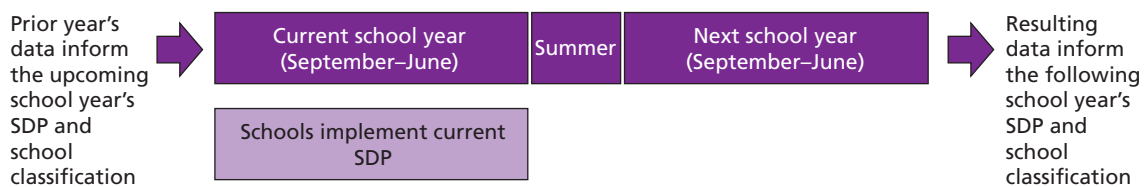


Schools Implement School Development Plan. At the beginning of the second year of implementation and each subsequent school year, schools would implement the School Development Plan (SDP) created the prior summer and based on the previous school year’s monitoring data and approval by the SQA office. This would include monitoring by the schools of SDP implementation. Under this proposed system, schools would update their SDPs during the school year as new issues arise (Figure 3.3a).

SQA Monitors and Supports Schools. While the schools are implementing their SDPs, the SQA supervisors would monitor, through visits, interviews, and observations, whether schools are implementing their SDPs as agreed (Figure 3.3b). The level of monitoring by the SQA supervisors will be determined by the previous classification of schools on the Step 1 indicators. SQA supervisors would use the school self-review rubrics to assess implementation of the SDP and identify any needed support. We recommend that SQA supervisors give less monitoring to schools of no or minimal concern and focus their efforts on those of some or significant concern. Throughout the year, SQA supervisors would provide support to schools (or connect schools to support providers such as the PD office or other external agencies) as needed.

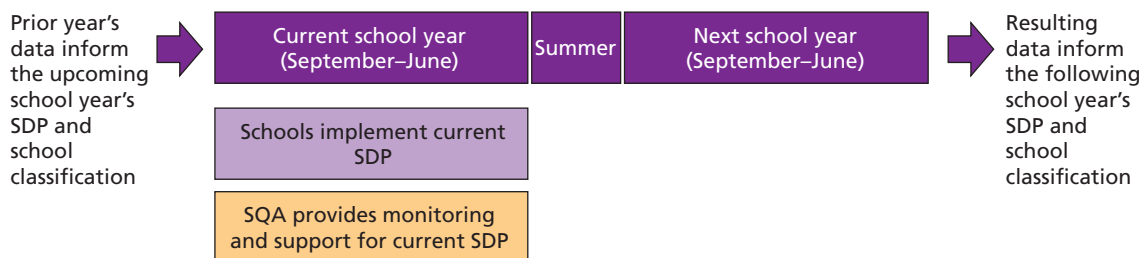
Schools Engage in Self-Evaluation and Develop Next Year’s SDP. When schools implement their current SDPs, they would also conduct annual self-evaluations to develop the next year’s SDP (Figure 3.3c), using the school self-evaluation rubric to do so. The objective of the school self-evaluation is to identify areas of strengths and weaknesses including processes and practices that have not been implemented well. Schools then can request support from the SQA supervisors and PD office staff to help them improve in weak areas. Having started in the fall

Figure 3.3a
The Monitoring Process Begins with Schools Implementing the School Development Plan



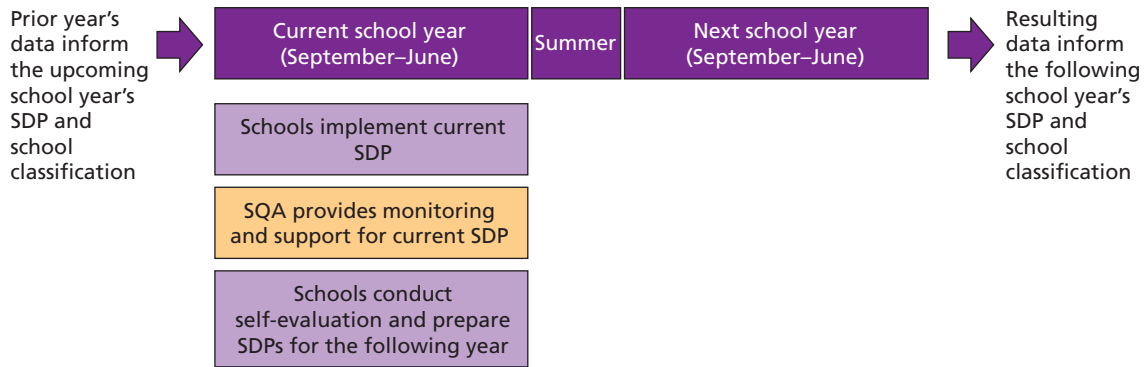
RAND RR960–3.3a

Figure 3.3b
The SQA Office Provides Monitoring and Support Throughout the School Year



RAND RR960–3.3b

Figure 3.3c
Schools Review Themselves Throughout the School Year



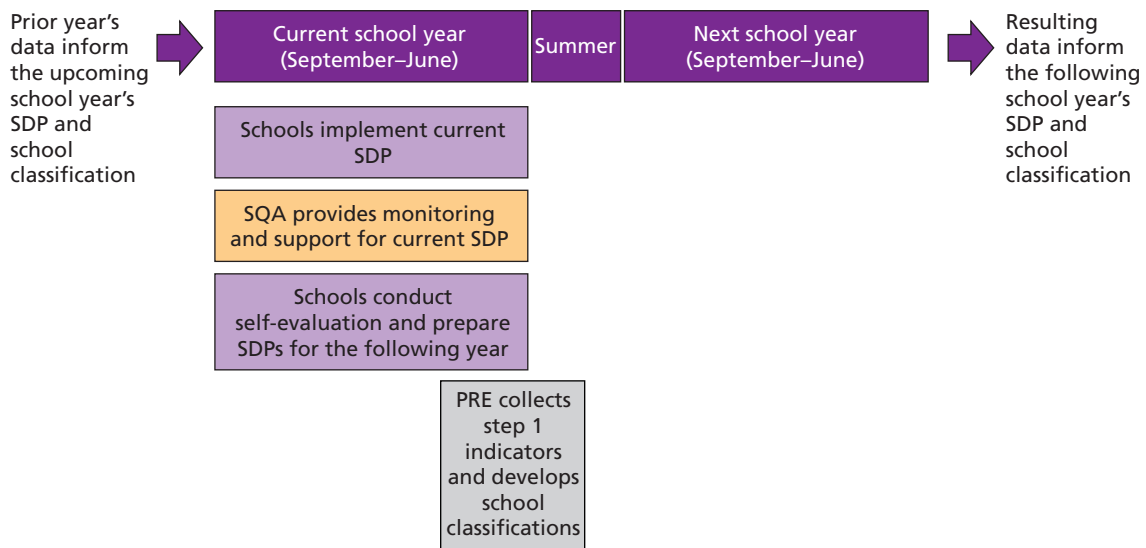
RAND RR960–3.3c

of the academic year, the schools would complete their self-evaluations by the following spring. Using the rubric results, schools would then develop their SDPs for the following academic year and list actions to maintain strong performance and rectify areas of weakness. The schools would submit their self-evaluation results and SDPs to the SQA office by early summer.

PRE Collects and Prepares Step 1 Indicator Data and School Classification Annual Report.

During the academic year, the PRE office would collect data on Step 1 indicators. The PRE office would provide Step 1 indicator information and classification of level of concern to schools and the SQA office before the end of the school year (Figure 3.3d). Schools could then incorporate these data in their self-evaluations. We strongly recommend that Step 1 indicator

Figure 3.3d
The PRE Office Provides Step 1 Indicator Information and School Classifications



RAND RR960–3.3d

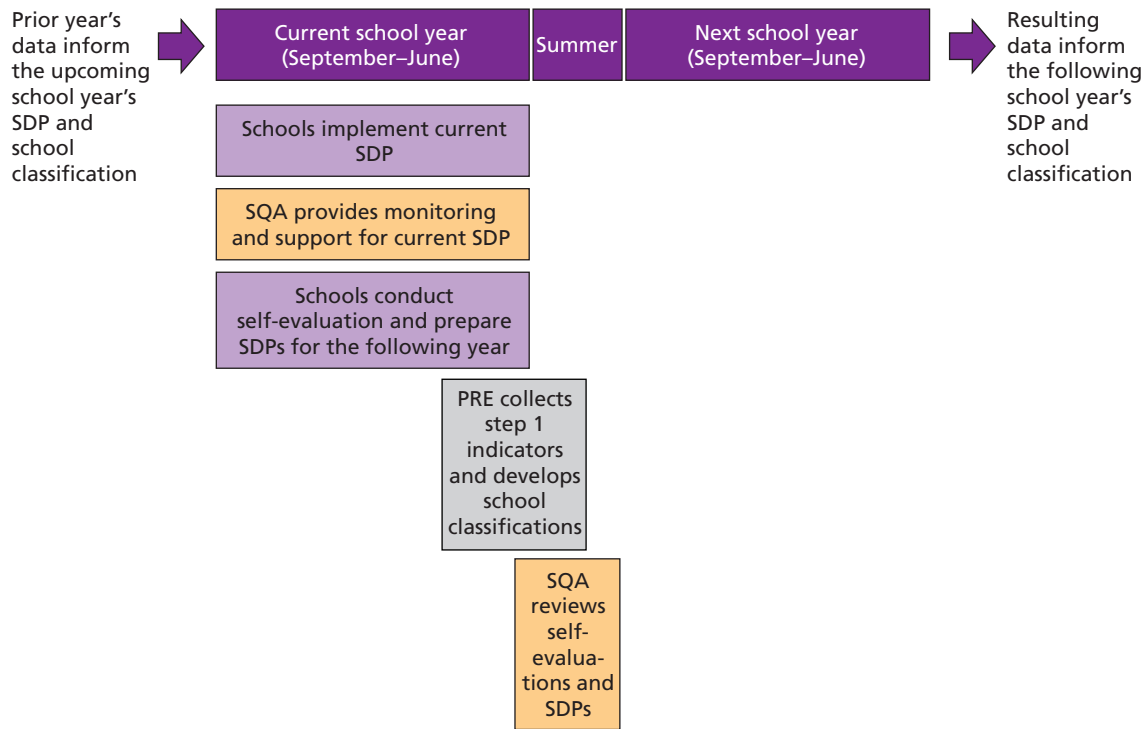
data be made available by May so that they can be used in finalizing school self-evaluation and improvement plans.

SQA Reviews and Assess School Self-Evaluations and Improvement Plans. After receiving Step 1 indicator results and school classifications from the PRE office, the SQA office would review the school self-evaluation and improvement plans in early summer (July). To make the review process efficient and ensure that the reviews are completed before the next school year, not every school would be reviewed with the same intensity (Figure 3.3e).

For those schools judged to be of no or minimal concern on Step 1 indicators, the school self-evaluation and SDP would receive only a light review by SQA supervisors. In a light review, the SQA supervisors would check that the school submitted the self-evaluation, whether it has a reasonable amount of evidence to support its ratings, and whether the action plans are reasonably linked to rubric ratings. If the schools have completed those tasks appropriately, it would need no further monitoring. If the light review finds one or more deficiencies, the SQA supervisors would reclassify the school as being of greater concern on Step 1 indicators and needing further monitoring.

For those schools being of greater concern on Step 1 indicators, the SQA supervisors would review school documentation in depth. The supervisors would examine the data they collected in the previous school year to validate the schools’ self-evaluation findings. If the supervisors were satisfied with a school’s documentation, they would discuss the school’s support requests and finalize a support plan before the start of the new school year.

Figure 3.3e
SQA Assess Schools’ Self-evaluations and Plans



If the supervisors were not satisfied with the documentation then, in early September, they would discuss the issues in question with the schools—using the rubrics to guide the discussion. The schools then would use the rubrics to reexamine their initial review and either revise it or challenge the judgment of the supervisors. The schools should view themselves as having the primary responsibility for explaining their decisions and actions. SQA supervisors would conduct their own visits to monitor the areas in question.

The school monitoring process would begin again with a new school year. Schools would implement the school development plan created during the previous spring and summer. The SQA supervisors would monitor schools (through visitation and interviews) that have been classified as having some or significant concern. The PD staff and SQA supervisors would also provide support to schools for implementing their SDP or would connect schools to other MoE or external support providers. Schools would conduct self-evaluations to develop the following year's SDP using data provided by the PRE office during the year.

Recommendations

We have proposed a blueprint of a school quality assurance and a monitoring system design based on extant best practices and current circumstances in the KRI. Further planning by the MoE is needed to finalize the design. This should include coordination between the MoE and the other organizations (e.g., Birmingham College, British Council, and UNICEF) involved in various pilot efforts.

In the coming year, we recommend that the MoE works to ensure that the structures and activities we described as necessary for “preparing for implementation” are in place and that it then start to implement, at least partially, the school monitoring system, expanding it to other components over time. The MoE should focus its efforts on finalizing Step 1 and Step 2 indicators, developing surveys to collect needed data, expanding national assessments to more grade levels, implementing strategies for rapid data collection and processing, and identifying and partnering with external organization for support to MoE staff and schools.

RAND could assist the MoE in these tasks. Specifically, it could

- help the MoE reach consensus on Step 1 indicators and provide input and feedback regarding the relevancy of the domains and Step 1 indicators and their prioritization
- set targets for each Step 1 indicator and develop a plan for combining various indicators into a level of concern
- facilitate discussions to finalize Step 2 indicators and ensure their cultural relevance, alignment with the proposed school monitoring system and Step 1 indicators, and consistency with other evaluation tools
- pilot the school quality assurance and monitoring system and revise the design and instruments based on feedback from MoE staff and schools.

We expect that implementing a school monitoring system will improve schools and help develop more collaborative relationships among MoE offices and schools. Because the context surrounding the goals and directions of the education system are evolving, we recommend that the MoE regularly review Step 1 and Step 2 indicators, including school self-evaluations, to assess their applicability to new conditions and modify as necessary.

Monitoring Quality and Encouraging Growth of Private Schools in the KRI

The KRI private school sector is small yet growing quickly in size and importance. In response, in 2012, the KRG passed a new private school law to manage and support this growth. A large private school sector could serve various purposes in the KRI. It could alleviate some of the pressure on public schools by reducing the school space shortage. Private schools may provide models for high-quality education, as well as education for returning members of the Kurdish diaspora whose children have started their education in other systems. They may also offer education for international expatriates, whose presence is necessary for growth in some economic sectors.

The fast recent growth of these schools has caused KRI education leaders to question whether private schools have consistent quality. In particular, there is concern that there is no effective way to monitor them and ensure that they comply with existing regulations. Often, the MoE has only limited data to answer questions about private schools.

The MoE asked RAND to develop a system to monitor the private school sector and to meet two goals. First, the MoE wants to ensure quality and other public interests in the private schools. Second, the MoE wants to encourage growth of the private school sector. Accordingly, after reviewing the current private school sector in the KRI and practices in monitoring private schools in other countries, we provide recommendations that the MoE could use to monitor and provide incentives for private school performance.

This work builds on previous analysis for the KRG MoE about the public school system, demand for school spaces, and school accountability and quality assurance (Vernez, Culbertson, and Constant, 2014). For this project, we interviewed MoE officials and supervisors about private schools, current practices, and MoE goals, and we attended a MoE presentation for private schools that solicited feedback from them about the new law and other issues. We reviewed the new KRG private school law and regulations, and we analyzed MoE data on private schools. We also visited three Kurdish and three international private schools in the region. Finally, we studied private school monitoring and support in ten countries.

Overview of the KRI's Private School Sector, Law, and Practice

We begin with an overview of the KRI's private school sector, law, and practice. We first describe the role of private schools in the education sector. We then discuss several aspects of managing private schools in the KRI. These include, as we discuss in turn, *laws, regulations, and governance; licensing and opening; supervision; policies for teachers and staff; managing student outcomes; and offering support.*

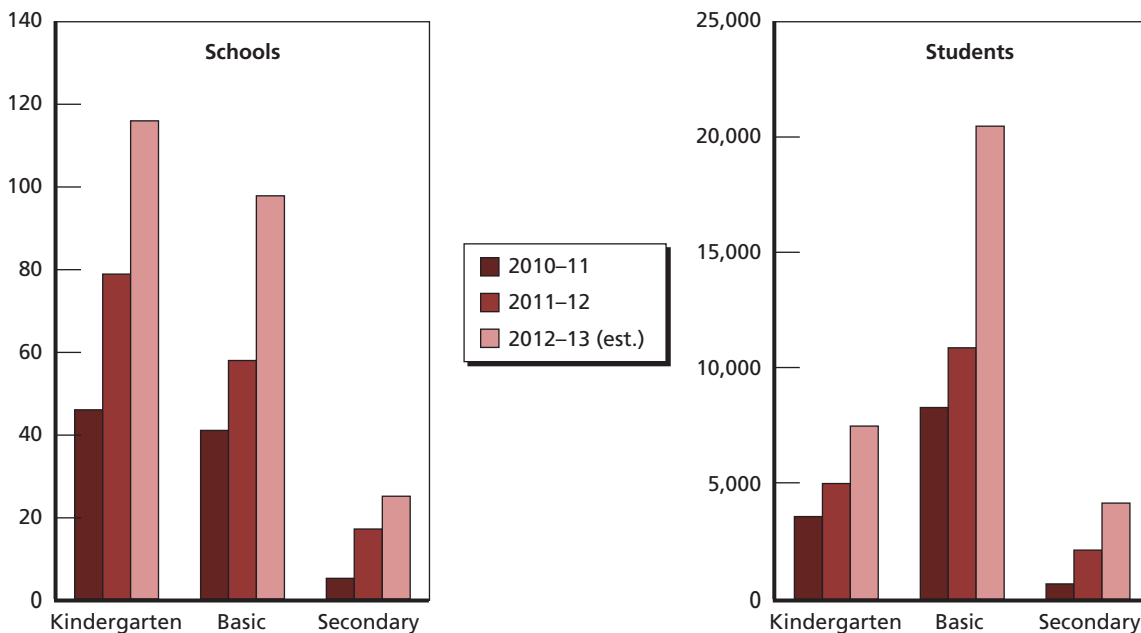
Private Schools Play a Small But Growing Role

From 2010 to 2013, the number of private schools, as well as student enrollment in private schools, more than doubled (Figure 4.1). During this same time, the proportion of all KRI students in private schools increased from 1.0 percent to 2.5 percent. Although the bulk of enrollment in private schools is at the basic school level (grades 1 through 9), a large proportion of private schools are kindergartens. This is because the KRI has only in recent years established public school kindergartens, and they are not yet available for all children at this point.

Private schools fall into two categories: Kurdish and international. The Kurdish private schools follow the KRG MoE curriculum under private management, and their students take regional examinations. These schools may offer extra courses (for example, English, Arabic, or computer science), have more instructional time per day than public schools, and hire their own teachers. The international private schools may follow any curriculum recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) or their country of origin. These schools are not required to administer regional exams to their students. MoE interviewees said that 12 international curricula are being followed in the KRI. Private schools may be for-profit or nonprofit. There are also public-private partnership (PPP) schools that are subsidized by the KRG and do not charge tuition.

Contributors to the rapid growth of the private schools include economic growth, increased security for international schools, the desire of parents to move children from crowded public schools with buildings in poor repair, demand for improved facilities with smaller class sizes, interest in English instruction, demand for better extracurricular activities such as sports and arts, and a perception that teachers in private schools put more effort into their work. There is also a perception that private schools can choose the best teachers (often public school teachers

Figure 4.1
Number of Private Schools and Students, by Type, 2010–11 to 2012–13



SOURCES: 2011, 2012, and 2013 MoE surveys of schools.

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who also teach in the private schools) to hire and be more selective about which students they accept. Indeed, 57 percent of teachers in private schools hold bachelor's degrees, whereas only 36 percent of teachers in public schools do so.¹

Laws, Regulations, and Governance: The Regulatory Regime Is a Solid Framework but Could Be Clarified

The legislation on private schools is Law No. 14 of 2012, “The Law on Private Schools and Institutions in the Iraqi Kurdistan Region.” This law governs private kindergartens, basic and secondary schools, institutes, and universities and colleges offering undergraduate degrees. It sets goals for the private school sector and governs licensing; supervision and monitoring; buildings and premises; teachers and staff; educational programs, enrollment, and exam systems; administration and finance systems; and violations. The law required that schools implement its provisions by the 2013–2014 academic year. When writing the law, legislators sought input from the MoE and some private schools.

The law delegates details of policy formation and implementation to the MoE. In turn, the MoE has published regulations that provide further detail and developed policies in support of the law, whose language is general in many cases.

Responsibilities for managing the private school sector are split. The MoE's Directorate of Private Schools and Institutes sets policy. The Private Schools and Institutes Department of the General Directorate of Education in each of the KRI governorates manages inspections, licensing, supervision, and general implementation of MoE guidance.

One particularly strong stipulation of the law is its prohibition on political parties and religious organizations from establishing private schools and on schools violating principles of religious or ethnic coexistence. These guidelines seek to avoid the exacerbation of national tensions that ethnically and religiously based private schools have caused in Lebanon (Euro-Trends, 2009).

The new law and regulations provide a solid framework but still need some clarification. Interviewees at the private schools report not fully understanding policies and procedures, and there are inconsistencies between the law, regulations, and practice. Examples of these problems include confusing practices for some issues that may not need much regulation (e.g., regulation of textbook prices or student grade-level placement in international schools), inconsistent and conflicting understanding of tuition and taxation policies and practices, and unclear policies on hiring international teachers, equivalency and KRI examinations, and enrollment and certification of students. Many policies serve KRG goals, but details of the procedures create challenges.

Licensing and Opening: Obtaining a License to Open a New Private School Can Be Challenging

Law No. 14 provides guidelines for applying for a license to open a new private school. The approval process involves submitting a written application as well as a set of internal school bylaws for MoE approval. Proposals must be in line with national values and promote the modernization and strengthening of education in Kurdistan.

An application to open a private school requires

¹ RAND's estimates are based on the 2013 MoE Survey of Schools.

- letters of support from governorate authorities, including those in health, security, municipalities, civil defense, and crime prevention
- an approval letter from the governorate’s committee on private property
- income tax information
- an education plan and lecture schedules
- teacher certifications and the principal’s resume
- a building title or lease (which must be at least for one year)
- the contract between the school owner and all staff
- the school owner’s pledge on abiding by the private schools’ law and regulations
- the name of the head and members of the school council (including photos and identification papers)
- international accreditation, when applicable, and approval of the curriculum by an accrediting organization
- for international schools, a letter authenticated by an Iraqi ambassador to that country or by the country’s ambassador to Iraq.

The applicant also must have the approval of the appropriate MoE directorate (e.g., Kindergartens, Vocational Programs, Institutes, Basic Schools, or Secondary Schools). Then the documents are sent to the minister for his approval.

Interviewees noted that the approval and licensing process for opening a new private school can be challenging. Specific challenges they mentioned include conflicting guidance on requirements, bureaucratic procedures in getting permission from multiple entities, and requirements to include certain documents in the application that can be obtained only after a school has started operations. For example, the regulations require that a school operator include all teacher curricula vitae and contracts as part of the application, but a school cannot hire teachers and supply curricula vitae before receiving a license to open. Schools have dealt with issues such as these by negotiating with the MoE on a case-by-case basis. Clearer guidelines in the regulations, streamlined procedures, and a policies and procedures manual could make the process easier for both the MoE and the schools.

Supervision: Complex and Not as Effective as Desired

Law No. 14 describes the MoE’s responsibility to supervise private schools, with details left to the MoE to determine and implement more detailed policies and procedures. The law requires that private schools do the following, under MoE supervision:

- have a plan for the academic year, instructional time, and exams
- set principles and methodologies for student examinations
- set their official holidays and educational holidays
- keep student enrollment and renewal in their annual register
- provide training courses for teachers and staff
- outline their supervision methodologies
- maintain safe school buildings and premises
- address specified health issues (in collaboration with the Department of Schools’ Healthcare).

To enforce these requirements, the MoE supervises the private schools in ways similar to current supervision of public schools. Private schools are inspected by MoE supervisors who, in addition to monitoring the above legislative requirements, focus on *facilities*, *school management*, and *instruction*.

Inspections involve several parties, including MoE's Directorates for Private Schools, Supervision, Basic Education, Secondary Education, and Institutes, as well as representatives of the governorates. The MoE sets the policies, and the supervisors themselves are managed by the governorates. Kurdish private schools receive supervision inspections from MoE supervisors managed by the governorates. International schools receive such inspections from MoE supervisors managed by the governorates for facilities, administration, Kurdish language, Arabic language, English language (if the language of the school is not English), religious education, and social studies. In addition, some international schools receive supervision from an international foundation in limited areas, such as in science and mathematics. Inspectors from Cambridge International Examinations, for instance, inspect science and mathematics examinations in 12 schools that use the Cambridge curriculum.²

Facilities inspections ensure that buildings meet construction requirements and involve inspectors from the governorates.

The MoE has a standardized evaluation form for both *management* and *instructional* inspections. Six to eight supervisors complete the forms for each school, including supervisors for each subject. Each type of supervisor visits each school under its purview twice annually.

Management inspections involve inspecting the school enrollment, accounting, and other administrative matters of the school. Supervisors on management visits gather basic data about the school, including school environment, management practices, teachers and staff and their educational qualifications, and number of students by class. The MoE also retains the right to monitor student enrollment, teacher certificates, and provision of graduation certificates.

Instructional inspections cover classroom teaching. Private and public schools have the same instructional supervisors, although the MoE has recently introduced a team of English-speaking supervisors who work with the English language private schools. Instructional supervision includes scoring of indicators for teachers in preparing and planning lessons, instructional methods, use of teaching materials, personal attributes, commitment to instructions and fulfilling duties, evaluations, and effects on the students. Schools receive reports from these inspections so that they can address any identified problems.

Interviewees both at the MoE and at private schools described challenges with supervision.

MoE interviewees identified supervising the international private schools as the biggest challenge with the private school sector. First, there are communication barriers with language. MoE supervisors often do not speak English, and many of the private schools operate in English, whereas some also operate in Arabic, French, Turkish, or German. Second, MoE supervisors lack knowledge about the curricula of the international private schools, which use systems unfamiliar to them. Third, the certification of teachers is a challenge, as MoE supervisors do not know how to judge the qualifications of teachers from other countries in the international schools. Fourth, judging the equivalency of students who have graduated from international private secondary schools and who want to attend university in Kurdistan is problematic for students who have studied other curricula. The university admission system in the KRI is

² Cambridge International Examinations is a division of Cambridge Assessments, a department of the University of Cambridge that offers curricula, assessments, and educational consulting services.

centralized, with students assigned to universities based on a ranking system that relies on the KRI grade 12 exam and grades 10 and 11 exams in the Kurdish public schools. Fifth, the MoE reported finding that some teachers from other countries held “fake” certificates and some international teachers had criminal records. Sixth, sometimes there is a lack of coordination between the MoE and schools about choosing the location for the school when the school owners are building it.

Some interviewees at private schools also suggested that instructional inspections did not help improve quality for several reasons. MoE supervisors are unfamiliar with international languages and systems and with different educational approaches, so that they cannot identify instructional weaknesses. They noted that inspection visits throughout the year often occurred without coordination between different MoE supervisors, resulting in many different inspection visits, which could be perceived as disruptive. Also, the visits are too short to significantly add value; one interviewee said that the supervisors came and made reports but did not help or hinder the schools other than that. Finally, the private school interviewees noted that inspection of some issues, such as enrollment policies, may not need inspection.

When there are problems with the private schools, both the private school law and regulations offer steps to resolve them, including discussions with MoE supervisors, warnings and fines from the MoE, and closing problematic schools. The MoE has closed four private schools in the past two years. There are no policies for handling parent complaints.

Restructuring quality assurance in the public schools (see Chapter Three) offers a good opportunity for restructuring quality assurance in the private schools at the same time.

Teachers and Staff: Policies Needed for Managing Them

The MoE faces two challenges in setting policies for private school principals, teachers, and staff. First, as noted, MoE officials are concerned that they do not know how to judge the qualifications of international teachers and also that they may not be aware of criminal records for such teachers.

Second, many private school teachers also hold jobs in a public school, often teaching one school shift at the public school and one school shift at the private school. The law permits MoE teachers and civil servants to work a second job in private schools if such work is after MoE working hours and the worker has the approval of his or her school district and school. Interviewees noted that there is a common impression that these teachers put less attention and effort into their public school than their private school teaching, as the private school gives them additional pay on top of their government teaching salary. The new law tries to address this by stipulating that at least 80 percent of the teaching staff at a private school must be “permanent faculty.” Although the law does not define this term, it was understood by interviewees to include teachers who are full-time employees of the private school and not also teaching in a public school.

The new law’s policies on teachers may have several implications for private schools. To reach the 80 percent target, private schools would have to lay off some current teachers and hire new teachers, or current teachers would need to resign from their government positions and serve only as private school employees. The law also requires that private school teachers hold teaching certificates (a degree from a teaching institute or teacher college, or a bachelor’s degree with certification to teach earned through additional training), and most who hold teaching certificates are public school teachers. There may not be enough available teachers with certificates with the right qualifications to work in the private schools. Interviewees at private schools

also said that if they had to hire persons who are not public school employees, then they would have only inexperienced teachers. In other words, private schools may not be able to find qualified persons willing to forgo the government benefits of a public school job.

Managing Student Outcomes: Lack of Data in Private Schools

Aside from supervisor evaluations, which are not aggregated, there are no data or policies to manage quality and student outcomes in private schools. Kurdish students in international private schools do not take KRI regional exams, preventing any efforts to compare their performance to that of other students at their grade level or seeking admission to Iraqi and KRG universities. Additional policies to promote interoperability and data gathering could address some of these challenges.

Offering Support: Limited Assistance Is Available to Private Schools

The MoE offers limited assistance to private schools.

First, as noted, it allows public school teachers to take a second job teaching at private schools or to take a leave of absence from the government schools to teach at private schools while keeping their government employee status and pension rights. As also noted above, however, requirements that at least 80 percent of private school faculty be permanent may constrict how many public school teachers private schools are able to hire.

Second, the MoE provides textbooks for certain common subjects in private schools. The MoE provides Kurdish, Arabic, Assyrian, and Turkmen language books to private schools free of charge, which schools must then provide free of charge to students. The MoE provides English language books for a specified price, and the schools must provide the books to the students for the same price.

Third, in rare cases, there is assistance with land, buildings, or financing, although there are no clear written policies on such assistance. Interviewees mentioned that it can be difficult to obtain financing to open a school, as there are no banks offering loans for this. Operators must use their own funds, get funding from the Investment Board (a government-funded authority that finances public infrastructure), or find a wealthy patron. In some cases, the KRG or governorates have provided land or buildings to private schools.

Fourth, the KRG has funded several PPP schools. This program has been controversial because of great parental demand for a few spots. No documents are publicly available about these programs. One company, a partnership between Sabis and Frobels, is operating seven PPP schools, using Sabis's education model and school management with local teachers, buildings, and students. These schools are not charging tuition but receive an operating fee from the government. Their cost per pupil is approximately \$700 to \$900 per year. (The government may pay teacher salaries directly and provide school buildings.) Sabis and Frobels have submitted a proposal to operate four more schools.

How much support the KRG gives to private schools is a policy decision that depends on how quickly the MoE would like the sector to grow, government budgets, and regional goals for diversity and equality of access to private education.

International Approaches to Managing Private Schools

Private schools play an important role in education in many countries, which have established a variety of institutions to manage them. In this section, we describe how other countries have managed quality and provided incentives to private schools. To do so, we conducted case studies of ten countries and one U.S. state. These are Egypt, Jordan, Lebanon, New York State, the Netherlands, Qatar, Singapore, Sweden, Turkey, the UAE, and the United Kingdom (U.K.). The case studies drew on academic literature comparing country approaches to private schools, government websites (in particular for ministries of education), and documents from international organizations describing and comparing private schools and quality assurance approaches.

We selected these countries to represent different geographical regions, varying approaches to monitoring and information-sharing, and varying roles of private schools within the school systems. We placed particular emphasis on other countries in the Middle East, as they are more similar to the KRI.

Practices in these countries could inform the KRG's approach to monitoring private schools in several areas. These include *the role and proportion of private schools in K–12 education, models for regulating private schools, the focus of monitoring, meeting national goals and promoting social cohesion, the monitoring steps, the management of private schools with nonnational curricula, balancing oversight with autonomy, and support for schools*. We discuss each below.

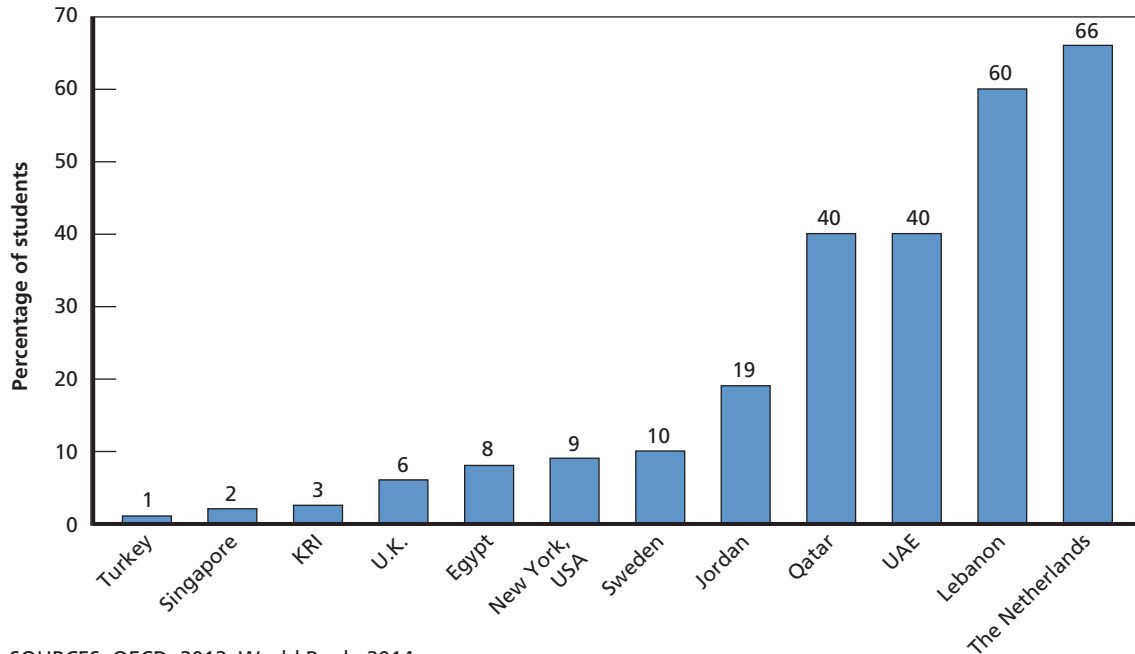
The Role and Proportion of Private Schools in K–12 Education

The proportion of students in private schools varies across countries, from 1 percent in Turkey to 66 percent in the Netherlands (Figure 4.2).

Proportions vary because of different national goals, such as promoting equality through universal, high-quality public schooling, providing freedom of education by promoting private management, accommodating expatriates, or filling gaps in the capacity of the public sector.

In Turkey, which seeks to avoid disrupting fragile national unity among ethnic groups, private schools face strict requirements for licensing and operating (UNESCO-IBE, 2012c; European Commission Against Racism and Intolerance [CRI], 2011; Turkish Ministry of National Education, 2005, 2012). Singapore, which emphasizes investment in high-quality public schools, also has a small proportion of students in private schools (OECD, 2012). The U.K., Sweden, and the United States similarly emphasize public education and have no more than 10 percent of students in private schools (OECD, 2012). Although Egypt has one of the lowest-ranked school systems in the world (Schwab, 2012; UNESCO-IBE, 2012a), only 6 to 8 percent of its children are educated in private schools (World Bank, 2014); families with children in public schools invest heavily in private tutoring to help prepare them to enter university (Dixon, 2010). Although Jordan's education system performs the best in the Middle East on international assessments, 19 percent of children are educated in private schools (Al Jabery and Zumberg, 2008; UNICEF, 2007; UNESCO-IBE, 2011). In Qatar and the UAE, 40 percent of children are educated in private schools, as there are significant expatriate populations and a high demand for English language curricula (Supreme Education Council, 2013; United Arab Emirates Ministry of Education, 2014b). In Lebanon, 60 percent of children are educated in private schools; during the civil war, private schools filled a gap in education that the failing state and public schools could not. Many private schools in Lebanon also cater to minority and religious communities (Ayyash-Abdo, Bahous, and Nabhani, 2009; Nabhani, Busher,

Figure 4.2
Proportion of K–12 Students in Private Schools in Selected Countries



SOURCES: OECD, 2012; World Bank, 2014.

NOTES: The percentages of students in private schools in the sample countries are for the most recent year available. Although the years of the data vary, we expect that the private school proportions are relatively similar over a period of a few years. Dates of the private school percentages are as follows: Turkey, U.K., Sweden, Singapore, Netherlands, Lebanon, Jordan, 2012; Egypt, 2005; Qatar, UAE, 2011.

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and Bahous, 2012; Euro-Trends, 2009). The Netherlands, which values educational freedom highly, subsidizes students who attend private schools with varying religious, ideological, or philosophical approaches to education and operating under national frameworks and quality standards (Eurydice Network, 2014b).

Models for Regulating Private Schools

Countries regulate and monitor private schools in many different ways, depending on their policy goals. Some countries regulate schools only lightly, whereas others have very strict requirements and monitoring systems. Countries that regulate schools lightly may do so because of goals to give autonomy to schools in some cases or because of a lack of capacity to monitor them in other cases. Countries with stricter regimes may do so to ensure consistency of quality in education, equality of opportunity, or teaching of national values. Among our sample countries, some relied on inspections of schools, and others relied on a system of self-evaluation in which the school takes responsibility for its own development plans. Some require an accreditation process that combines multiple components of inspection and self-evaluation. Table 4.1 displays the regulatory framework in our set of countries (with New York State, which has light regulation but also a framework for regulation and optional quality certification, shown twice).

New York State, Sweden, the Netherlands, and Lebanon have very light regulatory regimes; indeed, Sweden and the Netherlands are considered to have the most-deregulated private schools in the West (Arreman and Holm, 2011; OECD, 2012). The first three place a

Table 4.1
Regulatory Models for Private Schools

Light Regulation	Regulatory Framework Plus Optional Quality Certification	Participation in National Regulatory Framework Required
Lebanon	Jordan	Egypt
Netherlands	New York State	Qatar
New York State	Singapore	UAE
Sweden	Turkey	U.K.

particular value on school autonomy and have a preference for a reduced state role in managing private schools. Lebanon's light regulatory regime, by contrast, stems from a lack of capacity to manage its public and private education sectors after decades of civil war and instability. Private schools in the Netherlands have the highest level of autonomy in all OECD countries, with full responsibility for organizing learning, teaching personnel, and resource allocation, within a broader framework for attainment set by the government (OECD, 2012). New York State has light regulation, with no requirements for accreditation, licensing, approval, or registration but with registration required to grant high school diplomas; however, many schools seek accreditation (U.S. DoE, 2008, 2009).

In Singapore and Turkey, private schools operate within a regulatory framework that also offers additional optional quality certification. Singapore's system has two parts: a required framework for registration (with criteria that all private schools must meet) and an optional quality assurance scheme, EduTrust, which currently certifies about a third of private schools (APSC, 2010; CPE Singapore, 2009a, 2009b, 2013). In 1999, Turkey introduced an optional quality certificate, in addition to the inspections it performs with private schools (Collins, 2004). In Jordan and New York State, there is a regulatory framework, and some schools seek additional quality certification through accreditation.

Egypt, Qatar, the UAE, and the U.K. all require in-depth monitoring processes for schools, with Egypt, Qatar, and the UAE requiring accreditation. Private schools may either seek accreditation from an international organization or obtain the national accreditation from the Private School Accreditation Commission in the UAE, from the School Evaluation Office in Qatar, or from the National Authority for Quality Assurance and Accreditation of Education in Egypt (NAQAAE, 2010; UNESCO-IBE, 2012a; Supreme Education Council, 2012a). In the U.K., private schools receive inspections either from Ofsted (the Office of Standards in Education), the same body responsible for inspections of government schools, or by one of three independent inspectorates with inspection frameworks approved by Ofsted and the Department of Education (Eurydice Network, 2000).

Countries may require self-evaluation in addition to inspection to promote schools taking responsibility for their own long-term improvement plans and quality management. Table 4.2 summarizes these requirements by country.

In some countries, the MoE or an equivalent body has full responsibility for monitoring private schools. In others, an independent body conducts monitoring. Table 4.3 lists the body responsible for monitoring private schools in each country, as well as unique features of monitoring in some countries. The decision on whether the MoE or an independent body should conduct the monitoring is based on preferences for organizational expediency (in some cases, it

Table 4.2
Inspection and Self-Evaluation Models for Private Schools

Inspection Only	Inspection Plus Self-Evaluation
Jordan	Egypt
Lebanon	Netherlands
New York, USA (self-evaluation optional if a school pursues accreditation)	Qatar
Singapore (self-evaluation optional if a school pursues additional EduTrust quality certification)	Sweden
Turkey	United Arab Emirates
	United Kingdom

may be preferable for administrative purposes to house the monitoring body within the MoE), transparency and independence (some countries have a monitoring body not reporting directly to the MoE so that the body can make independent judgments), or historical or philosophical preferences for a private sector body to conduct the monitoring.

Focus of Monitoring

Countries regulate a wide variety of issues with private schools, depending on national goals. Some countries regulate many aspects of private schools, whereas others regulate very little, as noted above. Aspects regulated fall primarily into three categories: *school administration*, *curriculum and teaching*, and the *school environment*. Table 4.4 summarizes elements for each of these, and Table 4.5 shows the main categories of indicators in each of the comparison countries. Countries often use different phrases to refer to similar concepts, and Table 4.4 synthesizes these different phrases into common terms.

Meeting National Goals and Promoting Social Cohesion

Meeting national goals and developing social cohesion are important for many countries in regulation of private schools. There are several ways that countries do this.

Multiple countries require that all private school students take state, regional, or national exams. In Lebanon, for instance, schools can offer various curricula, but all students must take national exams (Euro-Trends, 2009). In New York State, schools that wish to confer diplomas must, as noted, register with the state and administer state (Regents) examinations (U.S. DoE, 2009). In Qatar, private schools follow the Qatari Curriculum Standards, and all students take the National Comprehensive Examinations (Supreme Education Council, 2012a). In the U.K., independent schools may offer a different curriculum but often follow the same as that in public schools because pupils all take the same national examinations at the end of their secondary education. Sweden inspects schools to ensure equity in private education, including equal access, education, and value (Nicaise et al., 2005).

Some countries also require that private schools teach a national curriculum or offer certain subjects of national interest. New York State provides guidance on subjects to teach by grade, recommends that schools offer a curriculum equivalent to that in the public schools, and requires that schools teach in English (U.S. DoE, 2009). Qatar and the UAE require that

Table 4.3
Agencies Responsible for Monitoring Private Schools

Country	Agency	Notes on Administration of Monitoring
Egypt	NAEQAA	NAEQAA was established in 2009, as an independent entity with responsibility for accrediting private schools; its process is pre-accreditation, institutional self-study, site visit, and decision (NAEQAA, 2010).
Jordan	MoE	The MoE has responsibility for inspecting all schools, both public and private; regulation is light; some private schools additionally seek international accreditation (UNESCO, 2013b).
Lebanon	National Center for Educational Research and Development, under the MoE	There is a legislative and regulatory framework for private schools; regulatory approaches are consistent across private schools that vary according to ethnicity, religion, and approach (Euro-Trends, 2009).
The Netherlands	Inspectorate of Evaluation, under the Ministry of Education, Culture, and Science	The Dutch Inspectorate of Evaluation evaluates both public and private schools, using a rating system; it uses a risk-based approach, involving inspection and self-evaluation (Meelissen and Punter, 2012).
New York State	The New York State Education Department; an optional independent agency of school's choice, such as New York State Association of Independent Schools (NYSAIS)	The New York State Education Department sets policies according to law and conducts light regulation; many schools seek accreditation, such as with NYSAIS, which requires self-study, peer review, site visits, and judgment on accreditation (Lauria, Sheridan and Swain, 2013).
Qatar	The Evaluation Institute of the Supreme Education Council	The Evaluation Institute of the Supreme Education Council (similar to an MoE) requires that all schools hold either international accreditation or accreditation through the Evaluation Institute; involves self-evaluation as well as external review of how the school meets Qatar's principles and standards (Supreme Education Council, 2012a).
Singapore	Council for Private Education (CPE)	The CPE is an independent board and manages two programs: a mandatory Enhanced Registration Framework and a voluntary quality assurance program called EduTrust; neither requires self-evaluation (CPE Singapore, 2009a, 2009b, 2012).
Sweden	Skolinspektionen	An independent body, it assists with licensing, evaluation, and control, and inspects both public and private schools (Swedish Institute, 2012).
Turkey	Ministry of National Education	Inspections are carried out at the provincial level under direction of the Ministry of National Education's Board of Inspection; there are inspections every three years at the secondary level and yearly at the primary level (Turkish Ministry of National Education, 2005).
United Arab Emirates	Abu Dhabi Education Council (ADEC)	The ADEC, equivalent to an MoE, oversees both public and private schools; private schools are inspected yearly and are required to have UAE or other accreditation (UAE MoE, 2012).
United Kingdom	Either Ofsted (reporting to the U.K. Department of Education) or one of three agencies of the school's choice	Ofsted, also responsible for inspecting public schools, inspects about half of private schools; three other inspecting agencies, using frameworks approved by Ofsted and the Department of Education, inspect the remaining schools (Ofsted, 2014c; Independent Schools Inspectorate, 2009).

Table 4.4
Elements of Aspects to Monitor for Private Schools

Administration	Curriculum and Teaching	School Environment
Leadership	Teaching of particular subjects	Facilities
Complaints	Quality	Health
Governance	Values	Wellness
Information, data	Special needs	Community participation
Staff qualifications	Teacher qualifications	Student support services
Tuition, fees	Examinations	Extracurricular activities
Time, calendar	Student achievement	Parent-teacher associations
Quality assurance	Instructional methods	Personal development of students
Institutional capacity		Care for special needs students
Vision and mission		Safety
Financial management		
Compliance with regulations		

private schools teach Arabic, Islamic studies, and national history/civics (Supreme Education Council, 2014; UAE MoE, 2012, 2014a). In Turkey, all private schools must use the Turkish curriculum (ECRI, 2011; Turkish Ministry of National Education, 2012).

Monitoring Steps

Monitoring can involve multiple steps (Figure 4.3).³ We discuss each step below.

Information Gathering

Information about private schools can be drawn from multiple sources. These include student test scores; parent surveys; interviews with teachers, students, administrators, and parents; news stories; school policy documents; financial reports; parent complaints; and prior years' reports. Qatar, Sweden, and the U.K. conduct parent and student surveys to gather information (Supreme Education Council, 2013; Swedish Institute 2012; Ofsted, 2014a, 2014d).

Self-Evaluation

Several countries require self-evaluation of private schools as a path to self-improvement. Self-evaluation typically involves school leadership and committees using a set form or process to describe strengths and weaknesses and to create a plan for addressing weaknesses. The purpose is to foster a culture of "constant improvement." New York, Singapore, and Turkey, although not requiring self-evaluation, have optional quality assurance certifications that use it

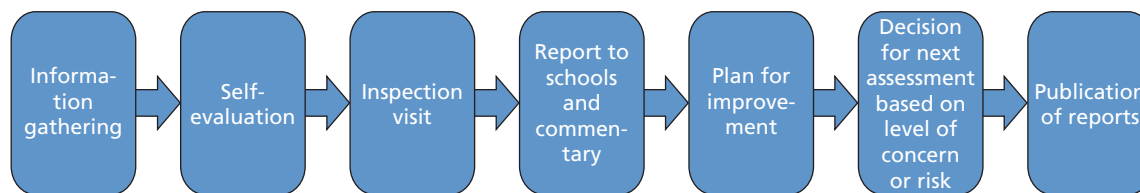
³ Not all countries use all steps. Below, we note example processes from several countries to provide more context about report processes.

Egypt's National Authority of Educational Quality Assurance and Accreditation uses four steps: pre-accreditation (with visits and a gap analysis report), institutional self-study (with a gap analysis, self-study report, and improvement plan), site visits (a team of four reviewers visits the school for three to five days, drafts a report, and sends it to the school for feedback), and a final decision about nine months after the start of the process.

Table 4.5
Indicator Domains, by Country

Country	Agency	Categories and Types of Indicators
Egypt	NAEQAA	Institutional capacity and educational effectiveness; institutional capacity includes vision and mission, governance, human and financial resources, community participation, and quality assurance and accountability; educational effectiveness includes student achievements, teacher qualifications, academic curriculum, and educational environment (NAEQAA, 2010).
Jordan	MoE	Not publicly accessible.
Lebanon	National Center for Educational Research and Development, MoE	Not publicly accessible.
The Netherlands	Inspectorate of Evaluation	Student outcomes, curriculum, instructional time, school climate, instruction, extra care to students who need it, existence of a quality assurance system (Standing International Conference of Inspectorates, 2012).
New York State	NYS AIS	Mission and culture; governance; school operations, finance, and advancement; admissions and financial assistance; educational program; students and student services; faculty, administration, and nonteaching personnel; parents; the school in its community; internal and external communications; process and reflection; compliance with local legislation, rules, and regulations (Lauria, Sheridan, and Swain, 2013).
Qatar	Supreme Education Council's Evaluation Institute	Statement of purpose, curriculum, management system, financial base, course offerings, staffing, facilities, qualified instructional staff, school plan for achievement and assessment, extracurricular and enrichment activities (Supreme Education Council, 2012a).
Singapore	CPE	Management commitment and responsibilities; corporate governance and administration; external recruitment agents; student protection and support services; and academic processes and assessment of students (CPE Singapore, 2012).
Sweden	Skolinspektionen	Standards of achievement, teaching and learning, and results; how the school instills democratic values; and internal audit and management (Swedish Institute, 2012).
Turkey	Ministry of National Education	Development of student skills, information, and talents; compliance with principles of Turkish national education; functioning of the schools and details regarding education; teaching; administration according to legislation; establishment and functioning of parent-teacher association; school cooperative and canteen (Eurydice Network, 2011b).
United Arab Emirates	ADEC	Leadership of the school, the school as a community, the school's approach to student learning, the classroom climate, students' personal development, and student attainment and progress (UAE MoE, 2012).
United Kingdom	Agency of school's choice	Quality of education; the moral, spiritual, cultural, and social development of students; welfare, safety, and health of students; suitability of proprietors and staff running the school; premises or accommodations; information provision and availability; and handling complaints (Independent Schools Inspectorate, 2012).

Figure 4.3
Steps in Private School Monitoring



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(U.S. DoE, 2009; CPE Singapore, 2009a, 2009b; Focus Singapore, undated; Lauria, Sheridan, and Swain, 2013). Jordan and Lebanon also do not require self-evaluations, but some schools there seek international accreditation, which may require self-evaluations (Euro-Trends, 2009; UNESCO, 2013b).

Inspection Visit. In countries with inspection visits, inspections are often carried out over several days by a group of inspectors from an organization such as Ofsted in the U.K. or the NYAIS in New York State (Independent Schools Inspectorate, 2012; Lauria, Sheridan, and Swain, 2013). Such visits may involve classroom observations, review of documents, and interviews with teachers, administration, and students, with subsequent review of additional data, self-evaluation, and inspection reports. Sweden conducts three kinds of inspections: full inspections, regular inspections (lighter), and thematic inspections (focusing on a particular issue, such as dropouts, the teaching of Swedish, or education for newly arrived immigrants) (UNESCO-IBE, 2012b; Eurydice Network, 2000; Penzer, 2011).

Frequency of inspections can vary. Turkey requires general inspections of private secondary schools once every three years, and general inspections for primary schools each year (Turkish Ministry of National Education, 2005). The Netherlands inspects schools at least once every four years (Eurydice Network, 2011a). The NYSAIS grants accreditation for five years (Lauria, Sheridan, and Swain, 2013).

Report to Schools and Commentary. After the inspection visit, the inspection team gives a report to the schools about what is going well, as well as areas for improvement. Schools may then respond to the report.

Plan for Improvement. Schools then draw up action plans to address weaknesses. These plans seek to foster a culture of self-improvement. The inspection team consults with the school and approves its self-improvement plan.

Decision for Next Assessment Based on Level of Concern or Risk. Some countries categorize private schools by performance. Schools doing well may receive fewer or lighter inspections (reviewing only basic indicators), whereas those with problems may have more frequent or in-depth inspections to help improve quality. Categorizing inspections this way provides autonomy to capable schools and maximizes use of MoE resources to help weak schools. Singapore licenses private schools from a period from one to six years, depending on how well the school meets the registration criteria (CPE Singapore, 2009a; 2009b; 2012). The U.K. uses performance data in deciding whether to give a school a full or light inspection, and the Netherlands

uses financial reports, attainment scores, self-evaluations, complaints, and media reports in such decisions (Meelissen and Punter, 2012; Eurydice Network, 2011a).

Publication of Reports. Many countries require that school reports be published on the school’s website, posted on the MoE website, or mailed to parents. This provides transparency of information to teachers, parents, and administrators. One risk of this is that public reports about a school’s problems can demoralize teachers and administration. Countries that publish private school inspection reports or report cards include Singapore, Qatar, and the U.K. (CPE Singapore, 2013; Supreme Education Council, 2012b; Ofsted, 2014a).

Management of Private Schools with Nonnational Curricula

Most countries we studied did not have a significant number of schools offering foreign language curricula or curricula of other countries, but several in Egypt, Jordan, Lebanon, Qatar, and the UAE did, with English or French language curricula being most common. Available data from the KRG MoE also show that there may be twice as many English language private schools as Kurdish language private schools in the region.

One approach to monitoring schools with nonnational curricula has been to develop a national monitoring system with specific capabilities for managing foreign language and foreign curriculum schools. Egypt, the UAE, and Qatar developed their own national accreditation systems (lengthy processes involving data gathering, inspections, and self-evaluation) in which all private schools must participate (UNESCO-IBE, 2012a; Supreme Education Council, 2012a; UAE MoE, 2012). Another approach has been to use foreign accreditation. In Egypt, Jordan, Lebanon, Qatar, and the UAE, a small number of private schools have international accreditation, but this is not widely available to most private schools in these countries. Even where available, foreign accreditation is expensive, can take many years, and requires high levels of organizational and instructional capacity. Egypt, Jordan, Lebanon, Qatar, and the UAE also have international school management companies, such as Sabis, GEMS, or Education Services Overseas Limited, that operate multiple schools.

In the Netherlands, schools using a nonnational curriculum are not subject to the same national inspections that other schools are (ACCESS, 2011). Such schools usually cater to foreign nationals and are under the supervision of international organizations that monitor standards for curricula and examinations.

Balancing Oversight with Autonomy

Private school monitoring systems may face criticism for too much or too little monitoring. Systems with heavy monitoring are not seen as adding value if inspection visits do not engage thinking about how schools can improve but rather seek to enforce standards viewed as disruptive, overly bureaucratic, or stifling innovation. For example, although Ofsted inspections in the U.K. are typically viewed as helpful as they are very consultative with stakeholders, they also face complaints that there are too many new rules, with worry that this might give rise to a “tick box” culture (Paton, 2009). OECD educational inspectors, when reviewing Turkey’s inspection system, noted that it was traditional and inflexible, requiring obedience to regulations, the official curriculum, and textbooks. They concluded that such close observance ignores local needs and may stifle innovation and that the workload of the inspectors was such that they could do little more than monitor compliance (OECD, 2007; UNICEF, 2007). The

Netherlands 2002 Education Inspection Act stipulates that inspections should be proportionate and not place a greater burden than necessary on schools (Eurydice Network, 2014a).

Systems with weak oversight and very little monitoring may be criticized as having limited power to improve failing schools, lacking formal criteria, and failing to track student progress. For example, Singapore's system was viewed as too weak to monitor quality in schools, but a new regime implemented after legislative changes in 2009 was more stringent, causing weaker schools to close (CPE Singapore, 2013; SPRING Singapore, 2011). In 2013, Egypt introduced a new law governing private schools, as its previous law, with weak oversight of "international schools," had led to a proliferation of schools seeking that label (Kors, 2013; Abu-Nasr, 2013).

Support for Schools

Some countries provide direct support of varying kinds for private schools, but others do not. Support policies depend on a country's goals for the size and role of the private school sector. The countries studied vary considerably, including in their levels of affluence, equality, ethnic diversity, and stability, all of which affect a country's interest in creating a large private school sector as well as its ability to support it. The size and levels of support for the private school sector has differing implications in the countries studied.

Some countries choose to support and incentivize their private school sector to offer diversity of education, support ethnic or religious community education, and provide excellence in education. A thriving private school sector can offer a high-quality education, relieve pressure on the public schools, offer instruction in international languages, and introduce diversity into the education system.

At the same time, there are risks to having a large private school sector as it can undermine social equality and national unity. In Turkey, Egypt, and Lebanon, children in private schools have greater access to university education, leading to a popular sense that while the public schools offer weak education (unless families can afford private tutoring), children from wealthier families who can afford private education have significant advantages (Collins, 2004; Esmer, 2009; Cinoglu, 2006; Nabhani, Busher, and Bahous, 2012; Euro-Trends, 2009; Loveluck, 2012). The European Commission has noted concerns with social cohesion in Lebanon, because of the disparities between the private and public schools (Euro-Trends, 2009). Poorer families rely on crowded and poorly resourced public schools, with lower pass rates and a reputation for lower quality. With 60 percent of Lebanese children educated in private schools, many of which are based on sectarian identity, Lebanon's school system is sharply divided by both social class and ethnicity. Such divisions in how children are divided from each other in childhood and educated separately are a contributing factor to ongoing sectarian divisions that threaten national unity.

The Netherlands, Sweden, and Qatar pay private school tuition for their citizens to support goals of equality of access of citizens (regardless of family wealth) to private schools, diversity in the educational experiences of citizens, or freedom of choice to families for education (OECD, 2012; Patrinos, 2013; Eurydice Network, 2000; Swedish Institute, 2012). Lebanon subsidizes certain religiously affiliated private schools, including Maronite, Sunni, Shi'a, Catholics, and others (Localiban, 2009).

Others provide more limited kinds of support, such as free textbooks, subsidized fees, bus transportation, or support for children with special needs. New York State offers such supports (Kober, 1999), and the KRG offers free textbooks that support regional educational

goals. Targeted limited support such as this enables countries to meet particular goals through subsidization.

Other countries provide no direct support for private schools. Singapore, Turkey, the U.K., Jordan, Lebanon, Egypt, and the UAE do not appear to provide tuition or any sort of subsidization in kind so as to focus public resources on public education.

The KRG will need to weigh the advantages and disadvantages of direct support to private schools, as it manages and provides incentives to private schools. In particular, it will be important to avoid encouraging a private school sector that is divided along sectarian lines, as in Lebanon.

Recommendations for Managing KRI's Private Schools

Our assessment of the private school sector in the KRI as well as our review of international practice in managing private schools point to several recommendations for managing quality and providing incentives for growth in the KRI private school sector.

Set Principles for Managing Private Schools

In support of the private school law and regulations, we suggest developing a set of principles to guide further development of policies and procedures. These include the following.

Balance Regulation and Autonomy for Both Kurdish and International Private Schools

Determine what areas to monitor and what areas to leave to the schools, without monitoring unnecessarily.

Develop a Culture of Self-Evaluation and Improvement

Give private schools incentives similar to those public schools will receive in the quality assurance program to take responsibility for improving quality.

Create Clarity

Develop open policies and procedures, with a clear division of responsibilities between schools, the MoE, governorates, and international bodies, and communicate them clearly.

Aim to Have Regulation and Monitoring Viewed as Fair

Engage with partners to facilitate good relations between the government and private educators and foster trust. Take an approach that is helpful, not judgmental. Use multiple data sources.

Streamline Policies and Procedures

The KRG can create clarity for private schools, the MoE, and the governorates by streamlining policies and procedures. A key tool for this would be the development of a private school policy manual that includes the law and regulations, policies, procedures, steps, points of contact, and forms. Although the MoE does have a combined document that includes the law and regulations, a clear policy manual that aims to help private schools navigate the tasks set before them would reduce some of the confusion and bureaucracy that some private schools described. Such a manual could add value particularly in explaining steps for licensing and opening a private school by streamlining procedures between the MoE, governorates, building inspectors, health inspectors, and other parties involved. The governorates could serve as a single point of

contact for schools with licensing issues, with the MoE setting the policies. The manual could describe policies for inspection of private schools. Finally, the manual could offer written policies regarding available supports to schools and criteria for them. The new law, regulations, and combined document are a good first step. Additional clarity about procedures would add value.

Make Private School Monitoring Compatible with Public School Monitoring

The new public school quality assurance system should be extended to both Kurdish and international private schools. The proposed public school quality assurance system has several key steps that can help improve private schools (see Chapter Three). The first is assessing all schools by common indicators, such as test scores, and requiring that all schools conduct a self-evaluation and develop a self-improvement plan. The second step is separating schools into categories depicting whether they are of no or minimal concern, of moderate concern, or of significant concern. The third step is conducting in-depth inspections of struggling schools, with an approach based on level of concern or risk, and putting assistance plans in place to help them.

Each step of the proposed process can be adapted to private schools. The private schools could conduct self-evaluations, using the same guidance, documents, and procedures as the public schools, with translations into the relevant languages. They could be assessed on a similar set of indicators as the public schools, with modifications as appropriate (particularly, as we discuss next, test scores). In-depth inspections could be conducted of schools with poor performance or those of significant concern. The schools of greatest concern could be warned or closed. Schools could be exempt if they have an accreditation from an international accreditation body.

To support these steps, the MoE would need to ensure that documents are translated into the languages of use and that specially trained MoE inspectors are assigned to the international private schools. Alternatively, if specially trained inspectors are not available, the MoE could hire consultants for the near term and over time train inspectors with foreign language capabilities.

Gather and Communicate Additional Data About Private Schools

One challenge in measuring student outcomes in private schools is the lack of systematic data about the schools and the performance of their students. We recommend creating a private school data plan, with a list of information that private schools must provide, and MoE plans for aggregating and managing the data.

Exam data will be particularly important. The MoE should gather and compare its grade 9 and grade 12 exam results by schools, with the exams translated into English and other key languages of private school instruction.⁴ For international schools, the MoE can also collect performance data on other exams such as the International Baccalaureate or the Scholastic Aptitude Test. In the medium term, the MoE might consider taking international assessments, such as the PISA, the Progress in International Reading Literacy Study (PIRLS), and the Trends in International Mathematics and Science Study (TIMSS), of both public and private schools.

For both public and private schools, the MoE should make quality information publicly available periodically, including requiring that schools post inspection reports on their web-

⁴ The MoE should also consider administering an exam for all schools (both public and private) at the grade 6 level to provide information on student achievement in earlier grades as well.

sites, dedicating part of the MoE website to both public and private school quality reports, and developing school report cards.

Enable Kurdish Private School Children to Fully Operate in KRI Society

As the private school sector in the KRI grows, it will be important to create mechanisms to ensure social cohesion in the KRI, so that KRI children attending private schools can still operate in KRI society. The private schools should not create an elite who speak foreign languages without strong knowledge of Kurdish and Arabic and who are culturally disconnected from the rest of society. One way to ensure social cohesion is to continue requiring that Kurdish children at all private schools take subjects of importance to the region, such as Kurdish or Arabic languages, as well as KRI-specific courses on civics and human rights. The MoE should also require that all KRI children take regional exams (translated into the language of instruction), to enable comparison of performance among schools and children as well as to enable children to compete for places in KRI universities.

Clarify Policies and Procedures for Hiring Teachers in Private Schools

The MoE should develop and clarify policies for hiring private school teachers and principals. For international school staff, the government should require two documents only: a notarized or certified copy of a bachelor's degree from an accredited university or teacher college and a notarized or certified copy of a criminal background check from the teacher's home country. For KRI teachers, the government should include estimates of the number of new private school teachers needed in its planning estimates for teacher colleges, develop and communicate policies for social security and benefits, and phase in enforcement of regulations restricting most teachers to one job (not both public and private). Such phasing in might take place over several years, to ease the hardship on existing schools that currently rely on teachers with jobs at both private and public schools.

Decide on a Desired Level of Support for Private Schools

The KRG should weigh the advantages and disadvantages of further supporting the private school sector, depending on its goals. Potential support measures may include the following:

- collaborating with the Investment Board to create loan programs for private schools for land, building, and start-up operations
- paying tuition for KRI children at private schools (perhaps paying up to the amount that the MoE spends per child at public schools)
- scaling the PPP program to develop other privately managed schools with public subsidies
- continuing to provide textbooks for subjects of regional importance.

Assessing Teacher Training

In 2007, the KRG Ministry of Education implemented a new curriculum in math, science, and English. This curriculum was benchmarked to international standards, and teachers were expected to learn and teach it using new textbooks and curriculum materials. Our earlier analysis of that initiative suggested that teachers, both new and experienced, did not receive adequate preparation to teach the new curriculum and reported significant challenges to its implementation (Vernez, Culbertson, and Constant, 2014). One of our key recommendations was to make in-service training more robust by establishing centers with full-time staff devoted to training in both content and pedagogy, with a focus on training teachers in implementing the new curriculum. The MoE plans to establish such centers, but with the more ambitious purpose of providing, after two years of training, a bachelor's degree to all teachers lacking one.¹

While the MoE develops these new training centers, it is continuing to provide in-service training as it has in the past. Such training typically occurs over the summer months between school years and is provided by staff with other academic year duties. In 2013, the MoE asked RAND to assess the current in-service teacher training system and identify gaps that should be addressed.

To do so, we conducted multiple interviews with officials of the General Directorate of Institutes and Training, including a center director and a trainer, and carried out four school visits in the fall of 2013 to speak with school leaders and teachers about current in-service programs. Our school visits allowed us to update findings from the 16 schools we visited in 2010 (see Vernez, Culbertson, and Constant, 2014). We also used multiple quantitative data sources, including administrative data on training programs and participants over the last seven years provided by the MoE and the results of a survey of teachers jointly administered by the MoE and RAND in the fall of 2010.²

¹ Most current basic (grades 1–9) teachers were prepared in MoE Teacher Institutes. The institutes offered (1) a six-year program for students who enrolled after completing grade 9 and (2) a two-year program for students who enrolled after completing grade 12. These institutes have been replaced by newly established four-year teacher colleges administered by the Ministry of Higher Education and Scientific Research that grant a bachelor's degree. Now, all new basic teachers are required to have a bachelor's degree.

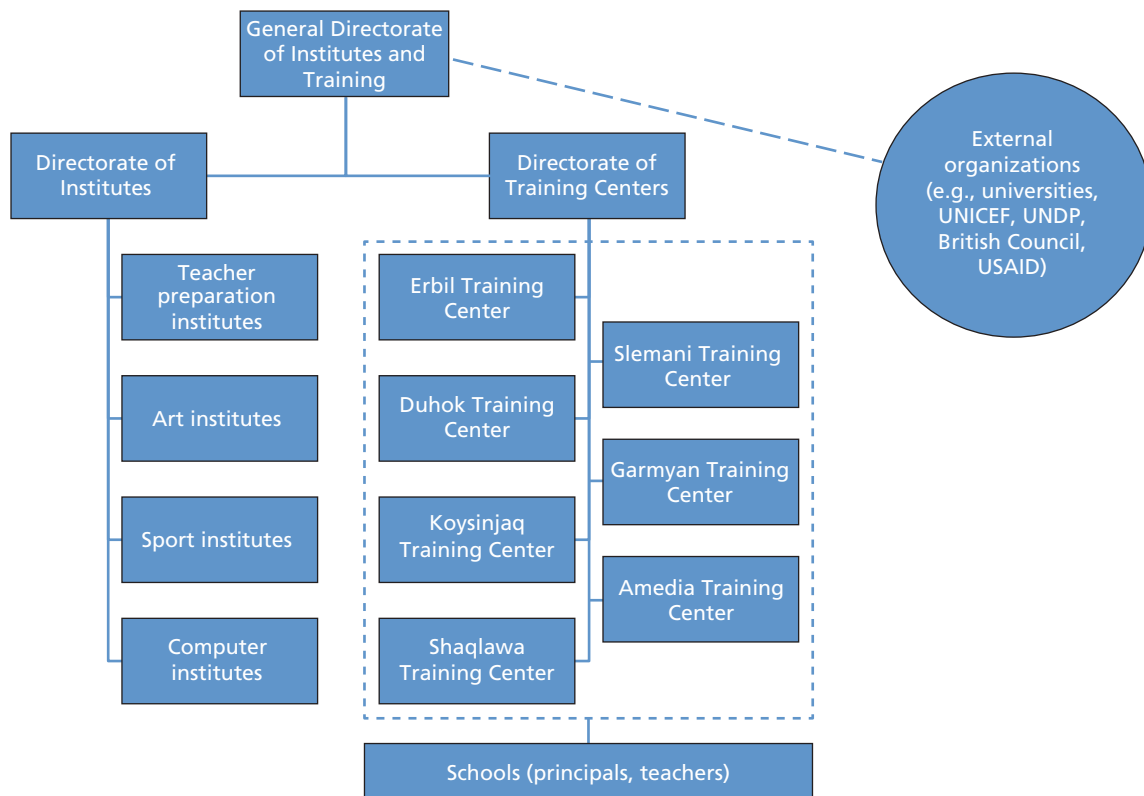
² In 2010, the Ministry of Education (General Directorate of Planning) and RAND administered a nationally representative teacher survey and collected information on teacher self-reported training received and training needed as well as teacher experiences with a new curriculum first implemented in 2009. The survey included a sample of 2,904 teachers in 226 schools randomly selected in proportion to enrollment in 11 districts across three governorates. We surveyed teachers from urban and rural schools and included primary (grades 1–6), intermediate (grades 7–9), and secondary schools (grades 10–12). For more details, see Vernez, Culbertson, and Constant (2014).

We begin by describing the institutional structure (governance and management) of training in the KRI. We then discuss the approaches to planning and delivering training. We review the types of training programs and participation and how well they fulfill needs identified in our school visits and the 2010 survey of teachers. Finally, we delineate recommendations for addressing weaknesses in the in-service training system.

Governance and Management of Training

The General Directorate of Institutes and Training under the Ministry of Education oversees training in the KRI. It is directly responsible for overseeing the development of (post-college) pre-service and in-service training programs to school personnel. It has two divisions—the Directorate of Institutes and the Directorate of Teacher Training Centers (Figure 5.1). The Directorate of Institutes oversees the teacher preparation institutes, which deliver the two-year and six-year teacher training programs for basic teachers. These teacher training institutes are being phased out in favor of requiring that all new basic teachers obtain a bachelor’s degree from a four-year teacher college. Yet some institutes remain to provide training in certain teacher education fields. As of 2013, 19 of these institutes remain: seven art institutes, five computer institutes, and seven sports institutes.

Figure 5.1
Organizational Structure of the General Directorate of Institutes and Training and Relationship to Schools



The Directorate of Teacher Training Centers oversees the seven governorate-based training centers that deliver the training. Most training is held in the three governorate-centers of Erbil, Sulaimaniya, and Duhok; other training centers are in Garmyan, Koysinjaq, Amedia, and Shaqlawa.

The General Directorate of Institutes and Training, as we discuss below, maintains relationships with universities (local and international), UN affiliates (UNESCO, UNICEF), and other organizations, such as the British Council. It works with these organizations, often coordinating with the Ministry of Education in Baghdad, to fund or directly provide training.

The seven training centers are the main staging grounds for providing training. Training centers typically organize development and training into two streams, one for basic schools and the other for secondary schools. The centers do not have full-time, in-service training staff, but rather, as we will discuss, draw their trainers from a pool of eligible ministry staff including supervisors, principals, and regular teachers who continue to fulfill their regular job duties.

Nontraining staff varies by center, but typically constitutes administrative or operations staff who manage scheduling, logistics, data collection, and coordination. The center also attempts to compile data—mainly administrative data on programs provided, duration, and number of participants—through a designated statistics office. These data are not consistently collected or managed, and their quality varies by training center.

Approaches to Training Planning and Delivery

Current Process for Determining Training to Be Offered

The MoE has three potential sources of input for determining what training to offer: MoE staff, external contractors, and evaluations of supervisors, principals, and teachers. We review each below.

Inputs from MoE Staff

The Directorate of Training Centers convenes the directors general, training center directors, and supervisors to enumerate and agree on what training to offer. The directorate also reportedly solicits input from select teachers and principals. It then develops a plan based on these inputs and discussions. Despite reported involvement of select teachers in the process, both our site visits and focus group meetings suggest that teachers have little input on the training they receive.

Inputs from External Contractors

To some extent, the type of training provided in any given year depends on the availability of external trainers from international organizations or training firms. Training may also depend on what such organizations offer to provide rather than on a strategic assessment of what is needed.

Supervisor and Principal Evaluations

Two potentially rich sources of information that can inform the types of training to offer but are not being systematically incorporated are supervisor and principal evaluations and the recently launched teacher self-assessments. Supervisors are supposed to formally document their evaluation of teachers and principals and refer school staff for training based on identi-

fied areas of weakness.³ Yet there is no formal systematic link between supervisor and principal evaluations and the in-service training that teachers receive.

The current approach that the directorate takes to assess needs and to plan and deliver training cannot handle all the growth and changes that the education system is experiencing. The directorate draws insights and ideas for training from various ministry officials but not enough from school-based staff or from any systematic analysis of areas of weakness and in need of improvement. The mechanisms for collecting supervisor and principal evaluations and teacher self-reports are in place, but these do not inform training that is provided, nor is there any strategy for including such information in determining training needs.

Training Delivery

The MoE delivers two types of training. First, the Directorate of Training Centers provides pre-service training to candidates with a bachelor's degree who did not graduate from a college of education. These graduates are recruited for high-demand specializations, such as mathematics, sciences, and English. To provide this training, the Directorate of Training Centers contracts with faculty members of one of the colleges of education. The training covers instructional approaches, classroom management, student discipline, child psychology, and other areas typically taught in a college of education. Interviews suggest that instructors develop their own training curriculum, and there does not appear to be a uniform curriculum set by the Directorate of Training Centers. The training is given over the summer months between school years.

Second, in-service training is also provided in the summer before the school year begins. The type of in-service training provided may vary from year to year and range from training on academic subject matter to instructional methods and use of computer software (as we describe in more detail in the next section). Teacher participation in in-service training is limited in any given year. In some schools we visited, participation included all teachers, whereas in others, only a few participated. In the survey of teachers, fewer than half reported that they had received any training in the previous two years. Trainers are chosen from eligible staff and receive their training from other trainers or from international organizations using a training-of-trainer (TOT) model.

The TOT model is the primary model for in-service training delivery, especially externally funded or contracted training. TOT trainers, whether from an international organization or a private provider, jointly determine with the Directorate of Training Centers the number of TOT training slots, typically based on resources. Slots are generally assigned proportionally based on the targeted number of trainees in each governorate. Once the number of trainees is determined, the Directorate of Training, with guidance from the training provider, typically recruits trainer candidates from among supervisors, school leaders, and, in some cases, experienced teachers through a formal announcement. Staff of the directorate and the governorate-based education directorates screen applicants and then select a pool of candidates. The training provider then interviews and selects from the pool of candidates those who will become trainers. To become a trainer, candidates must be younger than age 45, have at least five years of experience, and agree to work as a trainer during the summer for at least three years at locations and times specified by the directorate.

³ Currently, a supervisor's evaluation of a teacher receives more weight than a principal's evaluation.

Screening candidates includes examining their skills in training others. If teachers are selected, input regarding his or her suitability to be a trainer is solicited primarily from the supervisor and then from the principal. A principal of a basic school who served as a trainer told us that he received reimbursement for transport and refreshments but no other compensation. The financial reward is quite modest.

International organizations, such as UNESCO, UNICEF, America-Mideast Educational and Training Services, Inc., and the British Council, and development organizations, such as the U.S. Agency for International Development, the U.K. Department for International Development, and other agencies have been significantly involved in training in the KRI over the past 10 years. These organizations either provide the training directly or contract with private sector providers. Programs are typically adapted to the KRI context. The General Directorate of Institutes and Training is the primary interlocutor with international organizations and coordinates with the MoE of the central government in Baghdad and the governorates and the districts that deal directly with the trainees and arrange logistics.

UNESCO in particular has been involved with training on learning, quality assurance, and training strategies. For example, in September 2013, with financial support from the government of Qatar,⁴ it held a workshop in Erbil that trained staff from both the Ministry of Education in Baghdad and the Ministry of Education in Erbil on learning approaches. As part of this program, staff from both ministries developed methods to train supervisors who, in turn, trained teachers (UNESCO, 2013a). In October 2013, UNESCO organized a training workshop of ministry officials on international best practices in quality assurance, held in Erbil, involving officials from both the Ministry of Education in Erbil and the Ministry of Education in Baghdad (UNESCO, 2013b). In early 2014, UNESCO formally launched the “National Teacher Training Strategy,” held in Baghdad but in close cooperation with the Ministries of Education in both Baghdad and Erbil (UNESCO, 2014).

The involvement of numerous international organizations in the KRI has brought in both much needed resources and expertise to increase access to and improve the quality of training.⁵ Nonetheless, interviews with ministry officials and some providers suggest that there has also been an overlap of roles and lack of coordination between entities providing training. The result has been a lost opportunity to pool and leverage resources to further enhance training.

The TOT model may help reach a large number of school staff, but in interviews and focus group meetings, principals and teachers questioned the quality of TOT trainers. Some teachers complained that the TOT trainers were not professional or committed to the goal of effectively delivering the training. The trainers themselves may not have received enough in-depth exposure to the new curriculum to provide effective training in it. This may be attributed in part to the fact that the TOT trainers are frequently rotated and so do not get a chance to develop sufficient expertise to present training content effectively (Vernez, Culbertson, and Constant, 2014).

⁴ These efforts fall under the umbrella initiative of “Teacher Training Programme for Basic and Secondary Education” and receive financial support from Qatar through the Office of Her Highness Sheikha Mozah bint Nasser Al Missned, UNESCO special envoy for Basic and Secondary Education.

⁵ As of fall 2013, organizations active in principal and teacher training include UNESCO, UNICEF, British Council, and Birmingham College.

Training Programs, Participation, and Alignment with Needs

Training Programs

There are six types of programs:

- *subject-specific (curriculum) training*, pertaining to a specific subject or substantive area (includes kindergarten, which has expanded significantly)
- *capacity-development training*, annually provided to teachers on new topics including approaches to student-centered instruction and use of technology; also targets specific teachers to address performance gaps
- *school leadership and management training*, designed for school leaders, teachers, and supervisor
- *training of supervisors and training on administrative matters and use of computers*
- *contractor-specific training*, typically large in scale, initiated and provided directly to teachers by an organization such as the British Council (in 2012 and 2013)
- *other training*, includes topics not covered above, such as training in disaster relief and emergency management following the large influx of refugees from neighboring Syria.

These are in addition to the pre-service training in pedagogical methods, noted above, that is provided to graduates of noneducation colleges.

Length and Frequency of Training

The reported duration of training programs varied from five to 20 days. However, there was substantial variation in the length of training even within the same topic. For instance, training in administration or capacity development ranged from two or three days to 30 or 40 days. Teachers who participated in training during the summer typically did so over the course of five days, however. The training is scheduled for four hours daily, with the first four days consisting of lecture and the last day reserved for demonstrations of instruction and role playing. Teachers can receive training from their own principal if the principal has been trained through a TOT program.

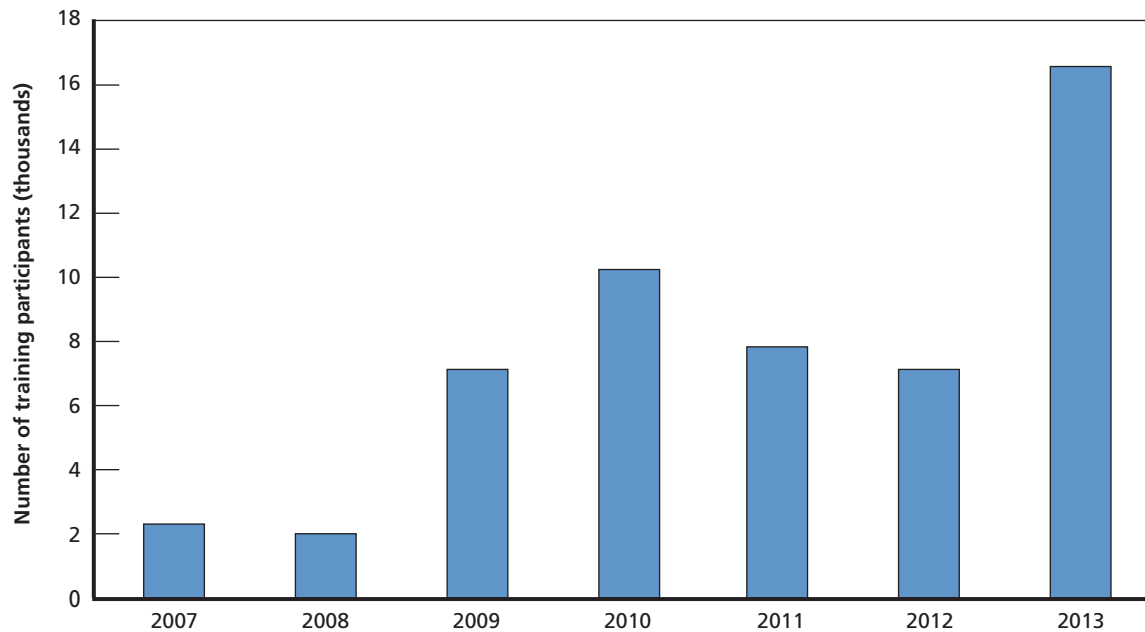
For subject-specific training, teachers reported significant intervals between training sessions. For example, in one school, a math teacher reported receiving training only twice since 2009, and a physics teacher reported having last received training in 2010. A principal reported that content-based training had not been provided in five years, except for a one-day training session provided by supervisors. If the textbooks were to change, teachers would receive only one day of training to become familiar with the new materials.

Training Participation

In recent years, the number of participants receiving in-service training in Duhok, Erbil, and Garman⁶ has increased from about 2,000 to nearly 17,000 (Figure 5.2). Two increases are particularly notable. First, in 2009 and 2010, the number of participants increased four- to five-fold over that in 2007 and 2008 with the adoption of a new curriculum. Second, in 2013, the number of trainees reported more than doubled from that in 2012, with much of that training

⁶ Data for Sulaimaniya were not available.

Figure 5.2
Number of Trainees in Erbil, Duhok, and Garmyan Governorates Receiving Training at the Training Institutes, by Year



SOURCE: General Directorate of Institutes and Training Administrative Data.

RAND RR960-5.2

provided by the British Council. Altogether, more than 53,000 individuals have received in-service training since 2007.⁷ Teachers were the largest group of participants receiving training.

Teacher participation in in-service training has been low for a number of reasons. Capacity of the teacher training institutes is limited as is availability of staff to provide the training. As noted above, trainers are drawn from supervisors who already have full-time jobs. Perhaps more important has been the lack of early recognition that teachers needed to upgrade their content knowledge to teach a more rigorous curriculum.

Though the cumulative number of teachers who have received training has grown annually, the number of trainees receiving substantial training remains only a fraction of the more than 109,000 teachers, school leaders (principals and vice principals), and supervisors in the region (87 percent of whom are instructional staff). Compounding the need for training are the high proportions—63 percent of instructional staff and 58 percent of principals and vice principals—who do not hold a bachelor's degree. Teachers lacking a bachelor's degree (43 percent) were less likely than teachers with one (50 percent) to have received training. Exposure to training also varies by grade level; our 2010 survey found that 55 percent of secondary (grades 10–12) teachers but only 43 percent of basic (grades 1–9) teachers reported receiving some form of training in the previous two years. The training data and the survey suggest that most teachers are not receiving regular sufficient training.

⁷ Ministry officials told us that an additional 27,000 staff had been trained in Sulaimaniya over the past seven years, but we were unable to confirm this estimate.

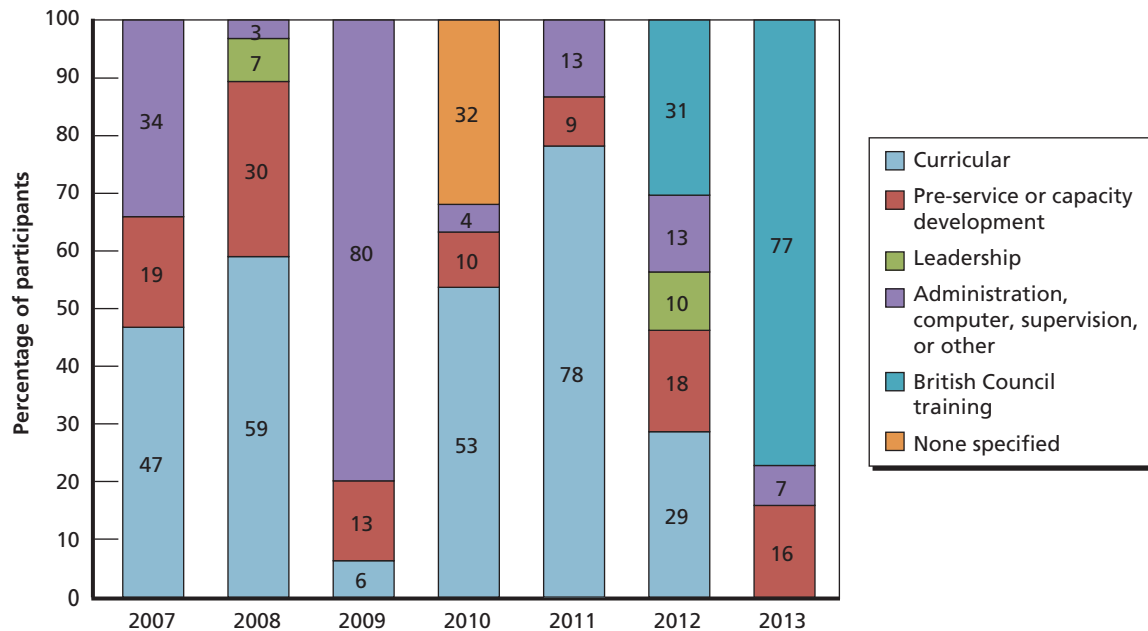
Training Participation, by Program Type

Training data show wide variation in the type of training received each year (Figure 5.3). Training on curriculum topics was the most prevalent in four of the seven years. This training was generally rotated among academic subjects rather than regularly provided on all subjects annually. For example, training in math and science was provided from 2007 to 2011, and Arabic was offered in 2011 and 2012.

Training of supervisors was provided nearly every year, although it varied in prevalence. Pre-service and capacity-development training was provided each year, but participation in it varied as well. The large proportion of teachers participating in British Council–provided training in 2013 resulted from the MoE embarking on a one-time, large-scale training program on the use of a teacher self-assessment form.⁸

The share of teachers who received training varied by academic subject. In the 2010 survey of teachers, English language and science teachers were more likely to report having received training over the past two years, whereas Arabic language and math teachers were among those least likely to have received training (Table 5.1). The Ministry’s approach of focus-

Figure 5.3
Percentage of All Participants, by Type of Training Offered in Erbil, Duhok, and Garmany, by Year



SOURCE: General Directorate of Institutes and Training Administrative Data.

RAND RR960-5.3

⁸ This training was provided to successive cohorts over five to six days. According to interviews with ministry officials conducted in September 2013, the goal was to train 15,000 to 16,000 teachers, school leaders, and supervisors before the end of the year. In the past, teachers were trained using ministry standards, but the British Council provided training on self-assessment that was linked to new standards aimed at teachers, school leaders, and supervisors. Previously, the training center director would set standards with the supervisors, and then those were used in the teacher training programs. The new standards used in the British Council training specify what school leaders, teachers, and supervisors should be doing across six domains: (a) vision, strategic planning, and quality assurance; (b) management; (c) teaching and learning; (d) care and support for students; (e) engagement with society; and (f) results and outcomes.

Table 5.1
Percentages of Teachers Who Reported Having Received Some Training in the Last Two Years and the Proportion of Teachers Receiving Training Who Found It Sufficient, by Subject

Subject	Percentage Receiving Training	Percentage Receiving Training Who Found It Sufficient
Arabic	39	45
English	58	43
Kurdish	41	41
Mathematics	42	34
Natural and physical sciences	52	34
Social and behavioral sciences	54	31
Fine arts and physical education	39	42
Islamic education	35	24
Literature	43	42
Total	45	39

SOURCES: 2010 MoE and RAND survey of teachers.

NOTE: 78 percent of surveyed teachers reporting, with 93 percent of teachers who received training reporting on sufficiency.

ing training on particular subjects rather than providing ongoing training in all subjects each year may account for this variation.

Most of those receiving training thought it insufficient for their needs.⁹ Language teachers were most likely to rate their training as sufficient (although even here only a minority did so), whereas mathematics and sciences teachers were the least likely to do so. Teachers in the secondary grades were also more likely than those at the basic level to report deficits in the training received.

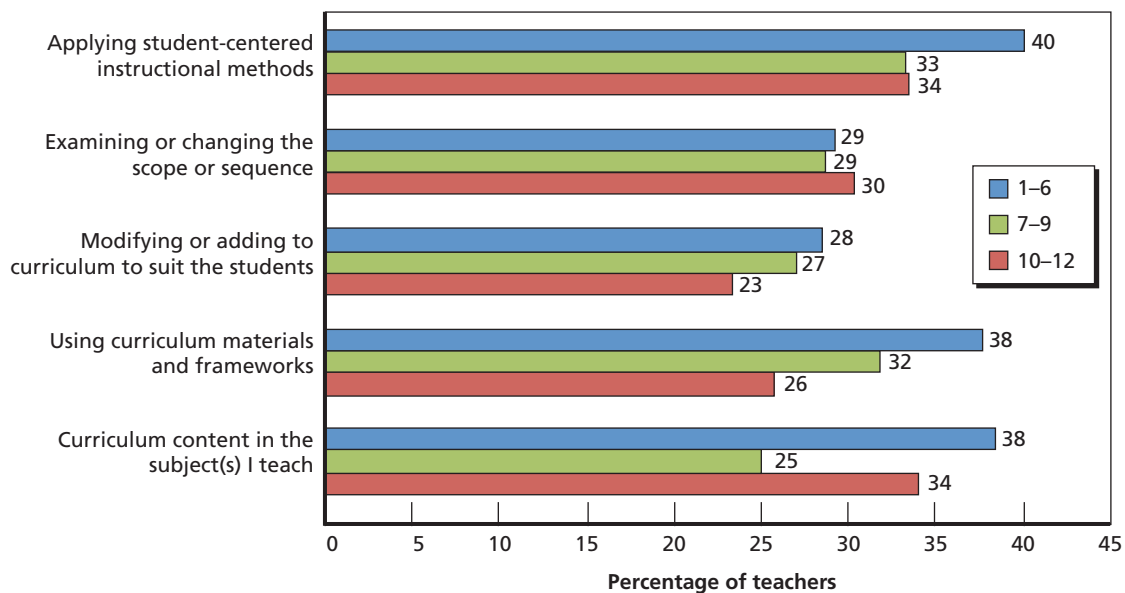
In areas specifically related to the implementation of the new curriculum, such as teaching the content of the curriculum and using curriculum materials and frameworks, about 70 percent of teachers across grade levels who reported having received training found it not sufficient or only partially sufficient for their needs (Figure 5.4). In most cases, teachers of primary grades were more likely than intermediate (grades 7–9) teachers and secondary (grades 10–12) teachers to report that their curriculum training was insufficient.

Teacher-Reported Training Priorities

In the 2010 survey, respondents were asked to rate their three top priority areas for training from among 14 possible training areas (Table 5.2). The area most commonly indicated was training in curriculum content (40 percent of all teachers). Across all grades, curriculum-focused topical areas, whether related to content or instructional methods, were generally given the highest priority. These included training in subject-matter content, developing daily lesson

⁹ Teachers were asked to indicate whether the training was sufficient, partially sufficient, or not sufficient to meet their needs. We group “partially sufficient” or “not sufficient” together.

Figure 5.4
Percentage of Teachers Reporting That Training Received in Selected Training Area Was Sufficient to Meet Their Needs, by Grade Level



SOURCES: 2010 MoE and RAND survey of teachers.
 NOTE: 93 percent of teachers who received training reporting.
 RAND RR960-5.4

plans, using curriculum materials and frameworks, and modifying the curriculum to meet student needs. Training in subject-curriculum content was particularly important to secondary school teachers: Close to 50 percent of them rated it in the a top three priorities. A significant share (37 percent) of basic school teachers also ranked training in developing daily lesson plans as a top priority. Around 35 percent of grades 7–9 teachers considered training in using curriculum materials and frameworks, and training in modifying or adding to the curriculum to suit student needs, as a top priority.

As noted above, the proportion of training devoted to curriculum, although large, varies considerably by year, with potentially significant periods of time between training in any one subject. Moreover, whereas the share of teachers participating in curriculum-based training at the centers is larger on average than other types of training, it remains a modest portion of the entire teaching workforce. By 2013, teachers had become more familiar with the newly implemented curriculum, but school leaders and teachers generally still reported that content-based training was still reserved for one day a year, which most responses indicated was not sufficient. This provides some evidence that there is a lack of alignment between training and teacher needs, the implications of which we discuss below.

Exacerbating this problem was teachers teaching outside their specialty. In the 2010 survey, around one-third of teachers reported teaching outside their subject specialization (Vernez, Culbertson, and Constant, 2014). During a 2013 school site visit, one principal told us that the school had teachers trained in physics and biology teaching chemistry classes, because he did not have a teacher trained in chemistry on his staff. Moreover, the principal added, teachers were eligible to receive training only in their specialization regardless of subjects they actually

Table 5.2
Percentage of Teachers Reporting Training as a Top Three Priority Area and Reporting That They and Their Peers Are Prepared in This Area

Type of Training Needed	Percentage Reporting Training as a Top Three Priority	Percentage Self-Reporting That They Are Prepared	Percentage Reporting That Their Peers Are Prepared
Focus on curriculum content	40	48	39
Develop lesson plans	34	79	66
Use curriculum materials	33	39	33
Change or add to the curriculum	30	36	35
Prepare homework assignments	29	78	69
Apply student-centered instruction	26	43	40
Engage students in critical thinking	23	53	43
Use instructional technology	19	20	22
Change the scope of the curriculum	18	39	37
Manage the classroom	15	64	51
Group students	14	38	36
Identify special education needs	13	48	41
Develop learning assessments	12	64	53
Address varied student needs	11	49	40

SOURCES: 2010 MoE and RAND survey of teachers.

NOTES: 91 percent of surveyed teachers reporting. Measure is the percentage of teachers placing this need in the top three priority areas for training. 95 percent of teachers reported in the self-rating, and 80 percent of teachers reporting on the peer rating.

taught. That is, a teacher may not only be required to teach outside a specialization but also cannot participate in training for that subject.

Teacher-Reported Training Compatibility with Classroom Conditions

In both the 2010 surveys and the 2013 focus group meetings, teachers noted that some topics, although informative, were not relevant to typical classroom conditions. Teachers reported that they received encouragement to employ new teaching methods, such as student-centered instruction, placing students in groups, and using instructional technologies. Yet teachers also cited various classroom conditions preventing their implementation.

Teachers surveyed in 2010 said that implementation of student-centered instruction was hampered by having too many students in a classroom (65 percent), insufficient student academic preparation (50 percent), and insufficient class time (48 percent). Such responses were generally uniform across grade levels.

Teachers also expressed concerns about classroom-management training suggestions that they place students in groups and allow them to choose where to sit during class. Teachers expressed difficulties with implementing these new strategies without adequate training to do so, especially in overcrowded classrooms. A principal of a basic school suggested that new

rules governing classroom management had left teachers with less authority to manage their classrooms.

Finally, teachers also questioned training for implementing instructional technologies. They cited poor infrastructure and lack of resources as major constraints in implementing such technologies (Vernez, Culbertson, and Constant, 2014). Some teachers noted that their classrooms lacked the equipment to use such information technology as videos demonstrating teaching lessons. Indeed, most classrooms lack even basic information technologies.

Implications of the Lack of Alignment

One implication of insufficient training that does not align with teacher needs, particularly regarding the new curriculum, is that the new curriculum will not be implemented appropriately. This was evident in the survey, which asked teachers to rate their own preparation and that of their peers for specific instructional activities (Table 5.2). Responses suggested that a significant portion of teachers felt that they were not prepared to implement many aspects of the new curriculum, although teachers generally rated their own preparation better than their peers'. Less than half of teachers rated themselves and less than 40 percent rated their peers as prepared to teach the content of the new curriculum. Less than 40 percent of teachers rated both themselves and their peers as prepared to use the curriculum's materials and frameworks, to change or add to the curriculum to suit student-learning needs, and to examine or change the scope or sequence of the curriculum. Only about 20 percent thought themselves or their peers adequately trained to use instructional technologies.

In sum, teachers do not appear to be receiving the training they require nor the curriculum and instructional support needed to reflect and improve on their teaching. More training should focus on content and curriculum, and training on pedagogy and new instructional methods should account for classroom conditions that teachers face. Similarly, given the key role that school leaders can play as instructional leaders, training should also help principals support teacher implementation of the new curriculum.

Recommendations

After assessing current in-service training practices and teacher training needs in the KRI, we make the following recommendations regarding training content, delivery, and priorities.

Link In-Service Training to a Broad Ministry Strategy to Improve Education Outcomes

In-service training content and frequency has been ad hoc, depending more on what was readily available than on what was needed to systematically improve teacher knowledge and pedagogy over time. The MoE should develop a longer-term training strategy to increase the ability of teachers to effectively deliver curriculum content and provides better guidance on lesson planning, instructional practices, and other curriculum approaches. This requires that principals, supervisors, and other leadership staff be education leaders who promote good instructional practices. Strategy elements should include plans for preparing trainers, appropriate frequency and duration of training, and coordination mechanisms across organizations that are delivering or supporting this training. This will harmonize external organizations' roles and align them with the Ministry's objectives. Currently, although there is broad consistency in the general goals—improving principal and teacher knowledge and skills—there is frequent over-

lap and lack of coordination and no links to a broader Ministry strategy for education improvement. A strategy that is based on a careful assessment of training needs would help prioritize efforts, especially in the context of current conditions staff face in the schools and classrooms. It would also help the Ministry direct training to where it is most needed.

Use Full-Time Trainers to Provide In-Service Training

Currently, trainers serve on a part-time, rotational basis, possibly preventing them from developing and maintaining the required training skills. The MoE can mitigate this problem by maintaining a cadre of professional trainers who are dedicated to this effort. These staff could provide training year-round and receive training themselves on new methods relevant to the KRI. The trainers would undergo intensive training to help them understand curriculum content and instructional methods so that they can in turn provide high-quality training to school staff. Such trainers could help standardize short courses according to needs as well as longer training programs during the summer. By standardizing training, the MoE will ensure that teachers have access to the same materials and training resources and that training is aligned to the curriculum (Vernez, Culbertson, and Constant, 2014).

Prioritize Curriculum Content Training

In interviews, focus group meetings, and our 2010 survey of teachers, the most frequently cited training need was help in implementing the new curriculum. The Ministry has been providing training in curriculum content, particularly during the early phases of implementation, but teachers require ongoing training rather than occasional training with long intervals in between. For many teachers who received their training before implementation of the new curriculum, the new content of the subject matter can be unfamiliar and overwhelming without sufficient support. This is particularly worrisome for teachers who are teaching outside their area of specialization. The Ministry may be compelled to reassign teachers to fill vacancies in certain subjects, but it needs to ensure that these teachers receive sufficient training and preparation in the new subject matter before they are reassigned. Not surprisingly, a teacher's in-depth knowledge of subject matter is a key contributor to student academic achievement (Hill, Rowan, and Ball, 2005; Yoon et al., 2007; Glewwe and Kremer, 2005; Clewell et al., 2004).

Respondents in interviews and focus group meetings also suggested that teachers would benefit from more consistent supervisor observations of classroom teaching as well as from modeling teaching in support of curriculum implementation. This could extend in-service training in curriculum content. School leaders and teachers alike want supervisors to be more proactive in assisting with curriculum content, demonstrating classroom instruction, and providing feedback through classroom observations. In the 2010 survey of teachers, more than 40 percent of teachers reported that supervisors did not interact with them about implementing the new curriculum, employing new instructional approaches, or providing feedback on classroom instruction, a finding echoed in our 2013 interviews. Supervisors have typically filled an evaluative role, but not the role that teachers say they need most: help in implementing the curriculum and demonstrating how new instructional approaches can be used in their classrooms.

Account for Current KRI Classroom Conditions

In recent training sessions, teachers have been encouraged to implement student-centered instruction, less-traditional classroom-management strategies (student group work, allowing students to choose their seats), and instructional technologies. However, teachers and school

leaders report that these approaches are difficult to implement in overcrowded KRI classrooms with poor infrastructure. Focusing on approaches that are not conducive to classroom conditions could additionally burden and overwhelm teachers and adversely affect instructional quality (Vernez, Culbertson, and Constant, 2014). This is likely where significant changes are occurring simultaneously, especially in implementation of a new curriculum, which teachers reportedly have struggled to implement. Thus, training might be better focused on approaches already familiar to teachers, especially those proven effective.¹⁰

Taking into account classroom conditions and school context for training would achieve three key objectives: (1) promote actual implementation of instructional approaches and methods covered in the training, (2) prevent frustration regarding training, and (3) encourage future regular attendance and engagement in training.

Assess Training Needs Regularly

The survey of training needs administered in 2010 and discussed in this chapter should be regularly conducted to track evolving training and professional development needs of the largest component of the ministry workforce—teachers. Such a survey is best complemented with focus group meetings and interviews to capture additional details that can help design training programs. In some cases, specialized surveys or participant forums can help in gaining a more in-depth understanding of needs to design programs for specific subjects.

The currently piloted teacher self-assessment is an opportunity to gather information on teacher training needs from the perspective of a teacher. Teachers fill out forms to assess their own strengths and weaknesses. This can be supplemented with principal and supervisor evaluations, which, if collected and documented in a systematic way, would be a further important input into determining training needs. These evaluations, taken together, could identify common weaknesses among teachers and help in constructing a region-wide training plan to address them.

Assess Effectiveness of Training Programs to Make Improvements

A key component of improvement is conducting regular assessments to guide future training programs and improve the design and implementation of current ones. Currently, the KRI collects rich data on schools and students. Evaluating the effects of teacher training on teacher skills and students outcomes could be an important input for improving and developing future programs. One relatively easy approach to assessment would be a regular survey of training participants to solicit evaluations of training received and its strengths and weaknesses.

The data system that the training centers maintain also needs to be improved. Currently, there is wide variation in the quality and scope of training data collected across the training centers. Some information is missing and, in many cases, the type of training program enumerated in the data was not clear. Improving this system would go a long way to ensuring that accurate records are kept on the type of training programs delivered, program descriptions, the number of participants and their job titles, and other basic information.

¹⁰ These might include, for example, preparing teachers in “providing an overview of course content at the beginning of class, organize course content in a step-by-step sequence, signal transitions between sections of a lecture, stress key points, use examples to illustrate key points, pause briefly at appropriate times to assess student comprehension, avoid unnecessary information, and review course content periodically during the lecture and at the end of class” (Vernez, Culbertson, and Constant, 2014, p. 63, derived from Scheerens, 2000; Chilcoat, 1989; and UNESCO, 2014).

Conclusion

The KRG MoE has steadily and consistently been designing and implementing efforts to improve quality and expand access to K–12 education. In 2007, it introduced changes to the foundations of its education system and policies, including a new, more rigorous curriculum; expanded compulsory education through grade 9; policies to reduce the rate at which students repeat grades; a requirement that all new teachers have a bachelor’s degree; and two new regional exams.

The management of improvements has continued steadily since then. In recent years, the MoE has expanded construction of new schools to meet its goal of universal basic education; planned and contracted the development of regional teacher training centers; piloted consolidation of schools in rural areas; collaborated with partners in international organizations to pilot teacher self-evaluation; put in place plans to automate data collection for examinations; tested the Trends in International Mathematics and Science Study, an international assessment with a small group of students; developed plans to establish three regional TVET centers for secondary students; and more. All this represents commendable, solid progress toward the goal of offering universal high-quality education to the students of the region.

To build on this work, we explored possibilities for developing quality assurance for schools, an MoE administrative structure to support multiple new initiatives, policies for monitoring and incentivizing the private school sector, and assessment of ongoing teacher training.

This report has laid out our analysis in these areas and developed a number of recommendations. The analysis has also pointed to next steps that the MoE may consider pursuing to continue its efforts to improve both quality and access. We conclude by summarizing our recommendations and also outlining thoughts for future endeavors.

Quality Improvement Recommendations

Below, we offer our recommendations to improve quality by topic. We recognize that there are many steps to take and that it may be appropriate to implement these recommendations in several phases, over time, so as to not overwhelm MoE management staff and schools with too much change at once.

MoE Administration

- Develop a new structure that supports the MoE’s initiatives and ongoing management of education (we have provided a suggested structure).

- Minimize the number of direct reports (span of control) to top managers.
- Establish clear lines of executive authority.
- Divide responsibilities of the minister and vice minister between vision setting, strategic planning, external affairs, and internal affairs.
- Limit the day-to-day workload of the minister with respect to routine matters, so that he or she can focus on vision setting, strategic management, and external relations.
- Ensure complementary divisions and groupings of MoE functions to promote coordinated management and decisionmaking.
- Facilitate linkages and coordination between complementary MoE activities and functions.
- Create and use a set of job descriptions for top managers (we have provided a set of suggested job descriptions in the appendix).

School Quality Assurance

- Develop a school quality assurance program through school monitoring, with a focus on school self-evaluation, self-development, and assistance to schools.
- Promote a collaborative approach between supervisors and schools using
 - School self-evaluation
 - External inspection (with level depending upon school performance)
 - School self-development plans developed with assistance.
- Implement school monitoring in two phases: preparing for implementation and engaging in school monitoring.
- Provide differing levels of monitoring and assistance to schools, depending on the “level of concern.”
- Establish supporting structures, including a guiding committee, and assign roles and responsibilities to MoE offices and schools.
- Develop data-collection and analysis capacity.
- Develop indicator domains, indicators, and targets.
- Develop overall school quality assurance guidelines and assessment rubrics.
- Develop school self-evaluation and school development guidelines.
- Provide training to ministry and school staff to implement school quality assurance.
- Build schools’ ability to manage performance through training and school engagement in self-evaluation and determination of needed support.

Monitoring and Incentivizing Private Schools

- Set principles for managing private schools, such as balancing regulation and autonomy, developing a culture of self-evaluation and improvement, creating clarity, and aiming to have regulation and monitoring viewed as fair.
- Streamline policies and procedures for private schools and develop a private school policy manual.
- Make private school monitoring compatible with public school monitoring, adopting many of the same policies and procedures, with modifications for international private schools as necessary.

- Gather and communicate additional data about private schools, including regional and international exam data, and other quality data.
- Enable Kurdish private school children to fully operate in KRI society by requiring that all KRI children study Kurdish and Arabic and participate in regional exams.
- Clarify policies and procedures for hiring teachers in private schools (academic requirements, background checks, and social security benefits).
- Decide on the desired level of support for private schools (which might include loans to schools, tuition support, providing textbooks, or scaling up the PPP programs).

Ongoing Teacher Training

- Link in-service training to a broad ministry strategy to improve education outcomes.
- Use full-time trainers to provide in-service training.
- Prioritize curriculum content training.
- Account for current KRI classroom conditions.
- Provide training more regularly and consistently.
- Assess training needs regularly.
- Assess the effectiveness of training programs to make improvements.

Next Steps for Improving KRG K–12 Education

Over the past three years, we have developed a set of strategic priorities for improving education in the KRI (Vernez, Culbertson, and Constant, 2014), made specific recommendations for the expansion and strengthening of secondary vocational education (Constant et al., 2014), and addressed in this report key issues of governance, school quality assurance, support of private schools, and in-service professional development. Looking ahead, the KRG’s MoE may wish to further continue its progress in developing quality and expanding access in education. Quality improvements may be most beneficial in a number of areas.

Continue to Implement Strategic Education Priorities

The MoE is implementing a large number of new initiatives, and these will take time and continued effort to make sustainable.

Develop Curriculum Standards

The MoE does not currently have detailed proficiency standards for students to guide the development of its curricula and assess the proficiency of its students. The MoE might assess its regional achievement exams in relation to international standards and then revise and develop KRI educational standards.

Build Capacity in Data Analysis

Although the MoE has developed a capacity to collect school data regularly, it does not have the capacity to analyze the data it collects other than providing minimal descriptive data. The MoE might establish a research and evaluation office and improve its capacity to collect reliable data, develop its capacity to analyze large data files, and evaluate the effectiveness of educational programs.

Improve Secondary School Preparation

Since the 2008 education reform eliminated performance on the grade 9 exam as a prerequisite for enrolling in secondary school, enrollment in secondary school has increased more rapidly than at any other level. The MoE might assess the quality of the education provided to improve quality and relevance to the labor market and university entrance.

Revise University Admission Policies

Currently, students wanting to pursue postsecondary education are centrally assigned to an academic area and college in large part based on their results on the grade 12 ministerial exam, within the constraints of available seats. Although they are considered to a limited extent, the student's and college's preferences often do not prevail. The KRG might assess the effectiveness of current admission policies and revise these policies accordingly.

Job Descriptions for the Proposed Organization Structure

In this appendix, we provide the job descriptions for the vice minister and the following directors general and directors:

Vice Minister	88
Director General of General Education	90
Director of Standards and Curriculum	92
Director of Examinations	93
Director of Exceptional Student Education	94
Director of Teacher Aids and Libraries	95
Director of Professional Development	96
Director of Student Career Counseling	98
Director of Private Schools	99
Director of Arts and Sports	100
Director General of Vocational Education	101
Director of Vocational Standards and Curriculum	103
Director of Vocational Examinations.....	105
Director of Vocational Teacher Aids and Libraries.....	107
Director of Vocational Professional Development	108
Director of Employer Relations	110
Director of Market Research and Data.....	112
Director General of Planning, Research, and Evaluation	114
Director of Strategic Planning.....	116
Director of Statistics and Data Collection	117
Director of Research and Evaluation	118
Director of Program Development and New Methods	120
Director General of Quality Assurance and Supervision.....	121
Director of Quality Assurance.....	123
Director of Supervision	124
Director General of Human Resources, Finance, and Shared Services.....	125
Director of Human Resources.....	127
Director of Finance	128
Director of Legal Affairs.....	129
Director of General Services and Procurement	130
Director of Facilities	131
Director of Information Technology.....	132
Director of Internal Audit (or Inspector General)	133
Director of Public Relations and Media.....	134
Director of International Relations	135
Advisor.....	136

MoE Job Description/Vice Minister

Title:	Vice Minister
Position description:	Strategically manages the MoE day-to-day operations and internal processes for the purpose of fulfilling the MoE mission
Reports to:	Minister

Key Roles and Responsibilities:

- Support the minister in furthering the vision and priorities of the MoE.
- Ensure the effective operation and coordination of all MoE general directorates and directorates.
- Coordinate with the minister and councils on establishment and refinement of MoE vision, mission, and goals.
- Lead the strategic planning process to ensure the refinement and furtherance of MoE vision, mission, goals, and priorities.
- Establish an MoE-wide plan that identifies what each general directorate and directorate will achieve.
- Develop and implement the overall MoE strategy.
- Establish measurable objectives that will support MoE goals and priorities.
- Provide periodic and ad hoc reports to the minister and councils.
- Lead the budgeting and planning process that incorporates inputs for all general directorates and directorates (with assistance from the Director of Strategic Planning and the Director of Budgeting).
- Represent the minister in public functions and meetings as may be required.
- Provide strategic guidance and direction to the directors general who have the following responsibilities:
 - General education: developing policies and providing support for general academic education.
 - Vocational education: developing policies and providing support for vocational education.
 - Planning, research, and evaluation: conducting strategic planning, research, and evaluation processes.
 - Supervision and quality assurance: supporting school improvement processes.
 - Support: providing human resources, finance, legal, information technology, facilities, and general services for the MoE.
 - International organizations: coordinating with outside organizations.
- Coordinate activities that span responsibilities across general directorates.
- Perform any other duties assigned by the minister.

Qualifications:

- Superior strategic thinking and management skills.
- Strong decisionmaking abilities.
- Superior analytical and problem-solving skills.

- Proven track record of building and managing organizations.
- General knowledge of education and vocational education processes.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Knowledge of strategic planning processes.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. required; M.S./M.A. or MBA preferred (or equivalent experience).
- 10+ years experience, 4+ years management of complex organizations, preferably 4+ years in an educational organization.
- Proficiency in Arabic and English preferred.

MoE Job Description/Senior Management

Title:	Director General of General Education
Position description:	Strategically manages the day-to-day policymaking, operations, and internal processes in support of academic education from kindergarten to secondary levels.
Reports to:	Vice Minister

Key Roles and Responsibilities:

- Ensure the effective operation and coordination of all general education directorates.
- Coordinate with the vice minister and councils on establishment and refinement of the academic vision, mission, and goals.
- Coordinate with the MoE in Baghdad as appropriate.
- Participate in the strategic planning process to ensure the refinement and furtherance of MoE vision, mission, goals, and priorities.
- Develop and implement overall general education strategy.
- Conduct periodic (e.g., annual) planning processes to ensure that all directorates have specific plans to pursue objectives supporting MoE mission, goals, and priorities.
- Establish measurable objectives that will support academic education goals and priorities.
- Monitor and report directorate progress toward achievement of objectives.
- Participate in the budgeting and planning process that incorporates inputs from all general education directorates (with assistance from the Director of Strategic Planning and the Director of Budgeting).
- Provide strategic guidance and direction to the directors who have the following responsibilities:
 - Standards and curriculum: developing academic standards and curriculum for all grades and subjects.
 - Examinations: developing and administering standardized student achievement tests aligned with the curricula and reporting results.
 - Special education: developing policies and materials for students with disabilities and high-performing students.
 - Teacher aids and libraries: selecting and developing tools and materials to support teacher instruction of the curriculum and developing school library content.
 - Professional development: developing policies, identifying needs, and providing for in-service training to teachers, principals, supervisors, and student counselors.
 - Student counseling: developing policies and materials to support counselors.
 - Private schools: developing policies for the establishment and operations of private schools and monitoring their compliance with private school law and regulations.
 - Arts and sports: developing policies for the teaching of arts and sports in schools, and overseeing art shows and sports competitions, including school sports league.
- Support development of efficient and effective processes across the general directorate.
- Coordinate with international organizations involved with education development in the KRI as appropriate.

Qualifications:

- Superior strategic thinking and management capabilities.
- Strong decisionmaking abilities.
- Strong project management, time management, and leadership skills.
- Superior analytical and problem-solving skills.
- Proven ability to manage complex processes to completion.
- Overall knowledge of basic and secondary educational processes.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Knowledge of planning processes.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education required, M.S./M.A. in education or MBA preferred (or equivalent experience).
- 10 years experience, 4+ years management of complex organizations, preferably 4+ years in an educational organization.

MoE Job Description/Senior Management

Title:	Director of Standards and Curriculum
Position description:	Develops student knowledge standards and defines the content of the curriculum that is aligned with these standards for each academic subject and each grade.
Reports to:	Vice Minister or Vice Ministers for General Education

Key Roles and Responsibilities:

- Develop and revise student knowledge standards for each academic subject and grade.
- Define and revise the curriculum content and sequence for each academic subject and grade that is aligned with the knowledge standards.
- Coordinate with the MoE in Baghdad on standards and curriculum issues as appropriate.
- Select, review, and approve the books, syllabus, and other teacher aids designed to support the teaching of the curriculum.
- Coordinate with the Director of Examinations in aligning the student achievement tests with the standards and curriculum.
- Coordinate with the Director of Professional Development to provide teacher training on the standards and the curriculum.
- Coordinate with teacher colleges and the College of Education to ensure alignment of standards and curriculum with preservice teacher preparation.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of basic and secondary educational processes.
- Advanced knowledge of international best practices in education and management.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, M.A. in education preferred (or equivalent experience).
- 7 years experience in the area of standards and curriculum development in an educational organization, 3+ years in a management position.

MoE Job Description/Senior Management

Title:	Director of Examinations
Position description:	Develops and administers standardized student achievement tests and other examinations.
Reports to:	Vice Minister or Vice Ministers for General Education

Key Roles and Responsibilities:

- Develop and revise annual standardized region-wide student achievement tests that are aligned with the standards and curriculum.
- Develop and maintain a bank of questions for annual standardized tests.
- Coordinate with the Director of Standards and Curriculum in ensuring that the tests are aligned to the standards and curriculum.
- Develop and maintain other types of examinations as may be requested by the Minister or Director General Vice Minister for General Education.
- Oversee the administration of the annual tests and ensure the integrity of the examination system.
- Coordinate and support implementation of international student achievement tests.
- Report the individual student results of the tests and aggregate these results by school, district, governorate, and KRI-wide to the minister.
- Provide copies of the results of the tests to teachers and school principals and to the Directorate of Research and Evaluation for further analysis.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of basic and secondary educational processes.
- Advanced knowledge of examination international best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in psychology, psychometrics, or education assessment, M.A. in psychology, psychometric or education assessment preferred (or equivalent experience).
- 7 years experience in the area of examination development, 3+ years in a management position, 3+ years in an education organization.
- Proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Exceptional Student Education
Position description:	Develops policies, regulations, and materials for students with special educational needs and gifted and talented students.
Reports to:	Vice Minister or Director General Vice Minister of General Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for students with special educational needs.
- Develop and revise policies and regulations for gifted and talented students.
- Develop and revise curricula for students with special educational needs in cooperation with the Directorate of Standards and Curriculum.
- Develop and revise curricula for gifted and talented students in cooperation with the Directorate of Standards and Curriculum.
- Develop and implement guidelines for the identification and referrals to appropriate services of students with exceptional needs.
- Develop materials and teaching aids and select books for students with special educational needs in cooperation with the Directorate of Teaching Aids.
- Develop materials and teaching aids and select books for gifted and talented students in cooperation with the Directorate of Teaching Aids.
- Keep abreast of development in international best practices for students with special needs and gifted and talented students
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Advanced knowledge of educational practices for students with special needs and gifted and talented students.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in special education or psychology, M.A. in special education or psychology preferred (or equivalent experience).
- 7 years experience in the area of special education in an educational organization, 3+ years in a management position.
- Understanding of written English; proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Teacher Aids and Libraries
Position description:	Develops tools and materials and selects books to support teacher instruction of the curriculum.
Reports to:	Vice Minister or Vice Ministers of General Education

Key Roles and Responsibilities:

- Develop and revise teacher aids and other instructional materials for each academic subject and grade, including lesson plans, curriculum sequence and maps, laboratory materials, and displays.
- Coordinate with the Director of Standards and Curriculum to ensure alignment of these materials and books with the standards and curriculum.
- Coordinate with the Director of Professional Development to integrate these materials in the training of teachers.
- Set standards and select books for inclusion in school libraries.
- Keep up with research and international development in the area of instructional tools and materials.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of basic and secondary educational processes.
- Advanced knowledge of international best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, M.A. in education preferred (or equivalent experience).
- 7 years experience in the area of instructional aid development, 3+ years in a management position.
- Proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Professional Development
Position description:	Develops policies and courses, identifies needs, and provides for the ongoing professional development of teachers, principals, supervisors, and student counselors.
Reports to:	Vice Minister or Vice Minister of General Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for in-service training of school and other staff.
- Oversee the training institutes.
- Identify the needs for in-service training through consultations with the Director General of Supervisors and Quality Assurance, Governorates of Education, principals, and other relevant parties.
- Design, oversee the fielding of, and analyze the responses of a periodic survey (e.g., bi-annual) of teacher, principal, and supervisor training needs in collaboration with the Directorate of Data Collection and Statistics.
- Prepare and implement an annual in-service training plan specifying the number and types of courses to provide and the number of and criteria for staff to be trained.
- Develop and revise short- and long-term courses to meet in-service training needs.
- Coordinate courses design with the Directorate of Standards and Curriculum and the Directorate of Teacher Aids and Libraries.
- Develop programs to train school staff in the use of self-evaluation and the development of school improvement plans.
- Ensure the continuing upgrading of the preparation of professional trainers.
- Ensure the effective operation of the directorate.
- Oversee international organizations and consultants involved with providing training.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of basic and secondary educational processes.
- Advanced knowledge of international in-service training best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, M.A. in education preferred (or equivalent experience).
- 10 years experience in the area of professional development, 4+ years in a management position, 4 years in an education organization.

MoE Job Description/Senior Management

Title:	Director of Student Career Counseling
Position description:	Develops policies and materials for student career counselors.
Reports to:	Vice Minister or Director General Vice Minister of General Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for student career counselors.
- Develop guidelines for counseling programs at the school level.
- Develop and maintain standards, requirements, and performance measures for student counselors.
- Develop materials, including academic and occupational career development pamphlets, occupational testing material, and other tools in support of the work of student counselors.
- Develop and maintain relations with employers to bring speakers to the classrooms and take students in the field to expose them to the world of work, in collaboration with the Directorate of Employer Relations in the General Directorate of Vocational Education.
- Ensure the continuing upgrading of the knowledge of student counselors, in coordination with the Directorate of Professional Development.
- Keep up with international student counseling best practices.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Superior knowledge of basic and secondary, including vocational, education processes.
- Advanced knowledge of international student counseling best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, psychology, or counseling, M.A. in education or psychology preferred (or equivalent experience).
- 7 years experience in the area of student counseling in an educational organization, 3+ years in a management position.
- Understanding of written English, proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Private Schools
Position description:	Develops policies for the expansion, operations, and oversight of private schools.
Reports to:	Vice Minister or GD Vice Minister of General Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for the expansion, operation, and oversight of private schools.
- Review and approve the applications for establishment of new private schools.
- Enforce compliance of private schools with the law, policies, and regulations governing private schools.
- Design and ensure the implementation of a private school quality monitoring process, in cooperation with the Director General of Supervisors and Quality Assurance.
- Prepare an annual report containing information on the number of schools by types and students by type, compliance, and the performance of private schools and issues that may need to be addressed in the forthcoming year.
- Keep up with the development of best practices in incentives for and oversight of private schools.
- Coordinate with the Director General of Planning, Research, and Evaluation to conduct studies and projections of the demand for private schooling.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of basic and secondary educational processes.
- Advanced knowledge of private school international best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, M.A. in education preferred (or equivalent experience).
- Reading comprehension of English desired, proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Arts and Sports
Position description:	Develops policies for the teaching of arts and sports and organizes and oversees arts shows and sports competitions, including school sports leagues.
Reports to:	Vice Minister or Director General Vice Minister of General Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for the teaching of arts and sports.
- Develop and revise policies and regulations for the holding of student art shows.
- Develop and revise policies and regulations for the organization of individual and team sports competitions between schools.
- Organize student arts shows at the district, governorate, and KRI-wide levels.
- Organize student sports competitions at the district, governorate, and KRI-wide levels.
- Enforce compliance with the policies and regulations for student arts and sports.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Strong organizational skills.
- Advanced knowledge of international student arts and sports best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- Graduation from an arts or sports institute, or B.A. in arts or sports (or the equivalent).
- 7 years experience in the area of student arts or sports, 3+ years in a management position.

MoE Job Description/Senior Management

Title:	Director General of Vocational Education
Position description:	Strategically manages the day-to-day policymaking, operations, and internal processes in support of secondary vocational education.
Reports to:	Vice Minister

Key Roles and Responsibilities:

- Ensure the effective operation and coordination of all vocational education directorates.
- Coordinate with the vice minister and councils on establishment and refinement of MoE vocational education vision, mission, and goals.
- Participate in the strategic planning process to ensure the refinement and furtherance of MoE vocational education vision, mission, goals, and priorities.
- Develop and implement overall vocational education strategy.
- Ensure the participation of employers and other social partners in the development of occupational programs.
- Conduct periodic (e.g., annual) planning processes to ensure that all directorates have specific plans to pursue objectives supporting MoE mission, goals, and priorities.
- Establish measurable objectives that will support vocational education goals and priorities.
- Monitor and report directorate progress toward achievement of objectives.
- Participate in the budgeting and planning process that incorporates inputs from all vocational education directorates (with assistance from the Director of Strategic Planning and the Director of Budgeting).
- Coordinate with the Director General of General Education on academic curriculum and examination requirements, and with the Director of Student Career Counseling on counseling approach and practices.
- Provide strategic guidance and direction to the directors who have the following responsibilities:
 - Standards and curriculum: developing academic standards and curriculum for all grades and occupations
 - Examinations: developing and administering standardized student achievement and other tests aligned with the curricula, and reporting results.
 - Teacher aids and libraries: developing tools and materials and selecting books to support vocational teacher instruction of the curriculum.
 - Professional development: developing policies, identifying needs, and providing for in-service training to vocational teachers, principals, and supervisors.
 - Employer relations: developing and maintaining relations with employers and other social partners to ensure their participation in developing occupational standards and curriculum and providing opportunities for practical experience for vocational students.

- Market research and data: collecting, analyzing, and disseminating labor market data to determine future labor market needs and skill requirements.
- Support development of efficient and effective processes across the general directorate.

Qualifications:

- Superior strategic thinking.
- Strong decisionmaking abilities.
- Strong project management, time management, and leadership skills.
- Superior analytical and problem-solving skills.
- Proven ability to manage complex processes to completion.
- Overall knowledge of training and vocational education and training processes.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Knowledge of planning processes.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./M.S. in vocational education required, M.S./M.A. in vocational education or MBA preferred (or equivalent experience).
- 10 years experience, 4+ years management of complex organizations, preferably 4+ years in a vocational educational organization.

MoE Job Description/Senior Management

Title:	Director of Vocational Standards and Curriculum
Position description:	Develops vocational student knowledge standards and defines the content of the vocational curriculum that is aligned with these standards for each occupation and each grade.
Reports to:	Vice Minister or Vice Ministers of Vocational Education

Key Roles and Responsibilities:

- Develop and revise vocational student knowledge standards for each occupation and grade.
- Ensure the participation of employers and other social partners in the development of occupational standards, curricula, and student certification requirements.
- Develop and revise academic education subjects for vocational students, aligning them with preparatory secondary education academic subjects in cooperation with the Directorate of Standards and Curriculum of the General Directorate of General Education.
- Define and revise the vocational curriculum content and sequence for each occupation and grade that is aligned with the occupational standards.
- Select, review, and approve the books, syllabus, and other teacher aids designed to support the teaching of the vocational curriculum.
- Coordinate with the Director of Examinations in aligning student achievement tests with vocational standards and curriculum.
- Coordinate with the Director of Professional Development to provide vocational teacher training on standards and the curriculum.
- Coordinate with the Ministry of Higher Education and Scientific Research to ensure alignment of secondary vocational education with the postsecondary technical education curricula.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of training and vocational and training educational processes.
- Advanced knowledge of international TVET best practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in vocational education, M.A./M.S. in vocational education preferred (or equivalent experience).
- 7 years experience in the area of occupational standards and curriculum development in a vocational educational organization, 3+ years in a management position.

MoE Job Description/Senior Management

Title:	Director of Vocational Examinations
Position description:	Develops and administers occupational standardized student achievement tests and other examinations.
Reports to:	Vice Minister or Vice Ministers of Vocational Education

Key Roles and Responsibilities:

- Develop and revise annual standardized region-wide student achievement occupational tests that are aligned with the occupational standards and curriculum.
- Ensure the participation of employers and other social partners in the development of student certification requirements.
- Develop and maintain a bank of questions for annual standardized occupational tests.
- Coordinate with the Director of Vocational Standards and Curriculum in ensuring that the tests are aligned with the occupational standards and curriculum.
- Coordinate with the Director of Examinations of the General Directorate of General Education to ensure alignment of the academic section of the tests.
- Develop and maintain other types of examinations as may be requested by the Minister or Director General Vice Minister of Vocational Education.
- Oversee the administration of the annual occupational tests and ensure the integrity of the examination system.
- Report individual student test results and aggregate these results by school, district, governorate, and KRI-wide to the minister and other stakeholders.
- Provide data and results from the occupational tests to teachers and school principals and to the Directorate of Research and Evaluation for analysis.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of vocational education processes.
- Advanced knowledge of international best TVET examination practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in psychology or psychometrics, M.A. in psychology or psychometrics preferred (or equivalent experience).

- 7 years experience in the area of examination development, 3+ years in a management position, 4+ years in an education organization.
- Proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Vocational Teacher Aids and Libraries
Position description:	Develops tools and materials and selects books to support vocational teacher instruction of the curriculum.
Reports to:	(Vice) Minister or Vice Ministers of Vocational Education

Key Roles and Responsibilities:

- Develop and revise vocational teacher aids and other instructional materials for each occupational subject and grade, including lesson plans, curriculum sequence and maps, workshop materials, and displays.
- Coordinate with the Director of Vocational Standards and Curriculum to ensure alignment of these materials and books with the occupational standards and curriculum.
- Coordinate with the Director of Vocational Professional Development to integrate these materials in the training of vocational teachers.
- Select books for inclusion in school libraries.
- Keep up with research and international development in the area of vocational instructional tools and materials and TVET development.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of vocational education processes.
- Advanced knowledge of international best TVET practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in education, M.A. in vocational education preferred (or equivalent experience).
- 7 years experience in the area of vocational instructional aid development, 3+ years in a management position.
- Proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Vocational Professional Development
Position description:	Develops policies and courses, identifies needs, and provides for the ongoing professional development of vocational teachers, principals, and supervisors.
Reports to:	(Vice) Minister or Vice Minister of Vocational Education

Key Roles and Responsibilities:

- Develop and revise policies and regulations for in-service training of vocational school and other staff.
- Identify the needs for in-service vocational teacher training through consultations with the Director General of Supervisors and Quality Assurance, Governorates of Vocational Education, principals, and other relevant parties.
- Design, oversee the fielding of, and analyze the responses of a periodic (e.g., bi-annual) survey of vocational teacher, principal, and supervisor training needs in collaboration with the Directorate of Data Collection and Statistics.
- Prepare and implement an annual in-service training plan specifying the number and types of course to be provided and the number of and criteria for staff to be trained.
- Develop and revise short- and long-term courses to meet in-service training needs.
- Coordinate occupational courses design with the Directorate the Standards and Curriculum and the Directorate of Teacher Aids and Libraries.
- Coordinate with the Directorate of Vocational Standards and Curriculum and the Ministry of Higher Education and Scientific Research to ensure alignment of secondary vocational and postsecondary technical education.
- Coordinate with the Directorate of Professional Development and the training institutes for the actual provision of training to academic teachers in vocational schools and to vocational teachers and principals.
- Ensure the continuing upgrading of the preparation of professional vocational trainers.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of vocational education processes.
- Advanced knowledge of international in-service training best TVET practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A. in vocational education or human resources, M.A. in vocational education or human resources preferred (or equivalent experience).
- 7 years experience in professional development, 3+ years in a management position, 3 years in an education organization.

MoE Job Description/Senior Management

Title:	Director of Employer Relations
Position description:	Develops and maintains relations with employers and other social partners to secure their involvement in developing occupational standards and curriculum, and providing students with opportunities to obtain practical experience.
Reports to:	(Vice) Minister or Vice Minister of Vocational Education

Key Roles and Responsibilities:

- Develop relationship with employers and other social partners to secure their participation in defining occupational standards and curriculum and setting student qualifications.
- Encourage employers to provide students with opportunities for practical experience.
- Set safety, behavioral, and other requirements for students while they are obtaining practical experience with employers.
- Set safety, behavioral, and mentoring requirements for employers and their staff offering practical experience to students.
- Create partnership with employers to develop and pilot apprenticeship model of training students.
- Design outreach events and support materials aimed at informing employers about vocational programs and receiving feedback from employers.
- Gather inputs for employers about changes in both academic and occupation skill requirements.
- Gather inputs from employers about additional occupations for which they would like training to be provided.
- Solicit feedback from employers regarding the preparation of vocational students.
- Provide overall supervision of students placed with employers for practical experience.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Superior knowledge of vocational education processes.
- Advanced knowledge of international in-service training best TVET practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with employers and staff at all levels.
- Ability to build cooperation and consensus among team members with competing interests
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in social sciences, public relations, or business; M.A./M.S. preferred (or equivalent experience).
- 5 years experience in private sector or vocational setting, 2+ years in a management position.
- Proficiency in English preferred.

MoE Job Description/Senior Management

Title:	Director of Market Research and Data
Position description:	Collects, analyzes, and disseminates labor market data to determine future labor market needs and skill requirements.
Reports to:	(Vice) Minister or Vice Minister of Vocational Education

Key Roles and Responsibilities:

- Collect and disseminate information about the labor market in the KRI.
- Conduct research about the conditions of the labor market and changes in the labor market over time.
- Conduct research and analysis about skills required by the labor market generally and for specific occupations.
- Design, field, and analyze in collaboration with the Office of Statistics and Data Collection, a periodic (e.g., annual or bi-annual) survey of employers to assess trends in employment, skill requirements, and other future labor market needs.
- Design, field, and analyze, in collaboration with the Office of Statistics and Data Collection, a periodic (e.g., annual or bi-annual) survey of students and graduates to ascertain their preferences and experiences while in training and after joining the labor market.
- Publish an annual report providing information on labor market and student experience trends and recommendations for occupational training and skill development requirements.
- Identify the needs for providing training in new occupations.
- Provide feedback to the Directorate of Vocational Standards and Curriculum regarding employer needs and requirements.
- Coordinate with the Kurdistan Region Statistics Office in data gathering and analysis.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Superior analytical and problem solving skills.
- Superior knowledge of vocational education processes.
- Advanced knowledge of international in-service training best TVET practices.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers and employers.
- Knowledge of statistics, survey, research and evaluation methods.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in social sciences, statistics, or similar quantitative discipline, or M.A./M.S. in social sciences or similar quantitative discipline preferred (or equivalent experience).

- 7 years experience in research and evaluation, preferably in the private sector, 3+ years in a management position.
- Proficient in the use of MS Office tools (Word, Excel, PowerPoint), Access, SQL, and at least one of the following three statistical analyses software programs: STATA, SPSS, or SAS.
- Experience designing and managing of large data sets.

MoE Job Description/Senior Management

Title:	Director General of Planning, Research, and Evaluation
Position description:	Leads the master planning processes of the MoE and collects and analyzes key education data to support decisionmaking.
Reports to:	(Vice) Minister or Vice Ministers of General Education and Vocational Education

Key Roles and Responsibilities:

- Coordinate with the (vice) minister, councils, and general directorates on establishment and refinement of the K–12 education vision, mission, and goals.
- Participate in the strategic planning process to ensure the refinement and furtherance of academic and vocational education vision, mission, goals, and priorities.
- Oversee the process that ensures the development of a master plan that aligns with MoE vision, mission, goals, and priorities.
- Formulate and review education policies and analyze key education data to support MoE decisionmaking.
- Work with general directorates and directorates to draft measurable objectives that will support MoE goals and priorities.
- Monitor and report progress toward implementation of the master plan.
- Participate in the budgeting and planning process that incorporates inputs from all general education directorates (with assistance of the Vice Minister(s) and Director of Budgeting).
- Support development of efficient and effective processes throughout the MoE.
- Ensure the collection and analysis of data and statistics to monitor the condition of the education system and the performance of individual schools.
- Ensure preparation of the research agenda to address MoE goals and priorities.
- Provide strategic guidance and direction to the directors who have the following responsibilities:
 - Strategic planning: coordinating the development of MoE vision, goals, and priorities and developing a master plan aligned with MoE visions, goals, and priorities.
 - Data collection and statistics: collecting student, teacher, school, and parent data and preparing and distributing regular statistical reports.
 - Research and evaluation: evaluating the effectiveness of education programs and assessing needs and requirements to improve educational processes.
 - Program development and new methods: keeping abreast of new research and developments in education and developing and testing new programs.

Qualifications:

- Superior strategic thinking.
- Strong project management, time management, and leadership skills.
- Superior analytical and problem-solving skills.
- Proven ability to manage complex processes to completion.

- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Knowledge of strategic planning and planning processes.
- Knowledge of statistical, research, and evaluation methods.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in social sciences, economics, statistics, or similar quantitative discipline, M.A./M.S. preferred (or equivalent experience).
- 7 years planning and research experience, preferably with 3+ years in an educational institution, 3+ years in planning and research management.

MoE Job Description/Senior Management

Title:	Director of Strategic Planning
Position description:	Oversees the MoE strategic planning process.
Reports to:	Director General of Planning, Research, and Evaluation

Key Roles and Responsibilities:

- Design and oversee the process that ensures the development of the overall MoE strategic plan that supports MoE goals and priorities.
- Work with management to draft criteria for measuring the outcome of the strategic plan.
- Conduct periodic planning processes to ensure that all directorates are focused on priority projects and are on track to meet strategic planning schedule.
- Monitor and review demand and supply projections for school places.
- Create and disseminate guidance on individual plan requirements, including the time line, content, and format of plan inputs.
- Ensure that all directorates deliver timely, high-quality input into the final strategic plan.
- Review plan inputs from the directorates and issue feedback to guide improvements.
- Monitor progress toward implementation of the strategic plan.
- Provide interim updates on implementation of the strategic plan to senior MoE managers.
- Ensure the effectiveness of the directorate.

Qualifications:

- Superior strategic thinking.
- Strong project management, time management, and leadership skills.
- Superior analytical and problem-solving skills.
- Proven ability to manage complex processes to completion.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to build cooperation and consensus among team members with competing interests.
- Knowledge of strategic planning and planning processes.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in planning, business, economics, or other relevant field; M.A./M.S. preferred (or equivalent experience).
- 7+ years planning experience, 3+ years in a management position.

MoE Job Description/Senior Management

Title:	Director of Statistics and Data Collection
Position description:	Oversees data collection and distributes regular statistical reports.
Reports to:	Director General of Planning, Research, and Evaluation

Key Roles and Responsibilities:

- Develop the annual data collection plan to address MoE mission and goals.
- Oversee the design and fielding of periodic and special purpose surveys of schools, teachers, principals, students, employers, parents, and MoE staff in support of MoE goals and priorities.
- Outreach to MoE general directorates and other directorates to identify their needs for data.
- Oversee and ensure adherence to quality control processes.
- Oversee preparation and dissemination of annual statistical reports on schools and other relevant areas.
- Oversee the preparation of targeted statistical reports requested by general directorates and other directorates in support of their goals and planning needs.
- Oversee the preparation of analytical electronic data files as requested by general directorates, other directorates, outside educational organizations, and consultants in support of MoE goals and priorities and needed for research and evaluation.
- Ensure the effectiveness of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Ability to manage competing priorities.
- Superior analytical and problem-solving skills.
- Excellent verbal and written communication skills.
- Ability to work cooperatively with high-level managers and other staff.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in statistics, business, economics, or other relevant field; M.A./M.S. preferred (or equivalent experience).
- 7+ years of data collection and survey design experience.
- Proficient in the use of MS office tools (Word, Excel, PowerPoint), Access, SQL, and at least one of the following three statistical analyses software programs: STATA or SPSS or SAS.
- Experience designing and managing large data sets.

MoE Job Description/Senior Management

Title:	Director of Research and Evaluation
Position description:	Ensures high-quality research in support of MoE’s mission and goals and educational improvements.
Reports to:	Director General of Planning, Research, and Evaluation

Key Roles and Responsibilities:

- Develop the annual research and evaluation plan to address MoE mission, goals, and priorities.
- Develop and oversee execution of the research and evaluation plan.
- Ensure that research staff is effectively allocated to research and evaluation projects.
- Oversee and ensure adherence to quality control processes.
- Monitor research progress toward achieving objectives.
- Conduct independent evaluative assessment and reviews of activities performed by all units of the MoE.
- Benchmark the schools’ and ministry’s performance statistics against best practices and agreed standards to ensure a more effective performance.
- Conduct benchmarking with education systems in other countries.
- Outreach to general directorates and other directorates about their needs for research and evaluation.
- Oversee preparation of research and evaluation reports.
- Identify critical findings for dissemination to stakeholders.
- Assist the Directorate of Quality Assurance in setting quality standards.
- Prepare the annual classification of schools by level of performance based on student achievement tests and other student- and school-level data.
- Manage request for proposal (RFP) processes for outsourcing research (preparation of RFPs and evaluation of proposals).
- Ensure the effectiveness of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Understanding of research process and quality control processes.
- Ability to manage competing priorities.
- Superior analytical and problem-solving skills.
- Experience designing and managing large electronic data sets.
- Excellent verbal and written communication skills.
- Ability to bring complex projects to completion.
- Ability to work cooperatively with high-level managers and other staff.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in statistics, economics, or other relevant field; M.A./M.S. preferred (or equivalent experience).
- 7 years research experience, with 3 years in research management.
- Proficient in the use of MS Office tools (Word, Excel, PowerPoint), Access, SQL, and one of the following three statistics software programs: STATA, SPSS, or SAS.
- Experience designing and managing large data sets.

MoE Job Description/Senior Management

Title:	Director of Program Development and New Methods
Position description:	Ensures that the MoE keeps abreast of new development in education and develops new educational methods to improve educational outcomes.
Reports to:	Director General of Planning, Research, and Evaluation

Key Roles and Responsibilities:

- Develop and maintain an inventory of institutions and organizations doing education research.
- Keep abreast of research and new development in the field of education.
- Monitor and report global and local best practices and make recommendations for implementation.
- Identify modified and new practices or programs that may improve education.
- Identify modified and new roles that may improve administrative and educational effectiveness.
- Develop and oversee execution of new programs or practices.
- Ensure that research staff is effectively allocated to research and evaluation projects.
- Oversee and ensure adherence to quality control processes.
- Ensure the effectiveness of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Understanding of research process and quality control processes.
- Superior analytical and problem-solving skills.
- Excellent verbal and written communication skills.
- Ability to bring complex projects to completion.
- Ability to work cooperatively with high-level managers and other staff.
- Ability to mentor and supervise staff.
- Proficient in English.

Education and Experience:

- B.A./B.S. in education or other relevant field, M.A./M.S. preferred (or equivalent experience).
- 7 years research and program development experience.

MoE Job Description/Senior Management

Title:	Director General of Quality Assurance and Supervision
Position description:	Ensures the effectiveness of the MoE and of schools and provides support for school and student instruction effectiveness.
Reports to:	(Vice) Minister or Vice Ministers of General Education and Vocational Education

Key Roles and Responsibilities:

- Define quality standards, which will be adhered to by all functions within MoE schools and institutes within the KRI, in cooperation with the Directorate of Research and Evaluation.
- Develop and maintain quality assurance monitoring systems for schools and MoE staff and directorates.
- Develop and maintain methodologies and tools to facilitate and support the implementation of quality assurance monitoring systems.
- Review school self-evaluations and improvement plans.
- Conduct in-depth quality assessments of school performance cooperatively with school staff.
- Provide methodologies and tools in support of school improvements.
- Provide advice in the development of school improvement plans.
- Provide expert advice in support of school improvements.
- Provide strategic guidance and direction to the directors with the following responsibilities:
 - Quality assurance: overseeing and managing the development of quality assurance systems for schools and the MoE.
 - Supervision: overseeing and managing the assessment of school quality and the provision of support for school improvement activities.
- Ensure the effective operations of the directorate.

Qualifications:

- Strong management, time management, and leadership skills.
- Proven ability to manage complex projects to completion.
- Overall knowledge of basic and secondary education processes.
- Solid knowledge of quality control processes in education.
- Superior analytical and problem-solving skills.
- Excellent verbal and written communication skills.
- Ability to work cooperatively with high-level managers and other staff.
- High sense of responsibility and accountability.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in education, M.A./M.S. preferred (or equivalent experience).
- 7 years experience with quality assurance systems, 4+ years in management, preferably in an education institution.

MoE Job Description/Senior Management

Title:	Director of Quality Assurance
Position description:	Oversees and manages the development of quality assurance systems for schools and the MoE.
Reports to:	Director General of Quality Assurance and Supervision

Key Roles and Responsibilities:

- Define quality standards, which will be adhered to by all functions within MoE's schools and institutes within the KRI, in cooperation with the Directorate of Research and Evaluation.
- Design and maintain quality assurance systems for schools, MoE staff, and directorates.
- Develop and maintain methodologies and tools to facilitate and support the implementation of quality assurance monitoring systems.
- Keep abreast of developments and best practices in quality assurance processes for education.
- Ensure the effective operation of the directorate.

Qualifications:

- Proven ability to manage complex projects to completion.
- Overall knowledge of basic and secondary education processes.
- Solid knowledge of quality control processes in education.
- Superior analytical and problem-solving skills.
- Excellent verbal and written communication skills.
- Ability to work cooperatively with high-level managers and other staff.
- High sense of responsibility and accountability.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in education, M.A./M.S. preferred (or equivalent experience).
- 7 years experience with quality assurance systems.

MoE Job Description/Senior Management

Title:	Director of Supervision
Position description:	Oversees and manages the assessment of school quality and the provision of support for school improvement activities.
Reports to:	Director General of Quality Assurance and Supervision

Key Roles and Responsibilities:

- Review school self-evaluations and improvement plans.
- Conduct in-depth quality assessments of school performance cooperatively with school staff.
- Provide methodologies and tools in support of school improvements.
- Provide expert advice in support of school improvements.
- Provide advice in the development of school improvement plans.
- Plan, assign tasks, and oversee the activities of supervisors.
- Establish measurable objectives in support of the work of supervisors.
- Ensure the continuing upgrading of the knowledge of supervisors in support of school improvement, in coordination with the Directorate of Professional Development.
- Ensure the effective operation of the directorate.

Qualifications:

- Superior management and logistics management skills.
- Solid knowledge of school quality assurance monitoring processes.
- Superior analytical and problem-solving skills.
- Excellent verbal and written communication skills.
- Ability to work cooperatively with high-level managers and other staff.
- High sense of responsibility and accountability.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in education, M.A./M.S. preferred (or equivalent experience).
- 7 years experience in school quality assurance monitoring, 3+ years at a management level.

MoE Job Description/Senior Management

Title:	Director General of Human Resources, Finance, and Shared Services
Position description:	Ensures that high-quality, cost-effective support services are provided to all units within the MoE.
Reports to:	(Vice) Minister or Vice Ministers of General Education and Vocational Education

Key Roles and Responsibilities:

- Coordinate the operations and administration of support units: Human Resources, Finance, Legal, Information Technology, General Services, and Facilities.
- Manage the preparation of the support unit budgets and of the MoE budget.
- Develop and monitor cost control systems for all support units.
- Develop efficient and cost-effective administrative support processes and materials across the MoE.
- Work with other general directorates and directors to identify support needs across the MoE.
- Establish service standards to respond to unit needs, and ensure that MoE support needs are met.
- Manage the development and maintenance of the MoE facilities.
- Provide guidance and direction to the directors who have the following responsibilities:
 - Human services: managing the overall provision of human resources services, policies, and programs for the MoE.
 - Finance: guiding and managing the MoE budget processes and overall provision of financial services, policies, and programs for the MoE.
 - Legal affairs: guiding and managing the overall provision of legal services for the MoE.
 - General services and procurement: providing high-quality and cost-effective administrative services and materials to all units within the MoE.
 - Facilities: providing high-quality and well-maintained facilities to all units within the MoE.
 - Information technology: selecting, implementing, and maintaining all technology platforms involved in MoE activities.

Qualifications:

- Budget administration expertise.
- General knowledge of finance, human resources, information technology, and procurement, and facilities processes.
- Strong project management, time management, and leadership skills.
- Strong decision analysis and negotiations skills.
- Excellent verbal and written communication skills.
- Superior problem-solving skills.
- Ability to work constructively with high-level managers.

- Ability to manage competing priorities.
- Ability to manage complex processes to completion.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. required, MPA or MBA preferred (or equivalent experience).
- 10 years management experience, with at least 4 years in service management.

MoE Job Description/Senior Management

Title:	Director of Human Resources
Position description:	Guides and manages the overall provision of human resources services, policies, and programs for the MoE.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Develop, review, and implement effective human resources policies, practices, and programs across the MoE.
- Provide all levels of management with expertise and tools for decisionmaking and planning related to staffing.
- Design and implement recruiting strategies.
- Develop and oversee compensation, performance management, and reward systems.
- Develop programs and processes designed to improve effectiveness and efficiency of the human resources team.
- Ensure the provision of human resources information systems.
- Develop and implement training and other programs to increase the effectiveness of MoE staff.
- Ensure compliance with policies and regulations as necessary.
- Provide advice to senior management to identify and resolve complex human resources related issues.
- Ensure the effectiveness of the directorate.

Qualifications:

- Solid track record of successfully developing and implementing human resources programs and initiatives.
- Strong project management, time management, and leadership skills.
- Strong decision analysis and negotiations skills.
- Solid problem-solving skills.
- Excellent verbal and written communication skills.
- Knowledge of human resources management systems (e.g., PeopleSoft).
- Knowledge of international recruiting and hiring procedures.
- Ability to work constructively with high-level managers.
- Ability to manage competing priorities.
- Ability to mentor and supervise staff.
- Competence in computer-based human resources systems.

Education and Experience:

- B.A./B.S. in human resources, M.A./M.S. preferred (or equivalent experience).
- 7 years experience in human resources, with at least 3 years at a management level.

MoE Job Description/Senior Management

Title:	Director of Finance
Position description:	Guides and manages MoE's budget processes and the overall provision of financial services, policies, and programs for the MoE.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Develop, review, and implement effective financial policies, practices, and programs across the MoE.
- Guide and oversee the preparation of the annual MoE budget and day-to-day budget operations.
- Ensure efficient allocation of funds within the MoE.
- Provide all levels of management with financial expertise and tools for decisionmaking and planning related to their activities.
- Design and implement cost control mechanisms across the MoE.
- Develop and oversee compensation, performance management, and reward systems.
- Develop programs and processes designed to improve effectiveness and efficiency of the financial team.
- Ensure compliance with financial policies and regulations as necessary.
- Ensure the effectiveness of the directorate.

Qualifications:

- Solid track record in finance and/or accounting.
- Strong project management, time management, and leadership skills.
- Strong decision analysis and negotiations skills.
- Solid problem-solving skills.
- Excellent verbal and written communication skills.
- Solid knowledge of financial and accountability processes.
- Ability to work constructively with high-level managers.
- Ability to manage competing priorities.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in economics, finance, or accounting, M.A./M.S. preferred (or equivalent experience).
- 7 years experience in finance, with at least 3 years at a management level.

MoE Job Description/Senior Management

Title:	Director of Legal Affairs
Position description:	Guides and manages the overall provision of legal services for the MoE.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Develop and maintain an inventory of laws and regulations relevant to MoE activities.
- Draft policies, regulations, and legislation necessary to support MoE activities.
- Ensure that policies, regulations, and legislation are consistent and mutually supportive.
- Provide advice to senior management on legal, legislative, and regulatory issues.
- Ensure the effectiveness of the directorate.

Qualifications:

- Understanding of processes related to develop policy, regulations, and legislation.
- Strong project management, time management, and leadership skills.
- Solid problem-solving skills.
- In-depth knowledge of KRG and Iraqi law.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to resolve conflicts between competing interests.
- Ability to mentor and supervise staff.
- Competence in computer-based HR systems.

Education and Experience:

- Law degree.
- 7 years experience in development of policy, regulations, and legislation.

MoE Job Description/Senior Management

Title:	Director of General Services and Procurement
Position description:	Ensures that high-quality and cost-effective administrative services and materials are provided to all units within the MoE.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Direct and coordinate administrative services, which may include office clerical, printing, mail distribution and messenger services, telecommunications, and security.
- Design, plan, and manage supplies and equipment.
- Develop and monitor cost-control systems for all administrative services.
- Develop efficient administrative processes across the MoE.
- Establish and enforce guidelines concerning the quality of vendors and goods and services to be acquired.
- Manage and facilitate the RFP process for acquiring services throughout the MoE.
- Manage and facilitate the selection of vendors for services and materials.
- Respond to vendors' inquiries, track the status of contracts and orders, and monitor contractor performance.
- Approve bills for payment.
- Work with senior management to identify relevant needs across the MoE.
- Establish service standards, and ensure that MoE support needs are met.
- Ensure the effectiveness of the directorate.

Qualifications:

- Solid knowledge of administrative and procurement processes.
- Strong project management, time management, and leadership skills.
- Strong problem-solving skills.
- Strong negotiation skills.
- Ability to manage processes to completion.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.
- Ability to manage competing priorities.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S., M.A./M.S. preferred (or equivalent experience).
- 7 years administrative or procurement experience, 3+ years at a management level.

MoE Job Description/Senior Management

Title:	Director of Facilities
Position description:	Ensures that high-quality and well-maintained facilities are provided to all units within the MoE.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Design, plan, and maintain MoE buildings and grounds.
- Work with MoE units to assess needs for space.
- Design and allocate space to units as needed.
- Establish space standards.
- Establish standards for building and ground maintenance.
- Develop efficient and cost-effective building and ground maintenance practices.
- Ensure the effectiveness of the directorate.

Qualifications:

- General knowledge of space planning.
- Solid knowledge of building and ground maintenance best practices.
- Solid problem-solving skills.
- Ability to manage processes to completion.
- Ability to manage competing priorities.
- Ability to work constructively with high-level managers.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S., M.A./M.S. preferred (or equivalent experience).
- 7 years building and ground maintenance experience, 3 years at management level.

MoE Job Description/Senior Management

Title:	Director of Information Technology
Position description:	Ensures proper selection, implementation, and effective use of all technology platforms involved in MoE's operations.
Reports to:	Director General of Human Services, Finance, and Shared Services

Key Roles and Responsibilities:

- Select, evaluate, and implement the appropriate hardware and software according to MoE needs.
- Oversee day-to-day information technology operations, including problem resolution.
- Develop and implement policies and practices that support MoE information technology needs.
- Ensure proper functioning of the information processing system and oversee necessary upgrade.
- Ensure that computer equipment, hardware, and software are updated to meet organizational needs.
- Oversee the integrity of computers and networks, including security, systemwide virus protection, back-up, and recovery.
- Develop and implement security policy.
- Develop and implement training of staff to maintain and improve security where necessary.
- Provide technical leadership in the design, implementation, and maintenance of MoE websites.
- Ensure the effectiveness of the directorate.

Qualifications:

- Commitment to keep abreast of changes in technology and associated practices and procedures.
- Strong project management, time management, and leadership skills.
- Solid problem-solving skills.
- Experience with building and managing servers, networks, and communication technologies.
- Excellent verbal and written communication skills.
- Ability to manage projects to completion.
- Ability to work constructively with high-level managers.
- Ability to manage competing priorities.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. degree in computer science, M.A./M.S. preferred (or equivalent experience).
- 7 years experience in information technology, 3 years in a management position.

MoE Job Description/Senior Management

Title:	Director of Internal Audit (or Inspector General)
Position description:	Ensures compliance with KRG laws and MoE policies and regulations.
Reports to:	Minister

Key Roles and Responsibilities:

- Plan and execute financial audits and administrative audits to ensure compliance with KRG education and other relevant laws and MoE policies and regulations across MoE units, regional units, and schools.
- Prepare an annual plan of audits.
- Compile audit report ensuring that all issues, exceptions, conclusions, and recommendations are documented accurately and supported by facts and figures.
- Review on an ongoing basis MoE processes and practices to improve efficiency and assess the adequacy of existing controls to reduce errors, irregularities, and potential fraud.
- Identify and report defaulters, ensuring that appropriate disciplinary actions are carried out.
- Proactively develop and implement preventive and detective measures in respect to fraudulent practices.
- Provide assistance to external auditors in the conduct of audits.
- Prepare an annual report of recommendations for improvement in the processes and practices of the MoE and regional units.

Qualifications:

- Strong project management, time management, and leadership skills.
- Proven ability to manage complex processes to completion.
- Superior knowledge of best control practices, auditing standards and guidelines, and internal audits code of ethics.
- Knowledge of KRG's laws and regulations.
- General knowledge of education processes.
- Advanced knowledge of fraud detection and control techniques.
- Excellent report writing and communication skills.
- High sense of responsibility, accountability and dependability.
- High integrity and ethical standards.
- Ability to work constructively with high-level managers.
- Ability to mentor and supervise staff.

Education and Experience:

- M.A. in finance, accounting, or related field; MBA preferred (or equivalent experience).
- 10 years experience in accounting or finance-related functions, with 4+ years audit experience, preferably in an education organization or reputable audit firm and in a management position.

MoE Job Description/Senior Management

Title:	Director of Public Relations and Media
Position description:	Serves as the primary interface with the government, the Kurdish public, and media.
Reports to:	Minister

Key Roles and Responsibilities:

- Develop and execute media strategy for the MoE.
- Educate the public about MoE contributions.
- Develop and ensure up-to-date maintenance of the MoE website, in cooperation with the appropriate directors general and directorates.
- Respond to media requests.
- Draft and coordinate messages and themes to be communicated to the public and media.
- Organize outreach events and support materials aimed at informing the public about MoE role, activities, and educational performance.
- Disseminate MoE research to relevant stakeholders.
- Facilitate dialogue between MoE staff and stakeholders regarding MoE initiatives.
- Manage media interactions and external web presence.
- Track public awareness and opinions, regularly update MoE management about public perceptions.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Crisis management skills.
- Training in media relations.
- Excellent verbal and written communication skills.
- Understanding of research process.
- Excellent relationship management skills.
- Ability to work constructively with high-level managers.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. required in public relations or communications, M.A./M.S. preferred (or equivalent experience).
- 7 years experience in public and media relations, with at least 3 years at management level.
- Proficiency in Arabic and English preferred.

MoE Job Description/Senior Management

Title:	Director of International Relations
Position description:	Serves as the primary interface with international organizations, foreign governments, and contractors.
Reports to:	Vice Minister (or Minister)

Key Roles and Responsibilities:

- Develop and revise policies and regulations governing MoE staff interactions with international organization, foreign government officials, and contractors.
- Respond to requests from international organizations and foreign governments.
- Coordinate and oversee activities of international organization, government staff, and contractors within the MoE.
- Facilitate dialogue and interchanges between MoE staff and international organizations, foreign governments, and private educational organizations.
- Develop and maintain relationships with international organizations, foreign governments, and private educational organizations to keep abreast of new developments in the field of education.
- Work with MoE directors general and directorates with contracts with international organizations and foreign consultants.
- Ensure the effective operation of the directorate.

Qualifications:

- Strong project management, time management, and leadership skills.
- Crisis management skills.
- Excellent verbal and written communication skills.
- Understanding of research process.
- Excellent relationship management skills.
- Ability to work constructively with high-level managers.
- Ability to mentor and supervise staff.

Education and Experience:

- B.A./B.S. in public relations or communications required, M.A/M.S. preferred (or equivalent experience).
- 5 years experience in government or public relations.
- Proficiency in English and Arabic preferred.

MoE Job Description/Advisor

Title:	Advisor
Position description:	Provides the minister with specialized expertise and advice in selected areas of education.
Reports to:	Minister

Key Roles and Responsibilities:

- Advise the minister in selected areas of education.
- Serve as a sounding board in assessing the pros and cons of ongoing practices and new initiatives.
- Undertake research, educational improvement, and managerial tasks as may be assigned by the minister.
- Keep abreast of international and research development in areas of specialization.
 - Perform any other duties assigned by the minister.
 - Examples of areas of specialization may include at various times, as needed by the minister
- School evaluation and quality assurance practices.
- Classroom instructional practices and pedagogy.
- Special education for students with special educational needs.
- Strategic planning.
- Teacher and student standards and curriculum.
- Professional development.
- Education research and methods.

Qualifications:

- Superior strategic thinking.
- Superior analytical and problem-solving skills.
- Proven track record in areas of specialization.
- General knowledge of education and vocational education processes.
- Excellent verbal and written communication skills.
- Ability to work constructively with high-level managers.

Education and Experience:

- M.S./M.A. in any field, Ph.D. preferred (or equivalent experience).
- 10+ years experience in area of specialization.
- Understanding of written English, fluent English preferred.

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OBJECTIVE ANALYSIS.
EFFECTIVE SOLUTIONS.



Kurdistan Regional Government
Ministry of Planning • Ministry of Education

The Kurdistan Regional Government (KRG) aims to restructure its Ministry of Education, develop a framework and implementation plan for a school quality assurance system, review the effectiveness of its monitoring and support of private schools, and assess the content and quality of in-service teacher training. To help the KRG in their efforts, RAND researchers interviewed Ministry of Education staff and reviewed the current situation; reviewed relevant literature on organization design, school monitoring, and private schools; conducted in-depth case studies of ministries of education, school monitoring, and private schools in other countries; analyzed data on KRG teachers; provided analysis and recommendations; and developed implementation guidelines.

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