USAID MONITORING, EVALUATION, AND LEARNING ACTIVITY

SCHOOL INFRASTRUCTURE MULTI-ACTIVITY EVALUATION

SEPTEMBER 2021

DISCLAIMER: This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Dr. Marc Shapiro (Evaluation Team Leader), PhD Prakash Nair, and The Kaizen Company, LLC. The contents of this report are the sole responsibility of The Kaizen Company, LLC and do not necessarily reflect the views of USAID or the United States Government.

ABSTRACT

This evaluation, designed to examine information from USAID school infrastructure activities in Jordan, employed a mixed method approach involving cross-sectional primary qualitative and quantitative data, including school observations and surveys across 104 USAID-funded schools and surveys of teachers from neighboring schools, along with focus groups and use of secondary data across three activities.

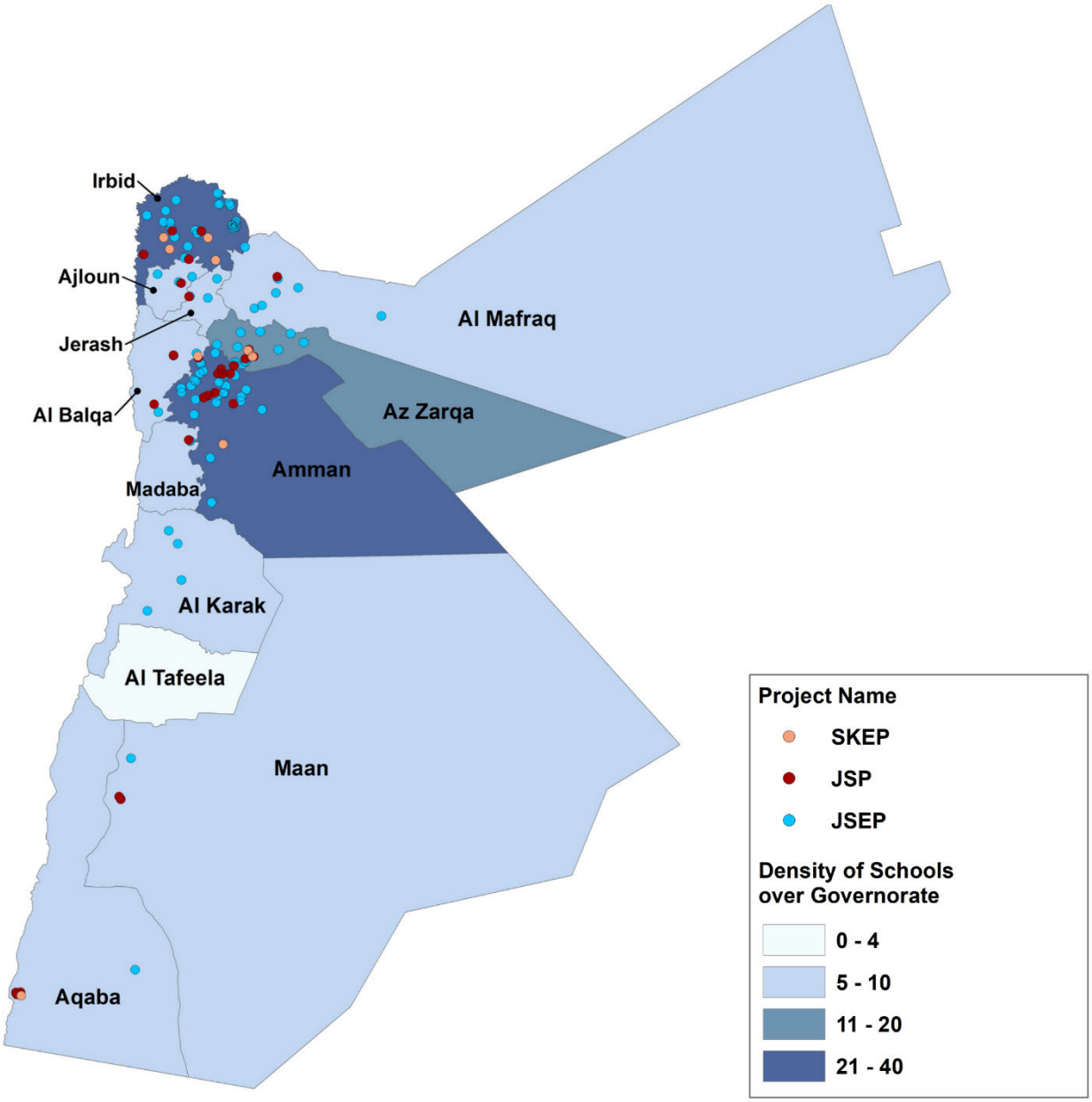
Overall, there were many positive elements among USAID-funded schools including reasonably high standards and all basic building features present plus evidence of progress over time. There were many areas for potential improvement relative to the goals of 21st-century learning, including that most classrooms were designed towards a "delivery of content" rather than active learning model, an absence of specialty learning space, deficiencies in wireless Internet and use of technology for learning, and outdoor areas that were not fully optimized for learning and play.

Surveys revealed stronger senses of community, belonging, use of technology in teaching, better student outcomes generally and parental and community engagement. Secondary data provided mixed evidence in student outcomes with some evidence of slightly better learning in SKEP and JSP early grades and modest differentiation in traditional subject outcomes from 2014 assessments, but other international assessment data that did not uniformly favor USAID-funded school students.

Twelve recommendations are provided to generate school design-related improvements to create school designs that can facilitate the delivery of a modern curriculum. Recommendations also are provided related to how the Mission might incentivize improved school utilization and measurement-related improvements to consider to better assess construction-related results.

Figure 1. Coverage of Schools during the Evaluation

This evaluation was informed by 110 schools that were built or rehabilitated under USAID-funded activities. The map below illustrates the schools that were visited under this evaluation, including nine schools built under Schools for a Knowledge Economy Program (SKEP), 28 built under Jordan School Construction and Rehabilitation Project (JSP), and 73 schools that were expanded or rehabilitated under Jordan School Expansion Program (JSEP).



ACKNOWLEDGEMENTS

The evaluation team would like to acknowledge the assistance of many people without whom this report would not be possible. First among them is Rasha Al Osta at USAID's Monitoring, Evaluation, and Learning Activity Jordan, for her considerable coordination efforts with stakeholders throughout the process. The team also acknowledges the guidance from the USAID Education and Youth Office and Office of Program Management in developing the evaluation's scope and input on instruments and reports. The data collection would never have been possible at the end of the school year and during end-of-year assessments and analysis during a long Eid break without the adroit leadership of Ahlam Shabaneh and Ibrahim Alrefaie of Leading Point Management Advisory Services. Muna Al Ghoul's interactions with Ministry of Education stakeholders was essential to gaining access to datasets. Key analytical inputs came from Louis Sirota in instrument design and analysis, with statistical analysis inputs from Mohammad Al Batayneh and Ro'ya Al Dibi'i. Other Activity team members including Camille Gockowski also provided important inputs to presentations and reports. Ahmed Abdelgawad at USAID's Early Grade Reading and Math Project provided access to and guidance about use of two important datasets as did Najd Al Hanahnah for USAID's Enhancing School Management and Planning activity.

LIST OF ACRONYMS

COVID-19	Coronavirus Disease 2019
EFEI	Education Facilities Effectiveness Instrument
EMIS	Education Management Information Systems
EQ	Evaluation question
ERfKE	Education Reform for Knowledge Economy
ESMP	Enhancing School Management and Planning
FGD	Focus Group Discussion
GoJ	Government of Jordan
JSEP	Jordan School Expansion Program
JSP	Jordan School Construction and Rehabilitation Project
LMO	Local Monitoring and Evaluation Organization
LQAS	Lot Quality Assurance Survey
MoE	Ministry of Education
MPWH	Ministry of Public Works and Housing
NAfKE	National Assessment for the Knowledge Economy
PISA	Programme for International Student Assessment
RAMP	Early Grade Reading and Math Project
SKEP	Schools for a Knowledge Economy Program
SOW	Scope of Work
TIMSS	Trends in International Mathematics and Science Study
USAID	United States Agency for International Development

TABLE OF CONTENTS

ABSTRACT	**ii**
ACKNOWLEDGEMENTS	**iv**
LIST OF ACRONYMS	**v**
TABLE OF CONTENTS	**vi**
EXECUTIVE SUMMARY	**viii**
Purpose, Evaluation Questions, and Methodology	viii
Findings and Conclusions	viii
Evaluation Question 1: Aspects of Physical School Environment	viii
COVID-related Adjustments	ix
Completion of Construction Work and Timeline Deviations	x
Evaluation Question 2: Student Body Changes in USAID-built and Neighboring Schools	x
Evaluation Question 3: Learning and Other Outcomes	x
Recommendations	xi
1. BACKGROUND AND PURPOSE OF EVALUATION	**1**
1.1. PROGRAMMATIC OVERVIEW	1
1.2. PURPOSE AND CONTEXT OF EVALUATION	2
2. METHODS AND LIMITATIONS	**2**
2.1. EVALUATION QUESTIONS	2
2.2. METHODS	3
2.2.1. Instruments, Sampling, Response Rates, Datasets	4
2.2.2. Limitations	5
3. FINDINGS AND CONCLUSIONS	**6**
3.1. EQ 1: Aspects of Physical School Environment to Take into Consideration for Future Construction	6
3.1.1. Overall Patterns in the Data	6
3.1.2. Areas of Strength	6
3.1.3. Areas for Improvement	7
3.1.4. Conclusions on USAID-funded Schools and ERfKE / 21st-century Learning	10
3.2. COVID-related Adjustments	11
3.3. EQ 2: Student Body Changes in USAID-built and Neighboring Schools	13
3.3.1. Number of Double-shift Schools	13
3.3.2. Number of Rented Schools	13
3.3.3. Distribution of Students by Nationality	13
3.3.4. Student to Classroom Units and Space Ratios	14
3.3.5. Student-teacher Ratios	14
3.3.6. Counterfactuals if USAID had not Built Schools and Perceived Effect	15
3.4. EQ 3: Learning and Other Outcomes in USAID-built and Neighboring Schools	17
3.4.1. Teaching Attitudes and Behaviors	17
3.4.2. Support, Skills, Attitudes	17
3.4.3. Teaching Behavior and Performance	18
3.4.4. EQ 1B: SKEP Start-up Training and Adoption of Student-centered Methods	20
3.4.5. School Programming and Facilities Including for People Living with Disabilities	21
3.4.6. Student Outcomes	22
3.4.7. Community Outcomes	25
3.4.8. Unintended Effects	26
3.4.9. Conclusions	26
4. RECOMMENDATIONS	**29**
4.1. School Design-related Improvements	29

4.2. School Use, Procurement, and Measurement Imp rovements
31
5. APPENDICES **34**
5.1. Appendix 1: Scope of Work 35
5.2. Appendix 2: Inception Report Including Detailed Methods 51
5.3. Appendix 3: Information Sources – List of Datasets Accessed, Interviews, Focus Groups 88
5.4. Appendix 4: Information Sources – References 91
5.5. Appendix 5: Broader Project Background 93
5.6. Appendix 6: Learning Community Example 97
5.7. Appendix 7: Methods – Additional Detail on Sampling, Response Rates and Statistical Tests 98
5.8. Appendix 8: Methods - Schools not Surveyed during the School Observations and Coding 101
5.9. Appendix 9: Methods - Data Collection Tools 102
5.9.1. Focus Group Discussion Tools 102
5.9.2. Evaluation and Evaluability Assessment Building Performance EFEI Survey 107
5.10. Appendix 10: COVID-related Adjustments in Schools 116
5.11. Appendix 11: Evaluation Question 1A – Completion of Construction Work and Timeline Deviations 117
5.12. Appendix 12: Detailed Delay Notes from by Current Construction Management Contractor 119
5.13. Appendix 13: USAID-funded School Procurement and Construction Timeline Proposed by Current Construction Management Contractor 122
5.14. Appendix 14: Scores by Index and Sub-indicator 123
5.15. Appendix 15: Summary Scores, Instruments 1 and 2 by USAID Activity 127
5.16. Appendix 16: Summary Scores, Instruments 1 and 2 by Sex, Education Level, Urbanity, Region 128
5.17. Appendix 17: Summary Scores, Instruments 3 and 4 (Principal and Teacher Survey) by USAID Activity 129
5.18. Appendix 18: Summary Scores, Instruments 3 and 4 (Principal and Teacher Survey) by Sex, Education Level, Urbanity, Region 130
5.19. Appendix 19: Disaggregated Statistical Tests from Teacher Survey 131
5.20. Appendix 20: Additional Information on Teacher Support, Attitudes, and Behavior 132
5.21. Appendix 21: Photographs of USAID-funded School Existing Conditions 134
5.22. Appendix 22: Photographs That Help Demonstrate Recommendations 144
5.23. Appendix 23: Teacher COVID-19 Responses 156
5.24. Appendix 24: Statistical Tests on Construction Timelines 157
5.25. Appendix 25: Principal Responses on Crowding 159
5.26. Appendix 26: MoE Supervisor Classroom Observation Tool in Arabic 161
5.27. Appendix 27: ESMP Data on Facilities 193
5.28. Appendix 28: LQAS Statistical Test Tables 197
5.29. Appendix 29: PISA Statistical Test Tables 198
5.30. Appendix 30: NAfKE Statistical Test Tables 202
5.31. Appendix 31: Educational Quality Control Statistical Test Tables 208
5.32. Appendix 32: TIMSS Statistical Test Tables 212
5.33. Appendix 33: Stakeholder Presentation Part 1 213
5.34. Appendix 34: Team Members 214
5.35. Appendix 35: Statements of Difference 227
5.36. Appendix 36: Conflicts of Interest Disclosures 243

EXECUTIVE SUMMARY

Purpose, Evaluation Questions, and Methodology

This evaluation was designed to examine information from USAID school infrastructure activities in Jordan, which were selected in support of the Kingdom's Education Reform for Knowledge Economy (ERfKE) goals to support a transition into a knowledge-based economy and hub for technology. The purpose was to inform the design of future schools and determine how USAID infrastructure has affected students and communities. The evaluation and its data collection tools were informed by research and best practice including that effective learning environments support a variety of learning activities in a way that most classrooms worldwide are not equipped to do.

This evaluation involves three primary evaluation questions that deal with use and usability, school occupancy, and outcomes for teachers and students.

1. What are the positive and negative aspects of the physical school environment (inside and outside spaces) that should be taken into consideration for future school construction?
2. In what ways, if any, has the student body changed in USAID built and neighboring public schools?
3. Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

The evaluation team also was asked to collect information on COVID-related safety adjustments in USAID-funded schools and to examine patterns in construction timelines.

The evaluation's methodology included cross-sectional data and comparisons across three points in time for question 2 relying on quantitative with some qualitative methods. These included observations of 104 of 108 USAID-funded schools across three activities: Jordan School Construction and Rehabilitation Project (JSP), Jordan Schools Expansion Program (JSEP), and Schools for a Knowledge Economy Program (SKEP). The school observations emphasized structure and potential improvements; surveys of principals and an online teachers survey from these schools; remote focus groups of teachers, field directorate supervisors, and SKEP Start-up Activity coaches; and secondary data analysis. A set of neighboring schools were drawn with support from the Ministry for comparison purposes from neighboring catchment areas defined as a one-kilometer radius for basic education and three kilometers for secondary education. The analysis of question two compared school populations across three academic years - 2010/11, 2015/16, and 2018/19. The first year was chosen as the academic year before waves of Syrian refugees arrived and last dates as the last academic year prior to a pandemic, which affected teaching and learning as well as the ability of the evaluation team to observe schools in session or interact with students.

Findings and Conclusions

Evaluation Question 1: Aspects of Physical School Environment

Findings from observational data show an expected ranking of scores from higher to lower for SKEP, JSP, and JSEP schools with room for improvement for all schools. Overall, there were many positive elements among USAID-funded schools with some improvements shown between JSP and SKEP schools. The schools were designed to reasonably high standards with high-quality materials, all basic building features present, good daylight and ventilation, and accessibility for students with disabilities. Further, the schools contained age-appropriate furniture, positioned shared teacher offices close to classes, and

contained individual space for student personal items. The buildings also scored well from a student safety perspective.

There were many areas for potential improvement in future schools, however, as the schools fell short in design and probably in how they are utilized when evaluated against the goals of 21st-century learning. While the designs were improvements over traditional schools in Jordan, the buildings were not designed to fully facilitate modern methods of teaching and learning in line with the ERfKE goals. Conclusions with respect to areas for improvement follow, categorized into three areas with further detail provided in the main text:

Program Deficiencies

- Outside of early grades, specialty learning spaces generally were not organized as learning communities. Learning communities[1] organize direct instruction spaces like classrooms around ancillary spaces like seminar rooms, small group rooms, teacher work rooms and learning commons in order to facilitate hands-on student-centered and directed learning.
- Storage for learning resources was somewhat insufficient.
- There were minimal options for students to eat beyond standard seating areas.
- Technology was not consistently used as a tool to teach, and students themselves did not use electronic technology as would be expected in a modern school.

Architectural Design Inadequacies

- Outdoor areas were not fully optimized for learning and play including insufficient outdoor areas dedicated for learning and shade.
- Indoor learning spaces did not connect directly to the outdoors to extend learning space. Less than 40% of SKEP or JSP schools had dedicated outdoor learning spaces near the school building and 51% of these schools had sufficient outdoor areas for messy work. See specific ways in which to better connect indoor and outdoor spaces as shown in Section 5.22, Recommendation # 10 Appendix 22 of this report.
- Teacher resources areas were limited. See a properly outfitted teacher office – Section 5.22, Appendix 22, Recommendation # 5 of this report. At 56% of JSP schools, teacher offices lacked opportunities for collaboration, limited visibility of student areas, were not adequately furnished, nor had adequate room for individual storage. Additionally, only 68% of JSP and 89% of SKEP schools offered a mix of formal and informal spaces for teachers to collaborate.
- Classrooms had temperature swings during different seasons.
- Enumerators observed that only 62% of JSP schools were organized to facilitate more than just lectures, as compared to 89% of SKEP schools. Additionally, JSP lacked learning community spaces or classroom groupings at 74% of their schools, and only 64% of JSP schools had informal group tutoring and table groupings available adjacent resource areas.
- Many schools lacked dedicated safe areas for buses to load or unload students.

Lack of Adequate Furnishings and Poor Maintenance

- Furniture was durable and appropriately sized but lacked variety with limited use of furniture that could encourage multiple modalities of learning beyond lecture and presentation.
- Building upkeep was lacking and many items remained in disrepair as schools age, a common problem across the system.

[1] See Section 5.6 Appendix 6 for a sample learning community diagram.

COVID-related Adjustments

Teacher survey data indicate that teachers from USAID-funded schools are somewhat more confident in measures taken by their schools to return to in-person learning. Five measures almost universally adopted among USAID schools included signs and floor stickers demonstrating social distancing, vaccination campaigns among teachers and staff, free masks, requiring masks inside the school, and increasing distance between classroom chairs to at least a meter apart. While the protective measures undertaken by neighboring schools were fewer across all measures, it was notable that substantially fewer of these schools reported opened windows, limited outside visitors, or offered masking stations, three easy, low-cost approaches to reducing spread of the virus. Few schools seemed to undertake measures to increase airflow in bathrooms, a known vector of viral transmission generally.

Completion of Construction Work and Timeline Deviations

The primary observable variable affecting success in on-time delivery of school construction projects was the onset of COVID and a nationwide lockdown, which doubled delays on average.[2] However, delays among contractors with better systems and commitment to contracts were a minimum of about two months. The evaluation found a difference in delays given a higher number of schools contracted and location outside Amman but only prior to COVID, and the differences were modest relative to the very long delayed timelines among some contractors. Some contractors were consistent in meeting timelines while others were not.

Evaluation Question 2: Student Body Changes in USAID-built and Neighboring Schools

The construction of the USAID-funded schools seems to have led to decreases in crowding among neighboring schools in the first two years after construction was completed. Indicators measured included a number of double-shift schools, rented schools, student nationality, ratios of students per classroom units and square meter, and student-teacher ratios. The student body increased over the period due to increases in both Jordanian and Syrian students (by about 20%), leading to large increases for both USAID-funded and neighboring schools in numbers of double-shift schools and smaller increases in the other measures of crowdedness.

Basic education levels were more crowded than secondary, although increases occurred for both levels by 2018/19. Based on available data from USAID-funded JSEP expansion schools, the number of students per square meter decreased by 40 percent between average existing classrooms and entirely new JSP and JSEP classrooms and by almost half between existing neighboring and SKEP schools.

A counterfactual analysis indicates that had USAID not invested in the schools, there would have been at least 27 percent more double shifts, or an additional 45 and 71 double shifts depending on the number of buildings the government rented.

Evaluation Question 3: Learning and Other Outcomes

Evaluation question 3 relied secondarily on survey data from principals and teachers and primarily on available secondary data, all of which had significant limitations in clarifying the effect of the school construction on learning and other standard academic outcomes across levels and school types. Data were even more limited in terms of the types of effects expected on building 21st-century competencies aligned with ERfKE and best developed in truly student-centered learning environments.

Overall, students were reported by teachers and principals at USAID-funded schools to have greater sense of community, belonging, slightly lower levels of bullying, higher attendance and use of

[2] Reasons provided by stakeholders included the lockdown and re-mobilization, disease outbreaks, effects on material and equipment suppliers, the transition to working on a cash-only basis, and a reduction in the size and quality of the labor pool.

technology in teaching, and better outcomes generally. The evidence also pointed to higher attendance but no difference in (already low) vandalism and grade repetition, teaching time on task, or student involvement in school activities. Parents and communities were better engaged, especially at the SKEP schools, although apparently not enough to overcome some resistance to use active-learning methods by motivated principals and teachers in some schools. USAID-funded schools were better organized to support students living with disabilities, but fewer disabled students were enrolled in the USAID-funded schools.

There was some evidence of slightly better learning in SKEP and JSP early grades, where building designs and support better facilitated real learning environments that promote co-teaching and student-centered learning. There was also a modest extent of differentiation in traditional subject outcomes, such as in upper grade national assessment results from 2014 designed to measure both traditional subjects and knowledge economy skills. However, outcomes measured did not uniformly favor USAID-funded schools. Among schools that were selected to generalize nationally rather than across USAID-funded and neighboring schools, two sets of international assessment scores were slightly higher. Further, it is important to note though that success in traditional school subject grades and assessments reflects on student ability to succeed within the existing, traditional system rather than necessarily their prowess in terms of 21st Century skillsets such as self-motivation, critical thinking and problem solving, wellbeing and belonging, cooperation, and understanding of complex situations.

Stakeholders also provided reason to expect there may be diminishing effects over time not just in terms of differences in teaching in newer over older schools, but also possibly within newer schools as modern technology, on which the teachers are trained to rely for their newer teaching methods, breaks or principals restrict their use. Structural limitations to student-centered methods, including a lack of co-teaching areas in upper grades and a dense curriculum combined with short classes will present a long-term limitation on expecting differences in teaching and learning.

Recommendations

The report provides two sets of recommendations, those related to school design-related improvements and those related to school use, procurement, and measurement improvements. These recommendations are explained in full in the text.

The following bullet-point version of the recommendations with respect to **school design-related improvements** were intended to guide the Mission toward creating agile and dynamic school designs that will work today, stand the test of time, and facilitate the delivery of a modern curriculum that equips students with the skills they need for success in a rapidly changing world and to meet ERfKE goals.

- Design for Student-Centered Pedagogy through Learning Communities across All Grades (beyond Early Grades)
- Add Specialized Learning Spaces
- Create Inspiring, Multi-Use Spaces
- Boost Educational Technology, as Allowed
- Improve Teacher Offices
- Increase Variety of Furniture
- Assure Adequate Storage
- Plan for Future Expansion, if Relevant
- Improve Eating Areas
- Improve Outdoor Play and Learning Spaces and Indoor-Outdoor Connection

- Add Informal Learning Areas
- Create Greater Room Variety and Connectivity
- Improve Student Drop-off and Pick-up Zones
- Provide Indoor Fitness Areas Where Such Areas are not Provided
- Assure Every School Includes Spaces for the Performing Arts
- Make Science Labs More Flexible
- Provide for Increased Community Use

The following bullet points summarize recommendations related to **school use, measurement improvements, and procurement** based on the findings and conclusions across all sections of the report.

- Examine with MoE Obstacles to Student-centered Learning Environments
- Adapt Student-centered Methods to Context
- Adapt Technology to and Policy Interventions Regarding Low Maintenance Context
- Build Community Support for Student-centered Methods
- Deepen Support for Learning Environment Adoption During or After Start-up Support
- Have USAID-funded Schools Serve as Learning Nodes
- Improve Inclusion for Students with Disabilities
- Promote Measurement of Competencies Beyond Traditional Academic Testing
- Consider Promoting Skill-focused National Assessments
- Supplement International Assessments
- Increase Self-assessment and Promotion of Student-centered Learning

1. BACKGROUND AND PURPOSE OF EVALUATION

1.1. PROGRAMMATIC OVERVIEW

Due to rapid population growth, the influx of Syrian and other refugees, and economic constraints that have caused a migration of students from private to public schools, Jordanian public schools have been strained by overcrowding in recent decades. Over 720 schools have operated double shifts to accommodate students, while many others operate with classroom sizes beyond their intended capacity. The Ministry of Education (MoE) also operates 777 schools in rented buildings. Both academic and non-academic learning outcomes across Jordanian public schools are affected by challenges in access to safe and engaging learning environments. In response to these needs, the Government of Jordan (GoJ) launched the Education Reform for Knowledge Economy (ERfKE) in 2003 in coordination with the MoE to support its transition into a knowledge-based economy and a hub for technology in the region. The context is discussed in greater detail in Appendix 5.5.

In support of GoJ efforts, USAID launched infrastructure activities beginning in 2006 with the four-year Jordan School Construction and Rehabilitation Project (JSP) and continued in 2014 with the six-year Jordan School Expansion Program (JSEP), followed in 2015 by the five-year Schools for a Knowledge Economy Program (SKEP). The focus of these activities was to reduce overcrowding in public schools, replace rented and double-shifted schools and provide a safe and more suitable school environment to respond to the needs of the MoE's reform efforts. USAID established specific guidelines for construction with implications for use. However, some guidelines may have aligned more closely than others with the objectives of establishing 21st century classrooms and some may have been adhered to more closely than others in implementation, implying scope for suggestions for improvement. Further, USAID did not have authority for mandating use as planned, as expressed to the evaluation team both anecdotally and via photographic evidence.[3]

Table 1 presents the activities that were implemented, budgets, durations, interventions undertaken and those linked to this evaluation.

Table 1: USAID Activities and Projects for Education Sector Under Evaluation

USAID Activities and Projects	Project Duration	Cost (million)	Interventions	Evaluation Scope
Jordan School Construction and Rehabilitation Project	2006-2013	$199	• Built 28 schools • Rehabilitated 100 schools	28 built schools
Jordan Schools Expansion Program	2014-2022	$180	• Rehabilitate 120 schools • Expand / rehabilitate 300 kindergarten classrooms • Expand / rehabilitate 50 sports fields / facilities.	80 school expansions & rehabilitations (including 6 JSP)
Schools for a Knowledge Economy Program	2015-2022	$102	• Build 25 schools (9 completed)	9 built schools

USAID supported ERfKE through other relevant activities in education from management systems, to training early-grade teachers on numeracy and literacy, information and communications technology

[3] For instance, the "SKEP Final Planning and Design Guidelines Draft" pp 35-55, 69-73, and 77-79 discuss space adjacencies and clustering of classes, labs, and teacher spaces in line with best practice. However, traditional desk types and arrangement were found on pages 66 - 68 as well as in the classrooms visited.

(ICT), and remote learning. School leadership and start up programming were provided for JSP and SKEP schools through a variety of contractual mechanisms.

1.2. PURPOSE AND CONTEXT OF EVALUATION

This evaluation was designed to examine information from USAID school infrastructure activities in Jordan to inform the design of new schools and determine how USAID infrastructure has affected students and communities.

The evaluation and its data collection tools were informed by research and best practice including that effective learning environments support a variety of learning activities in a way that most classrooms are not equipped to do. One perspective on approaches to learning is the 20 "modalities of learning" that Architect Prakash Nair identified and that can serve as a basis for the design of effective learning spaces.[4] When a school is "zoned" so that different learning activities are designed to happen in specific parts of the school, then the seamlessness needed for students to quickly cycle between several learning activities is lost. For example, regular classrooms are good for lectures and student presentations but do not work as well for most of the other modalities, like team collaboration, independent study, and peer tutoring. For learning spaces to work effectively and give students easy access to all or as many of the 20 modalities of learning as possible on an as-needed basis, school designs – for all school levels – would need to move away from the obsolete, traditional "cells and bells" model and towards a learning community model. An example of a school unit organized into a learning community is provided in Appendix 6.

2. METHODS AND LIMITATIONS

2.1. EVALUATION QUESTIONS

This evaluation involves three evaluation questions (EQ)—one with two sub-questions—that fit into three categories: 1) Use and Usability of the Physical Spaces Constructed, 2) Patterns of School Occupancy, and 3) Learning and Other Outcomes for Students and Communities from USAID Built and Neighboring Public Schools. The evaluation questions and any refinement of wording are discussed in further detail in the Inception Report (see Appendix 5.2).

- EQ 1 – What are the positive and negative aspects of the physical school environment (inside and outside spaces) that should be taken into consideration for future school construction?
    - EQ 1A – How long did it take to complete the construction work? In what ways did this deviate from the planned timeline?
    - EQ 1B – Is there evidence that SKEP school start-up teacher and principal training under the modified start-up program has resulted in use by teachers of methods and approaches that build on what the newer schools are designed to facilitate?
- EQ 2 – In what ways, if any, has the student body changed in USAID built and neighboring public schools?

[4] These modalities include independent study, peer-to-peer tutoring, one-on-one with teacher, lecture, team collaboration, project-based learning, distance learning, learning with mobile technology, student presentation, internet-based research, seminar-style instruction, performance-based learning, interdisciplinary study, naturalist learning, art-based learning, social-emotional learning, design-based learning, storytelling, team learning and teaching, play and movement learning. "Understanding Multiple Ways of Learning", pages 67-70. *Blueprint for Tomorrow*, Prakash Nair. Harvard Education Press, 2014.

- EQ 3 – Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

As EQ 1A ties in least with the central focus of the evaluation, it is presented separately in Appendix 5.11. As EQ 1B involved teacher behavior outcomes that are studied under EQ 3, this question is covered as a sub-section under EQ3.

2.2. METHODS

The evaluation utilized a mixed methods approach, predominantly cross-sectional and quantitative with some qualitative data. The quantitative data included observations of USAID-funded schools emphasizing structure and potential improvements (EQ 1); in-person and phone surveys of principals and an online teachers survey (EQ 1 and 3); remote focus group discussions (FGDs) of teachers, field directorate supervisors, and SKEP school coaches (EQ 1B and 3); and secondary data analysis (EQ 2 and 3). EQ 1A involved data on construction timelines. EQ 2 analyzed data cross-sectionally and across three points in time, 2010, 2015 and 2019. The observational collection and principal surveys were drawn from the Education Facilities Effectiveness Instrument (EFEI),[5] a tool used to evaluate the educational efficacy of over $1 billion worth of school facilities worldwide. EFEI was designed to assess schools both on the building design and features that directly affect the performance of teachers and students. The instrument was customized to include items that could reasonably be expected to be present in a well-designed school built in Jordan to meet today's learning needs, where students graduating from schools in Jordan must compete on equal terms with students regionally and globally. The instruments were composed of sub-indicators themselves composed of multiple questions or items rated ordinally.

Thus, in agreement with USAID and in line with the high bar USAID set for itself in the construction of the newer schools, the instruments were geared in measurement toward new or renovated buildings and the bar for excellence was not lowered. The teacher instruments were developed with some sections triangulating with the principal instrument and other sub-indices drawn from the literature on student-centered learning.

Because of COVID-19, data collection minimized exposure and required social distancing and mask wearing for in-person discussions. Data collection was monitored by both the local data collection manager and via review of data and photographs remotely. Methods and quality control measures are described in greater depth in section 5.2.3 of the Inception Report (Appendix 5.2). In order not to simply repeat the prior evaluation and assessment, and to add value and an additional perspective, the observational survey was designed to cover all schools across many dimensions. The observational data collection included 61 items for Part 1 on building design.

The first instrument included location, potential for expansion, layout and views, safety, materials and construction, specialty spaces, building condition, and building component condition. The second instrument included 53 items covering entry, specialty learning spaces, general learning spaces, teacher offices, shared learning resources, health and fitness, the indoor/outdoor connection, and furniture. The principal survey was designed with 91 questions to provide information on the school connection to community; availability of technology; building design and use; eating; teaching and learning; overall satisfaction and social cohesion; energy, materials, and maintenance; and utility infrastructure. A few questions were also added on the effect on neighboring schools, though these were not included in the indices. Finally, the fourth instrument was a short teacher survey of 50 questions. Three sections of the survey were intended to triangulate with the principal survey, covering similar issues involving

[5] Prakash Nair, 2006.

availability of technology, design and use, overall satisfaction and social cohesion. Two sections went in greater depth on teaching and learning. One of these teaching and learning sections was then added into the principal survey to triangulate with teacher responses. Summary scores from the four indices are found in Appendices 5.15 through 5.18.

EQ 2 and 3 were designed with two steps, first conducting an evaluability assessment focused on availability, completeness, and accuracy of available secondary databases, and second, collecting additional data if required. As existing data limitations became apparent quickly, additional data was collected up front by including the previously unplanned teacher survey and FGDs. Further, additional datasets were requested from the MoE for secondary analysis, emphasizing individual-level data where possible. A list of datasets accessed is provided in Appendix 5.4. As data from the pandemic onward would not capture the differential effect of school infrastructure and teaching, secondary data focused on the academic year 2018/19.

2.2.1. Instruments, Sampling, Response Rates, Datasets

The universe for this evaluation was constituted by two sets of schools. The first and primary focus of the evaluation was to examine schools that were built or rehabilitated under USAID-funded activities. A total of 110 schools, as presented earlier in Table 1, were examined, including 37 USAID-built schools (9 under SKEP and 28 under JSP), and 73 expansion schools[6] that underwent USAID-funded rehabilitation and expansion work (under JSEP). The second was comparison schools for EQ 2 and 3 and included neighboring schools (not built or reconstructed by other development partners) defined by catchment areas, representing the schools most similar to the USAID schools demographically. For primary schools, the catchment area was defined during planning as a one-kilometer radius, while that for secondary schools was defined by a three-kilometer radius. These catchments were used to define neighboring schools. The Queen Rania Center for Education and Information Technology used GIS to select schools within these thresholds, and schools listed multiple times were removed.

Data collection was complicated by its being undertaken at the end of the school year and during Tawjihi exams. The teachers' survey sample included all teachers that could be reached from all 110 USAID-funded schools and from 119 neighboring schools where principals provided contact information. Responses were received from teachers from 97 of the 110 USAID-funded schools and 78 of 119 neighboring schools, where principals agreed for their teachers to participate. For the observational data collection and principal survey, 104 of 110 schools were surveyed and included in the sample.[7] Further discussion about the observational and survey complications and response rates as well as focus group discussions and methods for EQ 1A are discussed in Appendix 5.7.

Secondary data drew on student-level data from the 2014 National Assessment for the Knowledge Economy (NAfKE), which covered mathematics, Arabic, and science and examined within those subjects skills in communication, problem solving, knowledge, applying knowledge, and reasoning. The team also received access to student-level data for the GoJ's annual Educational Quality Control examinations covering three grades in various years. The evaluation also drew on student-level data from the Programme for International Student Assessment (PISA) tests of 15-year-old students in Jordan in 2015 and 2018 in math, science, and reading, with higher-level skills underlying those fields. Finally, the

[6] This figure excludes schools with expansions under JSEP that were built new under JSP.

[7] Three principals were unreachable after three or more attempted contacts. For one school, two attempts were made to survey the structure indicated by USAID and the A&E firm. However, after data collection ended, it was discovered that the new extension to the school had been transferred to a primary school. A list of the schools not surveyed, and the reasons why are included in Appendix 5.7.

evaluation was provided access to the Trends in International Math and Science Study (TIMSS) assessment of 2015 and 2019, which assessed 4th and 8th grade students in math and science.

From USAID's Early Grade Reading and Math Project (RAMP), the evaluation drew on its Lot Quality Assurance Sampling Survey (LQAS) of early grade reading and math as well as the field directorate supervisor classroom observation dataset for early grades. Other sources of data included student repetition rates and a physical and phone survey of most of the MoE schools by the Enhancing School Management and Planning (ESMP) Activity from 2018-19. The evaluation also received, but could not use due to invalid data, student-level scores from the Tawjihi exam and school-level pass rates. These data sources, how they were used and analyzed, and limitations are discussed further in Appendix 5.7 and throughout the document, as relevant.

2.2.2. Limitations

Given that the evaluation occurred during a pandemic without students in schools since March 2020, the team analyzed data on outcomes from 2018/19. This limited the evaluation's ability to speak to outcomes for recently completed SKEP schools or to observe schools in operation. This is an important caveat because the evaluation could not observe classes directly, instead relied on self-reporting from principals and teachers, whose responses were subject to social desirability response bias. All stakeholders were familiar with the Ministry's goals with respect to ERfKE and the National Interactive Curriculum, and the supervision process and forms clearly linked performance with ability to apply student-centered methods, as far as the supervisors were trained appropriately to do so.

The team attempted to partially offset this bias by asking some questions in ways that framed direct instruction approaches in a positive light and calculated them as a sub-index and analyzed classroom observations from MoE supervisors for early grades, as available. The pandemic restricted travel and the ability to conduct most in-person training, surveys, or FGDs, but mitigation measures and experience with remote training and collection ensured no loss of quality or learning. Further, the analysis included triangulation of data across different sources, combining and comparing responses by principals, teachers, and other secondary data.

Creating or adapting a methodologically appropriate assessment of higher-level skills in line with the goals of the ERfKE reforms was not feasible due to the lack of primary data, so all measures used secondary data. As caveats, traditional measures of scholastic achievement, such as grades and subject assessment scores, focused on traditional 19th to mid-20th century measures of school success rather than skills like teamwork, self-direction, initiative, and entrepreneurialism that modern learning communities foster. Those important 21st century skills, aligned with ERfKE, were not captured in this evaluation. Measures of differences between two sets of schools also may have overstated the effects of the interventions if the new schools had disproportionately higher or "privileged" households of socioeconomic status, who could utilize resources to get into the better schools, as suggested by some stakeholders.[8] Further, each dataset provided outcomes with some limitations, in particular, the Education Quality Control examination data is school level and not entirely comparable with other analyses with clearly-identified neighboring schools, as indicated in Appendix 5.7.

As USAID funded multiple activities, the evaluation was unable to parse the effect of the infrastructure alone. This was not problematic as the evaluation did not aim at attribution. Further, the literature

[8] The evaluation team was not able to access data to test this hypothesis, and other stakeholders indicated that the process for student selection was transparent and unbiased.

suggested that, while investments in infrastructure can generate changes in learning outcomes,[9] these changes are strengthened by complementary capacity building support in how to best utilize the new or upgraded facility and resources.

There were some inconsistencies between the observed building design and conditions and the principal and teacher survey responses. Overall, the feedback from the surveys was more positive than one might gather from just the field observations alone. Unfortunately, we could not observe the schools in use to confirm or question the reliability of survey responses with respect to the intention of how the questions are framed. Under the circumstances, the report relies more on conclusions that could reasonably be drawn from the field observations even when they may not fully match up with what teachers and principals are saying.

3. FINDINGS AND CONCLUSIONS

3.1. EQ 1: Aspects of Physical School Environment to Take into Consideration for Future Construction

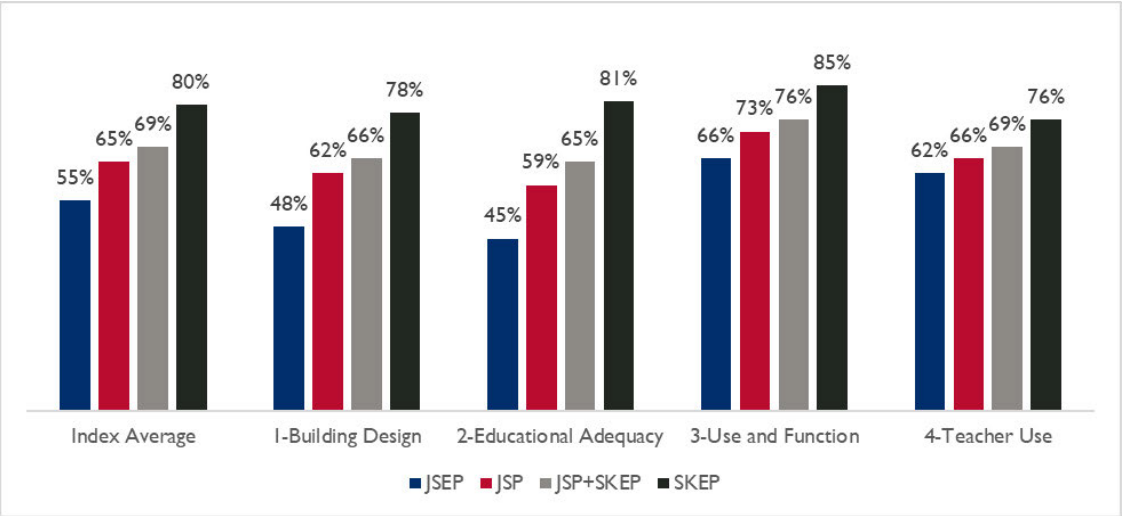
3.1.1. Overall Patterns in the Data

Figure 1 shows overall scores by index and the combination of the four indices as a percent of the maximum possible scores. Scores below 70% represent areas for improvement, scores above 75% represent a desirable and achievable goal for the country, and scores closer to 90% represent a preferred stretch goal development partners could aim for. The figure demonstrates an expected difference between JSEP schools, which only received an expansion on an existing, outdated school, and JSP and SKEP schools. They also demonstrate large differences between SKEP and JSP schools. This represents both improved design and a deterioration and insufficient maintenance already among the JSP schools. The difference is slightly more notable in the schools' educational adequacy than building design or principals' responses with respect to the questions in the index on use and function. The differences are smaller yet among teachers' responses across school types. Smaller differences are found among disaggregates tested, especially from the teachers' survey, with boys schools generally scoring lower than girls and mixed schools and rural schools scoring lower among a few measures. As these differences are not germane to the findings in the next two sub-sections, the tables are presented in Appendix 5.19.

Tables that show scores by index and sub-indicator are provided in Appendix 5.14. The teacher survey is discussed in greater detail under EQ 3, section 3.4.

[9] See for instance, http://dro.deakin.edu.au/eserv/DU:30036968/blackmore-researchinto-2011.pdf

Figure 2: Index Scores as a Percent of Maximum Possible by Instrument and USAID-funded Project/Activity



3.1.2. Areas of Strength

This sub-section discusses general areas of strength among USAID-funded schools with reference to schools by activity/project as relevant. Among the USAID-funded schools, the overall differences across regions, between rural and urban areas, and between primary and secondary schools were relatively modest across all instruments and so not discussed, although the scores are presented in Appendix 5.16 and 5.18.

School buildings can be a very significant (and often overlooked) force in creating a positive school climate. How students feel about school and how well they perform is directly impacted by the quality of their learning environment. The discussion below shows that most of the surveyed schools boasted several positive attributes.

All **basic building features** were present and generally in functioning order except for those noted below in the areas of weakness. The schools were designed to reasonably high standards and mostly held up well despite the lack of adequate maintenance, as discussed under weaknesses.

Learning spaces had access to **operable windows** (natural daylight / ventilation). Daylight is important not only for student health and wellbeing, but there is evidence as well that improved daylighting correlates to higher student academic achievement.

The enumerators found the USAID campuses **easy to navigate** as a result of good organization and wayfinding. Especially in larger schools, wayfinding and the proper location of classrooms, labs, and common spaces, can minimize travel distance and make schools function more efficiently.

SKEP schools in particular were built with **access for students with disabilities** to the school and toilets fully accounted for, with JSP better than JSEP schools, which generally lack good access, but trailing substantially SKEP schools, as discussed further under section 3.4.5. Supervisors indicated that the USAID-funded schools were better equipped than other schools to support students with disabilities in terms of accessible ramps, elevators, resource rooms, and toilets.

The **quality of interior design, materials, and lighting** was good. This refers more to the quality of materials selected than the adequacy of lighting and construction quality. Similarly, some attempts were made to furnish the schools with **age-appropriate furniture**, and all students had access to individual desks and chairs or, less positively, tablet armchairs.

Within the schools, many key **public indoor spaces had direct connections to the outdoors**. This is an architectural benefit in that it affords opportunities for better indoor-outdoor connections. However, to fully utilize this feature, outdoor spaces need also to be furnished and shaded as appropriate, which will be discussed further under weaknesses alongside classroom spaces.

Surveys noted that many **shared teacher offices/workrooms** were generally within a 30 second walk from their learning spaces. This is a valuable asset for the schools since teachers need to have professional spaces to work in and areas where they can take a well-deserved social break or time to coordinate with their colleagues in-between classes. In terms of personalized spaces, SKEP schools were particularly strong in providing each student with an **individual space for their personal items** with JSP trailing somewhat and JSEP schools far behind. Finally, resource rooms were available in the new schools for potential use by teachers for special needs or for students who needed one-on-one attention for whatever reason.

3.1.3. Areas for Improvement

This sub-section identifies problems unearthed during the field observations and subsequent surveys that could be addressed as part of upcoming USAID-funded school construction programming. While some of the items from the indices rated as inadequate may indicate a need for increased capital expenditures, in many cases, good design can balance the scales by creating more cost-effective solutions, merely improving the quality of the architectural and educational design. Others (such as the need for better furniture and more specialized equipment) would require higher funding or reprioritization of some funding.

Generally, the areas for improvement fall into three categories: 1) Program deficiency, meaning that the original design brief left out components that would be considered essential for a fully modern school; 2) design inadequacies, which refers to architectural design based upon an older (and obsolete) "cells-and-bells" paradigm; and 3) lack of adequate furnishings and poor maintenance. Each of these deficiencies has one or more pages of photographs associated with the deficiency, as presented in Appendix 5.19.

I) Program Deficiency

Specialty learning spaces were absent from many schools, including meeting spaces and multi-use/hands-on learning rooms. All SKEP schools had what the enumerators judged as adequate areas for hands-on learning. Conversely, while 75% of JSP schools had sufficient space, 54% of observed schools lacked proper resources in the space.

Figure 3. Um Maadab Al Khuza'eyah Comprehensive Secondary Mixed School (SKEP)

Student storage for JSP schools is insufficient. Storage is important for both student belongings and materials as well as for school learning resources. Student storage in the new schools was mostly large enough for individual students and well-distributed in smaller groupings. JSEP schools were particularly deficient in storage, but even JSP schools were deficient in the learning storage supply (at 43%). In labs, JSP scored 88% and SKEP = 100% on storage next to work area and 70%, and 94% for storage with counters and sinks. Even in SKEP schools, the enumerators' rated that storage space "might be inadequate" for learning materials (56% or 5 of 9) and for students (22 percent or 2 of 9)."

Specialty learning spaces were not universally designed properly to meet the needs of 21st century learning, lacking flexibility and features. Modern labs benefit from services at the perimeter of rooms or

supplied from ceiling grids. This allows the lab tables to be movable. That was not the case with most of the renovated or new schools, including SKEP schools; moreover, there were limited number of outdoor learning spaces directly connected to the labs, with SKEP scoring 83% and JSP scoring 40%. There were insufficient areas for art, such as drawing, painting, sculpture and ceramics.[10] Both in terms of quality and quantity, spaces for performance and music were strong among SKEP schools generally though less so for JSP schools and should be consistent for all future schools moving forward. SKEP schools scored 78% and JSP schools 70% overall, and 89% and 70% respectively have appropriate musical performance space. SKEP schools scored better generally than JSP schools, and USAID should assure that these spaces are available for all future schools without exception.[11]

Teachers indicate wireless Internet was not available across all schools[12], and video conferencing generally was not an option to bring in outside teachers. JSP teachers in FGDs indicated this affected use of facilities, such as laboratories. The Mission indicates this is not an infrastructure issue, as schools are equipped with the wired network but that the MOE policy does permit WiFi in schools. Assuming allowed, high-bandwidth wireless connections would allow anytime, anywhere learning and connect the school to the abundance of learning opportunities that can be found online.

There were minimal options for students to eat beyond standard seating areas. The evaluation did not observe student cafes or cafeterias. Such spaces are not just suitable for eating but serve many other purposes, such as providing valuable project space, an area for social and emotional development and for community meetings and school events.

Technology was not consistently used as a tool to teach, and students themselves did not use technology. There was not much evidence that technology was being used in the classroom to the extent that it should in a modern school. Portable laptop carts could be used in situations where it is not possible for every student to own a laptop. Computer labs were also set up more for direct instruction than for collaborative work or student projects (see details in section 3.4.5).

II) Architectural Design Inadequacies

Figure 5. Um Romanah Secondary School for Boys (JSEP)

Outdoor learning areas were lacking and few learning spaces connected directly to the outdoors. Although many rooms had outer windows and possibilities for extending learning outdoors under some lightweight sun shading, no attempt had been made to provide terraces or decks directly connected to primary learning spaces. Only 39% of SKEP schools and 20% of JSP schools had dedicated outdoor learning spaces within 15m of the school building. Teachers in FGDs confirmed that their students preferred learning lessons outdoors and would prefer doing so more often. For example, only 3% of JSEP schools (example shown to right) and 51% of JSP and

[10] Dedicated areas for different kinds of art will vary, since the work areas, equipment, storage needs, and ambiance will be different for drawing and painting vs. sculpture and ceramics or graphic design.

[11] Options for performance spaces include stairs that look onto a raised stage and big drop down screen or large LCD Monitor, dedicated auditoriums (not recommended due to cost and wasted space that could be better used for teaching and learning), which all SKEP schools have, or performance space with portable stage and some seating, which only 44% of SKEP and 48% of JSP had. Other alternatives include black box theatres, drama studios, and areas for dance. These should, ideally be next to production facilities and places for set design and have ancillary storage, green rooms, changing areas, etc.

[12] Even in SKEP schools, only two-thirds of principals indicate it is available throughout the building. Data from ESMP confirm this finding and indicate that problems with the Internet or wireless Internet connectivity and bandwidth were not more frequent at neighboring schools (p=0.72, p=0.73, respectively, Appendix 5.27).

SKEP schools had sufficient outdoor areas for messy work. Finally, 44% of JSP schools and 67% of SKEP schools had dedicated outdoor areas set up for gardening.

Outdoor learning space mostly was not properly shaded. Where outdoor spaces were provided, they were not properly outfitted for learning nor were they shaded, making them nearly impossible to use for extended periods. There was very little greenery, and most paved surfaces will radiate too much heat to be usable during the middle of warm days. During the cooler months of the year, these areas will have more utility.

Figure 6. Khawala Bint Al Azwar Basic Girls School (SKEP)

Teacher resources were limited in some cases. Offices for teachers, where they existed, were not properly outfitted to be used as professional workspaces or as areas that encourage collaboration – essential to prepare interdisciplinary team-teaching assignments. While 100% of SKEP schools had fully outfitted office spaces for teachers (well-removed from classrooms, a drawback discussed elsewhere), 56% of JSP schools provided teachers with elements such as conferencing tables, phones, computers, lockable personal and professional storage, and other equipment. Additionally, 68% of JSP and 89% of SKEP schools offered a mix of formal and informal spaces for teachers to collaborate.

Outdoor learning/play options were very limited. Some marginally acceptable, fixed play equipment for younger children was observed, but these are not the preferred way for young children to play. Opportunities for indoor and outdoor play for older students was non-existent to very limited.

Most classrooms outside of early education were designed as traditional, isolated rooms and organized by current management such that, while in class, students spent most of their time listening to teacher lectures rather than student projects/activities. Isolating rooms in upper basic and secondary levels encourages management to retrench to content-driven, teacher-centered learning. This reduces student engagement, as discussed further under section 3.4.6. Enumerators noted that only 62% of JSP schools and but 89% of SKEP schools were had at least some classrooms (most frequently in the sciences) organized to facilitate more than just lectures[13], with a variety of equipment, technology, and learning resources available in those classrooms. Furthermore, while enumerators indicated that 78% of SKEP schools' early basic education classrooms were in grouping of 4-6 in line with USAID guidelines, to promote collaboration, this was noted among only 26% of JSP schools. And while all SKEP schools had informal group tutoring and table groupings available adjacent to resource areas, this was only observed at 64% of JSP schools. Appendix 6 provides an example of how to create real learning communities throughout basic and secondary levels, where students are even better able to avail themselves of the better development learning communities offer.

Many schools lacked dedicated **safe areas for buses** to load or unload students.

III) Lack of Adequate Furnishings and Poor Maintenance

[13] As noted in the limitations, some schools were visited while closed and therefore the enumerators could not fully assess the full functionality of the rooms, but rather scored based on the layout the rooms were in at the time.

Furniture lacks variety in type, height, and materials. Most of the non-specialty classrooms (other than for very young children) had furniture designed and arranged solely for a teacher-centered pedagogy. In addition to a teacher desk, the classrooms were furnished with a desk that could accommodate one to two students. Plastic and metal chairs are durable but not ergonomic and not suitable for students to sit in for long periods of time. Soft or other comfortable seating like lounge chairs, sofas and foam seating were extremely rare. Additionally, the lack of sound absorbing materials used in the classroom may have prevented from rooms being acoustically comfortable; similarly, the principle surveys found that 72% of JSP schools and 89% of SKEP schools had classrooms that may have classes affected by outside noise.

Figure 7. Hamad Al Farhan Secondary School for Boys (SKEP)

Schools had temperature swings (too hot, too cold). Enumerator observations and discussions with principals suggest that many rooms in JSEP schools (though not necessarily the new wings) were not sufficiently insulated, and not all of them were air-conditioned making them uncomfortable on both hot and cold days with respondents indicating cold winter days as particularly problematic.

Building upkeep was lacking and many items remained in disrepair as schools age as noted below:

- **Interior Walls:** The condition of the interior wall materials at many schools (primarily JSEP and JSP) showed unacceptable levels of peeling, stains, scratches, and water damage on painted surfaces and wall coverings.
- **Toilets:** On average, toilet facilities, even among JSP and SKEP schools, were in only okay condition, with most fixtures working but not necessarily fully clean and stocked.14 In some schools, however, especially among JSEP and JSP, toilets were dirty, had exposed piping, smelled bad or had multiple non-working fixtures.
- **Library Collections and Computers:** Teachers in FGDs noted that library collections and computers were old and out of date.
- **Air Conditioning:** Lack of air conditioning affected the ability to use common rooms and theaters.

Issues with getting maintenance from the GoJ was a widely recognized issue among principals outside of USAID's manageable interest.

3.1.4. Conclusions on USAID-funded Schools and ERfKE/21st-century Learning

The field observations yielded sufficient data to draw some useful conclusions and provide clear direction for the design of future schools funded by USAID.

- Construction quality of both exterior and interior elements were reasonably good.
- The buildings scored well from a student safety perspective and were built to modern standards.
- The site designs observed did not generally consider the possibility of future expansion.15
- Maintenance was a problem.
- Outdoor areas were not fully optimized for learning and play.

14 Further, the difference between USAID-funded schools and neighboring schools was small and statistically insignificant (p-0.64).

15 While the evaluation team recognizes that nine of the JSP schools already have been expanded upon under JSEP and that the JSEP school sites were not designed originally by USAID, even the SKEP schools were rated at only 22 percent of their maximum across three questions.

- Learning environments seemed predominantly oriented towards a teacher-centered, top-down "delivery of content" model.16
- Adequate areas for the development of essential soft skills like social and emotional development, critical thinking and complex problem solving were lacking.
- While teacher collaborative areas were within a 30 second distance from the classrooms, they did not facilitate passive supervision. The ideal location for teacher offices would have been in the midst of student work areas to allow for passive supervision of students while teachers worked in their separate space.
- Facilities to properly address student health and fitness were lacking.
- There was a lack of adequate student storage in some cases.
- Furniture was durable but lacked variety with limited use of furniture that could encourage multiple modalities of learning beyond lecture and presentation.

The recommendations that follow from these findings and conclusions address the problems head-on. The idea is not for newly constructed schools to change the direction of education in Jordan overnight, but to design them in a way that allows existing teaching and learning models to evolve over time. In other words, the recommended way forward is to create agile and dynamic school designs that will work today, stand the test of time, and facilitate the delivery of a modern curriculum that equips students with the skills they need for success in a rapidly changing world.

3.2. COVID-related Adjustments

"When the school opened, we were amazed at it, and we used all its equipment and facilities…. But now, everything in the school is broken and ruined; even the air conditioners in the classrooms are out of order." – SKEP School teacher

The most reliable data gathered on how schools were adjusting to COVID was from the teacher survey. Additional discussion from school observations and how teachers felt about school readiness for COVID appear in Appendix 5.5. Figure 8 displays responses by school where at least half of teachers responded their school had undertaken a measure.[17] Most teachers across all responding schools indicated their school had undertaken a vaccination campaign among staff. However, otherwise, there were about a quarter to three-quarters fewer neighboring schools where teachers reported undertaking measures compared to USAID schools.

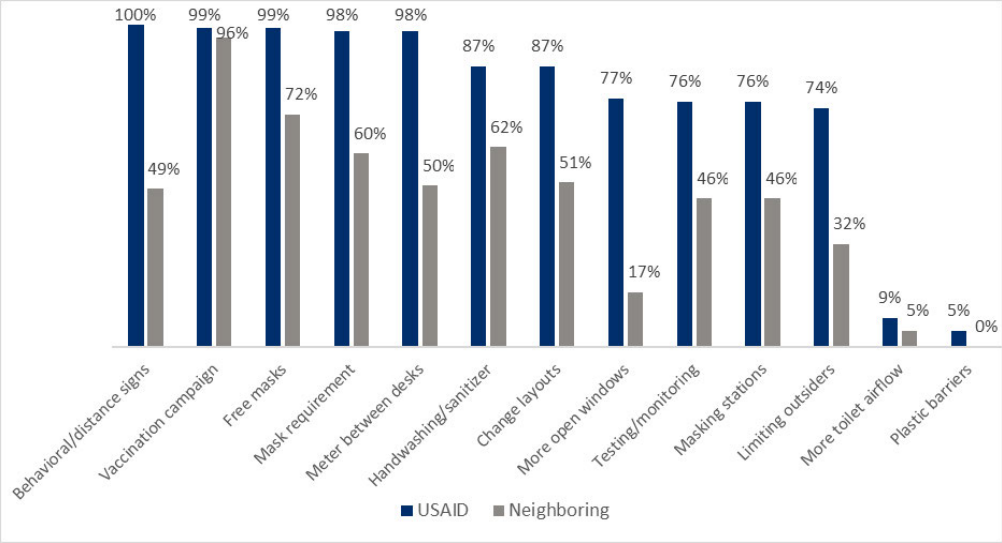
Figure 8 presents COVID measures applied, in order of frequency, among USAID-funded schools. The five measures almost universally adopted among USAID schools included signs and floor stickers demonstrating social distancing, vaccination campaigns among teachers and staff, free masks, requiring masks inside the school, and increasing distance between classroom chairs to at least a meter apart. The latter was challenging to do in the generally larger USAID-funded classrooms, but particularly difficult in smaller neighboring school classrooms. Also high on the list included additional hand washing or

[16] Teachers across USAID and neighboring schools claim to follow student-centered methods, but during COVID at least, their classroom arrangements and furniture seem oriented toward teacher-centered models.

[17] As noted in Appendix 5.19, there were somewhat fewer USAID-funded schools where three-quarters of teachers agreed that their schools undertook measures. The larger difference though was for neighboring schools, where, aside from a vaccination campaign among staff, there were no more than 20 percent of schools where three-quarters of neighboring school teachers agreed these measures were uniformly taken. Some variation was expected between these thresholds of agreement, as some of these measures were judged by some teachers as not widely undertaken or undertaken in the area of the building they frequent.

sanitizer stations, changing room layouts, leaving more windows open, testing temperature or tracking sickness status, limiting outsiders from entering the school, and implementing masking stations.

Figure 8: Proportion of Schools where at Least 50% of Teachers Report their Schools Undertaking Specific Protective Measures



While the protective measures undertaken by neighboring schools were fewer across all measures, it was notable that substantially fewer reported opened windows, limited outside visitors, or offered masking stations, three easy, low-cost approaches to reducing spread of the virus. Few schools seemed to undertake measures to increase airflow in bathrooms, a known vector of viral transmission generally. The extent to which such changes would be quick and inexpensive is expected to vary by school, but increasing openings in cement walls and inserting larger exhaust fans should not be expensive and would generally be positive for reducing viral transmission. Almost none indicated the schools had put up plastic barriers, probably impractical in classroom situations outside of non-existing kitchens or in administrative rooms; this was confirmed with no references to these changes among observational enumerators.

3.3. EQ 2: Student Body Changes in USAID-built and Neighboring Schools

In what ways, if any, has the student body changed in USAID built and neighboring public schools?

One of the purposes of constructing the schools was to reduce perceived overcrowding within catchment areas. Therefore, the evaluation explored occupancy, including how the student body had changed among USAID-built and neighboring schools and patterns of school use. [redacted]

[redacted]

18 [redacted]

[redacted] The end of the section examines the effect of the construction of the schools through a brief counterfactual analysis and question posed to principals.[19]

[redacted]

[19] Student drop-out rates are discussed under EQ3, examining if there are differences in outcomes among USAID-funded and neighboring schools.

[20] [redacted]

[21] [redacted]

[redacted]

Table 2: Student-to-teacher Ratios by Year and School Group

School Group	Education Level	Academic Year		
		2010/11	2015/16	2018/19
[redacted]				

[redacted]

22 [redacted]

23 [redacted]

3.3.6. Counterfactuals if USAID had not Built Schools

This subsection examines what is called counterfactuals of what school occupancy would have looked like without the USAID-funded schools constructed. One has to assume either that the government would have built or rented some additional buildings along with hiring additional teachers, let the size of classes increase, or increased the number of second shifts at schools. It is not possible to construct exactly what that scenario would look like, as at some point, increasing classroom size becomes impractical. This section examines two alternatives.

The least cost and most likely path is that the number of the students that were assigned to USAID schools at the time of the evaluation would have been reassigned across the pool of neighboring schools such that the number of second shifts would have increased proportionate to the number of USAID schools. This could mean that nearly half of all schools in the USAID catchment areas would have had double-shifts without the USAID intervention, representing a 43% increase over the current number of double-shift schools, per the table below. Some stakeholders during KIIs and FGDs have indicated that second shifts tend to reduce classroom hours for both shifts, thus reducing teacher time on task, and according to one stakeholder "destroys" the culture of ownership found among schools with single shifts/cohorts of students.

Table 3: Distribution of Shifts across Schools 2018/19 Actual, Under Two Counterfactual Assumptions

School Group		One Shift	Two Shifts
School Shifts 2018/19 (Actual)	USAID Schools	83	25
	Neighboring Schools	334	141
Schools Shifts without USAID (54 New Additional Rented Buildings/Schools)	Neighboring Schools	328	211
Schools Shifts without USAID (No Additional Rented New Buildings/Schools)	Neighboring Schools	274	238

Note: For simplicity, the schools are still referred to in the counterfactual as neighboring schools.

As more of the second shifts were designated for Syrian students only, it might be expected that this policy choice also would have been extended further resulting in slightly fewer schools with mixed student nationalities than at the time of evaluation. However, more of the second shifts in schools in the catchment areas were secondary-level, and fewer Syrian students had progressed to the secondary level. Therefore, the number of Syrian-only shifts might not have increased much or at all. Any increase would have been opposite of the current international trend in education of integrating different types of students to reduce the potential for marginalizing minorities.

A more-costly response to increased numbers of students would have been if the GoJ followed their recent approach of roughly evenly distributing students among 1) additional rented buildings and 2) increased second shifts across schools. This counterfactual scenario would have meant 27% more schools in the USAID catchment areas would have held double shifts barring the construction of the new schools. However, the use of rented buildings also would be expected to substantially reduce educational quality relative to the new schools through use of non-dedicated spaces lacking lab facilities, gymnasiums, libraries, and outdoor recreational and learning space discussed extensively under EQ 1.

Teachers are hired by MoE and not USAID, so there is no reason to believe the Ministry would not have hired sufficient teachers to staff the additional shifts, which would have resulted in roughly equivalent

student-teacher ratios as identified through the evaluation. However, funds might have been more limited with more rented facilities if that approach were used. Thus student-teacher ratios might have been somewhat or slightly higher than at the time of evaluation, if the MoE rented more buildings and education budgets did not increase to cover those buildings. During the evaluation, there were more second shifts (61 of the 74 night shifts) assigned for secondary-level education, which also had lower average student-teacher and student-classroom ratios. Together, this means that a GoJ strategy of increasing shifts in the absence of the USAID-funded school construction might not have alleviated crowding unless more of the second shifts were extended to basic-level education. However, the GoJ likely would have chosen a strategy of allowing slightly higher student-classroom ratios during morning shifts to accommodate more young students, which may be preferred by parents.[24]

As discussed in section 3.4, the USAID-funded schools exhibited higher scores among teacher survey indicators on school design and use; technology; satisfaction and social cohesion; and, to a lesser extent, teaching and learning. Thus, teacher and student experiences and opportunities would have been lower with respect to those indicators. Combined with greater crowding and the poorer experience in double-shift schools, educational quality would have suffered without the USAID-funded construction in either scenario. The exact degree of lowering of educational quality is complicated and not possible to project exactly. However, as discussed in the next section, expected differences in outcomes in the counterfactual were less clear-cut.

3.3.7. Perceived Effect on Neighboring Schools

The survey of principals confirmed the positive effects of school construction and expansions discussed in the subsection above on counterfactuals. The survey asked principals if their school "reduced crowding issues at neighboring schools" in the first two years after completion.[25] Of the 93 principals where the question was applicable, 86% indicated the construction reduced crowding within the catchment for the first two years. Similarly, 88.8% thought crowding was reduced somewhat (50%) or a lot (38.8%) even after the first two years. Further, over half of the principals responding indicated that average class sizes decreased. About a third indicated the number of rented buildings and the number of second shifts decreased in the catchment.[26] Of the 11 principals who did not indicate the construction reduced crowding at neighboring schools, nine provided open responses that the school was not designed large enough, four indicated that COVID meant more students were joining public schools, three cited additional waves of immigration, and two thought there were no nearby schools in the catchment.

3.4. EQ 3: Learning and Other Outcomes in USAID-built and Neighboring Schools

Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

[24] By definition of having fewer classroom units without additional schools, the student-class ratio would have been considerably higher. However, existing rooms would function amid two shifts as more than one class, so the student-class ratio statistic is not particularly insightful.

[25] See Appendix 5.24 for related tables.

[26] These were responses to separate questions. Twice as many principals indicated that there were no rented buildings among neighboring schools as the class size question, and so there was a higher not applicable response.

This section of the evaluation answers evaluation question three by exploring whether learning and behavioral outcomes of students differed from their peers in neighboring schools. It also explores whether there were effects on teachers as well as communities of newly built schools and school expansions. The analysis relied on primary data from the Teacher Use and Teaching and Learning Index and to a lesser extent the Principals General Use and Function Index to provide additional information on teacher behavior, teaching, and the learning environment. Five other secondary data sources relied on are discussed in greater detail in the methods section 2.2, Appendix 5.7 and in the Inception Report.

3.4.1. Teaching Attitudes and Behaviors

The implicit theory of change underlying the objectives of the construction programming involved first changes at the level of principals and teachers, which then translated to improvements in student-level and community relations outcomes. This was in line with general international research as well as that in Jordan. For instance, the finding from the executive summary of Jordan's National Assessment for Knowledge Economy assessment, noted that 11% of the variation in scores among students was associated with teacher-related variables.[27] Therefore, the evaluation examined first changes in teaching attitudes and behaviors.

The sub-index scores for the teacher instrument are shown in Table 4. The first two sub-indicators triangulate with principals' responses. These sub-indicator scores and individual questions constituting these indicators are discussed in subsequent sections.

Table 4: Teacher Use and Teaching and Learning Index Scores by School Program

Elements Assessed/Sub-Index	USAID School Average	Expansion Schools (JSEP)	New Schools (SKEP, JSP)	Neighboring Schools
Availability/Use of Technology[a]	51%	43%	62%	38%
Design Use[b]	63%	59%	70%	42%
Teaching & Learning 1[c]	63%	61%	66%	57%
Teaching & Learning 2[d]	55%	55%	55%	55%
Teaching & Learning 1+2 – Standard lecture, individual responses/tasks[e]	28%	26%	29%	38%
Overall Design/Use Satisfaction/Social Cohesion[f]	79%	77%	81%	55%

Notes: Numbers in red depict scores at or below 70%, which represents areas for improvement. References below to teacher survey sections and questions are found in Appendix 9, section 5.9.2 survey 4 of 4.

a: Section 1 of teacher survey, composed of six questions on availability and use of technology in classrooms

b: Section 2 of teacher survey, composed of eight questions on sharing rooms, resources and spaces; temperature; noise and maintenance disruptions; adequacy of play areas

c: Section 3 of teacher survey, composed of 15 questions related to teaching behavior and teaching/class structure.

d: Section 4 of teacher survey, composed of 15 items related to frequency of approach to teaching/learning assignments and style (direct instruction, group work, projects, etc.).

e: Nine questions from sections 3 and 4 of teacher survey, framed to elicit honest responses about frequency of teaching and learning structured in a traditional manner (desks in rows, direct instruction/lecture, teaching to different student levels, individual student questioning, recitation).

f: Section 5 of teacher survey, composed of 17 questions related to overall indicators of satisfaction, safety, belonging, teacher inclusion, and parental participation.

[27] Ahmad Tweissi, Khattab Abu Lebdih, and Emad Ababneh; "National Assessment for Knowledge Economy 2014 Executive Summary" August 2015.

3.4.2. Support, Skills, Attitudes

"I feel that the curriculum is higher than the level of the students, and I am frustrated because I am trying to simplify the information as much as possible for the student, but it remains difficult." – SKEP School teacher

There were some notable differences between USAID-funded and neighboring schools (see Appendix 20 paragraphs 3 and 4, section 5.20).[28] **Teachers from USAID-funded schools rated the support they receive from their principals and schools (such as involvement in leadership decisions and receiving feedback), teaching skills, and enthusiasm and belonging higher than neighboring schools** generally. The average weighted score for the index on school design and use (described further in Table 4, note be with detail provided in the instruments shown in appendices 9 and 15) was notably higher for USAID-funded schools (63%, 70% for JSP and SKEP) than neighboring schools (42%), as were other sub-index scores on sharing resources and spaces.

However, there is **room for improvement in terms of availability and use of technology in classrooms among USAID-funded schools**, where teachers indicated an average of 51%; these were 10% lower scores than principals that responded for the buildings overall. Low scores included wireless access in their classrooms, use of computers beyond computer classes, availability of portable equipment, and video conferencing capacity revealing considerable room for improvement in use of technology in classrooms. Even in SKEP schools, which scored 73%[29], with somewhat better wireless connectivity and computer access than other schools, there was room for improvement.

As shown in Table 4 (see also comment f), the sub-indicator on **teacher perception of design, use, satisfaction, and social coherence was relatively strong across USAID-funded schools** at 79%, which was 24% above their neighboring school colleagues. The lowest scoring questions within this sub-index included student focus, student attitudes and well-being, periodic bullying, and parental engagement, all rating between 43 and 65%. Each of the 17 individual questions are less important individually than the overall point of the subindex and finding that this points to both a weak point in the schools and the potential benefit of building designs (as well as potential changes in curricula and teacher pre-/in-service training) that could encourage a more student-centered learning environment. Such engagement through student-centered learning environments better focuses students, improves attitudes, well-being, and feelings of belonging. These in turn encourage improvements in other questions, such as average attendance rates and perceptions of outcomes, and potentially to engagement by teachers (although a wide range of factors are involved in the latter).

3.4.3. Teaching Behavior and Performance

The evaluation next explored teacher behavior and performance. As noted earlier, because of the pandemic, the team was unable to observe classes. To offset this, nine questions from the teacher surveys were purposely framed to try to reverse the social desirability bias by positively framing traditional, teacher-centered approaches and methods with outputs shown in the fifth row of Table 4.

The differences found between USAID-funded and neighboring schools were present but substantively modest. For the first sub-index of teaching and learning (see note c, Table 4), USAID-funded teachers provided only 7% higher category ratings than their neighboring school counterparts (63% vs 57%, respectively). The one key difference found was a **higher probability of USAID-funded school teachers offering students project-based learning each semester (72% vs 53%).**

[28] Due to the large number of respondents and their high proportion relative to the overall number of teachers from these schools, even accounting for clustering among schools, all differences were found to be statistically significant at the p=0.00 level unless indicated. Thus, the analysis focuses only on substantively relevant differences.

[29] JSP schools averaged 58%, which, combined with SKEP schools averages to 62% overall, per table 4, row 1, column 3.

For the second teaching and learning sub-index (see Table 4, comment c), differences were insignificant, as **teachers from all sets of USAID and neighboring schools rated themselves on average at 55%, with field trips, project work, and working at work stations scoring low**. Interestingly, teachers from USAID-funded schools indicated that they more frequently kept student desks "neatly in straight rows" than neighboring schools (88% and 64%, respectively).[30] Photographs from the USAID-funded schools were filled with standard individual chairs combined with writing desks or tablet chairs all set in straight rows facing the front. Although classes were not in session as enumerators observed schools, these did suggest that there remained room for USAID-funded school teachers to rely on newer, less-structured methods.

As noted under limitations, there were some disconnects between the survey responses, affected by social desirability bias and limited broader vision, and observational findings. For instance, the vast majority of survey respondents said that they "sometimes" taught students in an interdisciplinary manner and that they considered themselves as advisors allowing students to learn at their own pace. However, the teachers also reported limited time per class where students were actually learning;[31] school classrooms were generally organized according to subjects; the team found a lack of space for co-teaching interdisciplinary work or hands-on project areas; and there were large numbers of student chairs in standard classrooms, sometimes with tablet armchairs across JSEP, JSP, and SKEP schools. These made it nearly impossible to teach in a truly co-teaching interdisciplinary manner and to offer a truly differentiated curriculum often. Teachers across USAID-funded schools confirmed this to some extent with 43% (52% in neighboring schools) having indicated that "Teaching in different ways and to different levels for different students within an in-person class is not practical to implement...."

FGDs with teachers and supervisors also highlighted that **all teachers mostly used traditional teaching methods**, such as lecturing from the blackboard to explain subject matter. Teachers and supervisors indicated that early grade teachers were more likely to use modern teaching methods, such as learning by playing, cooperative education, peer learning and role playing. However, many supervisors during FGDs stated they saw little difference by grade or by whether the school was USAID-funded except when supervisors visited classrooms. In upper basic, Arabic and English teachers preferred more traditional teaching methods, while those teaching scientific subjects and mathematics added in some group work (as confirmed by supervisors), and in secondary, all teachers indicated they mostly used traditional methods. Teachers across the FGDs indicated the **biggest obstacle to using student-centered methods is the new curriculum** due to the amount of material and complexity of subjects that were not conducive to slower, student-centered methods during short class periods in classrooms with many students.[32] Teachers from JSP schools and some SKEP schools also noted **a lack of proper working equipment as an obstacle in applying student-centered methods**. Teachers and supervisors noted that **communities, including parents and students,**

"I did not find any difference frankly between the schools that were funded by USAID and the other schools. The level is very close and the traditional education is almost more than 90 percent." – Field Directorate Supervisor

[30] This question was stated in a way that suggested keeping chairs in a row was positive to try to offset positive bias and served as a check to see to what extent they actually used less-structured methods.

[31] With 45% of USAID-funded teachers reporting fewer than 20 minutes and another 45 reporting 20 to 30 minutes.

[32] Supervisors agreed that too many students and too small classrooms made student-centered learning difficult but did not believe the USAID school rooms were too small to do so.

resisted change to unaccustomed methods and new teachers relied on the pre-service Ministry training plus learning from other teachers, which they suggested diminishes the number using these methods over time.

A second example discussed with data in Appendix 5.20 was that there was **only weak evidence outside of the SKEP school early-grade clusters of teachers co-teaching and using true interdisciplinary teaching** where classrooms were configured as learning suites, allowing more modalities of learning. Supervisors called co-planning and co-teaching beyond early grades almost "nonexistent" and that many teachers bought pre-prepared traditional plans seeing minimal difference between USAID-funded and other schools. The Appendix also discusses slightly lower rates of corporal punishment in USAID-funded schools (which was infrequently used anyway); and time on task, which was universally short across all schools, at between 20 and 30 minutes, which, if the curriculum is long, leaves limited time for student-led self direction.

Finally, the evaluation used data from ratings of early grade teacher classroom performance according to field directorate supervisors, part of whose job was to provide feedback to teachers on their teaching. Supervisors rated teachers on a five-point ordinal Likert scale across 12 indicators, which were summed by MoE as an index representing "teaching effectiveness" in terms of student-centered teaching. Teachers also were rated similarly across 25 indicators with some questions specific to their academic discipline as an index of overall "teaching performance."[33] Electronic data were available only for early grades through the efforts of the RAMP program to code these electronically. There were many caveats to this data, as supervisors indicated that relatively few teachers were visited each year at least outside of early grades), in which RAMP operated, and teachers were selected purposefully based on known needs for professional support. The scale of scores were not particularly useful, as scores were upward biased given that teachers were generally provided sufficient forewarning to prepare specific lesson plans for observation by the supervisor. Thus, these ratings are best seen as a rough indicator of where supervisors saw the highest need for improvement among lower grade teachers. It is, however, the best test of the effect of the newer schools on teaching behavior, as early grades were the only level supervisors indicated one should expect differentiation.

The analysis found modest differences in teaching effectiveness scores in student-centered teaching among early grade teachers selected for observation. Teachers from neighboring schools were rated at 70%, while those at USAID-funded schools were rated slightly higher at 72% (p=0.001). Given how the index was constructed, this means teachers from USAID schools received on average a bit more than 1 point higher on 1 of the 12 items. Overall teaching scores for USAID and neighboring schools showed a slightly larger but still modest difference, averaging about 73% vs 69%, respectively (p=0.000). Although the data had many caveats for the intended purpose, it was consistent with the findings above that **teachers from the early grades in USAID-funded schools may have been using student-centered learning techniques slightly more often and more effectively than their neighboring school colleagues**.

3.4.4. EQ 1B: SKEP Start-up Training and Adoption of Student-centered Methods

Is there evidence that SKEP school start-up teacher and principal training under the modified start-up program has resulted in use by teachers of methods and approaches that build on what the newer schools are designed to facilitate?

This sub-section examines findings related to SKEP schools and compares them to other schools, especially JSP schools. The latter were expected to resemble more the SKEP schools as they received

[33] See Appendix 5.26 for the supervisor classroom observation tool from the MoE.

training under USAID-funded programming, albeit 8 to 11 years ago. Broadly, **teachers from SKEP schools reported a somewhat more student-centered teaching environment than other schools**, including JSP schools. Excluding issues of resources, on which SKEP schools score higher than others, SKEP school teachers reported 72% compared to 64% for JSP teachers on the general teaching and learning index. Questions where **SKEP teachers scored substantively higher** included frequency of **interacting with neighboring school teachers** on teaching methods; students having opportunities to do **project-based learning**; frequency of **co-teaching**; **more differentiated teaching and learning**; and **frequency with which students decided for themselves** how they wanted to learn subjects in class. **However, in terms of a series of student-centered teaching methods** (a second teaching and learning index) as well as questions designed to offset the social desirability bias, **SKEP school teachers rated themselves overall the same as JSP, JSEP, and neighboring schools** ($p=0.43$).

This represented a mix of small differences and no differences between SKEP schools and others, reflecting some combination of newer technology and more-recent technical assistance and training. The SKEP school teachers received indirect training through the training-of-trainers approach facilitated by motivated principals plus modest amounts of coaching for weaker teachers; they did not receive direct training, as with JSP.

SKEP school principals were mixed about whether the training and coaching support for teachers was sufficient, with 2 of the 9 indicating they thought it was very sufficient, 4 finding it somewhat sufficient and 3 indicating it was somewhat insufficient.

In terms of use of technology by teachers for learning, coaches noted that there was electronic data showing that teachers used the new equipment frequently. Their FGD comments also suggested that teachers depended on technology to facilitate use of newer methods. However, this finding highlights that **stakeholders frequently confused student-centered learning and learning environments with use of technology**, when most student-centered methods do not necessarily require advanced technology. This, combined with some comments from teachers at older SKEP schools about the equipment becoming broken without maintenance, points to a **potential flaw in the SKEP Start-up training of promoting new equipment as the primary method for student-centered learning**.

The evaluation also explored the SKEP Start-up Activity and its effect on teachers indirectly through its training for principals to practice inclusive leadership. This was represented through three questions to teachers on whether they "are kept informed regularly about what is happening or being planned regarding the school," whether "teachers are considered an important part of the school leadership team" and whether they received feedback on their performance. While neighboring school teachers rated their schools relatively poorly on these measures at 66%, JSP and JSEP schools rate their schools at 86%, and **SKEP school teachers rate their schools at 95% in terms of practicing inclusive leadership**.

In addition, one other element of the SKEP Start-up Activity training programming is to partner SKEP with neighboring schools to encourage teachers to interact and "share ideas, lessons learned and teaching strategies." A question on this engagement was asked of teachers; 72% of teachers at SKEP schools reported that they engaged frequently with teachers from neighboring schools compared to 58% for JSP schools and 55% for neighboring schools. Teachers and supervisors also noted that **teachers at SKEP schools interacted with each other, visiting each others' classes, and those at neighboring schools at least to some extent to provide support on student-centered methods** for those interested in teaching that way.

SKEP principals also were encouraged specifically to communicate regularly with parents. **Teachers from SKEP schools uniformly reported the school communicated regularly with parents** (99%). This figure

was a bit higher than teachers at JSP schools (95%) and much higher than at neighboring schools (72%). SKEP school teachers also rated the involvement of parents at 68%, or moderate to high involvement, compared to 50% (moderate involvement) for JSP, and 38% (low to moderate involvement) for neighboring schools.

3.4.5. School Programming and Facilities Including for People Living with Disabilities

The team used information from the ESMP dataset from academic year 2018/19 to compare some facility- and programming-related variety of extracurricular activities between USAID and neighboring schools. Statistical tables are provided in Appendix 5.27. USAID-funded schools were slightly more likely to have extracurricular programming in arts (94% vs 87%, p=0.06). Otherwise, differences were minor (and statistically insignificant) as almost all schools surveyed offered sports and less than 15% offered music.

Teachers in USAID-funded schools, especially SKEP schools (51 and 73%, respectively) reported higher use of technology than at neighboring schools (38%). Teachers reported lower use of technology than did principals though; 56% of USAID-funded school principals indicated computers were used often to aid learning beyond computer lessons, while 56% of teachers across USAID-funded schools indicated never using modern technology beyond computer lessons and only 15% indicated doing so often. Supervisors felt teachers needed further training on tools and equipment to use technology effectively and that the MoE needed to improve maintenance of them. They also noted that due to the high cost of the equipment, many teachers were afraid to use and damage equipment and principals sometimes restricted use of the equipment. Student use of portable technology was limited, however, with about 30% of teachers indicating students did so except for SKEP schools, half of whom indicated students do so.

Teachers and supervisors confirmed that SKEP schools had better-equipped and maintained facilities, including libraries, laboratories, and theaters, than JSP and other schools to facilitate student-centered learning. However, they noted that students were able to equally access internet-connected computers across SKEP and JSP schools (79% and 77%, respectively) at much higher frequencies than neighboring schools (48%).

Among variables included in the ESMP dataset was information on school facilities, including presence of and usability of disability ramps. There was a considerable difference between the USAID-funded and neighboring schools, with a high rate of disability ramp access among USAID-funded schools. A much smaller proportion (57%) of neighboring public schools had disability ramps, as shown in Table 5. Further, when examining whether available ramps were built at the appropriate angle, 94% of ramps at USAID-funded schools were properly-designed[34], while 77% were at the appropriate pitch among neighboring schools. This means that even among those ramps available, a greater percentage (23%) did not allow effective access.

Both teachers and supervisors noted that the USAID-funded schools were better equipped in general to support students living with difficulties in terms of accessible ramps, elevators, resource rooms, and toilets equipped for students with disabilities, which helped integrate them in regular classes. However, stakeholders noted that USAID-funded schools had fewer such students. In addition, given

"The application [of student-centered methods] does not rise to the level we want because … the teacher is not originally convinced of the strategies and resists change." – MoE Field Directorate Supervisor

[34] USAID designs all schools with ramps per the required regulations. This discrepancy may be the result of an observation of an existing ramp in the old portion of a JSEP school that USAID expanded.

system-wide problems with maintenance, elevators in JSP schools were not always working, and classes for students living with physical disabilities were moved to ground floors or students are individually carried up stairs. Supervisors indicated that teachers and administrative staff universally needed more training on how to work best with students with disabilities.

Table 5: Disability Ramp Availability and Adequacy for USAID and Neighboring Schools

School Group	Disability Ramp Availability			Disability Ramp Adequacy		
	Available (%)	No Ramps (%)	# Schools	Adequate (%)	Too Steep (%)	# Schools
USAID-funded schools	84.6%	15.4%	104	94.3%	5.7%	87
Neighboring public schools	57.1%	42.9%	357	77.4%	22.6%	195

Note: Differences are significant at the (p=0.000) level.

The average of the three observational items on school adaptations for disabilities resulted in scores of 44%, 74%, and 96% for JSEP, JSP, and SKEP schools, respectively, showing an improvement in design between the JSP and SKEP schools.

3.4.6. Student Outcomes

This section discusses student-level outcomes. The ideal measures to understand the differential effect of student-centered learning would assess self-motivation, critical thinking and problem solving, wellbeing and belonging, cooperation, and a global sense of understanding of complex situations. It is important to recognize that class grades and testing scores on traditional subjects are useful to understand how students operate *within traditional systems* rather than signal how they function at a higher level; the correlation between grades and competencies developed in student-centered learning are not necessarily strong or even positive. Further, during the evaluation there was anecdotal discussion among stakeholders of self-selection among motivated parents and students into the better, USAID-funded schools, such that differences may have been due to a "biased sample" of higher performing students.[35] Thus, as this section reviewed the mostly-traditional student-level outcome measures that were available for the analysis, the interpretation of differences across the groups of schools needs to be understood with caveats.

Wellbeing, Belonging, Focus, Attendance, Grade Repetition, Involvement in School Activities

"Before the design process, a meeting is held with parents and community members, and they are consulted and even participate in the design of the school, and thus community members feel that they are partners in this school since the beginning of its work." – SKEP Start-up Coach Participant

Teachers at USAID-funded schools who responded to the survey more often reported that "the school environment leads to a feeling of belonging among students" than their counterparts at neighboring schools (100% and 59%, respectively). Teachers at USAID-funded schools also reported that student outcomes generally were affected positively by their schools with 93% agreeing with that statement, well above the 71% saying so for neighboring schools. A similar, slightly-higher proportion of teachers from USAID-funded than neighboring public schools reported that the majority of students seemed well focused throughout the day (41% and 33%,

[35] Those affiliated with the SKEP, however, indicated they believed the selection criteria for students was transparent and neutral "giving all a[n equal] chance" to enter the schools.

respectively) and that the majority of students exhibited "positive social, physical, and emotional wellbeing" (64%[36] and 48%, respectively).

Teachers at USAID-funded schools reported more often than those in neighboring schools that "the school environment leads to increased student attendance" (88%[37] and 60%, respectively), reflecting both better conditions at the USAID-funded schools and that teachers at neighboring schools did not uniformly consider conditions at their schools bad. The evaluation also examined grade repetition rates. The database available included about half of schools at the basic level only for the academic year 2018-2019. There was a 1% grade repetition rate among basic-level students at USAID-funded schools and a 1.6% grade repetition rate at neighboring schools, a substantively and statistically insignificant difference (p=0.239).[38] Examining principals' perception of student involvement in school activities, as collected by ESMP, there was no difference between USAID and neighboring schools, with 89% of principals in both groups rating student involvement as moderate to high (see table in Appendix 5.27).

Safety, Bullying, and Vandalism

The teacher and principal surveys asked about safety and bullying. Most teachers in both sets of schools reported that "students, teachers, and staff feel safe while at school", though more teachers at USAID-funded schools agreed than at neighboring schools (85% and 73%, respectively). Teachers noted that bullying among students happened, though somewhat less frequently at USAID-funded schools. Overall, 24% of teachers at USAID-funded schools[39] reported bullying happened often compared to 43% of those from neighboring schools with only 9 percent indicating it never happened. Of principals at USAID-funded schools, 16% reported bullying happened more than once a month and 13% up to once a month.

Examining the data from principals collected by ESMP related to vandalism, there was almost no difference between USAID and neighboring schools in terms of those for which principals indicated vandalism was no problem or just a slight problem (66% and 67%, respectively p=0.84) as opposed to a moderate to severe problem. Supervisors confirmed that vandalism was not very common but presented more in boys' upper grades; vandalism was lower in USAID-funded schools than neighboring schools due in their view to having fewer students, thus allowing teachers and principals to provide more guidance in maintaining the schools.

National and International Assessments Reading, Math, Science and Problem Solving

National and international assessments provided moderate insight into student outcomes, predominantly but not uniformly indicating that USAID-funded school students performed somewhat better within the traditional system and traditional subjects and perhaps in other real-world competencies.

As discussed in the methods section, the 2014 NAfKE covered mathematics, Arabic, and science and examined within those subjects skills in communication, problem solving, knowledge, applying knowledge, and reasoning. Tables with t-tests are presented in Appendix section 5.30. Within mathematics, students from the JSP schools, which were new at that time, scored 5% to 9% higher than neighboring schools in three of four skills: communicating, knowledge base, and application of knowledge. With respect to science scores, students from JSP schools scored 3% to 7% higher (statistically significant at the alpha 5% to 10% levels depending on the skill). There were no significant

[36] USAID principals are more optimistic, with 92 percent reporting so.

[37] USAID principals are slightly more optimistic with 95 percent reporting so.

[38] As the dataset represented a sub-sample of schools of interest, the analysis examined the statistical significance.

[39] The figures are 26% for JSEP, 27% for JSP, and 11% for SKEP, which included specific elements on reducing bullying.

differences in Arabic. Analyzing skill sets across the three subjects, JSP students scored 4% to 6% higher for each of the skills.

The Kingdom has undertaken annual Educational Quality Control examinations each year in selected grades and selected subjects since 2017 (including grades 3, 4, 8, and 10, although only school-level data that was not entirely compatible with the other analyses was provided. Comparing the included JSP and SKEP schools to JSEP and other schools across these 16 test results, students from JSP and SKEP schools scored higher than students at neighboring schools for 3 results by between 13% to 16% in grade 4 math and English and grade 10 English, each statistically significant only at the alpha 0.10 level. Tables as shown in Appendix 5.31. Scoring above neighboring schools for 20% of the tests was higher than would be expected due to random chance at the 10% level but not resoundingly so.

The GoJ undertakes Tawjihi graduation exams for secondary students in their penultimate year to enter universities. Student-level data contained invalid data, but school-level data revealed no difference between USAID-funded and neighboring school pass rates for 2018, 2019, and 2020; however, in 2016, neighboring school pass rates exceeded those of USAID (p=0.002).

Examining the three main indicators from RAMP's LQAS related to reading and mathematics, there was a substantively- and statistically-significant difference for the reading comprehension assessment score between USAID-funded and neighboring schools. Students at 45 JSEP and 15 JSP schools (no SKEP schools were included) combined scored about 8% higher than neighboring schools (p=0.02) on reading comprehension. Looking at the two groups of schools separately, JSP and JSEP school students scored 16% and 6%, respectively (p=0.001 and 0.058, respectively). No statistically significant difference was found between USAID-funded and neighboring schools in terms of oral reading fluency scores.[40]

"External learning rooms are used because the teacher sees that the student gets more information, because he left the classroom and he may have a colleague other than the one who sits with him every time." – SKEP School teacher

The PISA assessments of 2015 and 2018 included sections on reading, math, and science both years.[41] No significant differences were found for math and science scores between the 14 JSEP and 8 JSP schools selected as part of the exam and the 115 neighboring schools, while scores for USAID-funded schools were 2.6% lower than neighboring schools in reading (p=0.003). While the sample did not permit generalizability across USAID-funded schools, the lower scores for USAID-funded schools may not have been fully representative of this set of schools and highlighted that JSEP school expansions should not necessarily be expected to provide much better outcomes. Nonetheless, the results indicated that scores in traditional academic subjects and higher-level thinking in upper basic education were not universally higher among all USAID-funded schools as expected and, in fact, were lower among some.

Students from the 13 USAID-funded schools included across the 2015 and 2019 TIMSS assessments had 7% lower scores in science) than neighboring schools, while there was no statistically significant difference in math scores. Tables are presented in Appendix 5.31.

The available assessment related data either did not include any SKEP schools (PISA, TIMSS, NAfKE, LQAS) or enough SKEP schools (1 or 2 in each of the Educational Quality Control exam data for 2018 and 2019) to test differences statistically between SKEP and other schools.

[40] Data for Mathematics were determined to be unreliable and so analysis not included.

[41] Scores for Jordan generally are below world-wide average, and those for urban areas and girls and higher than for rural areas and boys, as expected and as shown in Appendix section 5.29.

3.4.7. Community Outcomes

Teachers among USAID schools rated parental involvement and outreach higher than teachers from neighboring schools. Considerably more teachers at USAID-funded (84%) than neighboring schools (44%) reported that their school regularly communicated with parents. In addition, SKEP Start-up Coaches noted that parents were allowed to attend some classes at USAID-funded schools. Subsequently, somewhat more of the teachers at USAID-funded schools (83%) rated the level of engagement of the parental organization as moderate to high relative to that of teachers at neighboring schools (64%). The responses were essentially identical when teachers rated the level of engagement of parental involvement, with somewhat more teachers at USAID-funded schools (81%) rating parental involvement as moderate to high relative to teachers at neighboring schools (64%). SKEP Start-up coaches confirmed that USAID-funded school parent councils were held on a regular basis with real records, while most other schools generally did not have parent council meetings, though generate minutes if they did.

Principals from USAID-funded schools concur with teachers' assessments, having rated parental involvement in the ESMP data collection somewhat higher than at neighboring schools. Parental involvement was rated as moderate to exemplary (versus slight to none) by 68% of USAID principals compared to 55% among neighboring schools (p=0.02).[42] Lower parental involvement was expected with lower outreach but also with anecdotal reports of more engaged parents working to get their students into the USAID-funded schools.

Teachers and some supervisors noted parental interaction was stronger at SKEP schools and JSP than other schools. Teachers indicated that parental involvement at JSP schools often was limited to the stronger students. They also noted that the distance education period had reduced parental involvement across all schools due to the lack of an interactive platform between students and teachers (with the exception of a small group who communicated by phone, a practice later banned by the MoE).

USAID-funded school principals responded relatively high on connection with community sub-index, with SKEP schools rating 88% followed by JSP schools at 75% and JSEP schools at 55%. SKEP and JSP schools tended to have sports fields and rooms or areas designated for community use without creating safety issues. SKEP and two-thirds of JSP schools took advantage of local community resources. Enumerators confirmed that a) demonstration spaces and b) performance spaces were present more often among SKEP schools (89% and 72%) followed by JSP schools (58% and 44%), while JSEP schools lagged (21 and 11%). While the schools did not all run adult programming for their communities, students often volunteered for community service while parents and community members volunteered at the school, and more than half of JSP schools and three-quarters of SKEP schools reported that their communities had donated money or resources to the school. SKEP Start-up Activity coaches noted that involving communities in the design process, conducting training for community members, and allowing them to use school facilities built support.

3.4.7. Unintended Effects

The evidence did not point to any significant unintended consequences of the construction projects on the students, schools, or communities. This could have been due to the lack of major unintended effects. Another reason was that with limited stakeholder time in responding to evaluation team questions and limited time to complete the report, priority went toward expected rather than a wide

[42] See Appendix 5.27.

range of potential unexpected consequences. It also may be a consequence of not being able to visit schools and classes in person to notice unintended effects.

3.4.8. Conclusions

There was enough available data to begin to test the hypothesis that construction with modest amounts of technical assistance and training would result in improved outcomes in terms of scores in traditional subjects. However, the data had significant limitations even for that purpose and did not provide the full picture across levels and school types nor on 21st century competencies aligned with ERfKE and best developed in truly student-centered learning environments. One limitation of the data included relying on expansion schools where one would not expect a large effect.

Better student-level outcomes were found more often where building designs and support better facilitated real learning environments that promote co-teaching and are student-centered; that is, in SKEP schools and JSP schools when they were new. The evidence for EQ 1 and 3 suggested that early grade schools, more-often structured and supported as learning communities, somewhat better fostered student-centered learning with modest differentiation found in both teaching and learning. Traditionally-structured upper basic and secondary schools represented a lost opportunity. This is because students are better able to avail themselves of what student-centered approaches offer in increased learning the older they are, such as more-advanced ability to undertake longer-term projects.

Students were reported by teachers and principals to have greater sense of community, belonging, slightly lower levels of bullying, higher use of technology in teaching and learning, and better outcomes generally. USAID-funded school teachers responded that, while student focus was slightly higher than in neighboring schools, it generally was not high, which was a product of low engagement in student-centered learning, especially in upper basic and secondary schools. The evidence also pointed to higher attendance but no difference in vandalism, time on task, grade repetition, or involvement in school activities. Parents and communities also were better engaged, especially at the SKEP schools, although apparently not enough to overcome some resistance to use of active-learning methods by motivated principals and teachers in some schools. While USAID-funded schools were better organized to support students living with disabilities, fewer of such students were availing themselves of this opportunity for reasons that should be explored further.

The evidence also suggested modest differentiation in traditional subject outcomes, especially in the lower grades given the superior design of the facilities and support of teachers for higher use of student-centered methods. There was also a modest extent of differentiation in traditional subject outcomes in upper grades, especially in the 2014 NAfKE assessment results, which indicated modest differentiation in higher-level skill development among JSP schools when they were new. The differences were moderate and not uniform with too few SKEP schools included to assess differentiation in outcomes yet.

However, stakeholders provided reason to expect there may be diminishing effects over time not just in terms of differences in teaching in newer over older schools, in this case SKEP versus JSP, but also possibly within newer SKEP schools, as modern technology breaks or principals restrict their use and teacher's reliance on them. Structural limitations to student-centered methods, including a lack of co-teaching areas in upper grades and a dense curriculum combined with short classes will present long-term limitations on expecting differences in teaching and learning.

4. RECOMMENDATIONS

The section below identifies key design recommendations for potential incorporation into future USAID funded projects. Images demonstrating some of these recommendations in the context of schools outside of Jordan are provided in Appendix 5.22. They provide examples of the attributes discussed of various learning spaces and are not intended to be copied without contextualization. These design recommendations were written as suggestions to direct USAID's contractors and principals, but they assume overall that USAID adjusts its guidance and directions for contractors to revise and organize their designs accordingly. While the principles espoused by the examples cited are all applicable to the USAID schools in Jordan, each would be interpreted by architects in a manner that makes sense culturally.

4.1. School Design-related Improvements

Design for Student-Centered Pedagogy through Developing Learning Communities across All Grades. Design spaces to minimize lecture-based teaching, which should only be used as a supplement to hands-on learning approaches. One way to do so is for USAID to require designs that move away more completely from the obsolete "cells and bells" design invented during the first industrial revolution, beyond even the SKEP school designs, towards a fully student-centered model with fewer traditional classrooms and more spaces for active learning. Learning communities are even more effective in upper basic and secondary education, as students are better able to engage in more modalities of interactive learning as they age. Appendix 6 provides an example of how to create real learning communities even in upper basic and secondary levels.

Add Specialized Learning Spaces. Increase the number of specialized spaces such as maker labs and specialty labs, such as robotics, forensics, graphic art and design and video production, so the availability for practical learning on a day-to-day basis is increased. When a space is designed and available for student use, it should be outfitted with proper learning resources, furniture, equipment and supplies.

Create Inspiring, Multi-Use Spaces. School buildings should include inspiring, imaginative, and innovative spaces that are also highly functional and effective places to improve student academic achievement and contribute to their social and emotional development. Multi-use lab spaces with sufficient power outlets and water access for hands-on learning should be added to the standard program, as should better utilizing hallways as classroom extensions.

Boost Educational Technology. Prioritize educational technology early in the planning process. Audio and video systems should be fully integrated throughout the building design. High-bandwidth wireless internet, which was deficient in many of the surveyed schools, can become the catalyst for a variety of mobile technologies as well.

Improve Teacher Offices. Support and encourage teachers to work together by giving them access to better and more high-quality professional workspaces beyond the classroom and isolated teacher rooms that do not integrate with or oversee learning spaces.

Increase Variety of Furniture. Require variety, variation in heights, seating types, and materials for loose furnishings that contractors procure. Create a variety of seating and table selections to support a greater

range of student learning activities.[43] The ability for students to select preferred areas to work in and furniture to use improves the learning potential of each space.

Assure Adequate Storage. In new designs, include more storage for student projects and teaching and learning resources. Ensuring that there is adequate storage space in labs and other learning spaces within the classroom supports overall class management through the quick accessibility or storage of resources as differing lessons may dictate.

Plan for Future Expansion. Require architects to include in the master plan where an expansion might go to adequately plan for future enrollment growth.

Improve Eating Areas. Add and improve areas for dining with varied types of seating, outdoor dining spaces, and even remote spaces to sit and eat away from the main café.

Improve Outdoor Play and Learning Spaces and Indoor-Outdoor Connection. Improve outdoor areas for play, sports, and learning. Add more shaded features to increase flexibility and opportunities for various activities that would not be possible in an indoor setting. Make outdoor learning areas directly accessible from instructional spaces. USAID should encourage school designers to maximize opportunities for outdoor learning. Such spaces are cost-effective, in many cases, more functional than indoor spaces, have more healthy access to daylight and fresh air, and feel less prison-like and oppressive than crowded indoor classrooms

Add Informal Learning Areas. Optimize the number of informal learning spaces throughout schools, preferably one per four dedicated general learning spaces. Some of the smaller commons' areas could replace hallways that are prevalent in the current model and thereby not increase the total built-up area of the school.

Create Greater Room Variety and Connectivity. Make sure building designs include spaces of varying sizes including small group rooms, meeting rooms, seminar rooms, and quiet reading rooms. Require that more of the spaces link to each other to better facilitate co-teaching and true interdisciplinary learning where principals and teachers are ready. Provide meeting spaces of varying sizes that are usable by teachers and students. Seminar rooms for 15 students, small group rooms for 6 students, quiet rooms for 3 students are some of the most popular sizes.

Improve Student Drop-off and Pick-up Zones. Schools with bus drop-off and pickup should have a dedicated safe area for buses to park and load/unload students.

Provide Indoor Fitness Areas Where Such Areas are not Provided. When possible, an indoor gymnasium or a multiuse sports room would improve student wellbeing and would make a great addition to the standard program of spaces.

Assure Every School Includes Spaces for the Performance Arts. Ensure there are music rooms for both voice and instrumental music including an ancillary music storage room and areas for performance / drama or multi-use area to enable performance. This could be as simple as a classroom-sized space suitable for plays with a very small audience. Where space allows, also add a space for two-dimensional and three-dimensional visual arts to the standard program.

Make Science Labs More Flexible. Science rooms should be designed with movable tables, with services and sinks along the perimeter of the room. This flexible layout will support a wider range of activities.

[43] Currently, many rooms at USAID-funded schools are furnished with tablet armchairs, and even SKEP school general classrooms are organized to face the front of a classroom.

Consider connecting lab / specialty spaces that are on level 1 directly to the outside and adding a small learning porch that will be directly accessible from the room.

Provide for Increased Community Use. To increase the value of the school to the community, continue the pattern with SKEP of encouraging the school or parts to be made available for community use after hours. This can be made possible simply by 1) specifying locks on certain doors and making only selected areas of the school available after hours, or 2) having areas separate from the school building itself available to the community, as with some SKEP schools.

4.2. School Use, Procurement, and Measurement Improvements

Examine with the MoE Obstacles to Student-centered Learning Environments. If the MoE is willing, consider as part of an IP workplan working with the Ministry more broadly to assess plans to overcome obstacles to creating true student-centered learning environments campus-wide and adopting student-centered teaching modalities. Some specific examples are provided throughout this sub-set of recommendations.

Adapt Student-centered Methods to Context. Work with teacher leaders to better develop or refine a mix of student-centered methods presented to teachers that can cover large portions of curriculum during short class periods and that do not rely primarily on technology that can break. This effort could include developing along with teachers' pre-prepared lesson plans for teachers to share to make it easier to use them and not rely just on buying already-prepared traditional method plans.

Adapt Technology to and Policy Interventions Regarding Low Maintenance Context. Consider a policy-related component of upcoming activities focused on helping the GoJ in improving its policies, rules, and processes with respect to maintenance in terms of amount, timing, responsiveness, and ownership. Assuming such changes may not happen in the near term, design future schools selecting technology, less-sophisticated options that is as resilient as possible to neglect of official maintenance even if that may not seem as impressive upon opening to reduce an impediment to use of student-centered methods. Provide spare parts and tools as part of the initial delivery.

Build Community Support for Student-centered Methods. As two of the primary impediments to adopting student centered methods come from teachers and parents, USAID's IPs need to engage parents to better understand and advocate or at least not resist such methods being used in their schools.

Deepen Support for Learning Environment Adoption During or After Start-up Support. With new schools designed as learning communities across all levels, plan on an additional year of support for the schools in how to make best use of learning communities through collaboration and co-teaching, student-centered engagement, peer-centered learning, and other of the 20 modalities of learning. While the SKEP Start-up Activity focused on critical issues of proper administration, organization and operation of schools, a year of support did not allow for the depth of support required not just to really instill student-centered pedagogy but also how the whole school can operate differently in learning communities for true 21st-century learning.

Have USAID-funded Schools Serve as Learning Nodes. Continue and broaden the engagement between teachers in USAID-funded and neighboring schools as undertaken as part of the SKEP School Start-up program. However, USAID needs to recognize the potential benefits from such interactions across schools and within communities likely offset the slightly reduced differences in outcomes one might find in measuring differences in outcomes.

Improve Inclusion for Students with Disabilities. Make support of students living with disabilities a component of start-up school support and of sharing with neighboring schools.

Promote Measurement of Competencies Beyond Traditional Academic Testing. USAID and its implementers should work with the MoE to adopt and promote better measures of non-traditional skills aligned with ERfKE goals built through student-centered learning. Examples include teacher, self and peer assessment of agency and self-direction, learning and growth,[44] collaboration, and communication/presentation. Off-the-shelf tools in the forms of rubrics, checklists, and others are available to customize. Inserting such measures as this and the next recommendation as requirements for principals and supervisors could help emphasize to the MoE and stakeholders the importance of 21st-century global competencies as a motivation for system-wide promotion of student-centered teaching and learning.

Consider Promoting Skill-focused National Assessments. USAID should consider discussing with the MoE developing a national-level assessment focusing on competencies developed in student-centered settings that are not focused primarily on traditional academic disciplines,[45] which speak more-narrowly to student knowledge levels. In addition to emphasizing to stakeholders the importance of non-traditional skills to motivate wider adoption of student-centered teaching and learning, these recommendations also would help the Kingdom better assess progress towards ERfKE goals and provide better data to inform the Mission about the effects of construction on outcomes.

Supplement International Assessments. USAID should consider supplementing future international assessments in Jordan, such as PISA, that emphasize broader, global competencies and problem solving to increase the sample of USAID-funded schools, especially SKEP, perhaps JSP, and future schools due to higher expected effect size. Depending on available finances, consider neighboring schools as a superior comparator to all schools though not at the expense of including more USAID-funded schools. Undertake a power analysis based on clusters or hierarchical modeling[46] to determine required sample size to assure that the funds are worth the investment and how many are required given a desired percent difference in scores.

Self-assessment and Promotion of Student-centered Learning. As assessment processes motivate behavior, USAID could consider funding efforts through its IPs if the MoE is willing to promote supervisors, principals, and teachers working together toward conducting broader self-assessment of student-centered learning and teaching effectiveness at not just the teacher but school level of student-centered teaching and learning. USAID may also encourage the Ministry to add to supervisor observation protocols examining student behavior outside traditional classrooms and assessments of the school community (principals, teacher committees, and staff) to encourage building true learning environments at the school level. Different high scorers each semester at a set of nearby schools or district level could be asked to present to other schools and teachers some key lessons and examples.

Improve Timing and Reward Past Performance in Procurements. Request the GoJ inserts into procurement awards a large proportion of points with respect to timely past performance in general and

[44] I.e., relative to self-established targets including through process portfolios, rather than relative to grade performance levels

[45] This may be similar to some of what was measured in the 2014 NAfKE assessment, an Arabic-fluent educator would have to review to better ascertain their appropriateness beyond the categories of measurement made available to the evaluation team.

[46] That is, recognizing students are nested within schools rather than using school-wide averages or analysis by students without clustering within classes or schools.

with JSP, JSEP, and SKEP school construction specifically.[47] A recommendation with respect to procurement timing with respect to seasonality from the A&E Construction Management Contractor is provided in Appendix 5.13.[48]

[47] USAID may be considering limiting the size of award packages to 5 to 7 schools to limit the potential that large packages may increase burden on contractors during a period when credit might remain tight. However, the reason for doing so would be less due to a strong evidentiary basis and more for limiting the extensiveness of problems encountered from any single problematic contractor.

[48] As this SOW, evaluation design, and data do not provide significant leverage on this issue, we present the recommendations as provided without revision.

5. APPENDICES

5.1. Appendix 1: Scope of Work

USAID MONITORING, EVALUATION, AND LEARNING ACTIVITY

SCHOOL INFRASTRUCTURE MULTI-ACTIVITY EVALUATION

DISCLAIMER: This report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of The Kaizen Company, LLC and not necessarily reflect the views of USAID or the United States Government.

TABLE OF CONTENTS

1. REQUESTING DO 1
2. PERIOD OF PERFORMANCE 1
3. EVALUATION TYPE 1
4. BACKGROUND 1
5. EVALUATION OBJECTIVES 2
6. EVALUATION QUESTIONS 3
7. EVALUATION DESIGN AND METHODOLOGY 5
8. UTILIZATION AND DISSEMINATION 6
9. ROLES AND RESPONSIBILITIES 7
10. DELIVERABLES 8
11. PROPOSED EVALUATION TEAM STRUCTURE 10
12. CONTACTS 11

ACRONYMS & ABBREVIATIONS

A/E Firm	Architect and Engineering Design Firm(s)
COVID-19	Coronavirus Disease 2019
ESMP	Enhancing School Management and Planning
GOJ	Government of Jordan
JSP	Jordan School Construction and Rehabilitation Project
JSEP	Jordan School Expansion Program
MELA	Monitoring, Evaluation and Learning Activity
MoE	Ministry of Education
MPWH	Ministry of Public Works and Housing
RAMP	Early Grade Reading and Math Program
SKEP	Schools for a Knowledge Economy Program
SOW	Scope of Work
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development

JORDAN MONITORING, EVALUATION, AND LEARNING ACTIVITY
School Infrastructure Multi-Activity Evaluation

1. REQUESTING DO

☐ DO 1: EDE
☐ DO 2: Water
☐ DO 3: DRG
☐ DO 4.I: Health
☒ DO 4.2: Education
☐ DO 4.1: Vulnerable Populations
☐ DO 5: Women & Youth
☐ Other (specify):

2. PERIOD OF PERFORMANCE

Expected Start Date (on/about): January 2021

Anticipated End Date (on/about): June 2021

3. EVALUATION TYPE

☐ Performance
☐ Process
☐ Impact
☒ Other – multi-activity evaluation
☐ Baseline
☐ Mid
☐ End Line

4. BACKGROUND

4.1 DETAILS

Activities to Evaluate	Start/End Dates of Activity	Architect /Engineering Firm	Number of New Schools Built	Number of Schools Expanded/ Rehabilitated
Jordan School Construction and Rehabilitation Project (JSP)	2006-2013	Camp Dresser and McKee International	28	100*
Jordan School Expansion Program (JSEP)	2014-2020	Bitar	--	- 120 Schools (80 Completed) - 300 Kindergarten Classrooms** - 50 Sports Fields/ Facilities**
Schools for a Knowledge Economy Program (SKEP)	2015-2020	Engicon	25 (9 completed)	--

* Schools rehabilitated under JSP will not be included in this evaluation
**Kindergarten classrooms and sports fields/facilities built or rehabilitated under JSEP will not be included in this evaluation.

4.2 PROBLEM STATEMENT AND ACTIVITY OVERVIEW

Due to rapid population growth, the influx of Syrian and other refugees, and economic constraints that have caused a migration of students from private to public schools, Jordanian public schools have been strained by overcrowding in recent decades. While there is near universal enrollment in the school at the primary level, public schools do not have sufficient capacity to safely accommodate all students, and access is particularly limited for students with disabilities. Over 720 schools currently operate double shifts in order to accommodate students, while many others operate with classrooms sizes beyond their intended capacity. The Ministry of Education (MoE) also operates 777 schools in

rented buildings that are often not designed to accommodate all learners. Both academic and non-academic learning outcomes across Jordanian public schools are affected by challenges in access to safe and engaging learning environments, with high rates of violence in schools and low performance in literacy and numeracy from Kindergarten through the upper grades. The Government of Jordan (GOJ) estimates that it will require approximately 600 new schools over the next decade to meet demand.

In response to the MoE efforts to increase access to schools as well as enhance the learning environment, USAID/Jordan launched infrastructure activities beginning in 2006 with the four-year Jordan School Construction and Rehabilitation Project (JSP), and continued in 2014 with the six-year Jordan School Expansion Program (JSEP), followed in 2015 by the five-year Schools for a Knowledge Economy Program (SKEP). The primary focus of these activities has been to reduce overcrowding in public schools, replace rented and double-shifted schools and provide a safe and more suitable school environment to respond to the needs of the MOE's reform efforts.

Schools designs and construction supervision are provided by Architect and Engineering Design Firms (A/E Firm), while construction is implemented through multiple construction contracts under the Ministry of Public Works and Housing (MPWH). Furnishings and construction management services are also provided through contracts or grants with other entities.

JSP had a total budget of $199 million to construct and furnish 28 new public schools and to rehabilitate 100 existing ones (including $11.4 million for A/E design services and supervision of construction, $172 million for construction, and $15 million for furnishings). JSEP's budget is $180 million for A/E design services and construction to expand 120 Schools, construct 300 Kindergarten Classrooms and construct or rehabilitate 50 Sports Fields or Facilities, and SKEP has a budget of $102 million for A/E design services and the construction of 25 new public schools. Furnishings for JSEP and SKEP schools are provided through a separate $26 million grant to the United Nations Office for Project Services (UNOPS), and a $3.8 million Construction Management Contract with Trigon provides construction management services to both activities.

5. EVALUATION OBJECTIVES

USAID has made significant investments in school infrastructure in recent years and is planning to build an additional 30 schools over the next five years under its Inclusive Schools Program. This evaluation will examine data from recent and relevant USAID school infrastructure activities in order to 1) inform the design of the schools, and 2) determine how USAID infrastructure has affected students and communities. The focus will be on new schools built under JSP and SKEP but will also include an evaluation of schools which underwent significant rehabilitation or expansion under JSEP.

6. EVALUATION QUESTIONS

The primary areas of learning to be addressed by the evaluation relate to:

1) Use and Usability of the Physical Spaces Constructed
2) Patterns of School Occupancy in USAID Built and Neighboring Public Schools
3) Learning Outcomes of Students in USAID Built and Neighboring Public Schools

Each of these areas is described in further detail below.

1) Use and Usability of the Physical Spaces Constructed

Evaluation Question 1: What are the positive and negative aspects of the physical school environment (inside and outside spaces) that should be taken into consideration for future school construction?

Previous evaluations of JSP highlighted a number of issues with the utilization and functionality of different aspects of the school design, which were then taken into consideration in the design of SKEP and JSEP schools. This evaluation will revisit JSP schools to examine how those issues have impacted the school and its users since the last evaluation and will visit SKEP and JSEP schools to determine what aspects of the SKEP and JSEP school designs should be included or excluded from future school designs. The evaluation will consider, among other things:

- Layout/Teacher environmental competence
- Furnishings (JSP found that the size of the new furniture took up too much space)
- Utilization of technology features and labs in the schools
- Construction Materials
- Maintenance complexity and cost (JSP noted multiple issues with electromechanical systems)
- Construction materials (JSP noted quality of wooden doors, plaster on staircases, tiles, toilet sinks, indoor paint)
- Heat/Cold/Ventilation/Natural light (JSP noted air lock issue to maintain temp, aluminum window locks)
- Accessibility & movement of large volume of students through/around the space (JSP noted narrow main entrance, locked fire exits, bathroom odors)
- Safety
- Use/usability of all indoor space as intended (JSP noted inadequate book and toxic science material storage, inadequate size teacher lockers, size, design and location of canteens, use of libraries, size of computer rooms and nursery, location of administration office, use of planning room)
- Timeliness of construction/rehabilitation work. How long did it take to complete the construction work? In what ways did this deviate from the planned timeline?
- USAID has previously examined the benefits of the school start-up teacher/principal training programs at JSP schools, so it could be useful to explore in more detail how this has been going at the SKEP schools under the modified start-up program that is currently underway.
- Use/usability of outdoor space as intended (protection from the elements, adequate playground space and infrastructure) (JSP found that the outdoor space didn't adequately accommodate morning assemblies that mean the whole school population is outside at once, gardening areas too far from school, security walls too low)
- Was ongoing maintenance of the new and rehabilitated schools consistent and adequate? These aspects are somewhat covered in JSP's evaluation report. The evaluation team needs to refer to JSP's evaluation report to identify issues related to engineering and learning environment that have not been addressed in JSP and/or need further exploration.

While focusing on the use and usability of the schools, the evaluation shall also examine, where possible and appropriate, the changes or modifications as a result of COVID-19 related social distancing and other safeguarding practices. Such questions will not be a direct focus of the evaluation and may be treated as a sub-question under the overall use and usability of schools.

As the design of the new schools will soon be underway, the evaluation must prioritize the collection and analysis of data relating to the physical aspects of school infrastructure so that it is available in time to inform the school design, including furnishings and outdoor spaces.

2) Patterns of School Occupancy

Evaluation Question 2: In what ways, if any, has the student body changed in USAID built and neighboring public schools?

The sites for JSP, JSEP, and SKEP construction were deliberately selected based on a number of factors, including the level of overcrowding of schools within a three-kilometer radius, with the intention that new school construction or expansion would increase access to safe and enhanced learning environments to students who need it most. The JSP evaluation examined this to some degree but was limited by issues in data collection and availability. Since the completion of JSP, USAID has invested in dedicated technical assistance to the MoE and MPWH, the Enhancing School Management and Planning (ESMP) activity to assist with data collection and analysis as well as planning for new school infrastructure. With the benefit of newly available data[1], this evaluation will examine how the school construction and expansion affected students in JSP, JSEP, and SKEP schools and their neighboring schools, and will consider, among other things:

- Overcrowding at the school and classroom level
- Student dropout rates
- Enrollment of students with disabilities

3) Learning Outcomes of Students in USAID Built and Neighboring Public Schools

Evaluation Question 3: Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

In addition to increasing access to schools and easing overcrowding, USAID's infrastructure investments anticipated that the enhanced learning environments would also impact student learning outcomes. This hypothesis was somewhat explored through the JSP evaluation as well as the EDY School Construction Assessment, which sought to study changes in student and teacher attitude and behavior, but challenges in data availability limited an examination of whether academic learning outcomes differed between USAID-built and neighboring schools. With the benefit of ESMP as well as data collected at the school level by USAID's current Reading and Math Program (RAMP), this evaluation can reexamine the question related to academic and non-academic learning outcomes. It will study JSP, JSEP, and SKEP schools along with neighboring schools to consider whether there is any variation in among other things:

- Grade repetition rates
- Student scores in core subjects
- Violence and bullying in schools
- School vandalism
- Staff attitude or performance in schools

In addition to the above, identify the unintended positive or negative results of the program/project and its effects on school, students or local communities.

USAID believes that the availability, completeness and accuracy of data and factoring in an analysis of the available data and evaluability of the above listed issues is critical to addressing this question.

[1] The evaluation team would refer to existing data of JSP/SKEP to establish the need for conducting a school-level survey related to school occupancy.

Therefore, as part of this evaluation, an evaluability assessment will be carried out to see whether it is possible to answer this evaluation question based on facts, evidence, and data with findings supported by quantitative and qualitative information that is available, reliable and valid – details are presented in the following section.

7. EVALUATION DESIGN AND METHODOLOGY

The focus of this evaluation is 37 completed USAID-built schools (9 under SKEP and 28 under JSP), and 80 schools that underwent USAID-funded rehabilitation and expansion work (completed so far under JSEP) across governorates in Jordan. A list of beneficiary schools along-with their locations will be provided to the contractor after the award.

To test the effect of its activities in the listed schools and surrounding communities, MELA anticipates undertaking a multi-activity performance evaluation. The evaluation must examine the set number of USAID-built and expanded schools to help inform the upcoming architectural design of new schools, and then separately from that conduct comparative analysis to assess school occupancy patterns and learning outcomes at USAID-built schools and neighboring schools within a three-kilometer radius to help inform USAID future intervention.

MELA anticipates that the evaluation design and methodology for this evaluation may use a mix of qualitative and quantitative methods, including a desk review, key informant interviews, technical assessment of school facilities, surveys and or focus groups with beneficiary students, teachers, school management and communities in the catchment areas. This evaluation will be completed in the following two parts.

Part-I: Focusing on Evaluation Questions 1 and II

During Part 1, the evaluation team will first look into the use and usability of the physical structures. This part will focus on the evaluation questions one and two, as listed above. As explicit from the questions itself, the first question does not involve comparative study, whereas the second question would be a comparative study on how the student body has changed between USAID built and neighboring public schools. MELA will develop the evaluation scope and methodology via engaging a MELA's consultant. With the approval of USAID, MELA will identify and hire additional expertise needed for the evaluation team to develop data collection tools and implement the evaluation.

For Part-I, the evaluation team must submit an Inception Report that includes evaluation design and provides details on the following key elements:

- Detailed evaluation design matrix that links the Evaluation Questions from the SOW (in their finalized form) to data sources, methods, and the data analysis plan;
- Draft questionnaires and other data collection instruments or their main features;
- List of potential interviewees and sites to be visited and proposed selection criteria and/or sampling plan (must include sampling methodology and methods, including a justification of sample size and any applicable calculations);
- Limitations to the evaluation design

The data analysis plan shall clearly describe the evaluation team's approach for analyzing quantitative and qualitative data (as applicable), including proposed sample sizes, specific data analysis tools, and any software proposed to be used, with an explanation of how/why these selections will be useful in answering the evaluation questions for this task. Qualitative data should be coded as part of the

analysis approach, and the coding used should be included in the appendix of the final report. Gender, geographic, age cohort, and role (beneficiary, implementer, government official, etc.) disaggregation must be included in the data analysis where applicable.

At the completion of Part-I, MELA will submit to USAID an Evaluation Report for Part-I.

Part-II: Focusing on Evaluation Question-III

During Part-II, the evaluation team will look into the concepts of learning outcomes and student/teacher behavior and wellbeing. This second part will entail a more comparative analysis with neighboring schools.

The Part-II of the evaluation will focus on the third evaluation question, as listed in the section above. This part will have two key steps. The first step will be an evaluability assessment to ascertain whether it is possible to answer the evaluation question based on facts, evidence, and data with findings supported by quantitative and qualitative information that is available, reliable and valid.

To do this, MELA will review the existing EMIS and RAMP data, coupled with consultation meetings and or interviews with relevant stakeholders, factoring in an analysis of the availability, completeness and accuracy of the data on issues including *grade repetition rates, student scores in core subjects, violence and bullying in schools, school vandalism, staff attitude or performance in schools.*

USAID understands that the process of obtaining authentic data, especially the EMIS data, may involve a cumbersome process due to issues beyond MELA or USAID's control. However, to an extent possible, USAID will facilitate the evaluation team in obtaining data from relevant entities.

The timeline presented below indicates the key activities for Part-II of the evaluation. A key deliverable for Part-II is preliminary Data Review Report that will be submitted to USAID, indicating availability, completeness and accuracy of the data on the key issues, as indicated above. In consultation with USAID, MELA will identify information gaps and ascertain whether there is a need for additional data collection to fill those gaps (if any). In case, the existing data and analysis meets USAID's requirements, MELA will not carry out Step-II.

The Step-II, as listed in the following table, will only be launched, if and when, the existing available data is considered insufficient for addressing the requirements of the evaluation question. In such a case, MELA in close consultation with USAID, will finalize the activities and timelines for Step-II, which are currently kept as "To be Determined" (TBD) – see the table in the following section on evaluation timeline.

MELA expects that, at a minimum, that the evaluation team will:

- Familiarize themselves with documentation relevant to the activities covered under this evaluation as well as USAID's current assistance in the education sector in the region. MELA will ensure that this documentation is available to the team at the beginning of their work, including maps of the new schools and rehabilitated classrooms.
- Review and assess the existing performance and effectiveness information or data;
- Conduct site visits for field testing evaluation instruments (when applicable and feasible) and collect data required for evaluation;
- Meet and interview beneficiaries, partners, and host government counterparts at appropriate levels;
- Interview USAID and implementer's staff, and experts working in the sector;

8. UTILIZATION AND DISSEMINATION

The USAID Monitoring, Evaluation, and Learning Activity (MELA) has a focus on increasing the utilization of data it produces. To this end, the Evaluation Team is responsible for working with MELA and the United States Agency for International Development (USAID) in designing and implementing an evaluation that will produce actionable data for the purposes outlined in the table below.

Utilization	Data Requirements for Utilization	Timing of Utilization	Stakeholders Involved in Utilization
What decisions are to be informed using the evaluation results?	What data is required to make these decisions? What is the threshold that separates "actionable" from "un-actionable" data for these decisions?	When will these decisions take place?	What stakeholders and Mission members are involved in these decisions?

9. ROLES AND RESPONSIBILITIES

9.1 HUMAN SUBJECT PROTECTION

The independent evaluator(s) and/or evaluation team is responsible for the overall design, implementation, reporting and dissemination of the evaluation, including the following specific responsibilities:

- Statement that all information provided is confidential and information provided will not be connected to the individual
- Right to refuse to answer questions or participate in interview/discussion/survey
- Request consent prior to initiating data collection (i.e., interview/discussion/survey) or taking photos

In addition to the above, at each Phase, MELA will undertake extensive measures to ensure organizational conflict of interest (OCI) -- real or perceived -- are avoided. Consultants, firms, or others associated with this scope of work will be required to comply with the MELA OCI Mitigation Plan.

9.2 EVALUATION TIMELINE

The following table presents the timeline for the evaluation. Throughout the assessment, the evaluation team and MELA will update USAID/Jordan on a bi-weekly basis.

Task	Deliverable/Product	Due Date (estimated)
Recruitment	Recruitment of Evaluation Team	28-Jan-21
Kickoff Meeting	In-briefing with the Mission (kickoff)	1-Feb-21
Part-1: Focusing on Evaluation Q1 and Q2		
Inception Phase	Desk review and develop/finalize study methodology	15-Feb-21
	Inception Report (this to include design, data collection tools, sampling, methodology and methods expected deliverables deadlines, data collection plans, data collection instruments (in English and Arabic), data collection training overview/curriculum, sampling, analysis)	24-Feb-21
		USAID will review and provide feedback after 10 days. (March 4)
	Submit Final Inception report incorporating USAID's feedback (if any)	11-Mar-21
	USAID to approve the Inception Report	18-Mar-21

Data Collection	Team orientation/training on data collection tools	22-Mar-21
	Field data collection	4/29/2021, 5 weeks of data collection
Data Analysis	Analysis of collected data	5/3/2021, 3 weeks (part of this would be in parallel with the data collection)
Preliminary Findings	Preliminary finding presentation after field work	6-May-21
Evaluation Report of Part-I	Draft Report to MELA	16-May-21
	Draft Report to Mission	23-May-21
	USAID/Stakeholder feedback with response	30-May-21
	Final Report[2]	10-Jun-21
Part-II: Focusing on Evaluation Q3		
Step One: Evaluability Assessment		
Desk Review	Consultation meeting(s) with Mission to understand requirements and identifying the key data sources and stakeholders	2/10/2021, (These could start as early after the kick-off meeting, subject to USAID's availability)
	Meetings with relevant stakeholders to help obtain and understand data	15-Feb-21
	Obtain access to key data sources	20-Feb-21
	Review the available datasets/systems (EMIS, RAMP, and others)	3/15/2021, 3 weeks of data review
Analysis and Presentation	Analysis of available data (including which data is missing/needs to be collected)	3/30/2021, 4 weeks of data analysis (part of this would be in parallel with the data review)
	Presentation of preliminary analysis to USAID	April 1-5, 2021 (subject to USAID's availability)
	Incorporate USAID's feedback to inform analysis	4/15/2021 (This can be completed early, depending on the amount of analysis needed)
Data Review Report	Draft Report to MELA	20-Apr-21
	Draft Report to USAID	26-Apr-21
	USAID feedback with response	USAID will review and provide feedback after 10 days. (May 6)
	Submit Final Data Review Report	17-May-21
Step Two: Additional Data Collection (if required)[3]		
Methods for data collection	In collaboration with USAID, identify appropriate data collection methods	TBD
Data Collection	Team orientation/training on data collection tools	TBD
	Data collection	TBD
Analysis and Presentation	Analysis of collected data	TBD
	Presentation of preliminary analysis to USAID	TBD
	Incorporate USAID's feedback to inform analysis	TBD

[2] In case, USAID decides that the data from Step-1 of Part-II is sufficient and there is no need for Step-II, this report will be developed as a consolidated report both for Part-I and Part-II.
[3] The activities and timelines will be finalized in consultation with USAID upon completion of the Step-I mentioned above.

Final Evaluation Report[4]	Discuss and agree with USAID on submission of Final Report (inclusive of Part-I and Part-II)	TBD
	Draft Report to MELA	16-May-21
	Draft Report to Mission	23-May-21
	USAID/Stakeholder feedback with response	30-May-21
	Final Report based on USAID guidelines in the ADS	10-Jun-21
	Final raw and analysis files, anonymized following USAID guidelines	14-Jun-21
	Final Evaluation Report; Public Statement of Difference/Support	20-Jun-21
Final Presentations	Presentation for USAID;	21-25 June, 2021
	Presentation for stakeholders	

10. DELIVERABLES

The following are key deliverables for the evaluation:

1. Inception Report
2. Preliminary Data Review Report
3. Final Data Review Report
4. Evaluation Report Part-I
5. Final Evaluation Report (inclusive or Part-I and Part-II)

The **Evaluation Final Report** must follow USAID's criteria to ensure the quality of the Evaluation Report (found in Appendix I of the USAID Evaluation Policy).

- The report should not exceed **30 pages** (excluding executive summary, table of contents, acronym list and annexes).
- The Executive Summary will be translated into Arabic (two versions: English and Arabic).
- The structure of the report should follow the Evaluation Report template, including branding.
- Draft reports must be provided electronically, in English, who will then submit it to USAID.
- For additional Guidance, please see the Evaluation Reports to the How-To Note on preparing Evaluation Draft Reports found here.

USAID Criteria to Ensure the Quality of the Evaluation Report (USAID ADS 201):

- Evaluation reports should be readily understood and should identify key points clearly, distinctly, and succinctly.
- The Executive Summary of an evaluation report should present a concise and accurate statement of the most critical elements of the report.

[4] The timeline for the Final Evaluation Report may change subject to the time required for completion of Step-II of Part-II. In case, USAID decides that the data from Step-1 of Part-II is sufficient and there is no need for Step-II, the Final Evaluation Report will be submitted as per the below timelines.

- Evaluation reports should adequately address all evaluation questions included in the SOW, or the evaluation questions subsequently revised and documented in consultation and agreement with USAID.
- Evaluation methodology should be explained in detail and sources of information properly identified.
- Limitations to the evaluation should be adequately disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Evaluation findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or simply the compilation of people's opinions.
- Findings and conclusions should be specific, concise, and supported by strong quantitative or qualitative evidence.
- If evaluation findings assess person-level outcomes or impact, they should also be separately assessed for both males and females.
- If recommendations are included, they should be supported by a specific set of findings and should be action-oriented, practical, and specific.

Reporting Guidelines: The draft report should be a comprehensive analytical evidence-based evaluation/assessment report. It should detail and describe results, effects, constraints, and lessons learned, and provide recommendations and identify key questions for future consideration. The report shall follow USAID branding procedures. ***The report will be edited/formatted and made 508 compliant as required by USAID for public reports and will be posted to the USAID/DEC.***

The findings from the evaluation/assessment will be presented in a draft report at a full briefing with USAID and at a follow-up meeting with key stakeholders. The report should use the following format:

- Abstract: briefly describing what was evaluated, evaluation questions, methods, and key findings or conclusions (not more than 250 words)
- Executive Summary: summarizes key points, including the purpose, background, evaluation questions, methods, limitations, findings, conclusions, and most salient recommendations (2-5 pages)
- Table of Contents (1 page)
- Acronyms
- Evaluation/Analytic Purpose and Evaluation/Analytic Questions: state purpose of, audience for, and anticipated use(s) of the evaluation/assessment
- Project [or Program] Background: describe the project/program and the background, including country and sector context, and how the project/program addresses a problem or opportunity
- Evaluation/Analytic Methods and Limitations: data collection, sampling, data analysis and limitations)
- Findings (organized by Evaluation/Analytic Questions): substantiate findings with evidence/data
- Conclusions
- Recommendations
- Annexes

❑ Annex I: Evaluation/Analytic Statement of Work

❑ Annex II: Evaluation/Analytic Methods and Limitations ((if not described in full in the main body of the evaluation report)

❑ Annex III: Data Collection Instruments

❑ Annex IV: Sources of Information

➢ List of Persons Interviews

➢ Bibliography of Documents Reviewed

- ➢ Databases
- ➢ [etc.]

- ❑ Annex V: Statement of Differences (if applicable)
- ❑ Annex VI: Disclosure of Any Conflicts of Interest
- ❑ Annex VII: Summary information about evaluation team members, including qualifications, experience, and role on the team.

The evaluation methodology and report will be compliant with the USAID Evaluation Policy and Checklist for Assessing USAID Evaluation Reports

The Evaluation Report should **exclude** any **potentially procurement-sensitive information**. As needed, any procurement sensitive information or other sensitive but unclassified (SBU) information will be submitted in a memo to USAID separate from the Evaluation Report.

All data instruments, data sets (if appropriate), presentations, meeting notes and report for this evaluation/analysis will be submitted electronically to the MELA Senior MEL Specialist. All datasets developed as part of this assessment activity will be submitted to MELA in an unlocked machine-readable format (CSV or XML). The datasets must not include any identifying or confidential information. The datasets must also be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. Qualitative data included in this submission should not contain identifying or confidential information. Category of respondent is acceptable, but names, addresses and other confidential information that can easily lead to identifying the respondent should not be included in any quantitative or qualitative data submitted.

11. PROPOSED EVALUATION TEAM STRUCTURE[5]

Key Staff 1: Team Lead/Evaluation Expert

This individual will have both technical and methodological expertise and will meet the requirements of a USAID evaluation specialist and educational consultant, with expertise in evaluating learning outcomes at the primary level. The team lead should have significant experience designing and conducting project evaluations and/or assessments.

Roles & Responsibilities: The team leader will be responsible for (1) finalizing evaluation design and methodology; (2) providing team leadership; (3) managing the team's activities, (4) ensuring that all deliverables are met in a timely manner, (5) serving as a liaison between the USAID and the evaluation/assessment team, and (6) leading briefings and presentations.

Key Staff 2: **Subject Matter Expert, Facilities Assessment**

Roles & Responsibilities: The individual will serve as a member of the evaluation team, providing expertise in facilities assessment from use and usability perspective. This individual will be an educational facilities architect, with 10-15 years of experience in primary school construction and school facilities assessments inclusive of assessing use and useability. S/He will participate in planning and briefing meetings, design and conduct school facility assessment and contribute to writing of Evaluation Report. S/He will be responsible for assessing questions of the physical structure focusing on structural, mechanical, acoustic, and electrical engineering and other aspects as indicated in the evaluation questions. . S/he would be also assisted by an educational programmer, who assess the demographics of school siting and the impact of the school on the community.

Key Staff 3: Subject Matter Expert, Data Analyst/Statistician

[5] The team structure will be reviewed/revised in light of the finalized methodology – MELA may engage an LMO or increase the number of researchers.

The Data Analyst/Statistician will be responsible to data review and analysis of the entire evaluation. He/she will be directly responsible for obtaining, review and analysis of EMIS and RAMP data and would need to work closely with USAID education/construction team. Specifically, he/she will contribute to areas including, 1) Obtain data from relevant government entities, with support from USAID; 2) Acquire data from other primary or secondary data sources and maintain databases/data systems; 3) Interpret EMIS and RAMP (and other) data, analyze results using statistical techniques; 4) Develop preliminary Data Review Report for MELA and USAID; 5) Incorporate USAID's feedback to improve and or expand analysis; 6) Optimize statistical efficiency and quality through data analytics and other strategies; 7) Identify, analyze, and interpret trends or patterns in complex data sets especially on aspects contained in the evaluation questions; 8) Work with evaluation team and USAID to prioritize business and information needs.

Local Research Assistants (4) to assist the Evaluation/Assessment Team with data collection, analysis and data interpretation. They will have basic familiarity with educational sector in Jordan, as well as social research skills such as interviews, and focus group discussion, both facilitating and note taking. They will assist in preparation of data collection tools and transcripts, as needed. Local Data Collectors will also assist with logistics and administrative tasks, including arranging lodging, transportation, meeting and workspace (as needed), and setting appointments, and supporting the team with business center support (e.g., copying, internet, and printing). The Local Data Collectors will have a good command of English and Arabic. They will also assist the Team on logistics, as needed.

12. CONTACTS

	Primary Contact/Activity Manager	Technical Contact	MELA POC
Name:	Rand Milhem	Dr. Issam Omar Mayada Shakkour Shideler	Shadia Nassar
Title:	MEL Specialist	Program Management Specialist - Engineer EDY/ USAID/Jordan (XLA)	Gender and Inclusion Advisor
USAID Mission:	Program Office USAID/Jordan	Education Office USAID/Jordan	MELA
Email:	rmilhem@usaid.gov	iomar@usaid.gov mshakkour@usaid.gov	snassar@jordanmela.com

12.1 SUPPORT FROM USAID

ESMP and construction activities are committed to supporting this evaluation and providing the needed data – as it may require some significant effort for some staff.

13. SUBMISSION OF DATASET(S) TO THE DEVELOPMENT DATA LIBRARY:

Per USAID's Open Data policy (see ADS 579, USAID Development Data) the contractor must also submit to the COR and the Development Data Library (DDL), at www.usaid.gov/data, in a machine-readable, non-proprietary format, a copy of any dataset created or obtained in performance of this award, if applicable. The dataset should be organized and documented for use by those not fully familiar with the intervention or evaluation. Please review ADS 579.3.2.2 Types of Data To Be Submitted to the DDL to determine applicability.

14. SUBMISSION OF FINAL EVALUATION REPORT TO THE DEVELOPMENT EXPERIENCE CLEARINGHOUSE:

Per USAID policy (201.3.6.9 and 201.3.6.10b) the contractor must submit the evaluation final report and its summary or summaries to the Development Experience Clearinghouse (DEC) within three months of final approval by USAID.

5.2. Appendix 2: Inception Report Including Detailed Methods

USAID MONITORING, EVALUATION, AND LEARNING ACTIVITY

INCEPTION REPORT: SCHOOL INFRASTRUCTURE MULTI-ACTIVITY EVALUATION AND EVALUABILITY ASSESSMENT

APRIL 2021

DISCLAIMER: This report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of The Kaizen Company, LLC and do not necessarily reflect the views of USAID or the United States Government.

TABLE OF CONTENTS

1. REQUESTING DO 1
2. PERIOD OF PERFORMANCE 1
3. EVALUATION TYPE 1
4. BACKGROUND AND PURPOSE OF EVALUATION 1
   - 4.2 Activity Details 1
   - 4.3 Context 1
   - 4.4 Programmatic Overview 2
   - 4.5 Pandemic Context 3
   - 4.6 Evaluation Purpose 4
5. EVALUATION DESIGN 4
   - 5.2 Evaluation Questions 4
   - 5.3 Methodology 5
     - 5.3.1 Parts/Phases of the Evaluation 5
     - 5.3.2 Sampling 6
     - 5.3.3 Methods and Analysis 6
       - 5.3.3.1 General Methods 6
       - 5.3.3.2 Quality Control Measures and Mitigating Remote Access Issues 7
       - 5.3.3.3 Part 1 Methods and Analysis 8
         - On-site visits 10
         - Surveys 11
       - 5.3.3.4 Methods for Questions 1A and 1B 12
       - 5.3.3.5 Part 2: Step 1 Methods and Analysis Plan 12
       - 5.3.3.6 Part 2: Step 2 Methods and Analysis Plan 22
   - 5.4 Limitations and Challenges 24
6. DELIVERABLES TIMELINE 26
7. EVALUATION TEAM STRUCTURE 27

- ANNEX 1: PISA 2018 GLOBAL COMPETENCE DESCRIPTION 29
- ANNEX 2: EVALUATION DESIGN MATRIX 30
- ANNEX 3: INSTRUMENTS 32
- ANNEX 4: REVISED TIMELINE 34

ACRONYMS & ABBREVIATIONS

ANOVA	Analysis of Variance
COVID-19	Coronavirus Disease 2019
EMIS	Education Management Information Systems
ESMP	Enhancing School Management and Planning
ERfKE	Education Reform for Knowledge Economy
GOJ	Government of Jordan
JSP	Jordan School Construction and Rehabilitation Project
JSEP	Jordan School Expansion Program
LEE	Local Education Expert
LMO	Local Monitoring and Evaluation Organization
MoE	Ministry of Education
MPWH	Ministry of Public Works and Housing
PISA	Programme for International Student Assessment
RAMP	Early Grade Reading and Math Program
SKEP	Schools for a Knowledge Economy Program
SME	Subject Matter Expert
SOW	Scope of Work
TIMSS	Trends in International Mathematics and Science Study
USAID	United States Agency for International Development

JORDAN MONITORING, EVALUATION, AND LEARNING ACTIVITY

School Infrastructure Multi-Activity Evaluation

1. REQUESTING DO

4.2 Education

2. PERIOD OF PERFORMANCE

Expected Start Date (on/about): March 2021

Anticipated End Date (on/about): September 2021

3. EVALUATION TYPE

☐Performance ☐Baseline
☐Process ☐Mid
☐Impact ☐End Line
X Other – multi-activity evaluation

4. BACKGROUND AND PURPOSE OF EVALUATION

4.2 Activity Details

Table 1: Details of Activities Underlying Evaluation

Activities Included in Evaluation	Start/End Dates of Activity	Architect /Engineering Firm	Number of New Schools Built	Number of Schools Expanded/ Rehabilitated
Jordan School Construction and Rehabilitation Project (JSI	2006-2013	Camp Dresser and McKee International	28	100[1]
Jordan School Expansion Program (JSEP)	2014-2020	Bitar	--	- 120 Schools - 300 Kindergarten Classrooms - 50 Sports Fields/ Facilities[2]
Schools for a Knowledge Economy Program (SKEP)	2015-2020	Engicon	25	--

4.3 Context

Due to rapid population growth, the influx of Syrian and other refugees, and economic constraints that have caused a migration of students from private to public schools, Jordanian public schools have been strained by overcrowding in recent decades. While there is near universal enrollment in the school at the primary level, public schools do not have sufficient capacity to safely accommodate

[1] Schools rehabilitated under JSP will not be included in this evaluation.

[2] Kindergarten classrooms and sports fields/facilities built or rehabilitated under JSEP will not be included in this evaluation.

all students, and access is particularly limited for students with disabilities. Over 720 schools currently operate double shifts in order to accommodate students, while many others operate with classrooms sizes beyond their intended capacity. The Ministry of Education (MoE) also operates 777 schools in rented buildings that are often not designed to accommodate all learners. Both academic and non-academic learning outcomes across Jordanian public schools are affected by challenges in access to safe and engaging learning environments, with high rates of violence in schools and low performance in literacy and numeracy from Kindergarten through the upper grades. The Government of Jordan (GOJ) estimates that it will require approximately 600 new schools over the next decade to meet demand.

In response to these needs as well as broader concerns about helping the country's population become more competitive within the region, the GOJ launched the Education Reform for Knowledge Economy (ERfKE) in 2003 in coordination with the MoE. The overarching goal of ERfKE is to strengthen Jordan's human resources to support its transition into a knowledge-based economy and a hub for technology in the region. The four ERfKE components encompass: reforming education policy objectives and strategy; transforming education programs and practices; supporting provision of quality physical learning environments; and finally promoting learning readiness through early childhood education. This reform was supported by several international donors including the United States Agency for International Development (USAID), Kreditanstalt für Wiederaufbau/ German Government Development Bank (KfW), European Union (EU), Canadian International Development Agency, Arab Fund, European Investment Bank (EIB) and the Islamic Bank. ERfKE is supported by many interventions including large scale infrastructure development, information technology, and professional training and service delivery.

4.4 Programmatic Overview

In response to the MoE efforts to increase access to schools as well as enhance the learning environment, USAID/Jordan launched infrastructure activities beginning in 2006 with the four-year Jordan School Construction and Rehabilitation Project (JSP), and continued in 2014 with the six-year Jordan School Expansion Program (JSEP), followed in 2015 by the five-year Schools for a Knowledge Economy Program (SKEP). The primary focus of these activities was to reduce overcrowding in public schools, replace rented and double-shifted schools and provide a safe and more suitable school environment to respond to the needs of the MoE's reform efforts. These outcomes are the primary, but not the only, focus of this evaluation.

Schools designs and construction supervision were provided by Architect and Engineering Design Firms (A/E Firm), while construction was implemented through multiple construction contracts under the Ministry of Public Works and Housing (MoPWH). Furnishings and construction management services were also provided through contracts or grants with other entities.

JSP had a total budget of $199 million to construct and furnish 28 new public schools and to rehabilitate 100 existing ones (including $11.4 million for A/E design services and supervision of construction, $172 million for construction, and $15 million for furnishings). JSEP's budget is $180 million for A/E design services and construction to expand 120 Schools, construct 300 Kindergarten Classrooms and construct or rehabilitate 50 Sports Fields or Facilities, and SKEP had a budget of $102 million for A/E design services and the construction of 25 new public schools. Furnishings for JSEP and SKEP schools were provided through a separate $26 million grant to the United Nations Office for Project Services (UNOPS), and a $3.8 million Construction Management Contract with Trigon provides construction management services to both activities. USAID made significant

investments in school infrastructure and is planning to build an additional 30 schools over the next five years under its Inclusive Schools Program.

Table 2, below, presents the activities that were implemented, budgets, durations, interventions undertaken and those linked to this evaluation.

Table 2: USAID projects for education sector under evaluation

USAID Projects	Project Duration	Cost (million USD)	Interventions	Linked to this Evaluation
Jordan School Construction and rehabilitation Project (JSP)	2006-2013	199	● Built 28 schools ● Rehabilitated 100 schools	28 built schools
Jordan Schools Expansion program (JSEP)	2014-2020	180	● Rehabilitate 120 schools (80 completed) ● To expand / rehabilitate 300 kindergarten classrooms ● To expand / rehabilitate 50 sports fields / facilities.	80 rehabilitated schools
Schools for a Knowledge Economy Program (SKEP)	2015-2020	102	● Build 25 schools (9 completed)	9 built schools

USAID supports ERfKE through other relevant activities in education. USAID and other development partners provide support with teacher training, management systems, training early-grade teachers to improve early-grade numeracy and literacy, and the application of ICTs for learning, improving pedagogy, implementing e-learning curriculum components, non-formal education centers, as well as support for remote learning through television and digital platforms during the pandemic. For example, ESP partnered with the MoE plus Intel Corporation and Microsoft Corporation to pilot interventions testing strategies to improve access to ICTs in schools and better prepare students for work. The Enhancing School Management and Planning (ESMP) activity is designed to enhance the planning, oversight, operation, and maintenance capabilities of the MoE through technical assistance, capacity building, collaboration facilitation, and training to improve existing management systems and procedures for the planning, implementation, and utilization of public schools in Jordan. USAID also supports non-formal education centers outside the standard school system for young people who left school early. The Education Reform Support Program undertook a comprehensive leadership training program for JSP school principals and teachers when they were new. For SKEP, similar programming was conducted under a host country compact with modifications to reflect changes determined appropriately based on the prior evaluation.

4.5 Pandemic Context

This evaluation occurs within the context of a global pandemic and in an increasing wave of cases within Jordan specifically. The outbreak of the COVID-19 pandemic has had a negative impact on different sectors in Jordan. In response, the Government of Jordan activated the defense law and

applied some restrictions including full lockdowns, strict curfew hours, and a shift to a more online-based function in some sectors such as education. During a pandemic, people have been sufficiently at risk that schools have operated since March 2020 with few or no in-person classes (depending on grade) and this closure is anticipated to continue through the period of the evaluation field work (May 2021 for Part 1). The Ministry of Education turned to distance learning and worked with the private sector to develop an online platform, "Darsak," in order to facilitate the learning process in Jordan and accommodate all students, Jordanians and refugees. In addition, the local sports TV channels were channeled to broadcast lessons, and one of the channels was designated for secondary school (Tawjihi) students. There have been particular challenges concerning access, as students in rural and marginalized areas did not have access to the internet or devices including computers, laptops or mobile phones. However, after overcoming some of these challenges, according to the MoE statistics in November 2020, 1.3 million out of 1.5 million students have enrolled and followed their lessons on the Darsak platform, or about 88.5 percent. This restricts the choice in terms of measuring year-end outcomes that one expects to be affected differently across in-person classes to the 2019/2020 school year and earlier.

4.6 Evaluation Purpose

The sites for JSP, JSEP, and SKEP construction were deliberately selected based on a number of factors, including the level of overcrowding of schools within a one- to three-kilometer radius, with the intention that new school construction or expansion would increase access to safe and enhanced learning environments to students who need it most. The JSP evaluation examined this to some degree but was limited by issues in data collection and availability. Since the completion of JSP, USAID has invested in dedicated technical assistance to the MoE and the Ministry of Public Works and Housing (MPWH),with the ESMP activity assisting with data collection and analysis as well as planning for new school infrastructure. With the benefit of newly available data, this evaluation examines how the school construction and expansion affected students in JSP, JSEP, and SKEP schools and their neighboring schools.

More specifically, the purpose of this evaluation is to examine information from past USAID school infrastructure activities in order to 1) inform the design of the schools, and 2) determine how USAID infrastructure has affected students and communities. The focus will be on new schools built under JSP and SKEP but also includes an evaluation of schools which underwent significant rehabilitation or expansion under JSEP.

5. EVALUATION DESIGN

5.2 Evaluation Questions

This evaluation involves three questions, one with two sub-questions that fit into three categories that also map to the question number: 1) Use and Usability of the Physical Spaces Constructed, 2) Patterns of School Occupancy, and 3) Learning and Other Outcomes for Students and Communities from USAID Built and Neighboring Public Schools.

Evaluation Question 1: What are the positive and negative aspects of the physical school environment (inside and outside spaces) that should be taken into consideration for future school construction?

This evaluation question focuses on utilization and functionality of different aspects of the school design, so they can inform the design of the new planned schools. While focusing on the use and

usability of the schools, the evaluation will also examine, where feasible, the changes or modifications as a result of COVID-19 related social distancing and other safeguarding practices as an indicator. The SOW also provides the following questions that relate to but do not fit neatly under the rest of the question 1 data collection and analysis. We present them as questions 1A and 1B[3], below.

Evaluation question 1 A) How long did it take to complete the construction work? In what ways did this deviate from the planned timeline?

Evaluation question 1 B) Is there evidence that SKEP school start-up teacher and principal training under the modified start-up program has resulted in use by teachers of methods and approaches that build on what the newer schools are designed to facilitate?

Evaluation Question 2: In what ways, if any, has the student body changed in USAID built schools and neighboring public schools?

The evaluation analyzes how school's occupancy in USAID built schools has changed in comparison with neighboring public schools (three-kilometer radius). This question was investigated in the previous JSP evaluation, but it encountered issues with data collection and availability. In response to inadequate data availability, USAID has provided technical assistance to the MoE and MoPHW, through the ESMP activity, to assist in data collection. This data (and any other relevant data) will be analyzed for the purpose of this evaluation.

Evaluation Question 3: Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

This evaluation question was explored in previous studies (JSP evaluation and EDY school construction assessment). However, there were challenges in data availability to understand if learning outcomes in USAID-built schools relative to neighboring public schools. This question benefits from different data sources, Education Management Information Systems (EMIS), the Early Grade Reading and Math Program (RAMP), ESMP, and others. The evaluation will also consider intermediate behavioral and wellbeing outcomes for schools, students, and local communities.

5.3 Methodology

5.3.1 Parts/Phases of the Evaluation

The evaluation will be completed in two parts and phases. **Part 1** of the data collection involves data collection for question 1 including 1A and 1B. This will result in a draft evaluation report that covers just Part 1 initially, which focuses on question 1 and a few elements from question 2.

Part 2 of the evaluation covers questions 3 and 2. Part 2 begins with **Step 1**, an evaluability assessment to determine whether it is possible to answer these evaluation questions based on existing evidence and data. The evaluation team will discuss with USAID during regular meetings its key interim findings to consider making decisions in real-time and end this phase by developing a data review presentation based on this information. The presentation will identify what variables are

[3] Question 1B has been modified from this original language from the SOW. "USAID has previously examined the benefits of the school start-up teacher/principal training programs at JSP schools, so it could be useful to explore in more detail how this has been going at the SKEP schools under the modified start-up program that is currently underway."

available, what is missing, ifthese missing variables can be compensated through other proxy indicators, and what would be most needed to complete the evaluation. The analysis also will examine missing data in terms of observations (data) missing across variables, examining which types of observations (respondents or school/classroom features) are most frequently unavailable. The presentation will indicate potential next steps for managing the datasets and how to approach collecting additional data.

Utilizing this report, USAID will decide whether to undertake a second step of additional data collection or whether the evaluation team should rely on only existing data assessed but not fully analyzed under Part 2, Step 1. If additional data is to be collected requiring additional expertise, the evaluation team will be expanded as needed to develop additional data collection tools and complete the analysis for **Part, Step 2** .

5.3.2 Sampling

Broadly, the universe for this evaluation is constituted by two sets of schools presented earlier in Table 1: 1) **37 USAID -built schools** (9 under SKEP and 28 under JSP), and **80 renovated schools** that underwent USAID-funded rehabilitation and expansion work (under JSEP) across governorates in Jordan and 2) All other public schools not built or reconstructed by other development partners. However, for different analyses, the universe will be defined more narrowly, as indicated below.

The team plans to try to reach **all USAID -funded built and rehabilitated schools as part of Part 1 (EQ 1)** observational data collection, although it may sample fewer depending on resources and time available with the Local Monitoring and Evaluation Organization (LMO) to complete the full assignment. If sampling is required for Part 1, the sample may be clustered by district to reduce travel time as well as by geography (north, central, and south), gender of schools (male, female, mixed), and USAID-funded activity (JSP, JSEP, SKEP). All SKEP schools will be included in the final sample, as the number is small.

For EQ 2, the aim is to examine how the school construction and expansion affected students in JSP, JSEP, and SKEP schools and their neighboring schools, where positive spillover effects in reduced overcrowding were intended for the surrounding area. For EQ 3, the aim is to compare learning and behavioral outcomes and changes in attitudes between USAID funded schools and neighboring public schools, where no positive spillover effects are expected, but demographics are expected to be similar. Resources permitting, the sample is planned to include **all 119 USAID funded newly built or reconstructed schools and public schools in their surrounding areas** . For primary schools, the catchment area and thus its nearby neighborhood is expected to have been defined during planning as a 1 kilometer radius, while that for secondary schools, this is expected to have been defined by a 3 kilometer radius. The evaluation will use these thresholds to define neighborhoods. These schools were completed (defined as the year in which students first entered to complete a full year in the new or reconstructed schools) in different years.

5.3.3 Methods and Analysis

5.3.3.1 General Methods

The evaluation uses mixed methods, with some variation among the evaluation questions. Optimum methods follow from the evaluation questions. The questions for this evaluation do not follow that

of a typical performance evaluation (i.e. looking backward at activity performance and processes), but instead is forward-looking for programming in terms of physical structures and comparisons across school types in demographics and outcomes. Thus, the methods are predominantly quantitative with some qualitative data collected for triangulation with fewer interviews of individuals about their opinions on performance.

The evaluation started with a **desk review of existing materials** which included the prior evaluation of JSP from 2013 and an education assessment completed in 2018. **Question 1** is **cross-sectional, and the team will collect and analyze data only from selected USAID -funded schools** emphasizing structure and potential improvements. **Question 2** involves a **comparative analysis** between USAID-built schools and neighboring schools in terms of school occupancy patterns. It analyzes cross-sectionally and across two points in time. **Question 3** involves a **comparative analysis** of learning and behavioral outcomes between USAID-built schools and neighboring schools, but the analysis is expected to be only cross-sectional.

A few informal **key informant discussions** will be undertaken not as a part of the analysis per se but to provide additional context for Parts 1 and 2 including interviews about intended aims of the ERfKE reforms relative to the learning environment from the government's perspective. These are required as well to learn about information relevant to the appropriateness of datasets and gaining access. Currently, key informants may include officials from the MoE's Development Coordination Unit, Secretary General for Education, Education Management, the Supervision and Educational Training Management, Queen Rania Center for Education and Information Technology, and Testing and Examination Management. These interviews serve to clarify context and provide opinions and ideas about data sources and strengths, but do not answer specifically any evaluation questions.

For question 1A, summary statistics will be provided regarding construction timelines using original **construction plans** or related information. Resources permitting, a limited number of **online focus groups** may be undertaken for SKEP schools to respond to evaluation question 1B to supplement responses from principals.

As indicated previously, the evaluation occurs within the context both of a global pandemic and during an increasing wave of cases within Jordan specifically with few or no in-person classes for students since March 2020. As evaluation team members and stakeholders may have health sensitivities that put them at a heightened risk, the evaluation team was required to adopt a "do no harm" policy of minimizing international travel and in-person meetings as much as possible. All data collections are planned to minimize exposure and will only conduct face-to-face data collection with stakeholders for whom no other option will work.

A year into the pandemic, the evaluation team members are very familiar with conducting evaluations remotely, and the Part 2 evaluability assessment data analysis is easily conducted without face-to-face work. While these methods may result in some cases with lower response rates than face-to-face interviews, the positive side of this tradeoff is that most or all of the key stakeholders are accessible by phone or Internet. As such, the evaluation team can reach out to more stakeholders at lower cost in a compressed period. Most stakeholders also have considerable familiarity with conducting their work electronically or remotely as well as familiarity with taking surveys via phone or computer.

5.3.3.2 Quality Control Measures and Mitigating Remote Access Issues

The pandemic has made international travel more perilous and has reduced the value of the presence of a Subject Matter Expert (SME) in learning environments to travel and observe first-hand the nuances of teacher and student use of schools as learning environments, as that is not occurring presently in Jordan. The data collection and methods used therefore are designed to minimize the need for direct international senior-level oversight and include a number of mitigation measures to increase the reliability of the Part 1 data collection. This includes:

- Having the SME design an instrument based on facility surveys and questions used previously by the SME across many other countries and design the instrument to be undertaken easily by non-experts and analyzed easily remotely as with any other data collection
- Engaging a strong LMO led by an seasoned engineer as field manager with experience in school-based assessments and a team of enumerators for school observations with backgrounds in engineering and experience with a similar data collection for ESMP
- Utilizing another team member, the local education expert (LEE), as a second supervisor to support the data collection and conduct spot checks
- Several discussions and training sessions led by the SME of the field manager and LEE prior to training the enumerators on every aspect and item of the data collection and planned analysis
- Live video walk through of a USAID-funded school with the SME
- Real-time oversight of and participation in the training of enumerators by the SME including question and answer sessions
- Pre-testing and pilot testing of data collection instruments as well as real-time norming sessions among enumerators, field manager, and SME
- Programming the instrument electronically to prevent out-of-range entries and other errors
- Collection of photographs by enumerators with SME and field manager conducting random checks of photographs
- Targeting a large number of teachers for the online survey to offset low response rates encountered by online surveys

These are discussed further in the following sections, where appropriate.

Taken together, the evaluation team are convinced that these measures are appropriate and sufficient to assure it can respond to all evaluation questions with the appropriate validity and reliability of data to provide the Mission the best analysis feasible given the context. The evaluation team further notes that the measures for Part 1 are appropriate given the level of precision required to provide the needed recommendations. The team will consider similar measures under the Part 2, Step 2 data collection if decided upon by the Mission.

5.3.3.3 Part 1 Methods and Analysis

The evaluation team will examine the physical structures among USAID-funded schools, designed to incorporate improved learning environments in line with ERfKE from the perspective of international research and best practice in designing educational learning spaces. The reason to align the questions this way is to look for ways to further improve school construction programming and the overall quality and characteristics of the learning environments. The data collection method for Part 1, will focus on only USAID-funded school and, involves three primary methods:

- on-site observational data collection ,
- a survey of principals , and
- a brief survey of teachers .

The observational data collection plus the surveys combined will provide a comprehensive look at the design, use, and condition of all facilities in a safe method for all involved given the current pandemic conditions. The data collected are organized by indicators that are weighted by importance according to opinion based on the research and professional experience. Evaluation question 1 involves collection of data that the evaluation team grouped into **the following overall indicators** , which are developed more fully in the draft instruments.

School, equipment, learning environment

- School location attributes
- School site attributes
- Building condition
- General building structure and design
- Building Safety
- Classroom design elements
- General learning environment
- School program elements
- Expansion potential
- Entry and safety
- Specialty learning spaces (music, art, science)
- Availability of technology
- Efficient and flexible use
- Health and physical fitness
- Educationally appropriate furniture
- Availability and sharing of resources and equipment
- Indoor-outdoor connection
- Eating areas

Maintenance

- Utility infrastructure
- Construction materials and condition
- Upkeep, maintenance supplies, energy

Teaching and community connection

- Teacher learning environment
- Teaching and learning practices
- Community connection / engagement

The first two sets of indicators come from the **on-site observational data collection** and **survey of principals** . The third set of indicators are derived from the survey of principals and the **survey of teachers** . As part of the Monitoring, Evaluation and Learning Activity's commitment to human subject protections, no sensitive information will be asked nor will individuals be identified in the report.

On-site visits

The purpose of on-site visits is to technically assess school facilities across the indicators above. Each indicator will be composed of multiple easy to assess items with only three ordinal rating options for each item and detailed explanations for the rankings. The observation list contains only questions and items that can easily be observed by someone without a technical background. The goal is to keep this survey easy to complete without depending on anyone to be present besides the surveyor.

This survey will contain **three sections** :

1. First, an assessment of **building design** : questions pertaining to how the building was designed and if it has sufficient resources present.
2. Second, and related to the first, an assessment of the **building condition and main tenance** .
3. Third, and **educational adequacy assessment** : questions pertaining to how effective the building was designed to support teaching and learning.

This observational data collection will require approximately a half day per school and will be conducted by the LMO. Under the Part 1 data collection, the LMO undertakes all elements of this data collection from programming the tool designed by the evaluation team, logistics, school field visits, data entry, and data cleaning.

The evaluation team will utilize as much as possible **existing data from the ESMP 2020 facilities survey** to use resources efficiently including survey items on buildings, classrooms, boiler rooms, and bathrooms. These tend to use four-point Likert scales.

The on-site data collection will include collection of some photographs to validate for key indicators. The existence of the extensive dataset and photographs from the ESMP dataset offsets the need for many photographs and also serves to help ground-truth the instrument prior to use at least with respect to classroom data. However, taking some photographs of key locations is planned to increase reliability of the data as a quality control check. The SME and field supervisor will develop a protocol to conduct random checks of photographs. The plan is for the LMO to also undertake at least one live video walk through of a USAID-funded school using a school's WiFi system with the SME providing instructions on what to video record.

Each observation question and item is accompanied with as specific instructions as possible. As the SME will be available remotely only, the field team manager of the LMO and the local education expert will run through a school themselves to pre-test the instrument and generate some questions ahead. Remote training will be undertaken between the SME and the field manager and the local education expert, who also will serve to undertake some early spot checks of the data collection process. The SME will be available during the early hours in the US for the training session. The evaluation team will work with the LMO to program electronically the data collections such that the software restricts out-of-range entries and allows for other data checks.

The data collection process for field-based data collection will include training sessions as well as pilot-testing sessions. The plan is for the field team to visit a single school together as part of the norming process, with each individual rating information across the same school. The field team manager will pull the team together afterwards to see how each is rated to help everyone come to agreement on the same value. The pilot testing may also include data collectors proceeding to the

field again to separate schools and returning to discuss findings for any final adjustments of the instrument.

Surveys

The second method for Part 1 involves **surveys of all 119 principals** from USAID-funded schools to be undertaken by school principals[4] and support staff, as relevant for the maintenance section, which is the core data collection aside from the on-site observational data collection. This survey will ask questions pertaining to the use of the building by the teachers and students from the perspective of the principal. The principal also will be asked to provide information related to teachers and the community. If the principal feels that they cannot accurately answer questions it will be up to them to reach out to these parties and gain answers so they can summarize in their survey. A comments section will give the school leaders a chance to say what they would have done differently / added to improve their facility.

The modality of the survey of principals in USAID-funded schools will be determined in coordination with the LMO to maximize response rates given their capacity and experience. This might include **two modalities, such as online or WhatsApp survey** . For safety, follow-up for non-completed or incomplete surveys may be undertaken remotely both electronically **and by phone calls** to solicit information directly. The school observation enumerators also will be asked to speak directly (but at a mandated distance with masks) with the principal at the beginning of their visits to encourage taking the surveys, with which they can help if just a few questions or another person by phone can help if more needs to be filled in. The follow-up calls are expected to help increase response rates. The follow-up will be designed such that the caller will attempt to collect information by phone unless the principal indicates they will do so the same hour or day electronically. This survey will be pilot tested with a principal out of the USAID sample as feasible and then tested with one principal in the sample.

It is up to the principal to decide if they can accurately answer the questions, or if they want to reach out to others to gain answers. This keeps the process running smoothly without having to hold workshops, focus groups, interviews, or schedule multiple parties to be present on any given day or time during a pandemic. Surveys will be designed so that respondents can return to the survey or a specific question if they require more information rather than stopping the survey and possibly not completing other, easier, questions. The team is aiming for a one-hour survey, as there are many issues to cover.

The team also plans a **short electronic survey for teachers** from USAID-funded schools on a subset of the same indicators and items given to principals for triangulation to ground truth responses from principals which may seem different from the teachers' perspective. The sample for these surveys is not intended to include comparison public schools, so data collection on these indicators would not respond to the comparative aspect of question 3 without further data collection from other public schools.[5] If there may be a separate survey of teachers for Part 2, Step

[4] If the principal is new, the data collection may be undertaken with an assistant or support staff potentially along with the area supervisor.

[5] If it is clear data from indicators in Part 2/question 3 are of interest to USAID regardless of their comparative nature, the team could collect additional data from them at the same time unless it increases survey's length substantially, which could affect response rates.

2, the sample for the Part 1 survey may represent a portion of the total number of teachers, for instance a third, with the remainder left for the Part 2, Step 2 survey related to outcomes.

As with principals, the modality of the teacher survey will be determined with the LMO. The universe of teachers in USAID-funded schools is unknown at the time of the inception report. As response rates generally are low for electronic surveys (often between 3 to 15 percent), the data collection is planned as surveying at least half of teachers from USAID-funded schools.[6] Since teachers are secondary targets after principals and there are large numbers of them, three follow-ups are planned electronically only. Keeping the survey short will help with response rate. If resources permit, the LMO may undertake follow up calls to SKEP-funded schools by phone according to a randomized protocol stratified by school and subject in order to help answer evaluation question 1b.

Questions are expected to cover issues related to their classrooms and workrooms, equipment, use of internet technology, teacher coordination, teaching styles prior to moving to remote teaching, teacher/principal training programs (at SKEP schools but perhaps more broadly), and impediments to using newer methods. Contact information for teachers is expected to be solicited from principals, unless the MoE has updated contact information.

5.3.3.4 Methods for Questions 1A and 1B

To answer question 1A, documents will be gathered from USAID and possibly the former contractors regarding planned contractual timelines and actual completion dates as well as intermediate milestones. The method of analysis will be to calculate summary statistics across school construction timelines for completed school construction or reconstruction efforts by activity.

In order to answer question 1B, resources permitting, the data collection will include a few online focus groups of teachers from SKEP schools by subject (science, math, computer sciences, language). The exact number depends on resources available after discussions with the LMO. As online focus groups are more challenging to manage and engage participants the way typical focus groups do, the plan is to include a smaller number of participants (4 to 5) than typical focus groups.

5.3.3.5 Part 2: Step 1 Methods and Analysis Plan

Part 2 is designed within the SOW as composing two steps. The first step in the Part 2 analysis to conduct an evaluability assessment focused on secondary (existing) data sets to check the availability, completeness, and accuracy of the available databases to respond to the third and second evaluation questions. For evaluation question two, the evaluation team is requested to review existing information for its availability, completeness, and accuracy and provide information for the Mission to determine whether to collect additional information to complete the evaluation (Part 2, Step 2) or to complete the evaluation with only existing resources.

As it may be obvious early on that some ideal indicators are unavailable, USAID also may decide up front to collect additional information related to Part 2 when stakeholders to be contacted for Part 1 are being contacted already. This will be discussed further below.

In addition to increasing access to schools and easing overcrowding, USAID's infrastructure investments anticipated that the enhanced learning environments (in combination with its capacity

[6] The evaluation team plans to reserve a portion of the teachers from USAID schools in case needed for Part 2 data collection to reduce the burden on any who may be selected for that survey.

building and other soft intervention support) also would impact student learning outcomes. Thus, evaluation questions 2 and 3 examine intended and potentially unintended effects across outcomes learning, behavioral, and environmental success metrics.

However, as the assignment is to examine relevant changes directly relevant to ERfKE and the type of outcomes USAID intends to influence in the long run through new and improved schools, the evaluation also will look for evidence related to indicators that are not readily available or may not be feasible. These will provide the Mission a more-complete picture of what it could look for moving forward if it is to understand more holistically the effects of its investments in infrastructure, as well perhaps as its other complementary soft investments in the sector.

For evaluation question 2, the evaluation team plans to attempt to access and review information that speak to the indicators that follow in table 3, below. Table 3 presents broad indicators by category, and presents expected sources and comments, particularly when there are weaknesses or issues with availability. Indicators that are not expected to be used are presented in grey.

The evaluation team recognizes that it will not be feasible to collect objective data across all indicators. As of this writing, indicators expected or considered for analysis under Part 2, Step 1 and potentially used under Step 2 appear on the following page along with preliminary comments and limitations.[7] These comments are discussed briefly under Part 2, Step 2 and will be explained in greater detail in the evaluation report.

[7] This information provides more detail for discussion than the evaluation design matrix

Table 3: Evaluation Questions 2 and 3 Indicators by Category, Expected Sources, and Preliminary Comments and Limitations

EQ	Category	Indicator	Potential Source	Preliminary Comments / Limitations
2	Overcrowding	Number of (reduced) double-shifts	EMIS	If not in EMIS, will add to principal survey
2	Overcrowding	Number of rented schools in catchment areas (by primary/secondary)	EMIS	Different catchment area size by school level could a complication
2	Overcrowding	School occupancy levels relative to design	EMIS	Unclear if design standards set specific level and seems there may not be clear definitions for this indicator
2	Overcrowding	Class occupancy levels relative to design	EMIS	Unclear if design standards available disaggregate class across both USAID and comparison schools
2	Overcrowding	School oversubscription levels (number of students applying who ar not accepted)	EMIS	
2	Overcrowding	Student-teacher ratios	EMIS	
2	Overcrowding	Perception there are too many students to use newer pedagogical methods	▪ Teacher survey ▪ Field directorate supervisors online FGD	
2	Overcrowding	Student to classroom space ratios	EMIS + engineering firm plans and comparison to local schools with	Unlikely appropriate detail would be available consistently from engineering plans about consistently-defined catchment areas

			measures of classroom size	
2	Inclusion	Number of refugee-only schools	EMIS	
2	Inclusion	Enrollment with disabilities	EMIS	
2	Context	School-age population and area demographics	EMIS	It would be challenging to conduct demographic analysis by localized geographic units based on catchment units themselves and is more efficiently done using EMIS data to represent student population demographics for schools identified as being in the catchment.
3	Context	Complementary educational interventions	USAID-funded activities and other donors/development partners /document review	Mapping interventions by type across schools to understand the confounding and complementary interventions that might affect outcomes. This may be used to disaggregate findings using t-tests.
3	General success metrics	Grade repetition rates	EMIS	
3	General success metrics	Dropout rates	EMIS	
3	General success metrics	Tawjihi pass rates	EMIS	Available, though do not measure holistically intended outcomes of reforms
3	Core subject proficiency	Other standardized class test measures	EMIS	Probably unavailable

3	Core subject proficiency	Course grades – Mathematics, Science, English, Arabic, Computer sciences	EMIS	Higher grades in core subjects are not themselves the aim of the interventions and include hidden biases
3	Learning skills	Early grade reading/literacy skills	Lot Quality Assurance Survey (LQAS) Early Grade Reading Assessment	Do not appear to be paired with SES data for context. Do not speak to higher-grade level effects. Excludes schools built in prior 1.5 years Early Grade Assessments (Reading and Math) were not designed around USAID interventions and therefore likely provide insufficient numbers of USAID schools for generalization or representatives. Statistical tests may have too little power. Unlikely to be used in the analysis.
3	Learning skills	Early grade numeracy skills	LQAS Early Grade Math Assessment	See above
3	Learning skills	8th grade science and reasoning skills 8th grade math and reasoning skills	TIMSS 2019	In addition to content domains, results also account for cognitive domains of knowing, applying, and reasoning in a better-tested way than grades. See note below on data accessibility.
3	Learning skills	Fifteen-year old reading literacy, math, science, global competence, financial literacy, Internet and technology familiarity[8]	PISA 2015 / 2018	In theory, this represents an ideal dataset for this analysis, especially the "global competence" assessment (defined further in appendix A) and a section on familiarity with and use of IT. The sample is designed to be representative at the governorate level, so may include insufficiently funded

[8] Examines not just how well students "can reproduce knowledge; it also examines how well students can extrapolate from what they have learned and can apply that knowledge in unfamiliar settings."

				schools. It is unclear yet how to access the data, from the National Center for Human Development or from PISA/OECD itself. Data should be paired with optional surveys of parents and teachers.
3	Learning skills	Information technology access/skills	PISA 2018	Likely no uniform measure of skills available and too complicated to assess in timeline required.
3	Learning skills	Team/group work skills	▪ Classroom observation ▪ Field directorate supervisor observation data	Likely no uniform measure available, too complicated and unreliable to assess remotely in timeline required. Could be assessed in the future through classroom observation though teacher practice measure may speak to the likelihood of developing the skills
3	Learning skills	Project-based working skills	▪ Classroom observation ▪ Field directorate supervisor observation data	See above
3	Intermediate/teacher-level outcome	Teacher practice / classroom observation	Field directorate electronic supervisory program data	This indicator is an intermediate indicator of behavior that should help explain whether learning outcomes are likely to change. Involves 200 supervisors for grades K-3. Unclear how they map to USAID-funded schools. Our understanding is no wider availability across grades. Uncertain database location Uncertain how practice is rated / maps to training and learning taxonomies.

3	Intermediate/teacher-level outcome	Teacher practice / classroom observation	Field directorate paper-based supervisory program data	Same as above but for other grades. Uncertain how consistently available information is and time consuming the process of collecting this information would be, but the team will explore further. Will need to learn methods used to undertake paper-based versions to understand standardization and reliability. Will access the electronic database first to determine potential usefulness for part 2/step 2. May be readily available for only a subset of districts. Methods may range from developing clustered samples stratifying across treatment and comparison schools, grades, and subjects to an analysis of a small number of cases.
3	Intermediate/teacher-level outcome	Teacher classroom practices	▪ Teacher survey ▪ Principal survey	A few questions on teacher classroom practices could complement those listed immediately above as a proxy for actual practice. Only collecting for USAID (treatment) schools. Reliability is expected to be somewhat low and associated with a positive bias among teachers.
3	Intermediate/teacher-level outcome	Use of support materials	▪ Supervisory program data ▪ Teacher survey	Might be picked up in measure above plus question to teachers about equipment availability and use Only collecting for USAID (treatment) schools
3	Intermediate/teacher-level outcome	Segmentation of large schools	Principal survey	Only collecting for USAID (treatment) schools
3	Intermediate/teacher-level outcome	Teacher morale	Teacher survey	Only collecting for USAID (treatment) schools

3	Intermediate/teacher-level outcome	Time on task	▪ Principal survey ▪ Teacher survey	A question to these stakeholders is likely to be an unreliable measure of underlying indicator/issue but not costly to add to existing surveys. Only collecting for USAID (treatment) schools
3	Intermediate/teacher-level outcome	Non-violent disciplinary tactics	▪ Principal survey ▪ Teacher survey	Only collecting for USAID (treatment) schools
3	Intermediate/teacher-level outcome	Inter-teacher cooperation	▪ Principal survey ▪ Teacher survey	Only collecting for USAID (treatment) schools
3	Environmental outcomes	Bullying	PISA 2018	Unclear if available for analysis
3	Environmental outcomes	Safety	▪ ESMP ▪ Principal survey	
3	Environmental outcomes	Participation in extracurricular activities	Principal survey?	
3	Environmental outcomes	Vandalism	ESMP	
3	Environmental outcomes	Social cohesion	▪ Principal survey ▪ Teacher survey	Challenging to measure usefully Only collecting for USAID (treatment) schools
3	Community connection	Presence of life-long learning options	Principal survey	Only collecting for USAID (treatment) schools
3	Community connection	Parental involvement	▪ ESMP ▪ Principal survey	If available only through evaluation, only collecting for USAID (treatment) schools

The primary method planned for Part 2, Step 1, the evaluability assessment, is quantitative, reviewing available databases, triangulated as relevant with consultation meetings and potentially short interviews with relevant stakeholders (qualitative analysis). Primary data sources are EMIS, the database from ESMP on school infrastructure, and those from or associated with RAMP.

USAID and the Monitoring, Evaluation, and Learning Activity are facilitating access to the databases based in Jordan with discussions through meetings, virtual or in-person to discern how they can be analyzed to respond to the evaluation questions. The team will try to get electronic access to the databases at the MoE, mainly EMIS database, to discern format, what variables are included, linkages to GPS data or mapping systems, data availability by year and variable, feasibility of generating additional variables for analysis given data available, and more. Data from the RAMP and ESMP datasets will be analyzed similarly as well as how the databases can be mapped to the EMIS database or other databases, if feasible.

The evaluation team also will work on gaining access to anonymized data at the most disaggregated level permitted from two international assessments, the Programme for International Student Assessment (PISA) in 2018, which was designed to test applied reading, science and math skills in a problem-solving context and the Trends in International Mathematics and Science Study (TIMSS). The latter assessment was last undertaken in 2015 and so would apply only to JSP and JSEP schools. Access is expected to have to come from international sources, making access to those datasets more challenging and less likely in the time frame planned.

During the analysis of these databases, the team will focus on three criteria to guide analysis:

1) **Data availability** : The team will identify and understand whether all variables that are or might be required are available. The team will assess what are the available variables, which indicators can be developed based on these available variables, what is missing, and whether other databases can be used to complement each other.

2) **Database completeness** : While data can be available, it can be incomplete. All databases therefore will be analyzed to check their completeness and explore missing variables and observations, determine if variables and observations can be imputed, mapped or collected.

3) **Database accuracy:** Confirming that databases are accurate requires checking all variables for mistakes i.e. entry issues or calculations, and any extreme values. The DA/S will check the reliability of the databases through triangulating his analysis results with published reports or official figures from other sources, such as the Jordanian department of Statistics that publish reports and figures based on these databases analysis and calculations. This can also be checked using the qualitative analysis that will accompany these databases analysis, if needed, to check the accuracy of the data with relevant and different stakeholders.

The analysis plan for the Part 2, Step 2 evaluability assessment follows. Actual methods used may change or be added to based on the databases and issues encountered as well as database structure.

1) Run a descriptive analysis to analyze and ensure that these databases are complete. For example, investigating the number of schools included in these databases and ensuring their completeness. This analysis may include use of histograms, extreme value tests, and reliability

tests. Descriptive analysis will be the first and most important start of this analysis, as it will provide a starting point of analysis for USAID built schools and neighboring public schools.

2) This analysis also will involve identifying patterns in missing observation counts by different important characteristics, such as by class/grade level.

3) For data accuracy analysis, the team may cross-check across data sources if two datasets contain the same variable.

4) Derive all variables within each database (such as number of students, number of teachers, and school's area, etc.), to provide metadata analysis for these variables and provide a meaningful description.

5) Identify all possible indicators that can be formulated from these available databases where dummy tables will be developed explaining the variables included within each indicator with a description of these indicators that will be provided too.

6) To check the accuracy of these databases, the data collection tools will be checked to ensure that these variables are representing what they are tagged for, i.e. checking their reliability, then the derived indicators will be triangulated with other databases to check their validity.

7) Through exploring the databases, the team will check if there is any proxy indicators that they can be developed to cover any missing variables/indicators, if feasible.

Part of Step 1 will include undertaking some of the analysis planned as part of Step 2 to determine whether a more full analysis can be pursued. These steps include the following.

8) Cross-tabulation may be one of the methods to provide analysis of the data on different disaggregated levels, such as gender (male or female or mix schools), location (north, middle, south, rural, and urban), nationality of school (Jordanian or Syrian refugees or mixed schools), disability success (disabled students and other students), and any other variables that can be extracted from the databases.

9) Indicators will be developed using the available variables that are key in responding to this evaluation question, for example grade repetition rates which will be developed for USAID built schools and another one for neighboring public schools, then both indicators will be checked and analyzed if they have significant differences or not. To check the differences between these variables that are coming from two different groups, the team will check their distributions and characteristics, as these will determine the specific statistical analysis method that will be used. It has specific steps that can be followed as below:

    - Check if these two groups (USAID built schools and neighboring public schools) are paired or unpaired groups. It is expected that they are paired, as their data are related (i.e. data influenced by each other) in both groups. This also will be confirmed as a measurement that will be used for a series of years (before and after the intervention across time), as discussed further in the next sub-section.

- The team will match the appropriate test with the data type (continuous, ordinal, categorical, binary). For example, for continuous variables, the team will check the normality or skewness of the distribution. For normally-distributed variables, the team will use parametric tests, predominantly the paired t-test or the Pearson coefficient of correlation. If the data are not following normal distribution or it is unclear if they follow normal distribution, then the evaluation will undertake non-parametric tests such as the Wilcoxon's rank-sum test.

Potential disaggregations follow, as relevant and feasible, for the Part 2 analysis (Step 1 and 2), although others might be added.

- Intervention activity (JSP, JSEP, SKEP)
- Sex
- Geography (north, middle, south)
- Age cohort/class level (basic/secondary, lower basic/other basic)
- Refugee status (Jordanian, mixed, refugee)
- Students with disabilities/others
- Year of school construction/renovation (Probably schools built 6+ years ago, more recent)

5.3.3.6 Part 2: Step 2 Methods and Analysis Plan

As indicated before, Part 2 Step 1 will help determine additional data collection to be considered by the Mission based on what data is missing as well as how deeply the Mission will want to understand the effects of their investments and thus additional methods and requirements to be determined later. However, some possible data collections become clear earlier. Given timelines to provide the Mission useful input for academic year 2021-'22 programming, existing datasets available for analysis are likely to compose all or almost all of the analysis.

The key issue facing the Part 2, Step 2 evaluation analysis is that the most methodologically appropriate way to analyze the effect of the infrastructure on students is to use individual-level data complete with socioeconomic data rather than classroom level data. Such data would allow for matching by socioeconomic background of individuals for whom we would expect similar outcomes barring the intervention across schools is unavailable. That is, one would want to account for these differences that are likely to confound or bias results measured at only the school or even classroom levels.[9]

However, it appears that individual-level data is unavailable to conduct this type of analysis for many of the key outcomes of interest. Creating or adapting a methodologically-appropriate assessment of higher-level skills in line with the goals of the ERfKE reforms would require more time and resources than appear feasible to provide results rapidly. Further, and be impractical to conduct during a pandemic plus partially confounded by over a year of remote learning. The resulting analysis that the

[9] There is controversy, however, in the literature about the ability of matching relative to having a true control, which is not available here, to filter out sufficiently this bias. However, were the Mission interested in testing more-rigorously the hypothesis that infrastructure combined with soft support services affects learning outcomes, it might consider whether it is feasible to work with the government moving forward towards randomly (and thus perhaps more fairly) selecting students for schools where there is over-subscription (too high interest among students) relative to school capacity.

evaluation team therefore plans to undertake is likely to include a bias that might understate the effects of the interventions if the new schools disproportionately benefit "higher/privileged" socioeconomic status or vice versa.

Another method for consideration under Part 2, Step 2 could involve a survey and potentially online focus groups among subject-matter field directorate supervisors across all 42 field directorates that include USAID-funded schools on issues such as extent to which teaching methods used in USAID-funded schools and other schools, facilities and equipment supporting learning, and corporal punishment. Online surveys would be programmed by the LMO and remote focus groups would be organized and undertaken by the LMO under the supervision of the team leader and data analyst/statistician.

Initial discussions confirmed that using data from the pandemic onward would not capture the differential effect of school infrastructure and teaching. This is both because the family unit becomes more important than the school in outcomes and because teaching practices for remote learning were not necessarily accommodated or trained for differently between USAID-funded and regular public schools.

The team and the Mission considered conducting the analysis with a single cross section of each USAID-funded school and the nearby schools the year before and after students entered the new school, with each school measured whatever year that represented. This might provide the most powerful statistical test of differences between USAID funded and neighboring schools immediately after construction or reconstruction but does not help understand though trends over time. Therefore, the agreed-upon approach to capture the longer-term impact of the construction projects, therefore, is selecting specific cross-sectional years for all schools and check how these schools as a group have affected relevant indicators. The team plans to select as its three points of analysis 2010, 2015 and 2019. These years are designed to capture a broader effect of the USAID-funded schools. The rationale behind choosing these years is to ensure a point of time (2010/2011) before Syrian refugees' influx that shows the overall status of the schools, especially in terms of learning outcomes (academic and non-academic). 2015/2016 is a point where one can capture the full impact of JSP and partially JSEP as it was fully under implementation at that time and how they influenced the analysis results. Finally, 2018/2019 is chosen to check the impact of USAID-funded projects on EQ2 and EQ3 outcomes.

Within each selected year, for example 2010, data such as school occupancy indicators will be taken from EMIS for both the USAID-built schools and the neighboring public schools (G1 and G2). After calculating each indicator for these two groups for 2010, unpaired t-tests (probably Mann-Whitney depending on normality of the data) will be used to test the hypothesis that there is no statistically significant difference between these two groups. The year 2010 is the year prior to waves of Syrian refugee populations arriving. This process will be repeated for the years 2015 and 2019. To check for statistically significant differences in average indicator measures (e.g., for crowdedness) across all three years – 2010, 2015 and 2019 – relative to their catchment areas, the team will use repeated measures ANOVA test.

Similarly, for EQ 3, the mean of the learning outcomes of the students between USAID funded schools and neighboring public schools will be analyzed using t-test, after checking which t-test is suitable for these databases based on their normal distribution and variance differences. Then, repeated ANOVA will be used to check the differences between the learning outcomes of students in catchment areas within and between the selected years for this comparison.

The evaluation team and the Monitoring, Evaluation, and Learning Activity will take particular care with respect to sensitive and personally-identifying data it receives. These datasets will be uploaded into a separate secure folder with access limited to three or four individuals – two from the Monitoring, Evaluation, and Learning Activity and the data analyst and team leader from the evaluation team.

5.4 Limitations and Challenges

As the methodology is retrospective in nature and both does not afford the opportunity of selecting treatment and controls and occurs amid large exogenous contextual changes especially in terms of waves of refugees into the country that directly affect some of the key outcomes of interest, including schools occupancy.[10] Further, comparisons between USAID-funded schools and other public schools inside the catchment area (accounting for any school renovated or constructed by the government or other development partners) in terms of crowdedness indicators is expected to be somewhat attenuated (understated). This is because the point of the construction projects is to lessen overcrowding, which should result in positive spill-over effects to other schools in the catchment area. Therefore, the research cannot discern well attribution of some of the outcomes of primary interest.

However, the study will examine the contextual changes affecting outcomes generally and specifically in catchments around USAID-funded facilities and make that a point of the analysis. The evaluation team also will attempt to net out similar investments in new or rehabilitated facilities from its analysis of catchment areas to strengthen the confidence in attribution of results.

Given that the evaluation occurred during a pandemic without students in schools since March 2020, this has affected the validity of data from 2020 onward on outcomes that would be affected by differentiation of outcomes due to different in-school environments and limited the ability to safely conduct additional in-person data collection or for international travel. The team thus will analyze secondary data on student outcomes from 2018 to 2019, which limits its ability to speak to outcomes for the most recently completed SKEP schools. The pandemic restricts the ability of the internationally-based team leader and SME to travel safely and for the team generally to conduct in-person training with multiple people, in-person surveys, or focus groups. Given that schools are not in session in person, the loss of information from not having in person supervision by the SME is reduced greatly. Further, the team has undertaken strong mitigation measures to ensure no loss of quality or learning. They will rely on locally-based staff, encourage remote interviews and discussions, and conduct no in-person focus groups. The team also has planned several methods to quality assure Part 1 training and data collection including the team lead and SME designing tools that do not require in-person visits, conducting extra training, attending training remotely, use of supervisors and enumerators with background in facilities and already experienced in similar data collections in schools, pre-training norming sessions among enumerators, in-person supervision, and taking of photographs in schools monitored by the SME and field manager for adherence to intended criteria.

[10] Another challenge is that it is not possible to define fully whether a classroom or even a school is over-crowded. Thus, the team follows the lead of RAMP of instead measuring occupancy.

The analysis of student outcomes centers on analysis of historical data prior to the pandemic rather than recall. This reduces both the potential for recall bias and the problem of disruptions associated with the pandemic at the cost of fewer observations of completed SKEP schools for some analyses.

As noted earlier, a key issue facing the Part 2 analysis is that the most methodologically appropriate way to analyze students-level outcomes would be to use individual-level data matched with socioeconomic data rather than classroom-level or school-level data to control for observable differences across student populations using propensity score matching and regression methods. Individual-level data available on learning outcomes were unavailable to conduct this type of analysis for many of the key outcomes of interest, however. The resulting analysis that the evaluation team therefore plans to undertake is likely to include a bias that might understate the effects of the interventions if the new schools disproportionately benefit "higher/privileged" socioeconomic status or vice versa. However, creating or adapting a methodologically-appropriate assessment of higher-level skills in line with the goals of the ERfKE reforms would require considerably more time than feasible to provide results for programmatic purposes prior to the next academic year.

Another smaller challenge is that the methods cannot be fully spelled out for the Part 2 analysis early, as it depends on what data are found to be available and useful for evaluative purposes.

Similarly, the LMO was not yet chosen nor negotiations undertaken with the LMO over feasibility of planned data collection and sampling plans for Part 1 given a fixed budget and uncertain timelines to visit schools and collect all data at the time of developing the methods. This meant that the exact methods and sampling may need to change somewhat, although what the resulting data can tell the Mission will remain robust.

As there are multiple activities funded by USAID as well as other development partners and a relatively modest number of schools, especially new SKEP-funded schools, the evaluation will not be able to parse the effect of the infrastructure alone. That is because if all schools received both types of interventions, rather than some schools receiving no soft skills support, one cannot separate neither theoretically nor statistically the effect of just one intervention. This is not entirely problematic as the evaluation is not designed to designate attribution by specific activity. Further, while the evidence in the literature suggests that investments in infrastructure alone can generate some changes in learning outcomes without investments in complementary "soft" interventions,[11] these may be strengthened by the type of complementary capacity building support in soft skills in how to best utilize the new or upgraded facility and resources.

In terms of timing, evaluability assessment of existing data, there does not appear to be comparative data to assess database accuracy. Further, work and analysis with existing datasets often does not follow neatly desired schedules, especially when access to datasets is provided behind schedule. However, the team will analyze and report back to USAID whether it advocates additional time for analysis prior to presenting evaluability assessment findings.

Finally, the field-based data collection training and beginning of data collection overlaps with Ramadan. In addition, the analysis of so many discrete datasets with such a large number of variables requires more time than planned in the original SOW to provide solid findings and conclusions. This is even more the case with the entire team working remotely part-time in different time zones. The evaluation therefore hopes to compensate somewhat by trying to negotiate with its planned LMO

[11] See for instance, http://dro.deakin.edu.au/eserv/DU:30036968/blackmore-researchinto-2011.pdf

to use more enumerators to compress data collection timelines slightly and to plan for longer timelines in analysis prior to presenting findings. Slightly more time during analysis will allow the team to present the Mission more complete findings and even conclusions during its initial presentation as well as in the report.

6. DELIVERABLES TIMELINE

Each deliverable and some processes and their planned delivery dates are presented in Table 4, below. The timelines are contingent on when data is made available or feasible for the chosen LMO to collect as well as complications and additional manipulations required in analyzing them that will only be discovered while working with the data. For example, the data for Part 2 have been made available later than planned pushing back slightly the recommended delivery date for the initial Part 2 evaluability assessment findings.

This plan therefore is expected to change somewhat based upon mutual understandings between the Mission and the Monitoring, Evaluation, and Learning Activity. The evaluation team recommends a couple shifts in timelines to allow for sufficient time to analyze the many datasets available, but also hope to take measures to compress timelines if feasible and deliver earlier than indicated. Throughout the assessment, the evaluation team and the Monitoring, Evaluation, and Learning Activity plan to update USAID/Jordan and provide initial findings as available weekly or as the Mission is available.

Table 4: Deliverables or Processes and Planned Associated Delivery Dates

Period	Deliverable or Process	Estimated or Actual Date
Inception	In-briefing	3/17/2021
	Inception report delivered	4/11/2021
	Final inception report delivered	4/22/2021
Data Collection	Field work period completed	6/20/2021
Preliminary Findings	Preliminary findings presentation, Part 2 evaluability	5/13/2021[12]
	Preliminary findings presentation, Part 1	6/30/2021
	Final presentation (Part 1 and Part 2)	TBD
Report	Draft evaluation report, Part 1 submitted to Mission	7/25/2021
	Draft evaluation report, parts 1 & 2 submitted to Mission	

[12] Earlier approved on date was on a weekend and did not account for slower than planned provision of data. The team therefore recommends presenting findings no earlier than a week later to provide the Mission more robust findings.

	Revised evaluation report, Part 1 submitted to Mission	8/23/2021[13]
	Revised full evaluation report submitted to Mission	TBD
	Raw and analyzed files submitted to Mission	TBD
Final Presentations	Final presentation to USAID	TBD

7. EVALUATION TEAM STRUCTURE

Team Lead/Evaluation Expert

This team is overseen by a team leader with experience designing and conducting education-related project evaluations. The team leader supervises all parts of the evaluation including developing the evaluation design, managing team activities, development of instruments, data collection, analysis, presentations and reports.

Subject Matter Expert, Facilities Assessment

The facilities assessment subject matter expert provides expertise in international research and best practice regarding educational facilities and learning environments from the use and usability perspective. This individual is responsible for working with the team leader to develop methods and instruments to assess the physical structure, learning and general spaces, and equipment. The expert will lead analysis and writing for relevant evaluation questions and contribute to the Part 2 analysis as relevant

Data Analyst/Statistician

The data analyst provides analytic and technical skills necessary to handle the large number of datasets and data involved in the analysis. Working under the team leader, the data analyst provides input into the assessment and evaluation design and undertakes the evaluability assessment. The data analyst/statistician obtains, reviews and analyzes datasets, generates visualizations, and drafts sections of the report.

Local Education Expert

The local education expert provides expertise on the local educational context. This individual works under the team leader and with the Monitoring, Evaluation, and Learning Activity to discuss and coordinate with stakeholders in understanding the context, data availability, and data access. She provides input on processes and comments on written documents.

Local Monitoring and Evaluation Organization

The core evaluation team is complemented by a locally-hired LMO operating under a field team manager. The LMO organizes and undertakes the data collection according to the design with adjustments made according to field conditions and agreements with the evaluation team. This team includes enumerators and data-related staff as required, including a data analyst. The enumerators

[13] The recommended delivery dates for Part 1 account for the wide variety of data that need to be collected and analyzed for evaluation question 1, 1A and 1B and slightly longer timelines for Mission review, additional analyses, internal reviews, and revision.

are chosen such that they all have experience in infrastructure use and usability assessments related to schools. Those calling school representatives have a background in education.

ANNEX 1: PISA 2018 GLOBAL COMPETENCE DESCRIPTION

"The global competence assessment in PISA2018 is composed of two parts: a cognitive assessment and a background questionnaire. The cognitive assessment is designed to elicit students' capacities to critically examine global issues; recognize outside influences on perspectives and worldviews; understand how to communicate with others in intercultural contexts; and identify and compare different courses of action to address global and intercultural issues.

In the background questionnaire, students will be asked to report how familiar they are with global issues; how developed their linguistic and communication skills are; to what extent they hold certain attitudes, such as respect for people from different cultural backgrounds; and what opportunities they have at school to develop global competence.

The four dimensions of global competence are supported by four inseparable factors: knowledge, skills, attitudes and values."[14]

[14] OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b25efab8-en, "Chapter 6– Global Competence Framework," pp. 168-170.

▪ ANNEX 2: EVALUATION DESIGN MATRIX

Overlap

EQ#	Indicator Category	Potential Data So urces	Potential Data Collection Methods	Data Analysis Methods
1	● Building design ● Safety ● Infrastructure and materials ● Educational appropriateness ● Maintenance and condition ● Community connection ● Technology availability ● Building use ● Teaching and learning	● Key documents ● On-site observations ● Principals ● Teachers ● Ministry of Education ● EDY-funded activities	● Document review ● On-site observational school survey ● EMIS data obtained from MoE for all schools supported by JSP and JSEP ● ESMP database ● Principal survey ● Teacher surveys	● Development and analysis of indices weighted by importance ● Disaggregated univariate analysis
1A	Construction timeliness	Construction plans and trackers	Document requests, review	Summary statistics
1B	Use of teaching methods	Teachers	Online focus groups of teachers from SKEP schools	Qualitative content analysis
2	● School occupancy/crowding ● Inclusion ● Context	● Key documents ● Ministry of Education ● EMIS ● Construction plans (classroom size) ● ESMP database	● Accessing secondary data sources ● Document review ● Key informant discussions (context and data access only)	● Review of data availability, completeness, and accuracy ● Cross-year unpaired t-tests ● Repeated ANOVA ● Triangulating with consultative meetings, as relevant

3	● Success metrics ● Subject proficiency ● Learning skills ● Teacher practices	● Key documents ● RAMP LQAS database ● TIMSS 2019 ● PISA 2018 ● Principal ● Teacher ● Field Directorate supervisors	● Key informant discussions ● Accessing secondary data sources ● Document review ● Principal surveys ● Teacher surveys ● Supervisor classroom observation electronic data ● Supervisor classroom observation paper data ● Online focus groups of supervisors	● Review of data availability, completeness, and accuracy ● Cross-year unpaired t-tests ● Repeated ANOVA ● Triangulating with consultative meetings, as relevant

ANNEX 3: INSTRUMENTS

See attached Excel.

▪ ANNEX 4: REVISED TIMELINE

The following is the proposed timeline that was shared with USAID as of August 31,2021

Period	Deliverable or Process	Estimated or Actual Date
Inception	In-briefing	03/17/2021
	Inception report delivered	04/11/2021
	Final inception report delivered	05/31/2021
Data Collection	Field work period completed	08/22/2021
Preliminary Findings	Preliminary findings presentation, Part 2 evaluability	05/26/2021
	Preliminary findings presentation, Part 1	08/17/2021
Report	Draft evaluation report, Part 1 submitted to Mission	08/09/2021
	First draft of the complete final evaluation report, (inclusive of Q1, 1A &1B, Q2 and Q3) submitted to Mission	09/16/2021
	Second draft of the final evaluation report submitted to Mission	10/07/2021
	Final Full evaluation report submitted to Mission	10/21/2021
	Raw and analyzed files submitted to Mission	10/12/2021

5.3. Appendix 3: Information Sources – List of Datasets Accessed, Interviews, Focus Groups

Secondary Datasets Accessed

- Education Management Information System databases for academic years 2010-11, 2015-16, and 2018-19.
- Ministry of Education Student drop-out and repetition number
- Ministry of Education Tawjihi school-level pass rates, 2019
- USAID's Enhancing School Management and Planning Activity public school data collection, 2018
- USAID's Early Grade Reading and Mathematics Project Lot Quality Assurance Survey, 2018-19
- Field directorate supervisor early grade classroom observation dataset, 2018-2019
- The Trends in International Mathematics and Science Study, Jordan, 2015, 2019
- Programme for International Students Assessment, Jordan, 2015, 2018
- Tawjihi student-level scores, 2019[49]
- National Assessment for the Knowledge Economy, 2014
- Educational Quality Control exam, 2018, 2019

Table 5: Evaluation Team interviews, Meetings, and Calls with External Stakeholders

Institution	Persons	Position/Title	Dates (2021)
Enhancing School Management Program ESMP	Jordan Mission, Evaluation Team, MELA		March 28
Early Grade Reading and Math Program (RAMP)	Patric Fayaud, Suzan Salhi, Ahmad Tammam, Rula Al Jundi	CoP, DCoP, MEL Manager & Education Programs Officer	April 1
Queen Rania Center for Educational & Information Technology/ QRC/ MOE	Marwan Turman	Information Technology Directorate Manager	April 5
QRC/ MOE	Eng. Abd Razaq Awamleh	Engineer/ Information Technology Directorate	April 5
QRC/ MOE	Eng. Abd Rahim Mehyar	Engineer/ Information Technology Directorate	April 5
ESMP	Eng. Najd Hanahnah	Senior data and knowledge management specialist	April 13
Supervision & Educational Training Directorate	Jumaa Al Soud	Director	April 15

[49] The dataset provided included invalid data with more students taking the exam in USAID-funded schools than teachers and was not used.

Supervision & Educational Training Directorate	Jumaa Al Soud	Director	April 21
Early Grade Reading and Math Program (RAMP)	Patric Fayaud, Suzan Salhi, Ahmad Tammam, Rula Al Jundi	CoP, DCoP, MEL Manager & Education Programs Officer	April 22
Planning & Educational Research Management MoE	Safa Albiruti	School Planning Directorate	April 22 and May 5
QRC/ MOE	Marwan Turman	Information Technology Directorate Manager	April 27-28 & May 4-5
Leading Point Management Advisory Services	Ahlam Shabaneh	Leading Point Senior Partner	April 29 and many thereafter
School Development and Directorate Program	Dr. Zian Twaissi	Education Technical Adviser	April 28
Early Grade Reading and Math Program (RAMP)	Ahmed Abdelgawad	Senior Monitoring and Evaluation Manager - RTI	May 4 August 20
USAID/Jordan	Dr. Issam Omar	Project Management Specialist	May 6
MoE/ Development Coordination Unit (DCU)	Duaa Alsalah	KOICA Project Coordinator	May 16
Ministry of Education	Ali Hammad	Director of Examination & Testing Directorate	May 17
Ministry of Education	Mohammad Fiddah	Testing Directorate/ Department	May 18
Ministry of Education	Mohammad Shehadeh	Testing Directorate director	May 24
Ministry of Education	Mohammad Fiddah	Testing Directorate	May 24
Trigon Associates	Michael McGovern	Chief of Party	April 29
Trigon Associates	Michael McGovern	Chief of Party	April 29
SKEP Start-up Activity	Ibrahim Mahfouz	Team Leader	August 1

Table 6: Evaluation Team interviews, Meetings, and Calls with External Stakeholders

Respondent Type	Number of FGDs held	Total Participants
Teachers	7	44

Supervisors	4	28
Coaches	1	6
Grand Total	12	78

5.4. Appendix 4: Information Sources – References

Akour, Mohammad Ali and Rifat O. Shannak, 2012. "Jordan Education Reform for the Knowledge Economy Support Project - A Case Study". Macrothink Institute. http://www.macrothink.org/journal/index.php/jmr/article/view/2067/1858.

Bitar Consultants, accessed May 5, 2021. "JORDAN SCHOOL EXPANSION PROJECT (JSEP)," https://bitarconsultants.com/projects/educational/jordan-school-expansion-project-jsep.

Brombacher, Aarnout and Marissa Gargano, 2017. "Early Grade Reading and Mathematics

Initiative (RAMP): 2017 Midline Survey Report". RTI International. https://pdf.usaid.gov/pdf_docs/PA00W7WZ.pdf

"Education in Jordan." Wikipedia, Wikimedia Foundation. https://en.wikipedia.org/wiki/Education_in_Jordan

Engicon, n.d. "Technical Proposal (School Start-Up Activity - SKEP Phase 1 Schools)".

FutureSchool Jordanian Curriculum. "Jordanian Curriculum." n.d.

https://www.futureschool.com/jordan-curriculum/

"LQAS 2017: LQAS Briefing Session". Jordan, n.d.

"LQAS Reading & Mathematics Assessment: November 2018 Results". Jordan, n.d.

MPWH, Engicon, and USAID, Jordan, n.d. "Schools for a Knowledge Economy Project, Phase-1 School Start-Up Activity -SKEP Phase 1 Schools".

Nair, Prakash, 2020. "School Buildings - The Last Domino: It's Time for Learning Spaces to Catch Up". *Harvard Education Publishing Group*. https://www.hepg.org/blog/school-buildings-%E2%80%93-the-last-domino-it%E2%80%99s-time-for-l.

Nair, Prakash, 2020. "Transforming School Design in a Post-Coronavirus World". Education Design International. https://educationdesign.com/wp-content/uploads/2020/03/Newsletter.pdf.

Nair, Prakash, 2014. From 'Cells and Bells' to Learning Communities. *Harvard Education Letter*. *30*(5). https://educationdesign.com/wp-content/uploads/2020/03/From-Cells-and-Bells-to-Learning-Communities.pdf.

Nair, Prakash, n.d. "Outdoor Learning: Leave the Classroom Behind Special COVID-19 Issue". https://media.a4le.org/COVID/Outdoor%20Learning.pdf.

Nair, Parkash, 2014. *Blueprint for Tomorrow: Redesigning Schools for Student-Centered Learning.* Harvard Education Press.

Roggemann, Kristen; Manar Shukri. 2010. "Active-Learning Pedagogies as a Reform Initiative: The Case of Jordan." American Institutes for Research, January 22, 2010, pp9-10.

"RAMP December 2019 LQAS Brief". Jordan, n.d.

"RAMP LQAS report". Jordan, n.d.

"Section C- Description/Specifications/Statement of Work". Jordan, n.d.

"Scope of Work for the School Start Up Advisor Team under the Schools for a Knowledge Economy Project (SKEP)". Jordan, n.d.

Small, Breanna, 2020. "'I Want to Continue to Study': Barriers to Secondary Education for

Syrian Refugee Children in Jordan ." Edited by Bill Van Esveld et al., Human Rights Watch. https://www.hrw.org/report/2020/06/26/i-want-continue-study/barriers-secondary-education-syrian-refugee-children-jordan

Stern, Jonathan, Ahmed Abdelgawad, Patrick Gayaud and Rula Al-Jundi, 2019. "Early Grade

Reading and Mathematics initiative (RAMP): 2019 Endline Survey Report". RTI International. https://pdf.usaid.gov/pdf_docs/PA00WPQD.pdf

The World Bank, Jordan, 2020. "Jordan: Program for International Student Assessment – PISA 2018". https://www.worldbank.org/en/country/jordan/publication/jordan-program-for-international-student-assessment---pisa-2018

The World Bank, 2009. "Project Appraisal Document: For A Second Education Reform For the

Knowledge Economy Project". http://documents1.worldbank.org/curated/en/369431468272978763/pdf/468240PAD0P105101Official0Use0Only1.pdf

World Bank Group, Education, Middle East & North Africa, 2018. "Jordan PISA 2018". https://pubdocs.worldbank.org/en/605001580399622493/JORDAN-PISA-Brief-2018.pdf

USAID, Jordan, 2021. "The USAID Schools for a Knowledge Economy Project (USAID SKEP): Start-up Activity - Phase 2 schools and follow up on phase 1".

USAID, Jordan, 2021. "Enhancing School Management and Planning (ESMP) Project: Year 3

Annual Work Plan".

USAID, Jordan, 2020. "Enhancing School Management and Planning (ESMP) Project: Y2Q2

Progress Report". https://pdf.usaid.gov/pdf_docs/PA00WJXZ.pdf

USAID, Jordan, 2020. "Early Grade Reading and Mathematics Initiative Extension (RAMP-2): Quarterly Progress Report January 1, 2020 to March 31, 2020". https://pdf.usaid.gov/pdf_docs/PA00X6P4.pdf.

USAID, Jordan, 2020. "Enhancing School Management and Planning (ESMP) Project: Y2Q2 Progress Report". https://pdf.usaid.gov/pdf_docs/PA00WJZ1.pdf.

USAID, Jordan, 2019. "RAMP Impact Evaluation Final Report". https://pdf.usaid.gov/pdf_docs/PA00WKQ9.pdf.

USAID, Jordan, 2018. "Education Assessment School Construction and School Expansion". https://pdf.usaid.gov/pdf_docs/PA00TN2P.pdf.

USAID, Jordan, 2013. "Education Reform Support Program (ERSP): Year 5 - Quarterly Report".

USAID, Jordan, 2013. "'JSP: A Transformational Change', Evaluation of the Jordan School Construction and Rehabilitation Project". https://pdf.usaid.gov/pdf_docs/PDACX664.pdf

USAID, Jordan, 2007. "Jordan Schools Construction & Rehabilitation Program: Environmental Assessment Report Aqaba Schools". https://pdf.usaid.gov/pdf_docs/PNADK708.pdf.

USAID, Jordan, n.d. "The USAID Schools for a Knowledge Economy Project (USAID SKEP): School Start-Up Activity Onsite Support Tasks".

5.5. Appendix 5: Broader Project Background

Monitoring, Evaluation, and Learning Activity

Rigorous monitoring, evaluation, and learning (MEL) of USAID interventions are a major focus of Agency practices to improve performance management, accountability, and evidence-based decision making. The Agency has most recently focused on improving evidence-based decision making by incorporating Collaborating, Learning, and Adapting (CLA) practices into MEL. As stated in Automated Directives System (ADS) 201.3.5, "the purpose of monitoring, evaluation and learning practices is to apply knowledge gained from evidence and analysis to improve development outcomes and ensure accountability for the resources used to achieve them." By tying MEL to learning priorities, the Agency can rely on evidence to inform decision-making for management purposes, mid-course adjustments, and future designs.

To this end, USAID awarded the Monitoring, Evaluation, and Learning Activity (the Activity) to The Kaizen Company in February 2020 as a follow-on to the USAID Monitoring and Evaluation Support Program. The Activity is designed to ensure USAID's activities in Jordan achieve their intended results through monitoring and evaluation, strategic assessments, and CLA. The Activity helps USAID/Jordan create a dynamic learning environment among development actors which is focused on innovation, quality, and knowledge sharing. Through the Activity Accelerator, a rapid procurement mechanism, a cohort of Jordanian organizations works with the Activity team to successfully deliver projects while simultaneously strengthening their management and compliance systems. This approach provides USAID with high-quality MEL services across its portfolio, builds the capacity of Local MEL Organizations (LMOs), and ensures programs meaningfully empower and enhance local participation. The Activity will ensure program sustainability by building the technical and institutional capacity of local organizations to be capable of managing follow-on MEL activities.

Country Context

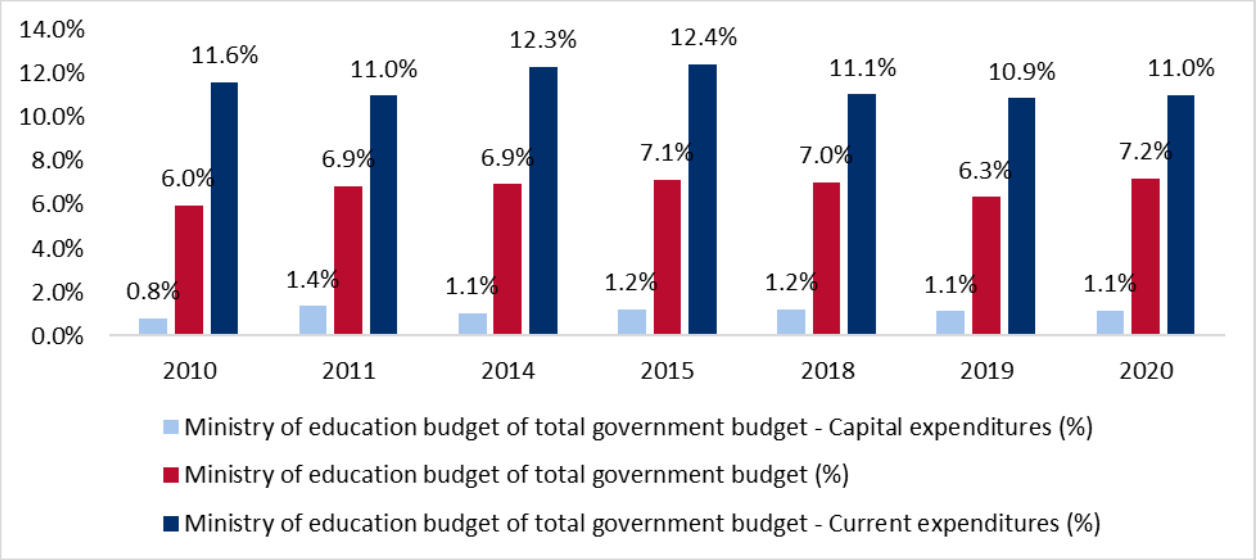
Jordan faces multi-contextual issues as a developing country, surrounded by crises almost from all its directions; Syrian crises from the north, that has been ongoing for more than 10 years now, with huge influx of Syrian refuges that came to the country as one of the main gates of peace they ran for, this resulted with more than 1.3 million refugees that are currently residing in the country (less than 20% are living in camps). On its west side, it has the issue of Palestinian and Israel conflict and from the west, it has to maintain its border solid for any penetration from what is called Islamic State of Iraq and Levant (ISIL) that was defeated in 2017 in Iraq, but still has some territory and power in Iraq and Syria.

Moreover, Jordan has been experiencing a deep economic shocks since its independence, but the latest 21st century shocks, start from 2008 economic depression, increase cost of oil, as Jordan is an imported country of its energy, passing through what is called the "Arab spring", Syrian refugees' influx to the country, a dramatic increase in its debt, corruption, population growth, and finally it has been hit heavily with COVID-19 pandemic, have affected Jordan economy, general budget, and its public services.

Several compound factors have affected Jordan economy and its ability to invest in its infrastructure, especially on education sector, despite the desperate need for this investment as the country expects that they might need around 600 schools over the next decade. However, Figure 9 below shows that Jordan has a steady with slight decline in its expenditures (current and capital) on education sector

(around 6.8% only). It has around 1% and 11.7% only from its budget as capital and current expenditures respectively, on education sector.

Figure 9: Ministry of education budget (total, current, and capital) of government budget (total, current, and capital) (%) - selected years



As the economic situation in the country deteriorates, public schools has witnessed an internal migration from students in the private schools, with the already crowded classes and schools, adding to it the Syrian refugees' influx that has started in 2011, the public schools witnessed sharp increase in students numbers, which led for more crowdedness. These overcapacity numbers of students in public schools forced Ministry of Education (MOE) to increase number of double shift schools (over 720 schools), while many schools operate with classrooms over their capacity. The MoE also operates 777 schools in rented buildings that are often not designed to accommodate all learners. This has a negative impact on the students enrollment in their schools and classes, as this creates an unsafe environment, affects students ability to focus, thus their learning outcomes. It also creates the need of hiring new teachers and capital investment by building new schools and classes to accommodates all these numbers of students. This directly impacts the GOJ budget as they have to provide more resources for these urgent needs. Both academic and non-academic learning outcomes across Jordanian public schools are affected by challenges in access to safe and engaging learning environments, with high rates of violence in schools and low performance in literacy and numeracy from Kindergarten through the upper grades. The GOJ estimates that it will require approximately 600 new schools over the next decade to meet demand.

As a result, in addition to government increase need to invest and expenditures on education sector, the learning outcomes (both academic and non-academic) will be affected within the Jordanian public schools; this can be reflected in various ways including, but not limited to:

1. Challenges in accessing safe and engaging learning environment,
2. Lead to a low performance in literacy and numeracy for all levels in public schools,
3. Increase depreciation of schools and vandalism due to overuse in double shifts public schools and over capacity,

4. Increase level of violence in public schools.

In response to these needs, the GOJ launched the Education Reform for Knowledge Economy (ERfKE) in 2003 in coordination with the MoE to support its transition into a knowledge-based economy and a hub for technology in the region. The four ERfKE components encompass: reforming education policy objectives and strategy; transforming education programs and practices; supporting provision of quality physical learning environments; and finally promoting learning readiness through early childhood education. ERfKE is supported by many interventions including large scale infrastructure development, information technology, and professional training and service delivery.

USAID/Jordan launched infrastructure activities beginning in 2006 with the four-year Jordan School Construction and Rehabilitation Project (JSP), and continued in 2014 with the six-year Jordan School Expansion Program (JSEP), followed in 2015 by the five-year Schools for a Knowledge Economy Program (SKEP). The focus of these activities was to reduce overcrowding in public schools, replace rented and double-shifted schools and provide a safe and more suitable school environment to respond to the needs of the MoE's reform efforts. These outcomes are the primary, but not the only, focus of this evaluation.

JSP had a total budget of $199 million to construct and furnish 28 new public schools and to rehabilitate 100 existing ones (including $11.4 million for A/E design services and supervision of construction, $172 million for construction, and $15 million for furnishings). JSEP's budget is $180 million for A/E design services and construction to expand 120 Schools, construct 300 Kindergarten Classrooms and construct or rehabilitate 50 Sports Fields or Facilities, and SKEP had a budget of $102 million for A/E design services and the construction of 25 new public schools. Furnishings for JSEP and SKEP schools were provided through a separate $26 million grant to the United Nations Office for Project Services (UNOPS), and a $3.8 million Construction Management Contract with Trigon provides construction management services to both activities. USAID made significant investments in school infrastructure and is planning to build an additional 30 schools over the next five years under its Inclusive Schools Program.

Table 7, below, presents the activities that were implemented, budgets, durations, interventions undertaken and those linked to this evaluation.

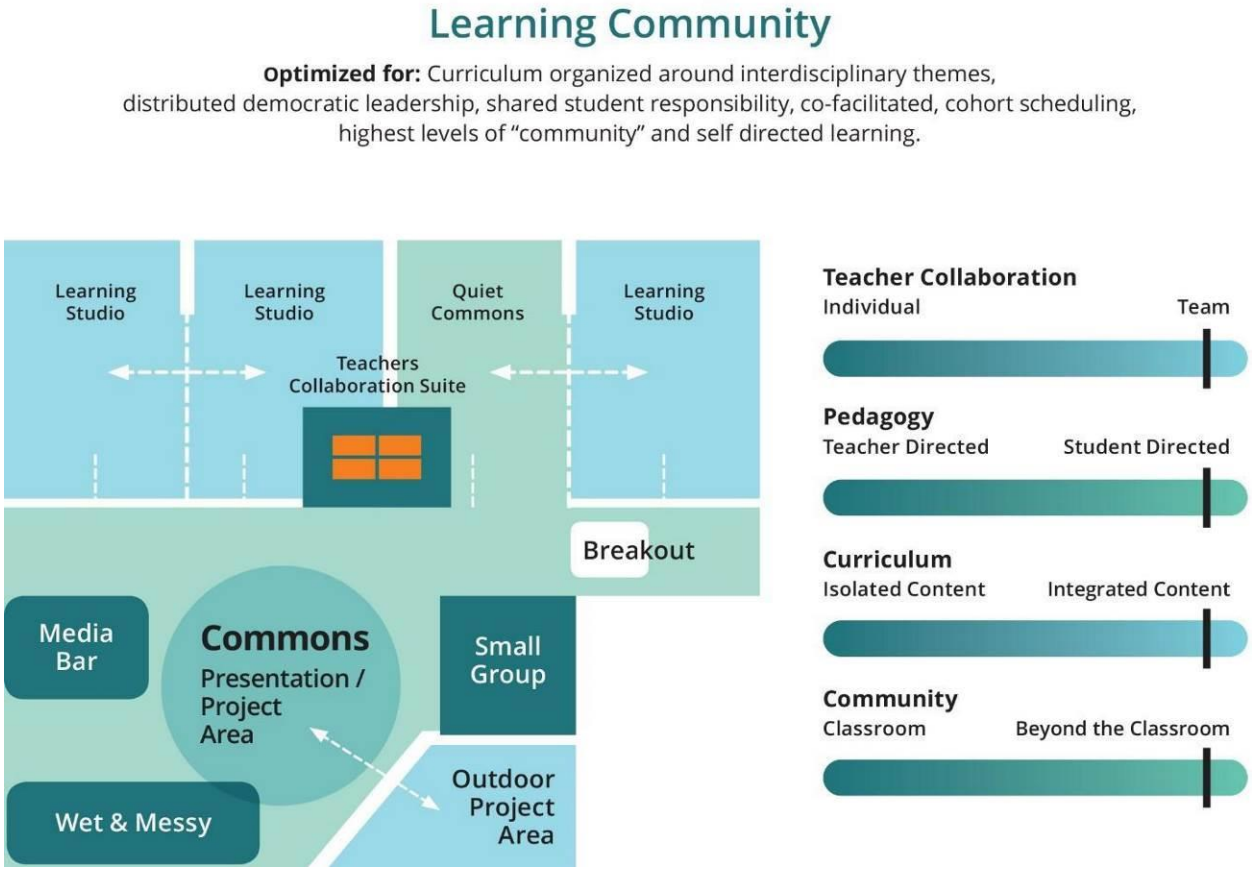
Table 7: USAID Projects for Education Sector Under Evaluation

USAID Projects	Project Duration	Cost (million USD)	Interventions	Linked to this Evaluation
Jordan School Construction and rehabilitation Project (JSP)	2006-2013	199	• Built 28 schools • Rehabilitated 100 schools	28 built schools
Jordan Schools Expansion program (JSEP)	2014-2020	180	• Rehabilitate 120 schools • Expand / rehabilitate 300 kindergarten classrooms • Expand / rehabilitate 50 sports fields / facilities.	80 rehabilitated schools
Schools for a Knowledge Economy Program (SKEP)	2015-2020	102	• Build 25 schools (9 completed)	9 built schools

USAID supports ERfKE through other relevant activities in education. USAID and other development partners provide support with teacher training, management systems, training early-grade teachers to

improve early-grade numeracy and literacy, and the application of ICTs for learning, improving pedagogy, implementing e-learning curriculum components, non-formal education centers, as well as support for remote learning through television and digital platforms during the pandemic. The Education Reform Support Program undertook a comprehensive leadership training program for JSP school principals and teachers when they were new. For SKEP, similar programming was conducted under a host country compact with modifications to reflect changes determined appropriately based on the prior evaluation.

5.6. Appendix 6: Learning Community Example



5.7. Appendix 7: Methods – Additional Detail on Sampling, Response Rates and Statistical Tests

For the teacher survey, contact information was problematic at two points, reaching principals and few principals providing incorrect information to reach teachers. Some principals also were unwilling to provide the team teacher contacts and instead offered to send links to the survey to teachers by WhatsApp. This made it difficult to calculate exact response rates. However, it appeared that about 55% of teachers whose contact information was provided were reached directly with 54% of those teachers responding, for a total response rate of about 30%, well higher than typical online survey response rates of between 3 and 15% for those contacted.

The observational data collection began later than planned, originally starting on June 16 and ended July 8. This created problems due to shorter working hours as schools were closing. Similarly, with the onset of Tawjihi exams for secondary students, many principals and all members of MoE staff assisting in providing responses or data were fully engaged most of that period, extending the timeline. The teachers survey was undertaken from June 21 to July 15.

Twelve online FGDs were conducted, seven with teachers across USAID-funded schools, primary, early primary, and secondary schools, and subjects (science, math, and IT; and humanities and other); four among directorate supervisors, across primary and secondary schools and subjects; and one with SKEP Start-up Activity coaches. For EQ 1A, the team received data on contractual timelines by school for all JSEP and SKEP schools and data by package rather than individual schools for only 7 of 28 JSP schools. As the JSP data was incomplete, incompatible with the data from other schools, and much older, the team was unable to merge in JSP school-level data for EQ 1A.

The observational data collection and principal surveys involved 104 USAID schools, approximately the entire universe and so statistical testing was not relevant. Statistical tests were undertaken for differences for the teacher survey and secondary data. Due to the large number of teacher respondents (3416 USAID and 2227 neighboring) and their high proportion relative to the overall number of teachers from these schools, even accounting for clustering among schools, all differences were found to be statistically significant at the p=0.00 level unless indicated. Thus, the analysis focuses only on substantively relevant differences. Whenever data was available at an individual level (teachers or students), statistical tests were undertaken using individual data accounting for clustering by school to appropriately scale the standard errors. The ESMP dataset, collected amid the COVID pandemic, includes 104 of the USAID-funded schools and two-thirds of neighboring and so uses statistical testing with a finite population correction to extrapolate to the full sample of neighboring schools.

In terms of secondary data, one of the data sources was the 2014 National Assessment for the Knowledge Economy, which covered mathematics, Arabic, and science for grades 5, 9, and 11. Within those subjects, the assessment covered skills in communication, problem solving, knowledge, applying knowledge, and reasoning. The dataset provided by the MoE included all 28 JSP schools, at which point in time, the schools were new. The evaluation team did not get access to the original assessments or information development process to assess the extent to which the skills represented are as indicated.

The Kingdom undertakes annual Education Quality Control examinations each year in a selected grade (grade 10 in 2017, grade 4 in 2018, grade 8 in 2019) in Arabic, English, math, and science. Since 2018, they also have taken these exams for grade 3 in Arabic and math. The MoE provided school-level data

only and not as requested. As there were few schools from the neighboring school list provided, and the evaluation team did not receive alternative data, the evaluation team therefore compared JSP and SKEP schools for each exam with other schools, including the JSEP schools, neighboring, and any other schools provided. On the one hand, this makes the data less compatible with other comparisons. It compares just the new schools against others, which should provide a stronger test than combining them with JSEP schools. However, that also means the JSEP schools might bias upward the comparators, reducing the power of the comparison. Data analyzed included grades 3 in 2018 and 2019, grade 4 in 2018, grade 8 in 2019, and grade 10 in 2017, for which the number of JSP and SKEP schools ranged from 12 to 33 and 43 to 68 comparison schools.[50]

The GoJ undertakes Tawjihi graduation exams for secondary students in their penultimate year to enter universities. The evaluation team requested student-level data for the Tawjihi as student-level scores. This dataset included invalid data indicating 2 to 4 times more students taking the exam in USAID-funded schools than students eligible to take the exam, and so the data could not be used. Instead, the team used school-level data on pass rates also provided by the MoE. The number of USAID-funded schools and neighboring schools by year follows: 2016 32 USAID and 223 neighboring, 2018 62 and 445, 2019 36 and 229, 2020 39 and 236. Only one differences was statistically significant at the p=0.00, 0.73, 0.93, and 0.66 levels, as discussed in the main text.

The Programme for International Student Assessment (PISA) tests 15-year-old students in participating countries in science, reading, and math as well as other questions on the learning environment and underlying skills for those countries that participate such as global competence. The PISA assessment is designed for international reliability to engage higher-level skills within academic subjects and therefore should provide insight into how students at these schools perform in both respects. The evaluation team combined comparable scores across the 2015 and 2018 exams, which, combined, included 8 JSP, 14 JSEP, and 115 neighboring schools. These schools were selected to be representative nationally and not to be representative of USAID-funded schools, which limits the ability to generalize. The assessments are designed to compare scores across years given the attempts by PISA to create assessments resulting in relatively consistent overall average scores across years. However, PISA scores in Jordan were higher in 2018 than 2015 by 3 to 5% across subjects. To make 2015 and 2018 scores more fully comparable and avoid bias created by there having been a lower percentage of USAID-funded schools in the 2019 than 2015 samples, the 2015 scores were normalized by the nation-wide difference in mean by subject area.

The TIMSS assessment assesses fourth and eighth grade students in math and science across participating countries including Jordan in 2015 and 2019. Combining scores from the two assessments resulted in 13 schools and 441 students from USAID-funded schools compared to 93 schools and 3145 students from neighboring schools. Given the number of students in each school, the power was enough to run statistical tests with corrections for clustering. As with the PISA assessment, to make 2015 and 2019 scores more fully comparable and avoid bias, the 2015 scores were normalized by the nation-wide difference in mean by subject area.

The evaluation also uses data collected by RAMP from its Lot Quality Assurance Survey (LQAS) related to math and reading. Across datasets, matching resulted in 15 JSP schools, 45 JSEP schools, and 151 neighboring schools. The match was the same for MoE classroom observation dataset as well. For each of the secondary data sources where there were few observations, the evaluation team considered alpha levels up to 0.10 levels. A key caveat in the use of this data, as the RAMP staff point out, is that

[50] The number of JSP + SKEP schools compared to JSEP and other schools by grade and year follow respectively: 20 (JSP + SKEP) and 65 (other) grade 3 2018, 21 and 66 grade 3 2019, 24 and 68 grade 4 2018, 33 and 66 grade 8 2019, 15and 43 grade 10 2017.

the data was not intended to measure differences across students but to screen for problems at the school level. However, in this evaluation, the point is to screen for differences at a higher level yet – across a set of schools, and these schools allow one to. The issue therefore is whether the schools generalize across USAID and neighboring schools, if not others.

Data also was analyzed from the Classroom Observation dataset derived from field directorate supervisor observations of classrooms and made electronic by RAMP. RAMP only made electronic observations for early-grade teachers from 62 USAID-funded and 182 neighboring schools. The latter instruments and indices were developed by the MoE, and teachers were rated by field directorate supervisors. Instruments are presented in appendix section 5.26.

5.8. Appendix 8: Methods - Schools not Surveyed during the School Observations and Coding

[Redacted]

5.9. Appendix 9: Methods - Data Collection Tools

5.9.1. Focus Group Discussion Tools

EDY SIMAEA Teacher FGD Draft Protocol

[*Note for reviewers: Wording and order to be revised slightly based on moderator expertise and comfortable translation into conversational Arabic. Questions will begin from easy to more involved. Not all probes may be necessary and not all groups may get through all questions.*]

[Standard informed consent and waiver forms will be sent ahead of time by email prior as part of agreeing to participate and will include questions about both agreeing to participate in this study and to be recorded as well as that the recordings will be destroyed after analysis.]

[*Introductions*]

My name is , and I am part of a team working for Leading Point on an evaluation for USAID on how past USAID-supported school construction activities have affected school use, occupancy, and outcomes. The evaluation will help us improve future school construction and programming funded by USAID but will have no effect on you or your school. You've been invited to this online focus group to help us understand from the teacher's perspective.

We are asking everyone to keep everything discussed today among ourselves. We also will treat this discussion as strictly confidential. That means none of your names will be associated with specific comments in our report, which will not be shared outside of USAID.

The group is planned for about 90 minutes.

You all work at schools funded by USAID and are [*Category math/science/Arabic/English/technology/(not specified)*] teachers [Or teachers at the same school]

[*Standard self introductions*]

Discussion Questions/Themes

- Thinking about your in-person classes before classes went online only, could you share the methods you used most often for teaching your students in a typical week?
  - And what methods do you use most frequently during remote teaching?
- Could you discuss broadly what you learned from others since you started teaching

in your current school on using newer methods and school resources effectively?

- [*Internal note*: *We are most interested in teacher pedagogy and resource use (technological and use of non-traditional learning spaces) but also on school/classroom management*]
- From whom or what source did you learn this?
- Have you received coaching on those methods? [*Probe as time allows*: From whom? Do you sense the coaching was coordinated with the principal or supervisor?]
- Why do you use the teaching methods you use most often?
- Is there anything else that complicates using those methods? [prompt only if needed: classroom size, furniture size, equipment, training, curriculum restrictions, time available, further training, coaching, school/supervisor support).
- What else might teachers need to get more comfortable with these methods?
- Are the rooms and furniture appropriate and maintained sufficiently to use them well?
- What could make them better?
- If students could use some of the area outside of your fixed classrooms, might that be helpful?
- Do you ever take or send your students outdoors as part of their learning?
- If you had easier access to the outdoors from a classroom, do you think you might use that as part of your teaching?
- How well are students with handicaps integrated in the classes and school? [How could they be better integrated/supported?]
- As our last questions, could you speak about the extent to which parents are engaged with you and the school?
- How is the community engaged beyond parents?

EDY SIMAEA Directorate Supervisors FGD Draft Protocol

[*Note for reviewers: Wording and order to be revised slightly based on moderator expertise and comfortable translation into conversational Arabic. Questions will begin from easy to more involved. Not all probes may be necessary and not all groups may get through all questions.*]

[Standard informed consent and waiver forms will be sent ahead of time by email prior as part of agreeing to participate and will include questions about both agreeing to participate in this study and to be recorded as well as that the recordings will be destroyed after analysis.]

[*Introductions*]

My name is , and I am part of a team working for Leading Point on an evaluation for USAID on how past USAID-supported school construction activities have affected school use, occupancy, and outcomes. The evaluation will help us improve future school construction and programming funded by USAID but will have no effect on you or the schools you supervise. You've been invited to this online focus group to help us understand more about teaching styles and principal leadership in schools from

what you have seen as a supervisor. We chose you because you supervise public schools that have been constructed with funding from USAID and others that have not.

We are asking everyone to keep everything discussed today among ourselves. We also will treat this discussion as strictly confidential. That means none of your names will be associated with specific comments in our report, which will not be shared outside of USAID.

The group is planned for about 90 minutes.

[*Standard self introductions.*]

Discussion Questions/Themes

[Overall goal in rough order of importance given time available find out about 1) extensiveness of use of student- versus teacher-centered pedagogy & classroom practices and comfort with teacher-centered methods, 2) barriers to using student-centered methods, 3) use of areas outside of classrooms for learning, 4) integration of students with disabilities, 5) extent to which teachers plan together or teach together, 6) disciplinary tactics used, 7) parental involvement, 8) ways USAID schools seem over-crowded]

Let's think back to the in-person classes you observed in 2019 before classes went online only. Let's talk first about the USAID-funded school or schools you supervise.

Norming questions

- What term do you use for methods when the teachers lecture, directly instruct, ask questions for individual students to answer? What about for methods that engage students working together in groups or where students engage each other or similar methods?
- Did you observe classes where the teacher did not plan with you ahead of time to use newer, [*"student-centered" or other term they use*] methods?
- *[Any other norming questions needed here]*
- *[Have a plan ahead of time for how to deal with other dimensions along which they might characterize differentiation in outcomes, like second shift/refugee teaching or among new teachers that arrived since original training or by grade*]

Data gathering questions

- Could you discuss the teaching methods you observed most often in the USAID-funded schools when you did not plan for them to use student-centered methods?
  - *[Draw out each and roughly how often as feasible]*
  - How often did you see them using any of the student-centered methods? How

comfortable did they seem they in using these methods?

- Did the use of student-centered teaching differ in the other public schools in terms of frequency? Comfort using them?
- Is there anything that complicates using student centered methods in USAID-funded schools? *[prompt only if needed: classroom size, furniture size, equipment, training, curriculum restrictions, time available, further training, coaching, school/supervisor support]*
  - How about in other schools?
  - What might they need to better use and be comfortable with these methods?
- Do teachers and students use areas outside of fixed classrooms for learning? [where?]
- How well are students with handicaps integrated in the classes and school? [How could they be better integrated/supported?]
- What type of disciplinary tactics do you see or hear about teachers using?
- How well do teachers seem to be using and maintaining the new technology provided in the schools?
- To what extent do you hear about teachers planning together or teaching together on their own [*outside of supervisors encouraging that during their coaching sessions*]?
- Could you speak about the extent to which you understand parents are engaged with teachers and the school?
- Could you speak about the ways schools seemed over-crowded during in-person classes?

EDY SIMAEA SKEP Start-up Activity Coaches FGD Draft Protocol

[*Note for reviewers: Wording and order to be revised slightly based on moderator expertise and comfortable translation into conversational Arabic. Questions will begin from easy to more involved. Not all probes may be necessary and not all groups may get through all questions.*]

[Standard informed consent and waiver forms will be sent ahead of time by email prior as part of agreeing to participate and will include questions about both agreeing to participate in this study and to be recorded as well as that the recordings will be destroyed after analysis.]

[*Introductions*]

My name is , and I am part of a team working for Leading Point on an evaluation for USAID on how past USAID-supported school construction activities have affected school use, occupancy, and outcomes. You've been invited to this online focus group to help us understand more about the start-up teacher and principal support provided to the new schools from what you have seen as a coach. The evaluation will help us improve future school construction and programming funded by USAID but will have no effect on you or the schools you work with.

We are asking everyone to keep everything discussed today among ourselves. We also will treat this discussion as strictly confidential. That means none of your names will be associated with specific comments in our report, which will not be shared outside of USAID.

The group is planned for about 90 minutes.

[*Standard self introductions.*]

Discussion Questions/Themes

- What do you see as the biggest support/value additions of the coaching to teachers? [*Could go in multiple directions along the line of discussions below, which is fine but redirect otherwise*]
- Where do you see the biggest weaknesses among teachers?
- What are the strengths of the teaching and coaching program?
- What are the weaknesses of the teaching and coaching program?
- Where/how do you think the teaching and coaching sessions could be strengthened?

- Have you been able to observe in-person classes?
  - What methods did you see used most often?
  - How often did you see teachers using student-centered methods?
  - Which methods?
- To what extent do the teachers seem to be comfortable at this point using student-centered methods [*in teaching in person,* online]?
  - Is there anything that complicates using those methods? [*prompt only if needed: classroom size, furniture size, equipment, training, curriculum restrictions, time available, further training, coaching, school/supervisor support]*
  - What might they need to better utilize these methods?
- How well do students with handicaps seem integrated in the classes and school? [How could they be better integrated/supported?]
- What type of disciplinary tactics do you see or hear about teachers using?
- How well do teachers seem to be using and maintaining the new technology provided in the schools?
- To what extent do you hear about teachers planning together or teaching together on their own [*outside of encouraging that during their coaching sessions*]?
- Could you speak about the extent to which you understand parents are engaged with teachers and the school? Other community members aside from parents?

5.9.2. Evaluation and Evaluability Assessment Building Performance EFEI Survey

USAID/Jordan EDY School Infrastructure Multi-activity Evaluation and Evaluability Assessment Building Performance EFEI Survey
Note that format of data entry, each instrument, and order of items will be determined in coordination with the local M&E organization. Coding and weighting of each item's relative importance to the overall score will be added during analysis.
School General information
School Name & Number:
School sub-unit, if any (If split into smaller units operating somewhat independently):
School Address & Phone Number:
School Principal Name, Phone #, Email:
Building Access Contact Name, Phone #, Email *(If different from the principal)* **:**
Date of Survey: **Name of Surveyor(s)**:

OBSERVATIONAL INSTRUMENT 1/4: BUILDING DESIGN ASSESSMENT		**Weight Factor** (on a scale of 1-10)	V
Completed by the Surveyor. Coding for each varies and is indicated for each question/item.			
Special Notes Below:	**1. SCHOOL LOCATION & SITE ATRIBUTES**		
	1. How accessible Is the school? Poor connections such as school entrance is off a narrow alley or directly onto a very busy street with nowhere to pull over = **1**; Fair connections from side streets = **2**; Easy, direct access from main streets = **3**	3	6
	2. Is there a dedicated Bus drop-off lane at the school separate from outdoor play areas? No bus drop-off lanes = **0**; Bus lanes shared with access drives and parking = **1**, Dedicated lanes separate from parking and children = **3**	3	4
	3. Is there is a dedicated sandy yard (not a hard surface) for children to play? No area = **0**, Area set aside but with serious flaws (e.g., no shade, insufficient sand, dirty sand, holes/trees interfering) = **1**, Area set aside but with minor flaws = **2**, Area set aside with no flaws and sufficient shade = **3**	3	4
	4. Is there is a dedicated hard surface yard for children to play? No such area = **0**, Designated hard surface area with no striping or fencing = **1**, Striped play yard with fencing, equipment to support games such as basketball hoops = **2**, Play yard with all previous features and natural shading provided by trees and shrubs or a canopy structure = **3**	3	8
	5. Is there age appropriate play equipment? No equipment = **0**, There is some equipment but it is in old and not well maintained = **1**, There is equipment in fair to good condition and located in protected and well monitored areas = **2**, There is relatively new equipment that is located in appropriate areas = **3**	3	2
	6. Is there an open air play or gathering area that is protected or shaded by a pavilion? No = **0**; Yes = **2**	2	4
	7. Are there are playing fields for football or other sports? No playing fields = **0**, un-striped fields = **1**, Striped playing fields = **2**, Striped playing fields with bleachers = **3**	3	4
	7b. Do the play area and field sizes as well as equipment appear sufficient for the size of the school? No = 0, Unclear = 1, Yes = 2.	3	4
	8. There is an area dedicated to outdoor learning in an area within 15m or connected to the building? No = 0; Only one = 1; 2 or more = 2	2	6
		pattern score	**25**
Special Notes Below:	**2. GENERAL BUILDING DESIGN & LAYOUT OF AREAS**		
	1. The school is easy to navigate between interior zones / groupings of spaces / departments Poor: Confusing to move around, no apparent organization = 0 Good: Most parts of the school are easy to find = 1 Excellent: The school is well laid out and it is very easy to navigate to all areas =2	2	10
	2. The school has permanent signs on the walls identifying rooms and areas of the school. No = 0; Yes = 2	2	5
	3. Every dedicated learning space has access to a window (natural daylight) No = 0; Yes = 2	2	10
	4. How many dedicated learning spaces have interior and exterior views beyond the immediate area. Few: Fewer than half have a pleasing view =0 Many: More than half but fewer than 3/4 of learning spaces have a pleasing view to the outside or another interior space =1 Almost all: More than 3/4 of learning spaces have a good view outside and connectivity with interior spaces = 2	2	10
	5. 50% of spaces have interior glass (interior window in a wall or a door) allowing transparency into the room. No = 0; Yes = 2	2	10
	6. Finding the entry to the school / site is intuitive and does not require extensive searching or asking for help? No = 0; Yes = 2	2	5
	7. The school's adaptations for use by handicapped individuals are present and maintained (Hallways and doorways, ramps and handrails, etc.) to serve students/staff with special needs. No = 0; Partially but with many areas non-accessible= 1; Yes, with few areas non accessible = 2; All areas accommodated including plumbing, signage, and elevators =3	3	8
	8. Are windows in learning spaces able to be opened and closed? No = 0; Yes = 2	2	10
		pattern score	**17**
Special Notes Below:	**3. BUILDING SAFETY**		

USAID Jordan - EFEI - Draft

	1. Are all entries to the school secured (Security camera or security staff monitoring the entrance)? Poor: No you can walk right in and access students, side doors are open and not secured =0 Great: Reception or security desk at main entry, side doors are closed, some level of door locking system is availible for use on all doors =3	3	6
	2. Is there a physical barrier (e.g., fencing) between school and surrounding area? Poor: Low Barrier, easy to walk right in or out = 0 Good: Gate & Fence = 2	2	4
	3. Are emergency exits from inside the school to the outside clearly marked with signage and are they easy to find (You could easily move from inside the building to outside the building in less than 2 minutes). No = 0; From Most Spaces = 1; From All Spaces = 2	2	7
	4. Are there more than 2 areas accessible to students that are not easy for teachers and staff to monitor? No = 0; Yes = 2	2	3
	5. To what extent do stairways and hallways appear wide enough to handle a rush of students when classes let out at once? Many do not appear wide enough or appropriately designed =0, a few may not be wide enough/appropriately designed = 1, all appear wide enough/appropriately designed =2.	2	3
	6. Are chemicals and cleaning supplies separated from the students? Poor: Stored on shelfing in the hall or an easy to access area = 0 Good: Dedicated room away from students = 2	2	4
		pattern score	**13**

Special Notes Below:	**4. GENERAL INTERIOR DESIGN**		
	1. The school has a pleasing and coordinated color pallete throughout? Poor: The school has non matching colors, flooring types and patterns are mixed, the school looks overall non coordinated or dreary = 0 Great: The school has matching colors that are coordinated throughout the school including flooring. Overall the school looks and feels bright and cheery =3	3	5
	2. The school's materials (Flooring, Paint, Furniture Fabrics, Light Fixtures, Ceiling Tiles) seem modern and not outdated No = 0; Yes = 2	2	4
	3. Is there adequate learning supply storage? No visible storage in the learning spaces, supplies are disorganized and in piles = **0**; Some mobile storage units or open shelving provided for the teachers but insufficient= **1**; In addition to Teacher provided units, there are some tall storage cabinets provided by the school for most learning spaces, might be insufficieent= **2**; The school provides sudfficient fixed and mobile storage for all learning spaces = **3**	3	2
	4. Does each student have an individual space for their personal items somewhere within the school? Poor: Limited areas for students to store belongings beyond lines of hallway lockers = 0 Good: Varied size spaces for individual belongings, projects, supplies, hallways are not lined with lockers =2	2	4
	5. What is the quality of the lighting? Poor: classrooms are under lit with high glare fluorescent lighting with little daylight = **1**; Fair: there is still insufficient distribution of light fixtures but with some daylight = **2**; Good: These is sufficient distribution of fluorescent lighting with some direct/indirect distribution and a good mix of daylight = **3**	3	3
	6. What type of flooring is used? Polished concrete floors = **1**; Ceramic / Porcelain floor tile or VCT = **2**; A mix of carpet tile, terrazzo, VCT or Ceramic / Porcelain floor tile, all spaces have the correct type of flooring for their intended use = **3**	3	2
	7. What is the quality of the acoustic elements? Poor: all surfaces are made from concrete and are highly reflective = **0**; Fair: a mix of concrete surfaces and some limited use of absorptive materials such as cork, wood, carpet, etc. = **1**; Good: Some acoustical ceilings and absorptive flooring or wall materials = **2**	2	5
	8. What are the instructional elements in learning spaces? No black board or display boards = **0**; Old black boards and one display board = **1**; Combination of blackboards and white boards, limited display = **2**; Whiteboards and several display areas = **3**	3	3
	9. Is there ventilation or air conditioning in all learning spaces? There is little or no ventilation or air conditioning = **0**; There are ceiling fans and operable windows providing cross ventilation but no ac = **1**; There is ceiling and wall fans supplemented with air conditioning in all learning spaces = **2**	2	9
	10. Are the toilet facilities designed with everyone in mind? Poor: Few options, not handicapped accessible, open fixtures with no partitions = 0 Good: Handicap Accessible, Provide adequate Privacy, Separate Staff Toilets = 2	2	3
	11. Are the toilet facilities centralized or evenly distributed throughout the school? No, they are located away from the learning spaces. Students would need to spend an extended amount of time durring class to access a toilet = 0; Yes = 2	2	3
	12. Is student work displayed throughout the school in a pleasing and not overwhelming way (or is there places to do so were school in session)? No = 0; Yes = 2	2	3
		pattern score	**29**

Special Notes Below:	**5. SCHOOL DESIGN PROGRAM ELEMENTS** *Does this school possesses the typical added program elements beyond classrooms required of most newer schools?*		
	1. Is there a school gymnasium with evidence that it is being used consistently as a gymnasium? There is no gymnasium, indoor or outdoor = **0**; There is an outdoor gymnasium but either no bleachers or shelter = **1**; There is a sheltered outdoor gymnasium with bleachers = **2**; There is an indoor gymnasium with bleachers and appropriate gym equipment = **3**	3	8
	2. Meeting spaces: The school <u>does not</u> have available meeting space for groups of over 50 = **0**, Some of the larger classrooms or the dining area could be used for small meeting groups of 50 to 100 people = 1; There is a dedicated meeting space used for small meeting groups of 50 to 100 people = 2; There is a dedicated meeting room at the school that may be used for performances and large meetings of over 100 people = **3**	3	7
	3. There is a variety of sized spaces throughout the school? Poor: The school is mostly just classrooms of the same size with the exception of some specialty rooms = 0 Good: An attempt has been made to offer some variety in space size to students = 1 Excellent, there is a wide offering of areas for students to learn beyond the classroom including rooms for 2-5, 6-12, 25-30, 50+ = 2	2	5
	4. Are there Science Rooms (Elementary Schools) or Labs (Secondary Schools) at this school with evidence they are being used for the intended purposes? There are no science rooms or labs = **0**; There are lab rooms for science but no equipment or appropriate furnishings or evidence they are used as general learning space = **1**; There are labs with lab furniture but with limited lab equipment or unclear evidence of use= **2**; There are labs with the appropriate lab equipment, counters, sinks and lab furniture with evidence they may have been used= **3**	3	7
	5. Is there a dedicated multiuse space for music and drama with evidence they are used for the intended purpose? There is no area = **0**; There is an area used for music and drama but it is not dedicated = **1**; There is a dedicated area but it is poorly equipped or unclear evidence it was used= **2**; There is a dedicated area that is appropriately equipped with evidence it may have been used = **3**	3	7
	6. Is there a dedicated area for art with evidence it is used for the intended purpose? There is no area = **0**; There is an area used for art but it is not dedicated = **1**; There is a dedicated area but it is poorly equipped or unclear evidence of use= **2**; There is a dedicated area that is appropriately equipped with evidence it may have been used= **3**	3	7

	7. Is there a school library with evidence it is used for the intended purpose? There is no dedicated library space or it is being used for other purposes= **0**, There is a dedicated library area but it is too small to service the students = **1**; There is a dedicated library with a limited book collection, some computer work stations and AV capabilities or unclear evidence of use = **2**; There is a school library with shelving for books and an operational computer and AV center with evidence it may have been used = **3**	3	8
	8. Is there a computer / technology lab with evidence it is used for the intended purpose? The computer lab is being used for other purposes or has 8 year old or older computers and inappropriate work stations = **0**; There is a Computer lab with with good quality newer work stations with evidence it may have been used = **2**	2	6
	9. Are there dedicated areas for hands on learning? There are no such areas = **0**; There are areas with older equipment and work benches, no technology in these spaces = **1**; Hands on learning areas are properly outfitted with technology and varied equipment = **3**	3	7
		pattern score	**25**

Special Notes Below:	**6. POTENTIAL FOR FUTURE EXPANSION** *What is the expansion potential of this school*		
	1. Building Additions: This school has enough room on site to expand existing buildings to accommodate additional program space = **3**	3	10
	2. Courtyard Infill: There are interior courtyards and plazas with potential for infill expansion = **3**	3	10
	3. New Buildings: The existing site is large enough to construct additional buildings without sacrificing outdoor activity space = 3	3	10
		pattern score	**9**

Special Notes Below:	**7. CONSTRUCTION / MATERIALS CONDITION** *The average current condition of the building is documented here*		
	1. What is the condition of the roofs at this school? Outdated roofing with some leaks reported each year = **0**; Serviceable newer roof with occasional leaks reported and repaired = **1**; Relatively recent roof with little or no reported leaks = **2**	2	5
	2. What is the condition of the exterior walls? Poor: Walls are cracked and failing in several places with visible settlement and leaking = **1**, Fair: Some settlement or stress cracks and minor damage = **2** , Good: Walls appear stable, no major structural issues = **3**	3	7
	3. What is the typical condition of the windows? Poor: Most are non-operable due to modifications, have hardware missing, window panes damaged, replacement needed = **0**; Good: Most windows are operable, no noticeable repairs needed = 2	2	5
	4. What is the condition of the doors? Poor: doors are have issues closing properly, hardware is missing on some doors due to vandalism = 0; Good: Doors are in good useable condition with minimal signs of wear, all doors have institutional hardware=2	2	5
	5. What is the condition of the structural elements? Poor: Apparent sagging and structural cracks, walls appear to be moving, no repairs evident = **0**; Fair: Some sagging, but appears structurally stable, some water damage is evident = **1**; Good: no major cracks visible, appears structurally stable = **2**	2	9
	6. How Adaptable is the structural system? Poor: Most interior walls are load bearing, removal will require additional structural reinforcement = **1**; Fair: The structural system allows for limited removal of interior wall partitions = **2**; Good: Structural frame (Concrete or Steel) allows for removal of most interior wall partitions and some exterior panels = **3**	3	10
		pattern score	**14**

Special Notes Below:	**8. BUILDING MAINTENANCE CONDITION** *Regarding the observed cleanliness and condition of the school.*		
	1. The ceiling is mostly in good shape free of water stains and broken ceiling tiles? No = 0; Yes = 2	2	6
	2. What proportion of light fixtures are in functioning condition? Nearly all = 2. Up to 10% non functioning =1. More than 10% non functioning =0	3	6
	3. No vandalism is present around the school grounds or interior. No = 0; Yes = 2	2	3
	4. Toilet rooms are sanitary? Poor: Dirty, exposed piping, smells bad, fixtures not working = 0 Fair: Okay condition, few if any fixtures not working = 1 Good: Very Clean, fully stocked with toilet paper, soap, and a hand dryers or paper towels = 2	2	8
	5. What is the condition of the interior wall materials at this school? Peeling / Stains / Scratches / Water Damage on Paint or Wall Coverings Poor: Damage observed in many places = 0; Fair: Damage observed in some areas = 1; Good: Damage observed in few places = 2; Excellent: Damage non existent = 3	3	6
	6. What is the condition of the classroom furniture? Poor: most furniture in subpar condition = 0; Fair: Most furniture in okay condition or seems slightly outdated = 1; Good: furniture is in good condition and seems fairly new = 2	2	2
	7. What is the condition of the interior floor covering materials at this school? Peeling / Stains / Scratches / Water Damage / Odors on carpet, vct, wood, vinyl flooring Poor: Damage observed in many places = 0; Fair: Damage observed in some areas = 1; Good: Damage observed in few places = 2; Excellent: Damage non existent = 3	3	6
	8. School grounds are kept free of litter and garbage, except in designated containers. No = 0; Yes = 2	2	5
		pattern score	**19**

SUBTOTAL SCORE TABULATION *(BUILDING DESIGN ASSESSMENT)*	
Raw Score	**V**
151	

OBSERVATIONAL INSTRUMENT 2/4: EDUCATIONAL ADEQUACY ASSESMENT	**Weight Factor** (on a scale of 1-10) **V**
Completed by the Surveyor	

All questions answered on avae
not present .5= somewhat pres
present

Special Notes Below:	1. WELCOMING ENTRY *How welcoming is the entrance to the school?*	(code 0, 0.5, or 1.0)	
	1. The entrance to the school is marked with visible signage	1	3
	2. As visitors walk in the door they will be seen by an office receptionist or a security guard	1	3
	3. Distinct signature elements in a highly visible location (e.g. School name, sculpture or flag)	1	4
	4. There is an area provided near the entry that is protected from rain and sun for parents to drop off and pick up children	1	5
		pattern score	**4**

Special Notes Below:	2. SPECIALTY LEARNING SPACES (E.G. SCIENCE LABS, ART ROOMS, LIFE SKILLS, PERFORMANCE STUDIOS)	(code 0, 0.5, or 1.0)	
	Are the science labs outfitted with the following enriched features? *(mark 0 if there are no labs present)*		
	1. Preparation space and secured storage space adjacent to work area	1	2
	2. Science areas contain movable tables	1	5
	3. Access to outdoor areas with tables suitable for projects or experimentation	1	4
	4. Proper venting and exhaust fan is provided for fumes from dust, paint and chemicals	1	3
	5. Access to running water within the space	1	5
	Are the art labs outfitted with the following enriched features? *(mark 0 if there are no labs present)*		
	1. Prep and storage areas with counters and sinks available	1	4
	2. Access to outdoors for messy work	1	5
	3. Space for a variety of art activities (drawing, sculpture, ceramics, etc.)	1	7
	4. Proper venting and exhaust fan is provided for fumes from dust, paint and chemicals	1	5
	5. Access to running water within the space	1	5
	To what extent is an applied life skills hands on learning curriculum supported? These items may be spread out or covered in a pre-vocational lab *(mark 0 if there are no life skills areas present)*		
	1. Sufficiently large space to work on hands-on projects in and/or outside classrooms (e.g. woodworking, sewing)	1	6
	2. Dedicated outdoor areas are set up for gardening	1	5
	3. Areas for demonstrations by outside community partners (e.g. multi-purpose space)	1	4
	4. Areas for small groups to work together	1	4
	To what extent is music and performance supported? Note: Area for these activities may be supported within the art lab, this is okay if the art lab meets the below qualifications *(mark 0 if there are no music and performance areas present)*		
	1. An outdoor area suitable for performance (plaza, amphitheater, etc.)	1	5
	2. Space suitable for small group music practice	1	4
	3. Performance space with portable stage and some seating	1	5
	4. Community able to use school facilities for larger performances AND/OR students use community facilities for larger performances	1	4
		pattern score	**18**

Special Notes	3. GENERAL LEARNING SPACES (Classrooms / Learning Studios) *To be applicable to all spaces or the school as a whole*	0, 0.5, or 1.0	
	1. The learning spaces area comfortable well lit pleasing place to be	1	6
	2. Examples of student work or projects are visible in the classroom	1	3
	3. There is more than 4 different types of furniture available	1	7
	4. There is a variety of equipment, technology, and learning resources available for use (Setup for more thn just lecture)	1	6
	5. Classrooms appear to be organized in groupings of 4-6 or in learning communities to promote collaboration	1	10
		pattern score	**5**

Special Notes Below:	4. TEACHERS AS PROFESSIONALS *To what extent does school create a professional environment for teachers?*	(code 0, 0.5, or 1.0)	
	1. Shared teacher offices/workrooms within a 30 second walk from their learning spaces	1	9
	2. Office space provides teachers with conferencing table, phone, computer, lockable personal and professional storage, and other equipment	1	4
	3. School offers mix of formal (0.5) and informal (0.5) spaces for teachers to meet and plan lessons	1	7
		pattern score	**3**

Special Notes Below:	5. SHARED LEARNING RESOURCES *To what extent are learning resources distributed versus centralized?*	(code 0, 0.5, or 1.0)	
	1. A central library/Media Resource Center serves as space for conducting research and a visible symbol for learning	1	8
	2. Library/Media Resource Center includes area for casual reading (0.5), furnished with soft seating (0.5)	1	7
	3. Informal group tutoring and table groupings available adjacent to resource areas	1	6
	4. There is adequate storage throughout the school for resources, student projects, personal effects	1	6
	5. There are a variety of instructional learning resources, technology, equipment available for use by all students	1	8
		pattern score	**5**

Special Notes Below:	6. HEALTH & PHYSICAL FITNESS *To what extent are health and physical fitness supported?*	(code 0, 0.5, or 1.0)	
	1. Organized sports and fitness have a place in the school (basketball, football, etc.)	1	8
	2. Age appropriate outdoor (0.5) and indoor (0.5) play spaces	1	6
	3. A running track or walking paths are accessible to school site	1	4
	4. 50% of outdoor learning spaces have some form of shading and protection from the elements	1	5
		pattern score	**4**

Special Notes Below:	7. INDOOR/OUTDOOR CONNECTION *What is the quality of the indoor/outdoor connections?*	(code 0, 0.5, or 1.0)	
	1. Key public spaces in the school have direct connections to the outdoors	1	7
	2. School site contains one or more of the following sports alternative feeatures: nature walks, kitchen gardens, greenhouses, planted courtyards, designated natural play spaces, outdoor shaded classrooms, exploration zone.	1	8
	3. There are outdoor seating and socializing areas	1	8
	4. Each ground level classroom has direct access to outdoors (0.5); upper level classrooms have direct access to a terrace or balcony (0.5)	1	7
		pattern score	**4**

Special Notes Below:	8. EDUCATIONALLY APPROPRIATE FURNITURE	(code 0, 0.5,

	Does furniture throughout the school seem appropriate, varied, and well organized for learning?	or 1.0)	
	1. Student seating is comfortable (chosen with ergonomic needs of students in mind or is adjustable)	1	8
	2. Soft, upholstered seating is available in appropriate areas (entrance, reading areas)	1	7
	3. Changes in surfaces delineate seating areas (carpeting, tile, ceiling height)	1	6
	4. Desk lights or reading lights available in soft seating areas	1	3
	5. Varied furniture types such as low floor types, desk height, standing height	1	8
	6. Are the size of desks/chairs and/or tables/benches appropriate to the age of the school?	1	7
	7. Some furniture is availible for studnets that move a lot (chairs on casters, alternative seating, rocking chairs)	1	7
	8. Both low and tall seating is availible	1	8
	9. Furniture selections were made with flexibility in mind (Easy to move, on wheels, easier to store, limited fixed or heavy pieces)	1	6
	10. Overall there appears to be enough places to sit for each student	1	8
	pattern score	**10**	

SUBTOTAL SCORE TABULATION *(EDUCATIONAL ADEQUACY ASSESMENT)*		
	Raw Score	W
	53	

SURVEY 3/4: GENERAL USE & FUNCTION ASSESSMENT (PRINCIPAL SURVEY)		**Weight Factor** (on a scale of 1-10)	W
Completed by the School Leadership or Principal			
	Intro: Thank you for agreeing to take this voluntary survey designed by the Kaizen Company for the US Agency for International Development. It is designed to understand how its projects to		
	Please think back to the 2019 to 2020 school year before the pandemic to answer questions relating to teacher and student use of facilities.		
	Note to surveyor, allow for the unprompted response of "do not know/unsure" or "not applicable." (These will not be coded numerically.)		
Special Notes Below:	**1. CONNECTED TO COMMUNITY**	**scale 0, 0.5, or 1.0 for first Q; 0, 1**	
	First, I'll ask some questions about the school's connection to its surrounding community to answer as yes or no.		
	1. Is there a room or area designated for sharing with communities easily accessible and without creating safety issues?	1	5
	2. Does the school run adult programs for the local community?	1	2
	3. Is the school facility used after school hours?	1	5
	4. Are there sports fields available for community use?	1	3
	5. Are exterior spaces provided for community use (e.g. playgrounds, community gardens)?	1	3
	6. Does the school take advantage of local community resources (e.g. public library, community center, universities)?	1	6
	7. Do students ever volunteer to help the community (community service) through the school?	1	3
	8. Does the school have an educational counsil involving community members beyond parents?	1	3
	9. Has the community donated money or important resources to the school?	1	3
	10. Do parents or community members volunteer at the school?	1	3
	11. . Answering the next question a bit differently, how often before COVID did the school shares its facilities with outside community groups - Often, on	1	6
	pattern score	**6**	
Special Notes Below:	**2. AVAILABILITY OF TECHNOLOGY**		
	Next, I'll ask some questions about technology		b. Others might be
	Response options to the following are yes/no	**Code 0,1**	
	1. Wireless networking with internet provides access throughout campus	1	7
	2. Students can access internet-connected computers	1	7
	3. Students have access to relevant software on the computes pertaining to lessons and specialties?	1	7
	Response options to the following are 'often' / 'on occasion' / 'rarely'	**Code 0,0.5,1**	
	4. Computers are used to aid in all types of learning (not just computer lessons)	1	6
	5. Students use portable digital equipment such as laptops, video cameras, etc.as part of their learning	1	5
	6. School utilizes video conferencing to bring in outside experts to teach kids	1	5
	pattern score	**6**	
Special Notes Below:	**3. DESIGN USE**	**Yes/No (code 0, 1)**	
	Now, I will ask some yes/no questions about school design features during the period when you held in person classes to answer as yes or no.		Was 0, .5
	1. Would it be difficult for teachers to share rooms easily throughout the day?	1	7
	2. Throughout the day, can teachers share resources easily?	1	7
	3. Are students allowed easy access to use learning spaces beyond their classroom?	1	8
	4. Are libraries used beyond the purpose of storing reading materials and reading?	1	3
	5. Are there flexible features in the school that are easy to use and used often (eg. Movable Walls, Movable Furniture, Multiuse Rooms)?	1	7
	6. Do students have adequate space to work without being disturbed by others?	1	3
	7. Is student pickup and drop off often a difficult process?	1	9
	8. Does outside noise affect learning inside the classroom?	1	7
	9. Does the school get too hot sometimes?	1	3
	9b. Does the school get too cold sometimes?	1	3
	10. In many spaces, are there issues of glare from sunlight?	1	8
	11. Is there an on site security personnel?	1	3
	12. Do teaching plans sometimes get affected by maintenance-related issues?	1	6
	13. Do common spaces get too loud during times of high traffic?	1	5
	14. Are the play area and field sizes as well as equipment sufficient for the number of students? No = 0, Partially = 1, Fully = 2.	1	4
	15. Are there areas that get consistenly crowded and congested throughout the normal day?	1	7
	15b. (if 13=yes) Which areas? (Open with coding: Staircases, hallways, eating area, exits, could specify further than these codes)	NA	
	pattern score	**16**	

Special Notes Below:	4. DINING AND EATING	yes / no. 0 or 1.0	
	Next, I'll read four statements about dining facilities to answer as yes or no		Was 0, .5
	1. is the food available in the school fresh, healthy, and generally well received by students?	1	6
	2. Are there casual eating areas available to all staff and students for at least 50% of the schools popualtion per lunch period?	1	5
	3. Are there options for students to eat in groups of 6-10?	1	7
	4. Are there outdoor seating areas directly adjacent to indoor eating areas?	1	5
	pattern score	**4**	

Special Notes Below:	5. TEACHING & LEARNING		
	Next, I'll read some statements about teaching and learning to answer as yes or no.		
		(code 0,1)	
	1. Does the school have sufficient teachers per grade and subject areas (core and extracurricular subjects)?	1	5
	2. Are sufficient resources and equipment available to instruct all core and extracurricular subjects?	1	4
	3. Are classes ever cancelled due to shortage of classrooms and teachers?	1	3
	4. Do teaching plans rarely (Less than once a month) get affected by maintenance-related issues?	1	5
	5. Are there sufficient budgetary resources available for teachers to work and plan classes?	1	5
	6. Is there generally sufficient staff including, but not limited to, guidance counselors, janitor, librarian, secretary, vice-principal, and principal to manage the school?	1	4
	7. Are some subjects taught in an interdisciplinary manner?	1	8
	8. Do all students have the opportunity to do some level of project based learning each semester?	1	7
	9. Do teachers act as an advisor to students helping them learn at their own pace?	1	7
	10. Are students allowed to move from one space to another with minimal supervision to learn as long as they are on task?	1	8
	11.When teaching in person, do teaching practices for many teachers vary throughout the day?	1	9
	Next, I'll read some statements about teaching where the response options are 'often' / 'on occasion' / or 'rarely or never'	**(Code 0,.5,1)**	
	12. In your experience, how often do teachers in the school use physical disciplinary methods to punish problematic student behavior?	1	6
	13. How often do teachers encourage students to learn subjects during classes in their own chosen way? (if asked, indicate either individually, in groups, via pri	1	3
	14. How often do teachers co-teach lessons?	1	8
	15. In your experience, how often do teachers adjust their lessons for students' different learning needs and levels within a class?	1	6
	16. How often do teachers have groups of students rotate across different types of assignments within a class?	1	6
	17. How often do teachers interact with teachers at neighboring schools to share ideas, lessons learned and teaching strategies?	1	6
	Varied response options	**(Code 0,.5,1)**	
	18. In your experience, what is the average time students are actually involved in learning activities during academic classes - less than 20 minutes, between 20 and 30 minutes, more than 30 minutes (0,0.5, 1)	1	6
	19. On an average, what proportion of classroom time is spent with teachers either lecturing classes, calling on students to directly answer questions, or having students do Individual reading/writing assignments at their desks? Less than a third of the time, between a third and two-	1	10
	20. [SKEP schools only] To what extent do you feel that the trainings and coaching of teachers is sufficient to support use of what the facility and resources offer and newer teaching methods- very insufficient, somewhat insufficient, sufficient, very sufficient?	1	
	20b. Why do you say that? (open ended)		
	pattern score	**20**	

Special Notes Below:	6. OVERALL DESIGN / USE SATISFACTION	yes / no (code 0/1)	
	You are more than half-way through the survey. Now, I will ask some questions about overall feelings about the school to answer as yes or no.		
	Response options to the following are yes/no	**(code 0,1)**	
	1. Are parents excited to send their students to school in this building?	1	6
	2. Do the majority of students seem well focused throughout the day?	1	7
	3. Do the majority of students seem to have a positive social, physical, and emotional well being?	1	6
	4. Is the overall perception of the building positive?	1	6
	5. Do students, teachers, and staff feel safe while at school?	1	5
	6. Are teachers excited to teach and have few complaints about their space?	1	7
	7. Does the school environment lead to a feeling of belonging among students?	1	3
	8. Does the school environment lead to a feeling of belonging among teachers?	1	3
	9. Does the school experience ongoing disruptive maintenance issues ?	1	5
	10. Do teachers and students play their appropriate roles in maintaining school resources?	1	3
	11. Does the school environment lead to increased student attendance?	1	7
	12. Are student outcomes affected positively by the current learning environment?	1	6
	Varied response options	**(Code 0,.5,1)**	
	13. How often are you or other staff alerted that bullying is happening among students? (Rarely or never=1, up to once a month=.5, More than once a month=0)	1	4
	14. Recognizing that there are differences among parents at each school, how frequent would you describe the average parental involvement at your school? (Most parents do not come to the school outside of pickup / dropoff =0, most parents generally come to the school 1-2 times a year =.5, Most parents meet each semester with teachers and there are other events to which parents come throughout the year = 1 [If there are questions about "most", define as more than half.]	1	4
	Allow for comments from the principal to clarify #14		
	pattern score	**14**	

Special Notes Below:	7. ENERGY, MATERIALS, UP KEEP USE	0, 0.5, or 1.0	
	Only three sections of the survey to go. Please answer the following questions about energy consumption and cost as either no, yes, or else somewhat or mostly as indicated.		
	Response options to the following are 'Yes / 'Somewhat/Mostly' / 'No'		
	1. Is there generally sufficient equipment and supplies to clean the school? No = 0; Mostly =.5; Yes = 1	1	5
	2. Is the process of daily cleaning and repairs to the building interior reasonable given its size? No = 0; Mostly =.5; Yes = 1	1	6
	3. Is the process of maintaining the site / grounds reasonable given its size? No = 0; Mostly =.5; Yes = 1	1	6
	4. Is there a sufficient budget for upkeep and maintenance of the building and grounds in the long-term? No = 0; Mostly =.5; Yes = 1	1	5
	5. Is the electricity use of the building higher than expected? No = 0; Somewhat =.5; Yes = 1	1	4

	6. Is the heating or cooling cost of the building higher than expected? No = 0; Somewhat = .5; Yes = 1	1	4
	Other response options		
	7. How well is the building insulated? Poorly: =0; Fair: (Not all are insulated value or all are insuldated but not well)=.5; Excellent: Walls, Doors, Windows are all insulated = 1	1	4
	8. Is the vegetation and ground cover easy to maintain proportionate to their size? Poor: Maintaining the grounds is time consuming and expensive, many of the original features have been replaced = 0 Good; The grounds are fairly easy to maintain and many of the original features remain intact = 1	1	4
		pattern score	**8**

Special Notes Below:	**8. UTILITY INFRASTRUCTURE**	**0, 0.5, or 1.0**	
	We're almost at the end. Please answer the following questions with the response options indicated.		
	1. Does this building have suitable and reliable access to the internet? No access to the internet = **0**; slow service/Intermittent/no wifi = .5; Fast, Reeliable, Wi-Fi coverage = **1**	1	10
	2. Is there is reliable electrical power serving this site? Intermittent service and not enough power = **0**; Fairly consistent electrical with occasional failures = **.5**; Consistent power at appropriate levels = **1**	1	7
	3. What is the condition of the water service to the school? Insufficient water pressure with frequent failures = **0**; Sufficient water pressure with occasional failures = **.5**; Sufficient water pressure with no recent problems = **1**	1	6
	4. Is this school set up for the disposal of waste water? No = **0**; Yes but with occasional failures = **.5**; Yes, with no reported problems = **1**	1	6
	5. Is this school set up for the disposal of latrine water? No = **0**; Yes but with occasional failures = **.5**; Yes, with no reported problems = **1**	1	6
	6. Do students and staff have ongoing, easy access to drinking water No = 0; Yes but with occasional failures = .5; Yes, with no reported problems = 1	1	4
	7. Does the school have a sufficient area dedicated to garbage disposal / gathering separate from student traffic? No = 0; Mostly = .5; Yes = 1	1	4
	8. Is there sufficient parking spaces for faculty and staff separate from outdoor play areas? There is no available parking or parking is insufficient = 0; There is sufficient parking but has another flaw (such as it overlaps with the play areas) = **.5**; There is sufficient parking, separate from the play areas = 1	1	4
	9. Does the school have all of the supplies and rooms on site to properly maintain and service the building and grounds? No = 0; Mostly = .5; Yes = 1	1	4
		pattern score	**9**

	9. EFFECT ON NEIGHBORING SCHOOLS *(JSEP and SKEP Schools only)*	Not scored with the above
	For our last three questions, we are asking about the effect of constructing your school on neighboring schools.	
	1. Did the construction or renovation of your school reduce crowding issues at neighboring schools in the first one or two full academic years after construction completed? For primary schools, we are considering neighboring schools within about 1 km and for secondary schools, about 3km. No/Yes (If there has not been one or two years of in-person classes, code as NA)	
	2a. (If answer "Yes" in 1) Did the construction or renovation of your school reduce crowding at neighboring schools in the first one or two years in the following ways?	
	Were any rented buildings no longer needed? (yes/no)	
	Were one or more double shifts no longer needed? (yes/no)	
	Did class sizes became smaller (yes/no)	
	2b) (If answered "No" in 1) Why do you think the construction or renovation of your school did not reduce crowding at neighboring schools? (Open end with closed coding)	
	(Additional waves of refugees arrived. School was not planned large enough initially. Reducing double shifts meant larger class sizes. With COVID, more students joined public schools.)	
	3. Did the effect of construction or renovation of your school continue to reduce crowding issues at neighboring schools after two years? No = 0; Somewhat = 0.5 A lot = 1	
	3b) (If answered "No" in 3) Why do you think the construction or renovation of your school did not reduce crowding at neighboring schools beyond the first year or two? (Open end with closed coding)	
	(Additional waves of refugees arrived. School was not planned large enough initially. Reducing double shifts meant larger class sizes. With COVID, more students joined public schools.)	

SUBTOTAL SCORE TABULATION *(GENERAL USE & FUNCTION ASSESSMENT)*	
Raw Score	
83	

SURVEY 4/4: TEACHER USE & FUNCTION ASSESSMENT	**Weight Factor** (on a scale of 1-10)
Completed by Teachers	
Thank you for agreeing to take this voluntary survey designed by the Kaizen Company for the US Agency for International Development. It is designed to understand how its projects to constr	
Please think back to the 2019 to 2020 school year before the pandemic to answer these questions.	
Note to surveyor, allow for the unprompted response of "do not know/unsure" or "not applicable." (These will not be coded numerically.)	

Special Notes Below:	**1. AVAILABILITY OF TECHNOLOGY**	
	How well is technology integrated with the curriculum?	

	Response options to the following are yes/no	**Code (0,1)**	
	1. Wireless networking with internet provides access throughout campus	1	7
	2. Students can access internet-connected computers	1	7
	3. Students have access to relevant software on the computers pertaining to lessons and specialties?	1	7
	Response options to the following are 'often' / 'on occasion' / 'rarely'	**Code 0,.5,1**	
	4. Computers are used to aid in learning beyond computer lessons	1	5
	5. Students use portable digital equipment such as laptops, video cameras, etc.as part of their learning	1	6
	6. School utilizes video conferencing to bring in outside experts to teach students	1	5
		pattern score **6**	

Special Notes Below:	**2. DESIGN USE**	**Yes/No (0, 1)**	
	1. Throughout the day, teachers can share rooms easily	1	7
	2. Throughout the day teachers can share resources easily	1	8
	3. Students have access to learning spaces beyond their classroom and are allowed easy access to use these spaces	1	8
	4. Outside noise does not affect learning inside my classroom	1	7
	5. My classroom can get too cold in winter	1	3
	6. My classroom can get too hot sometimes	1	3
	7. My teaching or plans get affected by maintenance-related issues (never=1, infrequently=.5, somewhat frequently=0)	1	6
	8 Do the play areas and fields sizes outside seem sufficient for the number of students? No = 0, Partially = 1, Fully = 2.	1	2
		pattern score **8**	

You already are a third of the way through. Again, think back to the school year before the pandemic to answer these questions.

Special Notes Below:	**3. TEACHING & LEARNING**		
	Response options to the following are yes/no	(code 0,1)	
	1. There are sufficient budgetary resources available for teachers to work and plan classes	1	5
	2.Student desks in my class are generally kept neatly in straight rows	1	4
	3.When teaching in person, I tend to use similar teaching methods throughout the day all or most of the week	1	9
	4.When teaching in person, I use tend to give direct instruction, ask questions for individual response, or provide written assignments for students to work on on their own	1	5
	5. I think of myself as an advisor to students helping them learn at their own pace	1	7
	6. I teach some subjects in an interdisciplinary manner	1	8
	7. My students are allowed to move from one space to another with little supervision to learn as long as they are on task	1	8
	8. Many students have the opportunity to do some level of project based learning each semester	1	7
	9.Teaching in different ways and to different levels for different students within an in-person class is not practical to implement in my classrooms.	1	7
	10. I interact regularly with teachers at neighboring schools to share ideas, lessons learned and teaching strategies	1	7
	11. I get sufficient resources and equipment for my subjects	1	4
	11b [If "No" above] What additional resource or equipment is most needed?		
	Varied response options	(code 0, .5,1)	
	12.The average time students are actually involved in learning activities during each class is approximately (less than 20 minutes =0, between 20 and 30 minutes = .5, more than 30 minutes = 1)	1	6
	13. I co-teach lessons with other teachers (never =0, infrequently=.5, sometimes=1)	1	8
	14. How often do teachers in the school use physical disciplinary methods to punish problematic student behavior (never =1, infrequently=.5, sometimes=0)	1	6
	15. My students decide for themselves how to learn subjects in class through groups, individually, printed media, technology (never =0, infrequently=0.5,	1	3
		pattern score **15**	

Special Notes	**4. TEACHING & LEARNING II**		
	Think back to your teaching in person in this school before the pandemic. Choose for each of the following about how often you used each approach (every day, at least once a week, at least once a month, between once and a few times a year, never)	**0, .5, 1, 1.5, 2**	
Coding for teacher-centered instruction (indicated with *) in opposite direction as for student-centered	Direct instruction / lecture and board (*)	1	2
	Individual reading/writing assignments or worksheets (*)	1	2
	Individual student responses to teacher questions (*)	1	2
	Group discussion	1	2
	Small group work	1	2
	Hands-on activities / experiments	1	2
	Students presenting / debating / oral reports	1	2
	Game-based lessons	1	2
	Recitation or reading aloud (*)	1	2
	Trips outdoors or field trips	1	2
	Using computers or technology	1	2
	Projects	1	2
	Work stations	1	2
	Assignments where students choose the subject and way to answer	1	2
	Journaling	1	2
	Using the same scale as above, how often have you been able to use methods that get student interacting with you and each other since teaching online? (every day, at least once a week, at least once a month, between once and a few times a year, never)	1	2
		16	

Just one more section to go. Thinking back to when students were in class…

Special Notes Below:	**5. OVERALL DESIGN / USE SATISFACTION / SOCIAL COHESION**		
	Response options to the following are yes/no	**(code 0,1)**	
	1. The majority of students seem well focused throughout the day	1	7
	2. The majority of students seem to have a positive social, physical, and emotional well being	1	6

3. The overall perception of the building is positive	1			6
4. Students, teachers, and staff feel safe while at school	1			5
5. Teachers are excited to teach and have few complaints about their space	1			7
6. The school experiences ongoing disruptive maintenance issues	1			5
7. The school environment leads to increased student attendance	1			7
8. The school environment leads to a feeling of belonging among students	1			3
9. The school environment leads to a feeling of belonging among teachers	1			3
11. Student outcomes are affected positively by the current learning environment	1			6
12.Teachers are kept informed regularly about what is happening or being planned regarding the school		1		5
13. Teachers are considered an important part of the school leadership team		1		5
14. I receive feedback on my performance from my colleagues or the principal		1		5
15. The school regularly communicates with parents		1		5
Varied response options	**(code 0,.5,1)**			
10. How often does bullying happen among students? (never=1, infrequently=.5, not infrequently or often=0)	1			4
12. I would rate the level of engagement of the parental organization as (low=0, moderate=.5, high=1)	1			3
13. How high would you rate average parental involvement generally? (low=0, moderate=.5, high=1)	1			4
	pattern score	**17**		

SUBTOTAL SCORE TABULATION *(GENERAL USE & FUNCTION ASSESSMENT)*

	Raw Score
	62

GRAND TOTAL SCORE TABULATION *(ALL FOUR ASSESSMENTS)*

	Raw Score
Total possible raw score = | Total possible weighted score	349

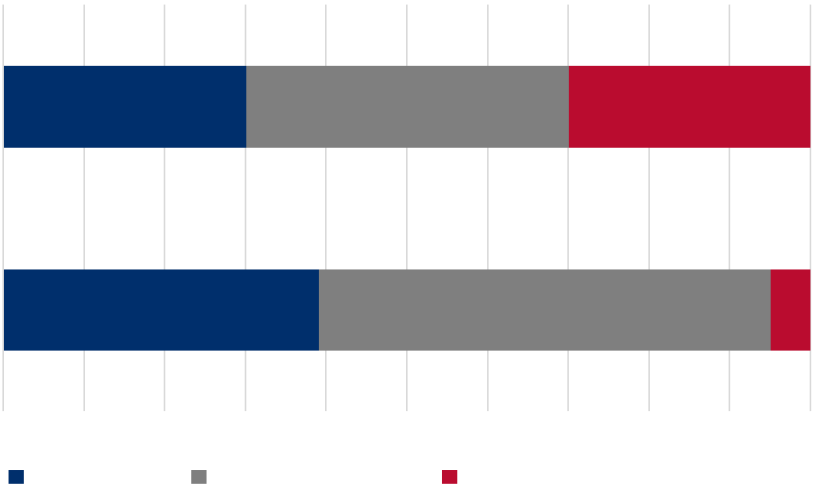
USAID Jordan - EFEI - Draft

5.10. Appendix 10: COVID-related Adjustments in Schools

As part of the observational data collection, the evaluation team notes that, in response to the COVID-19 pandemic, most schools appeared to provide hand sanitizers, which more recently is not determined to be a strong means of preventing spread of the SARS Cov-2 coronavirus. Many also provided stations with masks and educational panels or leaflets on distancing, which are substantially more important for preventing spread. However, fewer appeared to adjust in terms of wider seat distancing, creating an isolation room, or developing instructions for dealing with COVID-19 infected patients. A few had stickers on the ground demonstrating safe distances. In one case, student parking spaces were revised to better ensure social distancing.

Substantially more of the USAID school teachers thought their schools were somewhat or very ready to handle COVID than neighboring schools. Overall, 56% of USAID school teachers thought their schools were very ready and 95% thought they were somewhat or very ready. This compares to 30% and 70% respectively for neighboring schools.

Figure 10: Teacher Response on School Readiness to Handle COVID with In-person Classes



According to teachers, the USAID-funded schools generally have been undertaking more procedures than their neighboring schools. Across schools, USAID teachers indicated that their schools undertook an average of 3 more protective measures (9 vs 6). Figure 2

5.11. Appendix 11: Evaluation Question 1A – Completion of Construction Work and Timeline Deviations

How long did it take to complete the construction work? In what ways did this deviate from the planned timeline?

This analysis focuses on timelines for just the basic and secondary educational facilities, although the findings were consistent regardless of whether kindergartens, which were smaller and quicker to construct, were included in analyzing timelines. The analysis focuses on JSEP and SKEP schools, both because this information is more recent and also is available on a school-by-school basis.[51]

Timelines for construction work for the USAID-funded schools vary greatly by contractor, consistent with the assertion by the A&E contractor that commitment to schedule and contracts was the most important factor in delays beyond contract.[52] The average for schools completed prior to the March 17, 2020 lockdown was 89 days, with contractors ranging from 0 to 213 days over schedule. One contractor, Elagileh operating across governorates outside of Amman, always delivered on time. A second, FAZ – constructing schools within Amman, averaged only 28 days beyond schedule before the COVID lockdown. Removing those two contractors, the average was 108 days among the other 13 contractors.

However, even among these contractors, the variation is considerable. Two of these contractors (Dijla and General Chart, which respectively built 3 and 10 schools outside of Amman) averaged 43 days over contract. Four others (Al Eidi – 12 schools, Al Joud – 21 schools, Al Tahaina – 9 schools, and Babel – 7 schools) averaged between 60 and 70 days over contract. The association between construction of basic and secondary schools outside Amman and longer schedule overruns is only statistically and substantively significant at an extra 35 days (44 days including kindergartens, p=0.02 for both)[53] prior to the lockdown when more of the construction in Amman was being completed.

There association between number of schools contracted and delays is complicated by the lockdown. Two of the contractors with the longest over-runs, Sadeen and Samara & Yousef, indeed had a large number of projects with 20 and 27 schools under contract. However, another running well over contract (Al Rawashdeh) built only 3 schools. Meanwhile, two strong performers discussed above constructed 21 and 20 schools. A regression of number of contracts and overruns indicates no difference on this factor across all periods. However, examining only schools completed prior to the lockdown, the data finds each additional contract is associated with four additional days of contract overruns, a small amount of time unless the contractor is awarded a large number of contracts. This relationship is not statistically significant after the lockdown. The evaluation does not have data on prior construction success to discern the extent to which awarding many schools to a poor performing contractor worsens their performance, an obvious hypothesis otherwise worthy of exploration.

---

[51] The information available for JSP schools was both partial (about a third) and included only the date of when the last school in a package of schools was completed, rather than when each school was completed. Timelines for JSP therefore would be exaggerated relative to and less informative than the data for JSEP and SKEP.

[52] This analysis focuses on primary to secondary schools, although the patterns were similar including kindergartens. Also underlying the lack of commitment to contractual compliance is the lack of financial or reputational penalties to those contractors delivering well beyond timeline. The A&E firm estimates a 150-day delay on average across all contractors due to lack of commitment to contracts. The A&E firm also indicated that some contracts were probably set too short.

[53] Statistic tests are presented in Appendix 5.24.

Timelines also varied considerably by whether they were completed before the COVID-19 lockdown March 17, 2019. The average was much higher for primary and secondary schools completed after the 44-day lockdown, averaging 243 days with a range of 79 to 584 days over schedule for individual schools. Aside from one contractor that had already largely completed its work, there were five contractors that completed any type of schools both before and after the lockdown. These five averaged 117 days to complete schools prior to lockdown and an additional almost 138 days for those completed after lockdown, or a total of almost 255 days. However, two of these contractors, Al Joud and FAZ, which began their additional schools two months after the lockdown and were among the contractors delivering closer to contract schedule prior to lockdown, required only 30 and 66 additional days beyond their pre-lockdown average. This implies that one to two additional months[54] were required minimally at that point, as even stronger contractors required additional time.

The underlying causes for the shift to longer timelines after the pandemic outbreak are outlined by the Architecture and Engineering Construction Management Contractor (A&E) helping USAID oversee local construction of the JSEP and SKEP schools, as discussed below and in appendix 0. The document notes several causes for slow-downs during the pandemic, which included the actual lockdown and re-mobilization, disease outbreaks both on-site and in their offices, effects on construction material and equipment suppliers in terms of materials and the transition to working on a cash-only rather than credit basis as company cash reserves and offsetting projects dried up (aggravated by slow payment to contractors), and a reduction in the size and quality of the labor pool. To the extent that some of these factors remain in effect at the time of contracting future contractors, slightly longer timelines may be required.

The data analysis is hampered with respect to analyzing the effect of winter start-up, as virtually all the contracted work between 2018 and 2020 began just prior to or during the winter. Further, no contractors began some schools during the winter and others during spring or summer. Therefore, the data is insufficient to test the A&E contractor chief of party's conclusion that all construction projects started just prior to or during the winter of 2018 and 2020 were delivered with longer timelines with "cold weather effects retarding labor engagement" and "wet weather causing delays in excavation and other outdoor construction activities." The A&E contractor estimates this added 30 days to timelines and provided a recommendation on how to avoid such issues in the future, as shown in appendix 5.13. The data are insufficient to test the other explanations provided by the firm for longer timelines than contracted.[55]

[54] The A&E contractor estimated 30 percent extensions on average, or 90 days for a 10-month contract.

[55] These factors include Jordanian Class I Contractors are not well prequalified, MPWH and Supervisory Engineer lack contract compliance skills and depends still on paper files, site obstacles not being solved or handled appropriately during design, and contract durations being set too short in some cases.

5.12. Appendix 12: Detailed Delay Notes from by Current Construction Management Contractor

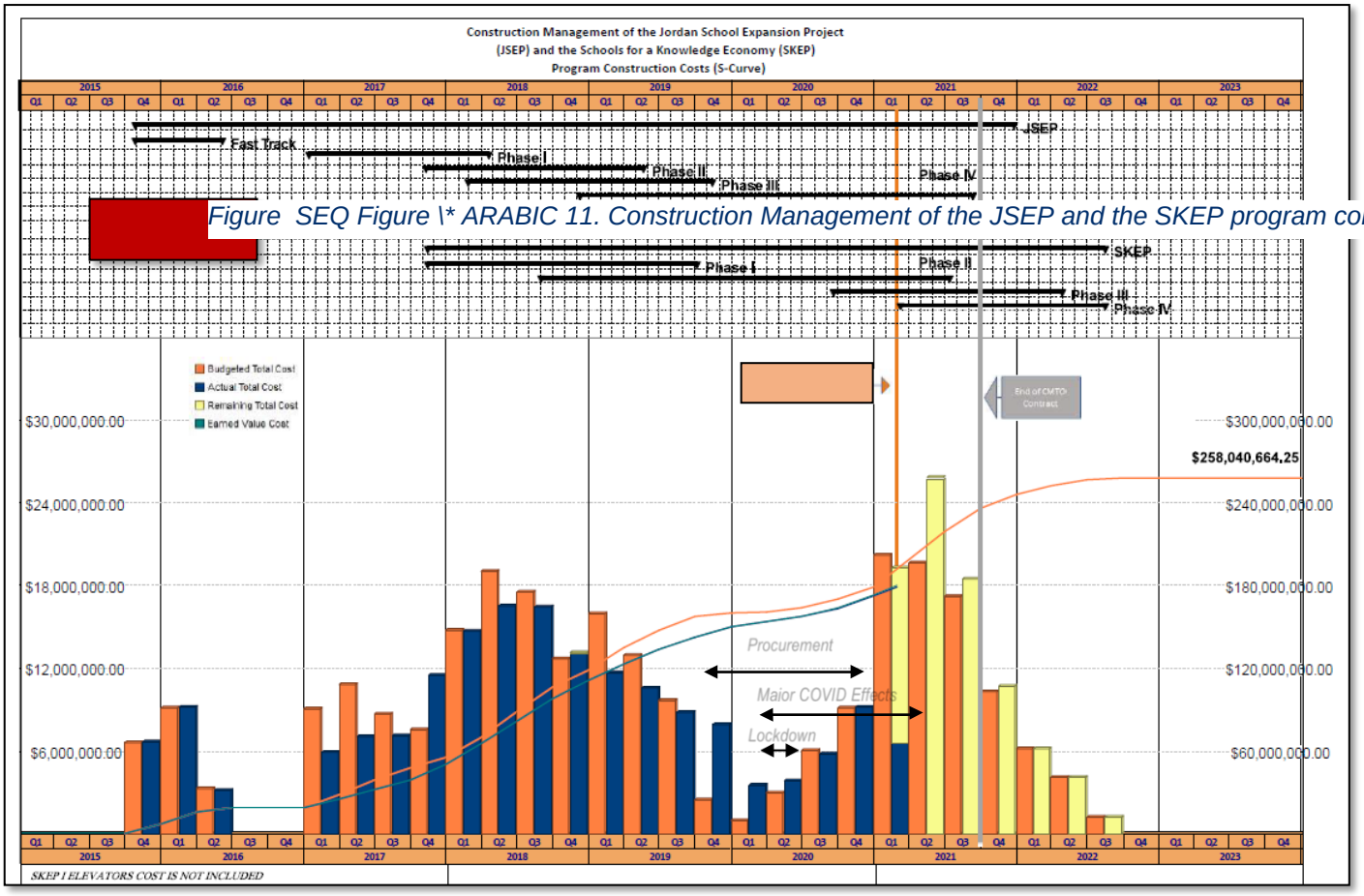


*Figure SEQ Figure * ARABIC 11. Construction Management of the JSEP and the SKEP program construction costs*

The Delays to JSEP and SKEP construction can best be viewed and understood by looking at the quarterly financial performance illustration below – **Figure 1**. This graphic shows the large "dip" in progress between 2019 and 2021. It also shows the date of this graphic, February 28, 2021, and the end dates of the current and proposed Trigon/CMTO Task Order. Also, note that while the planned end date for JSEP and SEKP Construction shown here is the end of the 3rd calendar quarter of 2022, we estimate that the construction will be further delayed in early 2023.

1. **<u>2020 COVID-19 PANDEMIC EFFECTS</u>**: Clearly the negative impacts of the COVID-19 disease upon JSEP and SKEP construction implementation have been significant starting in March 2020 and continuing up to this day. The CMTO projects these delays to continue well into 2021 as well. Specifically:

a. **The Lockdown** that occurred between March 17th and June 10th created an involuntary demobilization and remobilization on six construction Packages being executed by five Contractors who were mostly struggling to meet contracts schedules. These activities (demobilization and remobilization) take time and cost money.

b. **Construction Material/Equipment Manufacturers and Suppliers in Jordan who** typically produce, import, transport and otherwise sell cement, asphalt, steel, wood, fasteners, scaffolding, POL (petrol, oil and lubricants), floor, wall, and paving stone, bricks, paints, electrical and plumbing materials and fixtures, etc. have all been negatively affected. Some imported materials required are now unavailable. We expect this situation to continue well into 2021;

c. **Contractor Material and Equipment Suppliers Require Cash Business**: Up to the COVID-19 pandemic, Contractors were able to obtain equipment and materials using credit. Now suppliers and vendors require mostly cash payments. This is due to the effects of the Lock Down and the trickle-down damage to construction supply businesses nationwide. This cash only requirement is affecting all parties in the construction industry and causing delays as Contractors are sometimes finding it difficult and time consuming to arrange credit;

d. **Reduced Qualified Labor Pool**: Many construction jobs in Jordan are filled with expatriates from Egypt and Syria, perhaps more than 60%. As it is more difficult for these people to travel to Jordan, Contractors are having some difficulty finding qualified workers causing delays;

e. **Disease On-Site**: Approximately 20% of JSEP and SKEP construction sites have been affected and temporarily shut down by COVID-19 outbreaks on site. When this occurs work on site stops for more than one week in some instances; and

f. **MPWH and Supervisory Engineers Hard Hit by COVID-19**: The Ministry of Public Works and Housing (MPWH), the Employer of the Construction Contractors, and the Supervisory Engineers has been hard hit by COVID-19 disease incidence in their main offices. The Supervisory Engineer Offices (Mostaqbal and Bitar) have experienced outbreaks and thus affecting their work progress.

General JSEP and SKEP Time Delay: Roughly speaking, the COVID-19 pandemic has significantly slowed construction in 2020 and 2021, perhaps requiring additional 20-30% time extension to construction contracts durations in this period. Contractors have begun submitting Extension of Time Requests (EOTR) for COVID-19 delays. These EOTRs are for delays caused by suppliers, delays caused by disease on site, delays caused by lack of Commencement notification, GOJ not allowing work on weekends and lockdowns at 6:00 PM in the evening. ***We estimate for an average project of 10 months in duration these delays are being submitted for 30% contract time extensions***. ***Assume this is 90 days***.

2. **COINCIDENTAL JSEP IV, SKEP II, JSEP V, SKEP II START-UP DURING THE WINTERS (LATE NOVEMBER, DECEMBER, JANUARY AND FEBRUARY) OF 2017 AND 2020**: Trigon started work on this Task Order in September 2018. Since then, a total of 178 JSEP and SKEP school projects have started, have been completed or are still ongoing. All of these projects coincidently started just prior to or during the winter months of 2018 and 2020. This means they have started slow due to the cold weather effects retarding labor engagement and as this is the rainy season also, the wet weather caused delays in excavation and other outdoor construction activities. Delays also occurred as some material availability is affected by the cold and the rain. All of these projects have had slow starts because of this, adding an average of 20 to 40 days delay to each school infrastructure project and to each Package Contract.

General JSEP and SKEP Time Delay: Contractors typically in JSEP IV requested time delays of 30-45 days for winter and rain weather. This does not include ***We estimate for an average project of 10 months in duration these delays were responsible for a 30-day delay in 2019 and 2020, therefore***

3. **MINISTRY OF PUBLIC WORKS & HOUSING SLOW JSEP V, SKEP III AND IV PROCUREMENT**: From August 2019 to December 2021 (14 months), the CMTO has assisted the MPWH with their Host Country Contracting duties for Construction and Supervisory Engineering Services for:

a. JSEP V, Packages 1 and 2;
b. JSEP V, Packages 3,4 and 5;
c. JSEP V, Packages 6,7, and 8
d. SKEP III, Packages 1 and 2; and
e. SKEP IV, Packages 1 and 2.

This is 12 Construction Contracts and five (5) Supervisory Engineer Contracts valued at over $75 M. Construction and Engineer contracting under any tendering system takes time. This is a large amount of work that had to be processed by a small number of MPWH staff and through the MPWH and GOJ review, analysis and approval system and then through the USAID review and approval system. Because the procurement took longer than planned and included delays, this affected the starting dates of the work.

General JSEP and SKEP Time Delay: This exercise could have been carried out in say seven- or eight-months' time by an experienced USAID implementing partner such as AECOM, Tetratech, Trigon, etc. But there were also COVID-19 delays in 2020. ***We estimate that there was a 180 day delay due to procurement work being out of synch with past JSEP -SKEP implementation and the delays due to COVID-19***

4. **GENERALLY SPEAKING, JSEP AND SKEP CONSTRUCTION CONTRACTORS SCHEDULE PERFORMANCE AND COMMITMENT HAS BEEN LACKING**: **TABLE 1**, on the following page, summarizes JSEP and SKEP construction Contractor time performance, since JSEP I and SKEP I began. Of the ***21 completed and ongoing Construction Contracts, there has been a 67% delay*** (***average 187 days per contract***) in past contract completion dates – an . JSEP and SKEP Construction Contractors are habitually very late. There are two main reasons for this among others:

a. **Contract Performance Times Have Been Set Too Short**: Many of these projects are schools on existing school sites where there are functioning schools. Sometimes the land available to build upon is adjacent to these schools, there are utilities on the lots and it is difficult to enter the sites and store materials effectively. The CMTO believes that this adds significant time to construction operations and tis has not always been taken into account when setting contract performance times; and

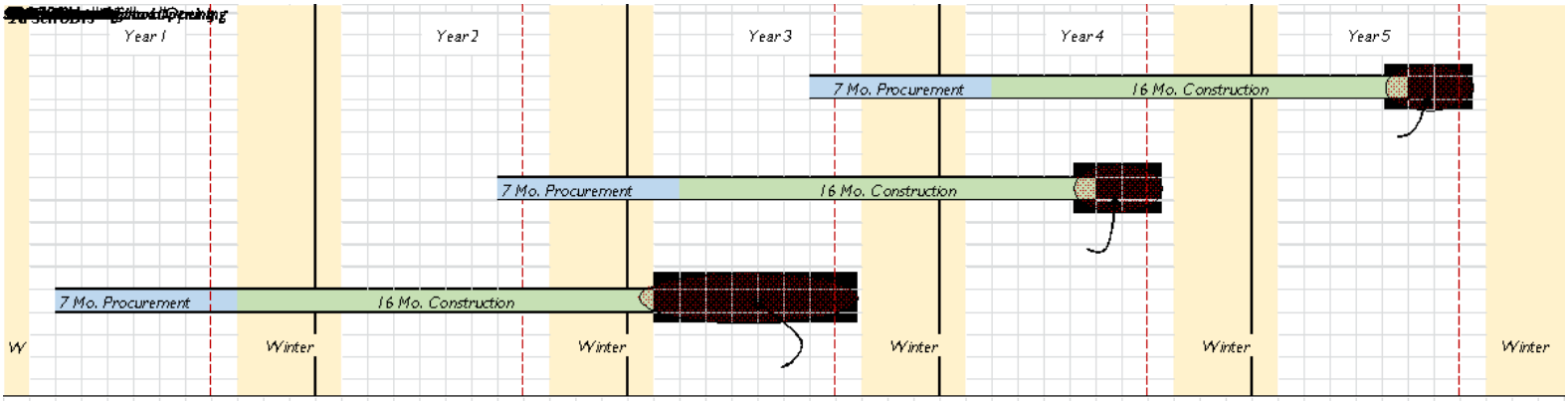
b. **Contractors Lack Commitment to Schedules**: The CMTO has been working hard assisting the MPWH and the Supervisory Engineers to understand that it is imperative that Contractors use their construction operation schedules daily, weekly and monthly and that they adhere to their schedules. Progress is being made regarding this issue and we are starting to see positive movement in the ongoing works under JSEP V and SKEP III and SKEP IV.

General JSEP and SKEP Time Delay: ***We estimate that there is 150-day delay on average to every Construction Contract due to this issue.***

5.13. Appendix 13: USAID-funded School Procurement and Construction

*Figure SEQ Figure * ARABIC 12.Proposed timeline by Current Construction Management Contractor*

Timeline Proposed by Current Construction Management Contractor


Year 1
Year 2
Year 3
Year 4
Year 5
7 Mo. Procurement
16 Mo. Construction
7 Mo. Procurement
16 Mo. Construction
7 Mo. Procurement
16 Mo. Construction
Winter
Winter
Winter
Winter
Winter
1 2 3 4 5 6 7 8 9 # # #

5.14. Appendix 14: Scores by Index and Sub-indicator

For the tables below, cells rated below 70% of maximum are shown in maroon. Any numbers that are below 70% reflect areas of deficiency that could be improved in future building and management programming, although some of the under-performing indicators have more to do with the way schools are maintained and operated rather than design. Light blue highlighted cells represent where either JSEP or SKEP+JSP scored on average at least 20 percentage points lower. Medium blue represents a 30-percentage point difference. Only the teacher's use and teaching survey was conducted with neighboring schools as well, so an additional column is provided for that table.

Table 8 and Table 9 come from the school observation instruments and show strengths particularly among the newer schools (JSP and SKEP) across indicators including general design and layout, safety, interior design, construction, and shared resources. However, areas for improvement include the school location and site attributes, other design program elements, potential for expansion, maintenance, entry, general and specialty learning spaces, teacher rooms, health and fitness, indoor-outdoor connection, and furniture. The instrument that seeks information from principals (shown in Table 10) adds to this list dining and eating areas; utilities; and energy, materials and upkeep. These are discussed further under section 3.1. Indicator scores and responses from the teacher survey (Table 12) are discussed under section 3.4.

Table 8 and Table 9 show that the new SKEP schools had the highest scores with 78% and 81% in the Building Design and Educational Adequacy categories. JSP schools that were newly constructed between 2008 and 2013 had measurably lower scores of 62% for Building Design and 59% for Educational Adequacy. JSEP Schools scored much lower, receiving just 48% for building design on average (across both buildings) and 45% for educational adequacy. This is not surprising given that JSEP schools represent expansion projects of existing schools and did not include comprehensive building retrofits.

Table 9: Building Design Index Scores by Sub-Indicator

Elements Assessed	USAID School Average	Expansion Schools (JSEP)	New Schools (SKEP, JSP)
School Location and Site Attributes	40%	54%	33%
General Building Design & Layout	71%	64%	84%
Building Safety	67%	62%	80%
General Interior Design	64%	56%	78%
School Design Program Elements	38%	25%	65%
Potential Future Expansion	31%	35%	25%
Construction/Materials Condition	74%	72%	78%
Building Maintenance Condition	58%	56%	61%

Items from the Building Design Index that are least concerning include general building design, building safety, and construction quality of both exterior and interior elements.

Top performing features include

- Learning spaces have operable windows (natural daylight / ventilation)
- Campuses are easy to navigate due to good organization and wayfinding
- High quality of interior design, construction materials, and lighting
- All basic building features are present
- SKEP schools and many JSP schools score particularly high on design

Areas that need significant improvement include those underlying the sub-index School Design Program Elements, which refers to inadequate specialized facilities such as STEM, music, art, technology, and design labs. Building maintenance, a complaint of principals, teachers, and other stakeholders with regard to the GoJ system, also scores poorly among JSEP and JSP schools, as is the lack of adequate landscaped areas for learning and play even among SKEP schools. Most of the schools, including SKEP schools, also were not planned properly for future expansion.[56]

Table 10: Educational Adequacy Index Scores by Sub-Indicator

Elements Assessed	USAID School Average	Expansion Schools (JSEP)	New Schools (SKEP, JSP)
Welcoming Entry	53%	47%	67%
Specialty Learning Spaces	34%	20%	63%
General Learning Spaces	46%	38%	65%
Teachers as Professional	51%	42%	69%
Shared Learning Resources	51%	37%	81%
Health and Physical Fitness	40%	32%	56%
Indoor Outdoor Connection	49%	48%	52%
Educationally Appropriate Furniture	49%	37%	62%

The Educational Adequacy Index includes eight sub-indices. The USAID-funded schools generally did not perform as well on average in terms of the educational adequacy index, which is apparent given the larger number of figures in red, below USAID's standard. However, the SKEP schools did not exhibit lower scores for this index than the Building Design Index.

Top performing features include

- Age-appropriate furniture used throughout campuses
- Enough furniture for all students
- Key public spaces have direct connections to outdoors
- Shared teacher offices/workrooms within a 30 second walk from their learning spaces

[56] While the evaluation team recognizes that nine of the JSP schools already have been expanded upon under JSEP and that the JSEP school sites were not designed originally by USAID, even the SKEP schools were rated at only 22 percent of their maximum across three questions.

- Learning space areas comfortable, well lit, pleasing

However, scores are too low in almost all the indices for all the categories of schools. Low-performing features include

- Specialty learning spaces were properly designed to meet the needs of 21st century learning, lacking flexibility and key features.
- Furniture lacks variety in type, height, and materials.
- Learning spaces do not connect to outdoors to extend learning space.
- Learning space that is outdoors is not properly shaded.
- Insufficient space for health and fitness

Table 11: Principals' General Use and Function Index Scores by Sub-Indicator

Elements Assessed	USAID School Average	Expansion Schools (JSEP)	New Schools (SKEP, JSP)
Connected to Community	63%	55%	78%
Availability of Technology	63%	59%	72%
Design Use	68%	64%	76%
Dining & Eating	40%	38%	45%
Teaching & Learning	72%	70%	77%
Overall Design/Use Satisfaction	91%	89%	94%
Utility Infrastructure	64%	62%	67%
Energy, Materials, Upkeep Use	60%	56%	67%

Principals among the JSP and SKEP schools generally gave their schools high scores. Surprisingly, even JSEP principals provided high scores in overall design and use. SKEP schools score well with fewer perceived problems. Within the Principals' General Use and Function Index, top performing features follow.

- Throughout the day, teachers can easily share resources.
- Students are allowed to use learning spaces beyond classroom.
- Students sometimes are taught in interdisciplinary manner and allowed to learn at own pace.
- Principals perceive students generally as having positive social, physical, emotional well-being.

Lower-performing features follow:

- Wireless Internet is not available throughout all schools and video conferencing is not an option for most teachers to bring in outside teachers/ speakers, such as outside teachers or community members with relevant experience, even with SKEP schools.
- School and classroom temperature swings - sometimes too cold, often too hot.

- There are minimal options for students to eat beyond standard seating areas.
- Principals indicate students spend most of their time listening to teacher lectures rather than student projects or activities.

Table 12: Teachers' Use and Teaching Index Scores by Sub-indicator

Table 13: Teachers' Use and Teaching Index Scores by Sub-Indicator				
Elements Assessed	**USAID School Average**	**Expansion Schools (JSEP)**	**New Schools (SKEP, JSP)**	**Neighboring Schools**
Availability/Use of Technology	51%	43%	62%	38%
Design Use	63%	59%	70%	42%
Teaching & Learning 1	63%	61%	66%	57%
Teaching & Learning 2	55%	55%	55%	55%
Teaching and Learning 1 + 2 – Standard lecture, individual responses/tasks	28%	26%	29%	38%
Overall Design/Use Satisfaction/Social Cohesion	79%	77%	81%	55%

The Teachers' Use and Teaching Index is examined in greater detail under section 3.4. Some highlights follow.

- Teachers know the goals of the Ministry and report they sometimes teach in interactive, interdisciplinary manner, acting as advisors helping students learn at their own pace.
- Teachers indicate they co-teach at times with other teachers.
- Teachers indicate they sometimes allow students to select assignments and move among spaces without constant supervision as long as are on task
- SKEP school teachers indicate they interact regularly with neighboring school teachers to share ideas, lessons learned, and methods.

Some areas for improvement follow.

- Classrooms are not comfortable, with variations in cold and particularly heat, distracting for teaching and learning.
- Parental involvement and student engagement is lower than desired, even among SKEP schools.
- Technology is not regularly used as a teaching tool, and students do not learn about or use technology outside computer rooms.
- Outdoor learning and play options as extensions of the school are limited.
- Teacher resources are limited, though better among SKEP schools.
- Project-based learning and field trips seem limited.

5.15. Appendix 15: Summary Scores, Instruments 1 and 2 by USAID Activity

5.16. **Appendix 16: Summary Scores, Instruments 1 and 2 by Sex, Education Level, Urbanity, Region**

Scores overall are slightly lower among boys' schools compared to girls/mixed schools for instruments 1 and 2 (51 versus 56%, 38 vs 48%, respectively) and from the teacher survey (60 vs 67%). Large differences (beyond 15 percentage points) are found across a modest number of the over 100 indicators across each of the observational sections.[57] Across all schools, teachers who taught science, math, or computers rated themselves slightly higher in terms of using student-centered learning methods than those who teach in the humanities or other subjects, although there was no statistically significant difference among JSP and SKEP schools, as shown in Appendix 5.12

[57] These include worse or lower scores for boys' schools on the following: sun-protected open and sandy play areas; interior glass and attractive views; student work displays; dedicated multiuse and performance spaces; visibility on entry by a receptionist; a mix of informal and formal spaces for teachers; public spaces having direct access to the outdoors;, attractive outdoor features; accessible toilet access; signs of vandalism; grounds cleanliness; taking advantage of community resources, donations, and volunteering; easy pick-up and drop-off; teacher interaction across schools; maintenance funds; high temperature control costs; use of computers during lessons; free access to learning spaces and choice of learning approach; teachers using various methods across days; capital punishment; increased attendance and sense of belonging; parental engagement. However, they scored more than 15 points better in terms of community use such as field, exterior space, and after-hours availability.

5.17. Appendix 17: Summary Scores, Instruments 3 and 4 (Principal and Teacher Survey) by USAID Activity

5.18. Appendix 18: Summary Scores, Instruments 3 and 4 (Principal and Teacher Survey) by Sex, Education Level, Urbanity, Region

5.12. Appendix 19: Disaggregated Statistical Tests from Teacher Survey

5.13. Appendix 20: Additional Information on Teacher Support, Attitudes, and Behavior

Support and Attitudes

There are some notable differences between USAID-funded and neighboring schools.[58] Teachers from USAID-funded schools scored the support they receive from their schools and their teaching skills higher than neighboring schools generally. The average weighted score for the index on school design and use (Table 4) was notably higher for USAID-funded schools (63%, 70% for JSP and SKEP) than neighboring schools (42%, p=0.00). Within that sub-index score, USAID schools rated much higher than neighboring schools on teachers sharing resources and spaces easily (85% and 59%, respectively, p=0.00). Temperature control, outside noise, maintenance issues lowered scores for USAID-funded schools within that index. Teachers at USAID-funded schools provided similar responses as principals (although slightly lower by 5% at 79%) with respect to overall design and use of the USAID-funded facilities.

However, USAID-funded school teachers indicate an average of 51% or 10% lower scores than principals with respect to availability and use of technology in their classrooms than principals respond for the buildings overall and 16% lower than principals in JSEP schools. Low scores included wireless access in their classrooms, use of computers beyond computer classes, availability of portable equipment, and video conferencing capacity. These scores reveal considerable room for improvement in use of technology in classrooms with some room for improvement even in SKEP schools, which scored 73%, with somewhat better wireless connectivity and computer access than other schools.

Teachers at USAID-funded schools report they are excited and have few complaints more often than do teachers at neighboring schools (74% and 59%, respectively). USAID-funded school teachers also more frequently report a sense of belonging than their neighboring school colleagues (83% and 68%, respectively).

Attitudes towards their schools also are more positive among USAID-funded school teachers than their neighbors. For instance, far more USAID (100%) than neighboring school (62%) teachers indicate a feeling of belonging. The sub-indicator on teacher perception of design, use, satisfaction, and social coherence attitudes include feelings of safety, well-being, and belonging among students and teachers, and sense of student outcomes, among others. This is shown in row six of Table 4. Overall, the sub-indicator on teacher perception of design, use, satisfaction, and social coherence is relatively strong at 79% across USAID-funded schools, which is 24% above their neighboring school colleagues. The lowest scoring questions within this sub-index include student focus, student attitudes and well-being, periodic bullying, and parental engagement, all rating between 43 and 65%. This points to both a weak point in the schools and the potential benefit of building designs that encourage a more student-centered learning environment.

Teaching Behavior

A second example is that two-thirds of USAID teachers reported they co-teach “sometimes” (versus infrequently or never). A quarter of USAID principals reported their teachers co-taught “often” in their view and 43% “on occasion.” Frequent co-teaching and true interdisciplinary teaching would be more likely in a situation where classrooms were configured as learning suites – where two adjacent

[58] Due to the large number of respondents and their high proportion relative to the overall number of teachers from these schools, even accounting for clustering among schools, all differences were found to be statistically significant at the p=0.00 level unless indicated. Thus, the analysis focuses only on substantively relevant differences.

classrooms are connected via a movable partition. Co-teaching also allows for multiple modalities of learning and almost forces teachers off the traditional track. However, the enumerators found little evidence that classrooms were setup to facilitate frequent co-teaching, as visible in the Appendix 5.19, especially outside of the SKEP schools, for which design standards included early-grade clusters as a standard. About 62% of USAID-funded school principals report teachers co-teach lessons only on occasion rather than often. Further, a similar proportion (58%) of neighboring school teachers, who generally teach in truly old, traditional “cells-and-bells” classrooms report the same. This indicates little difference along this measure from the arrangement of classrooms in USAID funded schools and a need to better assess frequency of such behavior. One explanation given among supervisors in the FGD is that co-planning and co-teaching occurs mostly among the early grade teachers. Supervisors called such co-planning and co-teaching beyond early grades almost “non existent” despite teachers having been trained to do so with some limited exceptions within their own discipline. In fact, some supervisors indicate that many teachers buy the plans and do not prepare the plans themselves so do no planning alone or with colleagues with no difference noticed between USAID-funded and other schools.

USAID funded schools report teachers or staff resort to corporal punishment somewhat less often. 22% of USAID funded teachers versus 44% of neighboring school teachers indicated “teachers in the school use physical disciplinary methods to punish problematic student behavior” sometimes and 22% vs 32%, respectively indicated they do so infrequently. Supervisors and teachers in FGDs indicate that corporal punishment is seldom used as a disciplinary method generally and that more often parents are summoned and possibly fined.

The evaluation team also examined the average time students are involved in learning activities varied between USAID and neighboring schools. Responses were equivalent with about 45% of teachers indicating learning activities occurred for 20 to 30 minutes per class and 46% reporting learning activities for fewer than 20 minutes.

5.14. Appendix 21: Photographs of USAID-funded School Existing Conditions

Existing Conditions 1: Outdoor Spaces

Above: A rare but good example of a shaded outdoor space. Even though this space is not furnished for outdoor activities, it affords some opportunities for active outdoor play. The paving material is more attractive for play than the concrete paved surfaces which were more typical of the schools surveyed (JSP - 8th Area Secondary Boys)

Below: Some schools have shaded entrances like the one pictured here from the same school with a suitable wheelchair ramp

Existing Conditions 2: Indoor Spaces

Above: Another unusual but good example of a well-maintained open stairwell in a typical SKEP school. The little touches to make the space more colorful and friendly go a long way toward creating a positive school climate. (SKEP – Um Maabad Al Khuza'eyah Comprehensive Secondary Mixed School)

Below: Any kind of soft seating like those featured here at the same SKEP school provides a welcome break from the hard plastic chairs or wooden benches on which students must sit for several hours each day. Adding seating variety should be a high priority for new USAID schools.

Existing Conditions 3: Toilets and Lockers

Above: While this is not typical of most of the surveyed schools outside of SKEP, some schools have taken extra effort to maintain clean bathrooms like the one Um Maabad Al Khuza'eyah Comprehensive Secondary Mixed School

Below: Most new schools have generously-sized individual student storage lockers as below at the same school. In the absence of personal laptops or tablets, students still rely on heavy textbooks that they would have to carry all day and having lockers like this for their textbook and other personal effects is a positive thing. Smaller locker groupings like this are preferable to lining up the entire corridor since they create "water-cooler"-like settings for informal socializing.

Existing Conditions 4: Project Space

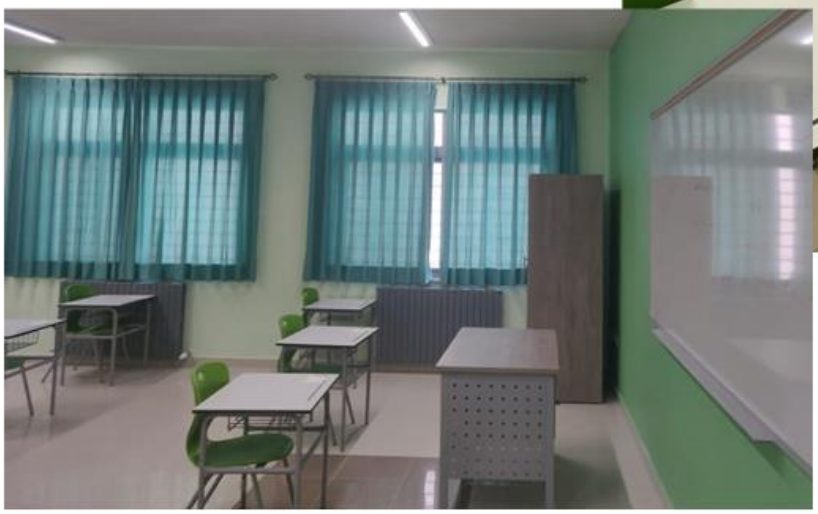
Above and Below: Some schools have rooms like these from JSP's 8th Area Secondary Boys above and JSEP Al-Thaminah Secondary Mixed School below that are suitable for hands-on project activities and art. They are deficient in that there are not enough power outlets or access to water. Good features include lots of daylight, large working surfaces and movable furniture.

Existing Conditions 6: SKEP School Classrooms

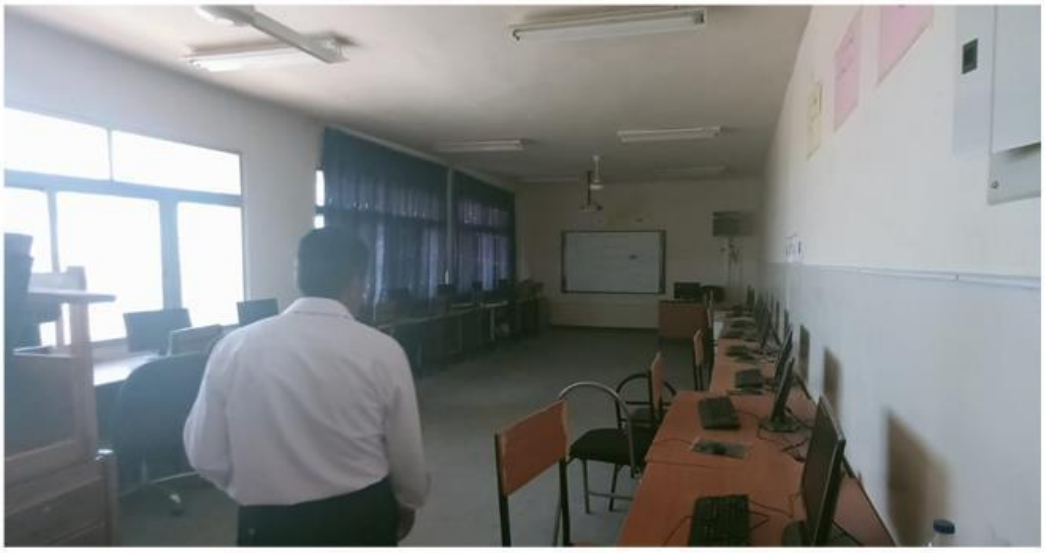
Above: Traditionally-arranged classroom in SKEP's Khawla Bint AlAzwar Basic School for Girls

Right: Typical non-specialty classroom in Hamad Al Farhan Secondary for Boys

Below: Lots of space available for distancing amid a typical traditionally-arranged classroom Al Samt Basic for Boys



Existing Conditions 7: Computer Labs



Above and Below: Even when there is no money for individual student laptops, computer labs could be eliminated in favor of laptops on carts – with the potential to introduce essential technology into any classroom. The room above from JSEP's Al-Zaa`tari Basic Boys School extension wing is narrow and long, preventing a good view of the screen at the front. Large windows cast a glare on computer screens unless the room is darkened. Placing computers in this linear arrangement reduces opportunities for collaboration and teamwork. (Bottom, SKEP's Um Maabad Al Khuza'eyah Comprehensive Secondary Mixed School)

Existing Conditions 8: Outdoor Play Areas

Above: This football field from JSEP's Um Romanah Secondary School for Boys school is usable but of poor quality and notably worse than found for JSP or SKEP.

Below: The early years play area below from the JSEP Al-Thaminah Secondary Mixed School is also very old paradigm and offers few choices. Modern play areas for the early years provide children many opportunities for imaginative active play

Existing Conditions 9: Outdoors

Above: There are many such hardscaped areas that provide some essential outdoor play space. However, there are insufficient green areas, and very little attention paid to the provision of outdoor learning areas like vegetable gardens or shade trees (JSEP – Um Romanah Secondary School for Boys)

Below: This basic-level SKEP school, Khawala Bint Al Azwar Basic Girls School, provides a lot of outdoor area, but with limited features or shade.

Existing Conditions 10: Hallways and Labs

Right: Even SKEP schools (Khawla Bint AlAzwar Basic School for Girls pictured to right) largely seem to be built with a "cells-and-bells" model among contractors despite some flexibility in standards. This hallway space with classrooms on each side may be organized as clusters, but these hallway spaces are lost for learning purposes.

Below: The new SKEP schools (Al Samt Basic for Boys below) have science labs that are well provisioned, but the fixed table arrangement is limiting. A more dynamic space can be created by limiting services to the periphery of the room and having worktables that are mobile.

Existing Conditions 11: Early Grade Furnishing

Left: Early years spaces do have age-appropriate furnishings, such as schools like JSEP's Al-Thaminah Secondary Mixed School KG extension. For this age group, pastel colors are preferred to primary colors. The classroom would also benefit from being divided into multiple learning centers each focusing on different interests and skills. They would include things like a reading corner, a wet and messy area with access to outdoor sand and water play, a social play space, a storytelling zone which doubles as floor seating, a writing area and so on.

5.15. Appendix 22: Photographs That Help Demonstrate Recommendations

The following pages illustrate and augment many of the ideas proposed in the recommendations section of the report with examples from schools outside of Jordan. For clarity, the recommendations in this appendix are assigned numbers where they correspond with numbers in the report. (Photos courtesy of Education Design International, Prakash Nair, Fielding Nair International)

Recommendation # 1

Design for Student-Centered Pedagogy: Spaces should be designed to minimize lecture-based teaching which should only be used as a supplement to hands-on learning approaches. One way to do so is for USAID to require designs that move away from the obsolete "cells and bells" design invented during the first industrial revolution towards a student-centered model with fewer traditional classrooms and more spaces for active learning.

Larger tables in classrooms support small projects & all desk tasks. A variety of spaces and furnishings support a wider range of student-centered learning activities

Recommendation # 2

Add Specialized Learning Spaces: Increase the number of specialized spaces such as maker labs and specialty labs, so the availability for practical learning on a day-to-day basis is increased. When a space is designed and available for student use, it should be outfitted with proper learning resources, furniture, equipment and supplies.

Makers Labs

Multiuse Labs

Recommendation # 3

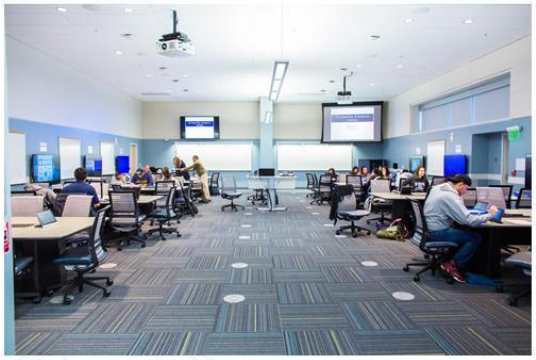
Create Inspiring, Multi-Use Spaces: School buildings should include inspiring, imaginative and innovative spaces that are also highly functional and effective places to improve student academic achievement and contribute to their social and emotional development. Multi-use lab spaces with sufficient power outlets and water access for hands on learning should be added to the standard program

This inspiring space serves as a café, a presentation and community forum, an art center, a wet and messy project area, a reading room and a large collaboration zone

This welcoming entry is the school's "family room." It abuts a "curiosity center" containing a variety of media and tools that students can access in order to imagine, research, design and implement their ideas

Recommendation # 4

Boost Educational Technology: Prioritize educational technology early in the planning process. Audio and video systems should be fully integrated throughout the building design. High-bandwidth WiFi, which was deficient in many of the surveyed schools, can become the catalyst for a variety of mobile technologies as well.



Modern media labs are setup to encourage collaboration

Mobile technology increases flexibility

Recommendation # 5

Improve Teacher Offices: Support and encourage teacher to work together by giving them access to better and more high-quality professional workspaces beyond the classroom and isolated teacher rooms that do not integrate with or oversee learning spaces.

Professional teacher offices can be located in areas where they can passively supervise student learning spaces

This is a teacher "open office" with a "help desk" that students can access as needed

Recommendation # 6

Increase Variety of Furniture: Require variety, variation in heights, seating types, and materials for loose furnishings that are contractors procure. The ability for students to select preferred areas to work in and furniture to use improves the learning potential of each space. If the schools had more of a variety of seating and table selections their spaces would support a greater range of student learning activities. Currently, many rooms at USAID-funded schools are furnished with tablet armchairs, and even SKEP school general classrooms are organized to face the front of a classroom.

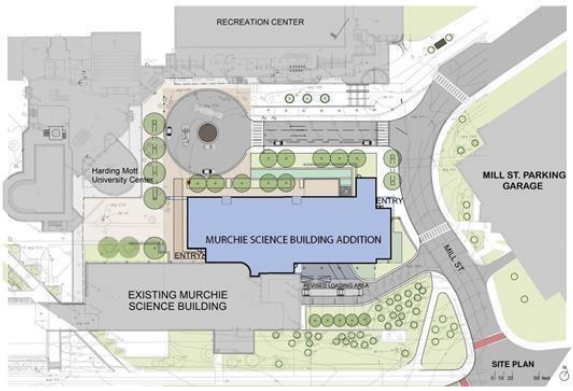
Regardless of Grade Level, Classrooms should have varied size, height and types of furnishings

Recommendation # 7 and 8

Increase Storage: In new designs, include more storage for student projects and teaching and learning resources. The lack of adequate storage was evident during field observations.

Plan for Future Expansion: Require architects to include in the master plan where an expansion might go to adequately plan for future enrollment growth.

Storage / Science Prep Room



Site Plan Showing Future Expansion

Recommendation # 9

Improve Eating Areas: Add and improve areas for dining with varied types of seating, outdoor dining spaces, and even remote spaces to sit and eat away from the main café.

Varied type furniture can work even in compact cafés

Take advantage of shaded outdoor locations to provide additional areas for dining

Recommendation # 10

Improve Outdoor Play and Learning Spaces and Indoor-outdoor Connections: Improve outdoor areas for play, sports, and learning. Add more shaded features to increase flexibility and opportunities for various activities that would not be possible in an indoor setting. Make outdoor learning areas directly accessible from instructional spaces.

Instead of the sterile plastic and metal playgrounds in which play is pre-determined by adults, this kind of an imaginative playground allows children to imagine and create their own play experiences

Sometimes the simplest places are also the most appealing. A place like this is inexpensive to build and can also be used for a variety of physical fitness activities like dance, yoga and aerobics

Recommendation # 10 (contd.)

USAID should encourage school designers to maximize opportunities for outdoor learning. Such spaces are cost-effective, in many cases, more functional than indoor spaces, have more healthy access to daylight and fresh air, and feel less prison-like and oppressive than crowded indoor classrooms

This previously unused space between two buildings was captured inexpensively for outdoor learning

This small deck outside a common space covered by a lightweight shade structure extends makes a seamless indoor-outdoor connection

Recommendation # 11

Optimize number of informal learning spaces throughout schools, preferably one per four dedicated general learning spaces.

Informal learning spaces should be distributed throughout the school such as this kind of central shared reading room

Ideally, there should be a mix of formal and informal areas even in the primary learning zones like classrooms

Recommendation # 12

Create Greater Variety of Room Sizes and Connectivity: Add spaces of varying sizes including small group rooms, meeting rooms, seminar rooms, and quiet reading rooms. Provide meeting spaces of varying sizes in every school that are usable by teachers and students. Seminar rooms for 15 students, small group rooms for 6 students, quiet rooms for three students are some of the most popular sizes.

Small rooms like this permit groups of between two to six students to provide a learning atmosphere that is very different than in a classroom

A large space like this central heart of school has several different "zones", each acting like its own "room" and permitting varied size groups and a variety of learning activities

Recommendation # 14

Provide Indoor Fitness Areas: When possible, a multiuse indoor gymnasium and a fitness room older students would improve student wellbeing and would make a great addition to the standard program of spaces.

Properly equipped indoor gymnasiums are essential for students of all ages. They permit a variety of physical fitness activities. If a wood floor is used, it should be protected in the event that the gym doubles as a large gathering space

Fitness centers such as the one pictured here are essential for high school students who participate in competitive sports and should be provided if budgets permit

Recommendation # 15

Provide and Improve Areas for Performance Arts: Add an area for performance / drama or multi-use area to enable performance. This could be as simple as a classroom-sized space suitable for plays with a very small audience.

It is not necessary to provide a large auditorium for drama and theater. Small multi-use areas like this can work extremely well as a performance and presentation space.

When funds are limited, a space like this entry to the school with a two-level gathering stair can function as a good space for music, drama and theater as well as for formal presentations to a large audience

Recommendation # 15, continued

Provide and Improve Areas for Performance Arts: Add a space for 2D and 3D visual arts to the standard program.

Dedicated art spaces like this that are properly equipped and daylit create the proper environment for students to excel at art and do professional quality work

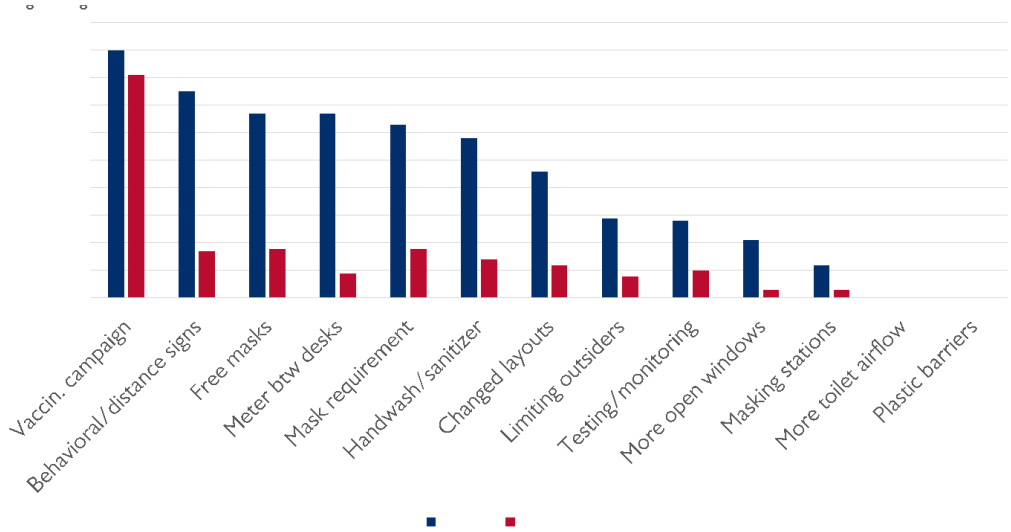
For the early years, ateliers like this that accommodate a variety of art-related activities are a good place for budding artists to explore and express their creative talents

Recommendation # 16

Make Science Labs More Flexible: Science rooms should be designed with movable tables, with services and sinks along the perimeter of the room. This flexible layout will support a wider range of activities. Consider connecting lab / specialty spaces that are on level 1 directly to the outside and adding a small learning porch that will be directly accessible from the room.

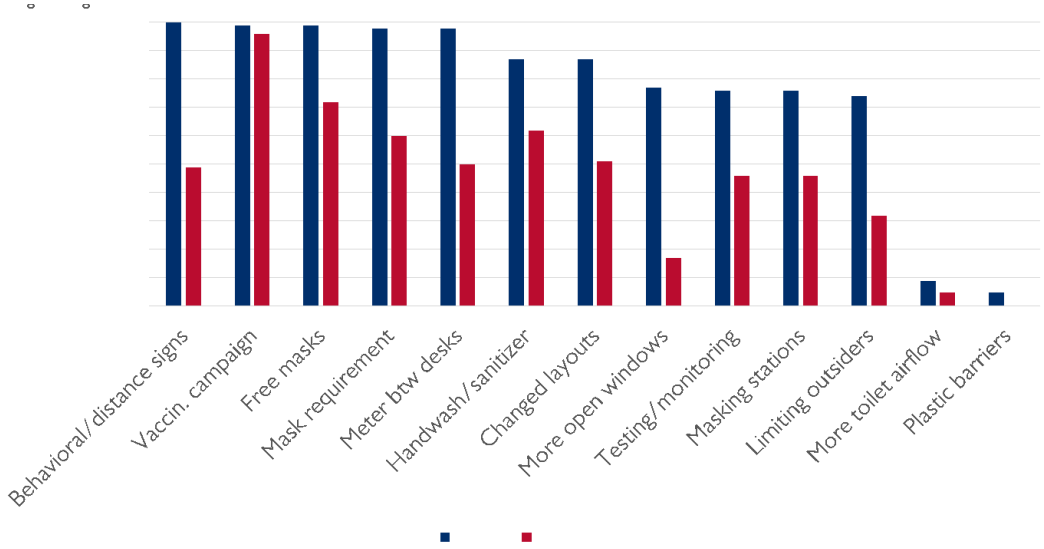
5.16. Appendix 23: Teacher COVID-19 Responses

Figure 13: Proportion of Schools Where at Least 75% of Teachers Report Their Schools Undertaking Specific Protective Measures



Note: Responses organized by frequency of response among USAID-funded school teachers.

Figure 14: Proportion of Schools Where at Least 50% of Teachers Report Their Schools Undertaking Specific Protective Measures



Note: Responses organized by frequency of response among USAID-funded school teachers.

5.17. Appendix 24: Statistical Tests on Construction Timelines

Table 14: T-tests of Differences in Delays Days by Governorate with Kindergartens After COVID						
	n	**Mean**	**Std. Deviation**	**t**	**df**	**Signif.**
Governorate						
Amman	10	158.1	86.30366	-0.561	33	0.578
Others	25	180.24	111.77592			

Table 15: T-tests of Differences in Delays Days by Governorate without Kindergartens After COVID						
	n	**Mean**	**Std. Deviation**	**t**	**df**	**Signif.**
Governorate						
Amman	9	157.7778	91.53248	0.019	18	0.985
Others	11	156.6364	155.98287			

Table 16: T-tests of differences in Delays Days by Governorate with Kindergartens Before COVID						
	n	Mean	Std. Deviation	t	df	Signif.
Governorate						
Amman	29	55.3448	38.79366	-2.295	70	0.025
Others	43	90.4186	88.39824			

Table 17: T-tests of differences in Delays Days by Governorate without Kindergartens Before COVID						
	n	Mean	Std. Deviation	t	df	Signif.
Governorate						
Amman	21	61.8095	33.87568	-2.373	49	0.023
Others	30	106.0333	93.71471			

Table 18: Regression Analysis for Delays Days by Number of Contractors Before and After COVID Lockdown Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	102.159	21.598		4.730	.000
	Contracts	.723	2.319	.030	.312	.756
a. Dependent Variable: Delay_days						

Table 19: Regression Analysis for Delays Days by Number of Contractors Before COVID Lockdown Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.515	20.179		1.909	.060
	Contracts	4.415	2.136	.240	2.067	.042
a. Dependent Variable: Delay_days						

Table 20: Regression Analysis for Delays Days by Number of Contractors After COVID Lockdown Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	211.115	38.934		5.422	.000
	# of Contracts	-4.617	4.310	-.183	-1.071	.292
a. Dependent Variable: Delay_days						

5.18. Appendix 25: Principal Responses on Crowding

Table 21: Construction or renovation reduced crowding issues at neighboring schools in first 1-2 academic years after construction completed					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	13	12.5	12.5	12.5
	Yes	80	76.9	76.9	89.4
	Not Applicable	11	10.6	10.6	100.0
	Total	104	100.0	100.0	

Table 22: Were any rented buildings no longer needed?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	34	32.7	42.5	42.5
	Yes	24	23.1	30.0	72.5
	Not Applicable	22	21.2	27.5	100.0
	Total	80	76.9	100.0	
Missing	System	24	23.1		
Total		104	100.0		

Table 23: Were one or more double shifts no longer needed?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	45	43.3	56.3	56.3
	Yes	21	20.2	26.3	82.5
	Not Applicable	14	13.5	17.5	100.0
	Total	80	76.9	100.0	
Missing	System	24	23.1		
Total		104	100.0		

Table 24: Did class sizes become smaller?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	32	30.8	40.0	40.0
	Yes	37	35.6	46.3	86.3
	Not Applicable	11	10.6	13.8	100.0
	Total	80	76.9	100.0	
Missing	System	24	23.1		
Total		104	100.0		

5.19. Appendix 26: MoE Supervisor Classroom Observation Tool in Arabic

بسم الله الرحمن الرحيم

وزارة التربية والتعليم

إدارة الإشراف والتدريب التربوي

أداة الملاحظة الصفية للصفوف الثلاثة الأولى في اللغة العربية والرياضيات

مبادرة القراءة والحساب للصّفوف المبكّرة

النسخة النهائية في ضوء كتاب الأدوات والنماذج الإشرافية رقم م ت 14/ 6/ 16244 بتاريخ 2020/5/26 وزارة التربية والتعليم، عمّان

أداة الملاحظة الصفية للصفوف الثلاثة الأولى في اللغة العربية والرياضيات والتربية الخاصة

	الرمز	المعلومات	الاستجابة
المعلومات الأساسية	.1	اسم ورقم المشرف:	تلقائي
	.2	تاريخ اليوم:	تلقائي
	.3	اسم المدرسة ورقمها الوطني:	خيارات
	.4	الصف الذي تقوم بزيارته:	□ 1 □ 2 □ 3
	.5	شعبة الصف الذي تقوم بزيارته:	□أ □ب □ج □د □هـ
	.6	اسم المعلم/ـة الذي تقوم بزيارته/ها:	خيارات
	.7	مادة الحصة التي تقوم بزيارتها:	خيارات
	.8	وقت بدء الملاحظة:	تلقائي

المجال الرئيسي	المجال الفرعي	الرقم	مؤشر الأداء*	التقدير				
التعلّم والتعليم	التخطيط للتعلّم	.1	تنفيذ الخطط المدرسية في الموقف الصفي **	5	4	3	2	1
	تنفيذ عمليات التعلّم والتعليم	.2	التمهيد للدرس ومراعاة التكامل الرأسي والأفقي	5	4	3	2	1
		.3	مراعاة التسلسل المنطقي في تدريس المحتوى التعليمي **	5	4	3	2	1
		.4	الاستثمار الأمثل للوقت لتحقيق النتاجات التعليمية	5	4	3	2	1
		.5	استخدام الاتصال الفعال (اللغة السليمة، لغة الجسد، التواصل البصري) **	5	4	3	2	1
		.6	توظيف استراتيجيات التعلم النشط بفعالية وتنويعها**	5	4	3	2	1

		.7	ربط التعلّم بالحياة	5	4	3	2	1
		.8	الدعم المتمايز ومراعاة الفروق الفردية **	5	4	3	2	1
	تقويم التعلّم	.9	توظيف التقويم بأنواعه المختلفة واستخدام استراتيجيات التقويم وأدواته لدعم تعلم الطلبة	5	4	3	2	1
		.10	توظيف نتائج تحليل التقويم لتحسين التعلم **	5	4	3	2	1
بيئة التعلّم	الأوعية المعرفية	.11	توظيف مصادر التعلم المتنوعة بفعالية لدعم تعلم الطلبة (المختبرات، التكنولوجيا، مصادر المعرفة العالمية)	5	4	3	2	1
	الدعم النفسي الاجتماعي	.12	توفير بيئة تعليمية آمنة تدعم خصائص الطلبة النفسية والاجتماعية**	5	4	3	2	1
	الابتكار والإبداع	.13	توفير فرص لدعم واستثمار إبداعات وابتكارات الطلبة	5	4	3	2	1
التعلّم للحياة	المهارات الحياتية	.14	استخدام المهارات الحياتية في الموقف التعليمي	5	4	3	2	1
	مسؤولية التعلّم	.15	توظيف كفايات التعلم الذاتي عند الطلبة	5	4	3	2	1
التخصص	اللغة العربية	.16	تطبيق الممارسة المستقلة في المهارات القرائية**	5	4	3	2	1
		.17	تطبيق استراتيجيات الاستيعاب القرائي**	5	4	3	2	1
		.18	تطبيق الطلاقة القرائية**	5	4	3	2	1
		.19	تطبيق مهارات الكتابة**	5	4	3	2	1
		.20	إلمام الطلبة بالأنشطة الروتينية **	5	4	3	2	1
		.21	توفير فرص قراءة مناسبة لمستوى الطلبة	5	4	3	2	1
		.22	تطبيق أنواع القراءة المختلفة (التحرّر التدريجي)	5	4	3	2	1
		.23	تطوير مهارة المحادثة	5	4	3	2	1
		.24	متابعة حل تمارين كراسة الطالب	5	4	3	2	1

		.25	تعزيز الاتجاهات الإيجابية نحو اللغة العربية	5	4	3	2	1
	الرياضيات	.16	استخدام الطلبة لطرائقهم الحسابية الخاصة**	5	4	3	2	1
		.17	تنمية مهارة حل المسألة**	5	4	3	2	1
		.18	نقاش طرق التوصّل للحل**	5	4	3	2	1
		.19	دعم اكتساب الطلبة لمادة الرياضيات مفاهيميًا وليس إجرائيًا**	5	4	3	2	1
		.20	إلمام الطلبة بالأنشطة الروتينية **	5	4	3	2	1
		.21	التدرج من المحسوس إلى المجرد (الإسقاطات النمائية في تدريس الحساب)	5	4	3	2	1
		.22	التلاعب بالأعداد (الحساب الذهني)	5	4	3	2	1
		.23	توفير فرص حل المسائل ضمن مستوى الطلبة	5	4	3	2	1
		.24	متابعة حل تمارين كراسة الطالب	5	4	3	2	1
		.25	تعزيز الاتجاهات الإيجابية نحو الرياضيات	5	4	3	2	1
	التربية الخاصة	.16	تطبيق ادوات الكشف والتشخيص الرسمية وغير الرسمية المناسبة للفئة **	5	4	3	2	1
		.17	تطبيق البرنامج التربوي الفردي (الخطة التربوية الفردية والخطة التعليمية الفردية)**	5	4	3	2	1
		.18	تطبيق استراتيجيات التدريس المناسبة لفئة الطلبة**	5	4	3	2	1
		.19	بناء المعلم خطة تعديل السلوك مكتوبة وينفذها حسب حاجات الطلبة**	5	4	3	2	1
		.20	توظيف المعلم الوسائل التعليمية الحسية وشبه الحسية وملائمتها للنتاجات التعليمية**	5	4	3	2	1
		.21	تطبيق أوراق عمل تناسب الطلبة	5	4	3	2	1

		.22	تفعيل برامج التعزيز المناسبة والمتنوعة	5	4	3	2	1
		.23	متابعة تنفيذ الواجبات والمهمات التعليمية عند الطلبة	5	4	3	2	1
		.24	تطبيق المعلم انموذج متابعة يومي مع الطلبة في كل حصة/جلسة تدريبية بطريقة صحيحة	5	4	3	2	1
		.25	إعداد السجلات المحددة في بطاقة الوصف الوظيفي ويفعلها	5	4	3	2	1
المعلومات الأساسية		.9	وقت انتهاء الملاحظة:	تلقائي				
			المجموع من 125	**(/ 125)**				
أداء المعلم المجموع من 125/5= (العلامة) من 25				**(/ 25)**				
فعالية التدريس (12 فقرة) (المجموع للفقرات ** من 60*1.67) = ( ) من 100				**(%)**				

*ملحق (1): وصف مؤشرات الأداء في ملحق الملف

**الجوانب المشار لها بالنجمتين (**) هي الجوانب التي تُمثّل مؤشرات فعالية التدريس (Effective Instruction Indicators)

آلية تطبيق أداة الملاحظة الصفية (سلم التقدير اللفظي)

أولًا: تظهر أسئلة المعلومات الأساسية (أ – ح) على صفحة واحدة، ويقوم المشرف بتعبئتها على النحو الآتي:

المعلومات	الاستجابة
اسم ورقم المُقيِّم:	بمجرد كتابة رقم المشرف الوزاري يظهر اسمه تلقائيًا ليتم اختياره
تاريخ اليوم:	يظهر اليوم والتاريخ الميلادي تلقائيًا
اسم المدرسة ورقمها الوطني:	تظهر أسماء المدارس ورقمها الوطني التابعة للمشرف في منطقته
الصف الذي تقوم بزيارته:	يتم اختيار الصف من بين الصفوف الثلاثة الأولى □ 1 □ 2 □ 3
شعبة الصف الذي تقوم بزيارته:	يتم اختيار الشعبة من بين الشعب □أ □ب □ج □د □هـ □و
اسم المعلم/ـة الذي تقوم بزيارته/ها:	يظهر اسم المعلمين في المدرسة المختارة تلقائيًا، ويُترك المجال لإضافة اسم المعلم ورقمه الوزاري إذا كان جديدًا (مع إمكانية بدء الملاحظة الصفية)
مادة الحصة التي تقوم بزيارتها:	تظهر خيارات مواد الصف الذي تم اختياره
وقت بدء الملاحظة:	يظهر وقت بدء الحصة تلقائيًا

ثانيًا: تظهر علامة (o) بجانب الوصف الأدائي لدرجة التقدير لكل مؤشر أداء في سلم التقدير اللفظي ليختار المشرف منها (دون ظهور المجالات الرئيسية والفرعية).

ثالثًا: ضرورة ظهور جميع مؤشرات التدريس الـ (25) على صفحة واحدة، ليسهل على المشرف تعبئتها دون ترتيب، وتعديل الاختيار في حال تم ملاحظة أي أمر يؤثر على أحد الخيارات التي تم اختيارها مسبقًا، حيث يمكن وضع مؤشرات الأداء ووصفها داخل المجالات الفرعية وداخل المجالات الرئيسية (.Drop down)

	المجال الفرعي	مؤشر الأداء	درجة التقدير والوصف الأدائي لكل منها				
			5	4	3	2	1
	التخطيط للتعلّم (المُلاحَظ من الحصة الصفية وليس من الخطة)	1. تنفيذ الخطط المدرسية في الموقف الصفي	يبني المعلم/ـــة خطة يومية للدرس وبشكل دقيق ومستمر ينفذها في الموقف التعليمي ويعمل على تنفيذ المهام المسندة إليه في خطط المدرسة والتي تنعكس على أداء وتحصيل الطلبة بحيث تتحقق النتائج المرجوة للطلبة وفق مجال التعلم والتعليم في الخطة التطويرية.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى من 3 وأقل من 5	يبني المعلم/ـــة خطة يومية للدرس وبشكل مستمر ينفذها في الموقف التعليمي ويعمل على تنفيذ المهام المسندة إليه في خطط المدرسة والتي تنعكس على أداء وتحصيل الطلبة بحيث تتحقق النتائج المرجوة للطلبة.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى من 1 وأقل من 3	يبني المعلم/ـــة خطة يومية للدرس وبشكل متقطع ينفذها في الموقف التعليمي.
	تنفيذ عمليات التعلّم والتعليم	2. التمهيد للدرس ومراعاة التكامل الرأسي والأفقي	يتناول المعلم/ـة مفاهيمًا تتكامل مع مفاهيم الدرس من مواد أخرى من نفس المرحلة (التكامل الأفقي) ومن الصف السابق/اللاحق (التكامل العامودي)، ويكتب المعلم/ـة الأهداف المخطط لها للدرس على اللوح مع مرونة إضافة أهداف أخرى يحتاج الطلبة لتعلّمها كمتطلب لتعلّم الدرس، ويشارك طلبته في تحقيقها، ويُطبق أنشطة تتناسب مع تعلّم الطلبة السابق/اللاحق.		يتناول المعلم/ـة مفاهيمًا تتكامل مع مفاهيم الدرس إما من مواد أخرى من نفس المرحلة أو من الصف السابق/اللاحق، ويكتب المعلم/ـة الأهداف المخطط لها للدرس على اللوح ويشارك طلبته في تحقيقها، ويُطبق الأنشطة بما يتناسب مع تعلّم الطلبة السابق/اللاحق.		يكتفي المعلم/ـة بتناول المفاهيم دون اعتبار تكاملها مع مفاهيم المواد الأخرى من نفس المرحلة ولا من الصف السابق/اللاحق، ويكتفي المعلم بإعلام طلبته شفهيًا بالأهداف المخطط لها للدرس ويسعى لوحده إلى تحقيقها دون اعتبار تعلّم الطلبة السابق/اللاحق.
		3. مراعاة التسلسل المنطقي في تدريس المحتوى التعليمي	يراعي المعلم/ـة تسلسل المفاهيم من السهل، المعلوم، المحسوس إلى الصعب، المجهول، المجرد مع الأخذ بعين الاعتبار التعلّم السابق واللاحق، ويركّز على مدى محتوى التعلّم من معارف ومهارات، ويثريه بطريقة تناسب حاجات الطلبة لتعميق فهمهم، ويوظّف المعلم/ـة تتابع المفاهيم بجميع أشكالها (صورة، رسم، شكل، سؤال، نشاط، وسائط متعدّدة، نص، إلخ.) بما يتناسب مع اختلافات الطلبة.		يراعي المعلم/ـة تسلسل المفاهيم نوعًا ما (مثل طرح المادة من العام إلى الخاص أو العكس)، ويركّز على مدى محتوى التعلّم من معارف ومهارات ويلتزم به، ويوظّف المعلم/ـة تتابع المفاهيم ببعض أشكالها (صورة، رسم، شكل، سؤال، نشاط، وسائط متعدّدة، نص، إلخ.) دون الأخذ بعين الاعتبار اختلافات الطلبة.		يراعي المعلم/ـة تسلسل المفاهيم في بعض الأحيان فقط، ويخرج عن مدى محتوى التعلّم دون إثرائه، ويستخدم المعلم/ـة تتابع المفاهيم بشكلين من أشكالها على أكثر تقدير (الاعتماد على النصوص والصور أو الرسوم) دون الأخذ بعين الاعتبار اختلافات الطلبة.

		4. الاستثمار الأمثل للوقت لتحقيق النتاجات التعليمية	يُخصّص المعلم/ـة الوقت الكاف لتحقيق جميع الطلبة كل نتاج تعليمي مع الإشارة إلى تحقيقه والانتقال إلى النتاج الآخر حتى الانتهاء من تحقيق الطلبة لجميع النتاجات عند نهاية الحصة الصفية.		يُخصّص المعلم/ـة الوقت الكاف لتحقيق معظم الطلبة لكل نتاج تعليمي مع الإشارة إلى تحقيقه والانتقال إلى النتاج الآخر حتى الانتهاء من تحقيق معظم الطلبة لمعظم النتاجات عند نهاية الحصة الصفية.		يُدير المعلم/ـة الوقت بطريقة ضعيفة تضمن تحقيق بعض الطلبة لبعض النتاجات عند نهاية الحصة الصفية.
		5. استخدام الاتصال الفعال	يستخدم المعلم/ـة لغة سليمة ومُعبّرة، حيث تتشابه استجابات الطلبة حول مادة التعلّم ويتفق جميعهم عليها ويضيف استخدام فعال للغة الجسد ووسائل اتصال أخرى تعمل على تنظيم استجابات الطلبة.		يستخدم المعلم/ـة لغة سليمة، حيث تتباين استجابات الطلبة حول مادة التعلّم ويتفق معظمهم عليها.		يستخدم المعلم/ـة لغة غير واضحة، حيث تتباين استجابات الطلبة حول مادة التعلّم ويختلف معظمهم عليها.
		6. توظيف استراتيجيات التعلم النشط بفعالية وتنويعها	يُوظّف المعلم/ـة استراتيجيات متنوعة نشطة تتمحور حول الطالب وتتناسب مع حاجاتهم، ويتفاعل الطلبة في التعلّم فيما بينهم في مجموعات تعاونية ومع المعلم/ـة من خلال أنشطة ومهمات جماعية.		يُوظّف المعلم/ـة استراتيجيات متنوعة نوعًا ما تتوزع بين المعلم والطالب، ويتفاعل الطلبة في التعلّم مع المعلم/ـة فقط من خلال الأنشطة والمهمات الفردية.		يُوظّف المعلم/ـة استراتيجيات محدّدة تتمحور حوله (التلقين)، ويستمع الطلبة إلى المعلم/ـة ويتّبعون تعليماته/ها في المهمات فقط.
		7. ربط التعلّم بالحياة	يقدّم الطلبة أمثلة تطبيقية من واقع حياتهم اليومية حول مادة التعلّم.		يُقدّم المعلم/ـة أمثلة متعدّدة من واقع الحياة اليومية حول مادة التعلّم.		يُقدّم المعلم/ـة مثالًا واحدًا من واقع الحياة اليومية حول مادة التعلّم.
		8. الدعم المتمايز ومراعاة الفروق الفردية	يراعي المعلم/ـة اختلاف الطلبة من حيث قدراتهم وتفضيلاتهم واتجاهاتهم، ويُخصّص الدعم والوقت لهم حسب حاجاتهم في مجموعاتهم العلاجية والمتوسطة والمتقدّمة.		يراعي المعلم/ـة اختلاف الطلبة من حيث قدراتهم فقط حيث يندمج الطلبة في مجموعاتهم العلاجية والمتوسطة والمتقدّمة.		يتجاهل المعلم/ـة اختلافات الطلبة، ويضعف تدريسهم حسب حاجاتهم.
	تقويم التعلّم	9. توظيف التقويم بأنواعه المختلفة واستخدام استراتيجيات التقويم وأدواته	تتنوّع استراتيجيات التقويم وأدواته لتشمل أساليب تشخيصية (أداة تشخيص القدرات القرائية/الحسابية)، وواقعية تتضمن سلالم تقدير وقوائم شطب، بالإضافة إلى أساليب وأدوات مستخدمة لرصد مدى تحقيق نتاجات التعلم.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى	تشمل استراتيجيات التقويم وأدواته أسئلة التأكد من الفهم والتقويم الأدائي في الختام.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى	تقتصر استراتيجيات التقويم وأدواته على أسئلة محدودة للتأكد من الفهم واختبار الورقة والقلم كأداة التقويم الختامي.
		10. توظيف نتائج تحليل التقويم لتحسين التعلم	يتّخذ المعلم/ـة قراراته التدريسية بناءً على البيانات التي يحصل عليها نتيجة استراتيجيات التقويم المختلفة وشواهد سجلات التقويم وملف أعمال الطلبة.		يتّخذ المعلم/ـة قراراته التدريسية بناءً على مدى فهم الطلبة وبعض شواهد سجلات التقويم وملف أعمال الطلبة.		يتمسّك المعلم/ـة بأساليب تدريسه، وقد يعيد تدريس معرفة أو مهارة ما بناءً على مدى فهم الطلبة أو نتائج الاختبارات.

	الأوعية المعرفية	11. توظيف مصادر التعلم المتنوعة بفعالية	يُوفّر المعلم/ـة بيئة مُشجّعة يجلس فيها جميع الطلبة في مقاعدهم في مجموعات تتناسب مع أهداف الدرس وفروقهم الفردية بطريقة صحية، وتُتيح لهم التفاعل مع المعلم والطلبة والوسائل التعليمية، وهناك قيمة مضافة (توفير وقت وجهد) من استخدام التكنولوجيا.	من 3 وأقل من 5	يُوفّر المعلم/ـة بيئة مُشجّعة نوعًا ما يجلس فيها الطلبة في مقاعدهم المرتبة تقليديًا (على شكل صفوف) بطريقة صحية، ولكن تُصعّب عليهم متابعة المعلم والطلبة والوسائل التعليمية، ويستخدم المعلم/ـة التكنولوجيا والوسائل دون وجود قيمة مضافة.	من 1 وأقل من 3	يُوفّر المعلم/ـة بيئة غير مُشجّعة يجلس فيها الطلبة في مقاعدهم المرتبة تقليديًا (على شكل صفوف) بطريقة تمنعهم من التفاعل مع المعلم والطلبة والوسائل التعليمية إن وُجدت، مع ندرة استخدام أي وسيلة تكنولوجية بالرغم من إمكانية ذلك.
علّم	الدعم النفسي الاجتماعي	12. توفير بيئة تعليمية آمنة وراعية وداعمة لتعزيز فرص التعلم لدى الطلبة	يُوفّر المعلم/ـة بيئة آمنة يلتزم فيها جميع الطلبة بقواعد السلوك، ويُبادروا لتحقيق أهداف التعلّم وحصد كفايات شخصية وأكاديمية، ويقدّم التغذية الراجعة للطلبة بتعزيز الأداء الصحيح للطلبة وتشجيع المحاولة، ثم يعمل بشكل جماعي مع الطلبة لتصحيح الأداء الخاطئ.		يُوفّر المعلم/ـة بيئة آمنة نوعًا ما يلتزم فيها معظم الطلبة بقواعد السلوك، ويُشاركوا في تحقيق أهداف التعلّم وحصد كفايات شخصية وأكاديمية، ولكن يظهر لدى بعضهم الخوف من الخطأ أو الشعور بالذنب لأن التغذية الراجعة تُعزّز الأداء الصحيح وتُصحّح الأداء الخاطئ دون التشجيع على المحاولة.		يُوفّر المعلم/ـة بيئة آمنة في بعض الأحيان يلتزم فيها بعض الطلبة بقواعد السلوك، ويُشاركوا في تحقيق أهداف التعلّم وحصد كفايات شخصية وأكاديمية، ولكن يظهر لدى الكثير من الطلبة الخوف من الخطأ والشعور بالنقص لأن التغذية الراجعة تُعزّز الأداء الصحيح فقط دون التشجيع على المحاولة وتصحيح الخاطئ منها.
	الابتكار والإبداع	13. توفير فرص لدعم واستثمار ابداعات وابتكارات الطلبة	يُوفّر المعلم/ـة بيئة مُحفّزة للإبداع حيث يقدّم الكثير من الطلبة أفكار جديدة (أصيلة)، وطرق متعددة غير مألوفة (مرنة)، وسرعة في الأداء (طلاقة).		يُوفّر المعلم/ـة بيئة مُحفّزة للإبداع نوعًا ما حيث يقدّم بعض الطلبة أفكار جديدة (أصيلة)، أو طرق متعددة غير مألوفة (مرنة)، أو سرعة في الأداء (طلاقة).		يُوفّر المعلم/ـة بيئة مُحفّزة على للإبداع في بعض الأحيان حيث يبادر بعض الطلبة بعمل وسائل أو رسومات توضيحية.
لحياة	المهارات الحياتية	14. استخدام المهارات الحياتية في الموقف التعليمي	يُوزّع المعلم/ـة الطلبة في مجموعات يتفاعلون فيها إيجابيًا بأدوار متنوعة تنمي لديهم مهارات التواصل والعمل ضمن فريق وحل المشكلات، وتحثهم على بذل الجهد والمحاولة للتعلّم بدلاً عن الخوف/الخجل من الخطأ أو تدني التحصيل أو غيرها من الضغوط.		يُوزّع المعلم/ـة الطلبة في مجموعات يتفاعلون فيها إيجابيًا بأدوار محدودة تُساعدهم على التواصل وحل المشكلات، وتحثهم على المحاولة للتعلّم بدلاً عن الخوف/الخجل من الخطأ أو تدني التحصيل أو غيرها من الضغوط.		يُوزّع المعلم/ـة الطلبة في مجموعات يعمل فيها عدد محدود من الطلبة تحدّ من التواصل والتعاون، يقل فيها المحاولة للتعلّم بدلاً عن الخوف/الخجل من الخطأ أو تدني التحصيل أو غيرها من الضغوط.
	مسؤولية التعلّم	15. توظيف كفايات التعلم الذاتي عند الطلبة	يطلب المعلم/ـة من الطلبة مراقبة أدائهم والتأمّل فيه للتوصّل إلى أفضل أداء ممكن تحقيقه في التعلّم و/أو الحلول الممكنة لتخطي مشكلات التعلّم.		يطلب المعلم/ـة من الطلبة مراقبة أدائهم والتأمّل فيه للوقوف على الأخطاء، ويُقدّم لهم المعلم/ـة الحل الأنسب.		يراقب المعلم/ـة أداء الطلبة ويطلب منهم التقيّد بما يُقدّمه لهم من معارف ومهارات.

	المجال الفرعي	مؤشر الأداء	درجة التقدير والوصف الأدائي لكل منها				
ص	اللغة العربية	16. تطبيق الممارسة المستقلة في المهارات القرائية	يُخصّص المعلم/ـة الوقت الأكبر لممارسة الطلبة بصورة مستقلة للمهارة.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى من 3 وأقل من 5	يُخصّص المعلم/ـة للممارسة المستقلة وقتًا مساويًا لوقت النمذجة والممارسة الموجهة.	يترك التقدير للمشرف بحيث يكون الأداء للمعلم أعلى من 1 وأقل من 3	يُخصّص المعلم/ـة الوقت الأكبر للمعلم في النمذجة أو للطلبة في الممارسة الموجهة.
		17. تطبيق استراتيجيات الاستيعاب القرائي	يطبّق المعلم/ـة استراتيجيات الاستيعاب القرائي بشكل صحيح مع إتاحة الوقت الأكبر للطلبة للممارسة المستقلة.		يطبّق المعلم/ـة استراتيجيات الاستيعاب القرائي مع بعض الأخطاء.		يتجاهل المعلم تطبيق استراتيجيات الاستيعاب القرائي أو يطبّقها بشكل خاطئ.
		18. تطبيق الطلاقة القرائية	يطبّق المعلم/ـة أنشطة متعددة للطلاقة القرائية مراعيًا مستويات الطلبة (مثال: حائط الكلمات، تعاقب العبارات، رصد درجة الإتقان، مثلث الاستماع، الحصان الدوار، ...)، ومُقدّمًا الدعم المناسب لهم.		يطبّق المعلم/ـة أنشطة متعددة للطلاقة القرائية مراعيًا مستويات الطلبة (مثال: حائط الكلمات، تعاقب العبارات، رصد درجة الإتقان، مثلث الاستماع، الحصان الدوار، ...).		يقتصر المعلم/ـة في تطبيق أنشطة الطلاقة على نشاط واحد دون مراعاة مستويات الطلبة.
		19. تطبيق مهارات الكتابة	يطبّق المعلم/ـة أنشطة متعددة في الكتابة تتدرج من كتابة الحرف إلى كتابة الجملة والكتابة الوظيفية والإبداعية حسب مستوى الصف مُقدّمًا الدعم المناسب لهم.		يطبّق المعلم/ـة أنشطة متعددة في الكتابة تتدرج من كتابة الحرف إلى كتابة الجملة دون اعتبار مستويات الطلبة المتعددة.		يقتصر المعلم/ـة في تطبيق أنشطة الكتابة على نشاط واحد دون مراعاة مستويات الطلبة ودون تصحيحهم.
		20. إلمام الطلبة بالأنشطة الروتينية	يشارك الطلبة بثقة وفعالية في الأنشطة حيث تبدو أنها مألوفة لهم وقد طبّقوها مرارًا مسبقًا.		تبدو الأنشطة مألوفة لدى معظم الطلبة حيث يبدو أنهم قد طبّقوها مسبقًا.		تبدو الأنشطة غير مألوفة لدى الطلبة حيث يتضّح أنهم لم يطبقوها مسبقًا.
		21. توفير فرص قراءة مناسبة لمستوى الطلبة	يُتيح المعلم/ـة الوقت الأكبر للطلبة لقراءة نصوص أو كلمات بشكل فردي أو ثنائي (حسب مستويات الطلبة) حيث يقرأ الطلبة نصوصًا وكلمات من خارج الكتاب المدرسي.		يُتيح المعلم/ـة وقتًا للطلبة للقراءة دون استخدام نصوص وكلمات من خارج الكتاب المدرسي.		يُسيطر المعلم على عملية القراءة مع فرص محدودة للطلبة للقراءة.

		22. تطبيق أنواع القراءة المختلفة (التحرّر التدريجي)	يعطي المعلم/ـة الطلبة مسؤولية القراءة بشكل متدرج وحسب مستواهم، حيث يستفيد الطلبة ذوي القراءة الضعيفة من الطلبة المتقدمين في قراءتهم في تطبيق قراءة الشريك، ويُتيح الفرصة للطلبة القراءة حسب مستواهم مع مراعاة التنقل بينهم لتقديم الدعم المناسب لهم.		يعطي المعلم/ـة الطلبة مسؤولية القراءة بشكل متدرج وحسب مستواهم، ويكتفي بأن يستفيد الطلبة ذوي القراءة الضعيفة من الطلبة المتقدمين في قراءتهم في تطبيق قراءة الشريك.		يقرأ المعلم/ـة النص بشكل متكرر أمام الطلبة لدرجة أن الطلبة يحفظون النص، وبعدها يُتيح للطلبة المتقدمين فرصة القراءة.
		23. تطوير مهارة المحادثة	يطبّق المعلم/ـة أنشطة متعددة في المحادثة تتدرج الإجابة بنعم أو لا حتى التعبير عن أنفسهم بطريقة إبداعية حسب مستوى الصف مُقدّمًا الدعم المناسب لهم.		يطبّق المعلم/ـة أنشطة متعددة في المحادثة تتدرج الإجابة بنعم أو لا حتى التعبير عن أنفسهم بطريقة إبداعية.		يقتصر المعلم/ـة في تطبيق أنشطة المحادثة على بعض الإجابات المحددة دون مراعاة مستويات الطلبة ودون تصحيحهم.
		24. متابعة حل تمارين كراسة الطالب	يحل الطلبة تمارين كراسة الطالب 4-5 أيام أسبوعياً وحلولهم مُصحَّحة.		يحل الطلبة تمارين كراسة الطالب 2-3 أيام أسبوعياً وحلولهم مُصحَّحة.		يحل الطلبة تمارين كراسة الطالب يوم-يومين أسبوعياً ولكن حلولهم غير مُصحَّحة
		25. تعزيز الاتجاهات الإيجابية نحو اللغة العربية	يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام اللغة العربية وجمالها، ويتحرّى استخدام الطلبة لمثل هذه المفاهيم لتعزيزه.		يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام اللغة العربية وجمالها دون تشجيع الطلبة لاستخدام مثل هذه المفاهيم.		يقتصر استخدام المعلم/ـة للمفاهيم الإيجابية على تلك المطروحة في المنهاج الدراسي كما هي.

	المجال الفرعي	مؤشر الأداء	درجة التقدير والوصف الأدائي لكل منها				
ص	الرياضيات	16. استخدام الطلبة لطرائقهم الحسابية الخاصة	يُتيح المعلم/ـة الوقت الأكبر للطلبة لعرض طرائقهم في الحل مع الإشارة إلى الطرق الأكثر فاعلية.	يترك التقدير	يُخصّص المعلم/ـة للطلبة من أجل عرض طرائقهم في الحل وقتًا مساويًا لوقته في عرض طريقته دون عرض طرق الحل.	يترك التقدير	يُخصّص المعلم/ـة للطلبة لعرض طرائقهم في الحل وقتًا قليلًا لوقته فيما ينشغل في عرض طريقته في الحل وإلزامهم بها.

		17. تنمية مهارة حل المسألة	يقدّم المعلم/ـة مسائل ضمن سياق الحياة ويندمج الطلبة في الحل بدون تدخل المعلم، ويعرض المعلم حلول الطلبة المختلفة لتعميق المفهوم لدى جميع الطلبة.	المشرف بحيث يكون الأداء للمعلم أعلى من 3 وأقل من 5	يقدّم المعلم/ـة مسائل ضمن سياق الحياة ويقدم توجيهًا للطلبة ويقوم بحلها أو يطلب من أحد الطلبة حلها.	المشرف بحيث يكون الأداء للمعلم أعلى من 1 وأقل من 3	يحل المعلم المسائل الكلامية ويطلب من الطلبة اتباع أسلوبه في الحل.
		18. نقاش طرق التوصّل للحل	يسأل المعلم/ـة الطلبة عن معقولية ناتج إجابتهم وكيفية التوصّل لها.		يسأل المعلم/ـة الطلبة عن كيفية توصّلهم لناتج إجابتهم.		يشرح المعلم/ـة للطلبة نتائج إجابته هو وكيفية التوصّل لها.
		19. دعم اكتساب الطلبة لمادة الرياضيات مفاهيميًا وليس إجرائيًا	يتأكّد المعلم/ـة من فهم الطلبة لما يُطرح مفاهيميًا وليس إجرائيًا، ويُعدّل طريقة تدريسه وفقًا لذلك.		يُقدِّم المعلم المفاهيم الرياضية إجرائيًا مثل: (تحديد الكلمات المفتاحية، والعملية الحسابية المناسبة) دون التأكد من اكتساب المفهوم.		يراقب المعلم/ـة أداء الطلبة الإجرائي، ويُلقّن الطلبة طريقة الحل.
		20. إلمام الطلبة بالأنشطة الروتينية	يشارك الطلبة بثقة وفعالية في الأنشطة حيث تبدو أنها مألوفة لهم وقد طبّقوها مرارًا مسبقًا.		تبدوالأنشطة مألوفة لدى معظم الطلبة حيث يبدو أنهم قد طبّقوها مسبقًا.		تبدو الأنشطة غير مألوفة لدى الطلبة حيث يتضّح أنهم لم يطبقوها مسبقًا.
		21. التدرج من المحسوس إلى المجرد (الإسقاطات النمائية في تدريس الحساب)	يُقدّم المعلم/ـة مفهوم الحس العددي وغيره من المفاهيم الرياضية للطلبة من خلال التدرج بالمفهوم من المحسوس إلى المجرد مراعيًا دعم الطلبة للوصول إلى الفهم المجرد من خلال مراعاة الإسقاطات النمائية في تدريس الحساب.		يُقدّم المعلم/ـة مفهوم الحس العددي وغيره من المفاهيم الرياضية للطلبة من خلال التدرج بالمفهوم من المحسوس إلى المجرد.		يُقدّم المعلم/ـة المفاهيم الرياضية للطلبة بطريقة مجردة دون مراعاة خصائص الطلبة النمائية.
		22. التلاعب بالأعداد (الحساب الذهني)	يُطوّر المعلم/ـة استراتيجيات تُساعد الطلبة على إيجاد الحلول من خلال استراتيجيات مثل العد للوراء، الإكمال للعشرة، ... إلخ، ويُقدّم الدعم المناسب لهم.		يُطوّر المعلم/ـة استراتيجيات تُساعد الطلبة على إيجاد الحلول من خلال استراتيجيات مثل العد للوراء، الإكمال للعشرة، ... إلخ.		يقتصر تدريس المعلم/ـة على استراتيجية واحدة لإيجاد حل المسألة.
		23. توفير فرص حل المسائل ضمن مستوى الطلبة	يُقدّم المعلم/ـة فرصًا متعددة للطلبة لحل أمثلة ومسائل ضمن مستواهم مُقدّمًا الدعم المناسب لهم لتعميق الفهم لديهم.		يُقدّم المعلم/ـة فرصًا محدودة لحل أمثلة ومسائل ضمن مستوى الطلبة.		يكتفي المعلم/ـة بالأمثلة والمسائل في الكتاب المدرسي دون تقديم أمثلة إضافية لتعميق الفهم.
		24. متابعة حل تمارين كراسة الطالب	يحل الطلبة تمارين كراسة الطالب 4-5 أيام أسبوعياً وحلولهم مُصحَّحة.		يحل الطلبة تمارين كراسة الطالب 2-3 أيام أسبوعياً وحلولهم مُصحَّحة.		يحل الطلبة تمارين كراسة الطالب يوم-يومين أسبوعياً ولكن حلولهم غير مُصحَّحة

		25. تعزيز الاتجاهات الإيجابية نحو الرياضيات	يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام الرياضيات وتطبيقاته، ويتحرّى استخدام الطلبة لمثل هذه المفاهيم لتعزيزه.		يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام الرياضيات وتطبيقاته دون تشجيع الطلبة لاستخدام مثل هذه المفاهيم.		يقتصر استخدام المعلم/ـة للمفاهيم الإيجابية على تلك المطروحة في المنهاج الدراسي كما هي.

	المجال الفرعي	مؤشر الأداء	درجة التقدير والوصف الأدائي لكل منها				
	التربية الخاصة	16. تطبيق ادوات الكشف والتشخيص الرسمية وغير الرسمية المناسبة للفئة	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ النتاجات التعليمية والاجرائية المحددة حسبما ورد في الخطة التعليمية الفردية.	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ النتاجات المحددة للمهارات الأكاديمية حسبما ورد في الخطة التعليمية الفردية.	ينفذ المعلم/ـة بعض النتاجات المحددة حسبما ورد في الخطة التعليمية الفردية للمهارات الأكاديمية.	ينفذ المعلم/ـة نتاجات ومهارات بشكل عشوائي ليست من الخطة التربوية الفردية والتعليمية الفردية.	لا يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية للمهارات الأكاديمية.
		17. تطبيق البرنامج التربوي الفردي (الخطة التربوية الفردية والخطة التعليمية الفردية)	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ النتاجات التعليمية والاجرائية للمهارات النمائية المحددة حسبما ورد في الخطة التعليمية الفردية.	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ بعض النتاجات المحددة للمهارات النمائية حسبما ورد في الخطة التعليمية الفردية.	ينفذ المعلم/ـة بعض النتاجات المحددة للمهارات النمائية حسبما ورد في الخطة التعليمية الفردية.	ينفذ المعلم/ـة نتاجات ومهارات بشكل عشوائي ليست من الخطة التربوية الفردية والتعليمية الفردية	لا يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية للمهارات النمائية.
		18. تطبيق استراتيجيات التدريس المناسبة لفئة الطلبة	ينوع المعلم/ـة في تطبيق استراتيجيات تدريس ذوي الإعاقة وصعوبات التعلم (تحليل المهمة/تعددي الحواس) وتفاعل الطلبة مع المهمات.	يطبق المعلم/ـة بعض استراتيجيات تدريس ذوي الإعاقة بشكل محدود.	يطبق المعلم/ـة استراتيجيات تدريس ذوي الإعاقة وصعوبات التعلم (تحليل المهمة/تعددي الحواس بدون تفاعل الطلبة.	يطبق المعلم/ـة بعض استراتيجيات تدريس ذوي الإعاقة بشكل محدود.	يتجاهل المعلم/ـة تطبيق استراتيجيات تدريس ذوي الإعاقة وصعوبات التعلم.

		19. بناء المعلم خطة تعديل السلوك مكتوبة وينفذها حسب حاجات الطلبة	يبني المعلم/ـة خطة تعديل السلوك مكتوبة وينفذها ضمن حاجات الطلبة.	يبني المعلم/ـة خطة تعديل السلوك مكتوبة وينفذ الإجراءات العلاجية بشكل محدود.	يبني المعلم/ـة خطة تعديل السلوك دون تنفيذ الإجراءات العلاجية.	يبني المعلم/ـة خطة تعديل السلوك غير مناسبة.	يتجاهل المعلم/ـة بناء خطة تعديل السلوك.
		20. توظيف المعلم الوسائل التعليمية الحسية وشبه الحسية وملائمتها للنتاجات التعليمية	يستخدم المعلم/ـة الوسائل التعليمية الحسية وشبه الحسية وملائمتها للنتاجات التعليمية.	يستخدم المعلم/ـة الوسائل التعليمية الحسية وشبه الحسية.	يستخدم المعلم/ـة الوسائل التعليمية الحسية منها فقط.	يستخدم المعلم/ـة وسائل تعليمية.	لا يستخدم المعلم/ـة الوسائل التعليمية.
		21. تطبيق أوراق عمل تناسب الطلبة	يطبق المعلم/ـة أوراق عمل تناسب وتراعي طبيعة ومستوى ونوع ودرجة الصعوبات والإعاقة لجميع الطلبة المستهدفين في الجلسة.	يطبق المعلم/ـة أوراق عمل تناسب طبيعة ومستوى ونوع الصعوبات والإعاقة عند بعض الطلبة.	يطبق المعلم أوراق عمل تناسب نوع الصعوبات والإعاقة دون مراعاة الدرجة ومستواها عند الطلبة.	يطبق المعلم أوراق عمل تناسب مستوى واحد من الصعوبات والإعاقة عند الطلبة.	لا يطبق المعلم أوراق عمل تناسب طبيعة ومستوى ونوع الصعوبات والإعاقة عند الطلبة.
		22. تفعيل برامج التعزيز المناسبة والمتنوعة	يستخدم المعلم/ـة برامج التعزيز المناسبة والمتنوعة والملائمة لمستوى الطلبة.	يستخدم المعلم/ـة أساليب التعزيز المناسب والمتنوع بشكل منتظم.	يستخدم المعلم/ـة أساليب التعزيز المناسبة والمتنوع بشكل غير منتظم.	يستخدم المعلم/ـة نوع واحد من المعززات بشكل غير منتظم.	لا يستخدم المعلم/ـة التعزيز.
		23. متابعة تنفيذ الواجبات والمهمات التعليمية عند الطلبة	يحل الطلبة الواجبات والمهمات بشكل يومي وتصحيح إجاباتهم.	يحل الطلبة الواجبات والمهمات من ثلاث إلى أربع مرات وتصحيح إجاباتهم.	يحل الطلبة الواجبات والمهمات مرة أو مرتين وتصحيح إجاباتهم.	يحل الطلبة الواجبات والمهمات بشكل متقطع وإجاباتهم غير صحيحة.	لا يحل الطلبة الواجبات والمهمات بشكل يومي ولا تصحح إجاباتهم.
		24. تطبيق المعلم انموذج متابعة يومي مع الطلبة في كل حصة/جلسة تدريبية بطريقة صحيحة	يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة في كل حصة/جلسة تدريبية بطريقة صحيحة.	يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة مرتان إلى ثلاث مرات في الأسبوع.	يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة مرة واحدة فقط أسبوعيا.	يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة بشكل غير صحيح.	لا يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة.

		25. إعداد السجلات المحددة في بطاقة الوصف الوظيفي ويفعلها	يعد المعلم/ـة السجلات المحددة في بطاقة الوصف الوظيفي (7 سجلات) ويفعلها.	يعد المعلم/ـة معظم السجلات المحددة في بطاقة الوصف الوظيفي.	يعد المعلم/ـة بعض السجلات المحددة في بطاقة الوصف الوظيفي ويفعلها.	يعد المعلم/ـة بعض السجلات المحددة في بطاقة الوصف الوظيفي دون تفعيلها.	يتجاهل المعلم/ـة أعداد وتفعيل السجلات المحددة.

رابعًا: بعد مؤشر الأداء رقم (25)، يضغط المشرف على زر "التالي" لينتقل إلى صفحة أسئلة التحقّق من مهارات الطلبة القرائية (الطلاقة) إذا كانت الحصة حصة لغة عربية، أو الحسابية إذا كانت الحصة حصة رياضيات.

أسئلة للتحقق من مهارات الطلبة القرائية (الطلاقة)

سيتم توفير 3 نماذج من الأسئلة لتتغيّر مع تغيّر الطالب.
يتم اختيار 3 طلبة عشوائيًا من الصف ويطلب منهم المشرف قراءة الكلمات والجمل الآتية (ينبغي أن يكون الطلبة مختلفين في كل مرة):

ل الأول، الفصل الثاني

كبر عدد ممكن من المقاطع الصوتية والكلمات والجمل الآتية (بالإشارة إلى الترتيب من اليمين إلى اليسار عند كل سطر من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

بِ	سِ	لَ	تَ	زُ	دو		لُ	بو	تي	با	زا	مَ		سي	شَ	فو	رِ	زُ	
زو	تا	جَ	رو	فو	دٌ		شَ	سي	فو	بِ	زُ	رِ		حا	نِ	عي	فُ	دَ	
عٍ	جُ	سٌ	ثَ	سي	كي		جو	نِي	عا	تي	نٌ	في		بو	لُ	تي	مَ	زا	
بو	تي	لُ	مَ	با	زا		نِ	حا	عي	زِ	دَ	فُ		ظو	لَ	سِ	تَ	دو	

و	زٍ	ري	شو	بُ	سُ		حَتْ	جُ	مِنْ	خى	رَسْ	شى		نٌ	تي	في	جو	عا	ني
ـَ	دٌ	رو	تا	جَ	زو		تَ	دو	سٌ	سِ	عٍ	لَ		زٍ	حو	ري	بُ	شو	سُ
ـِي	نٌ	في	عا	جو	ني		ري	زٍ	حو	شو	سُ	بُ		شَ	مِنْ	حَتْ	شى	خى	رَسْ
ـا	كي	ثَ	جُ	سٌ	عٍ		رو	دٌ	كي	تا	زو	جَ		دَ	زِ	فُ	نِ	عي	حا
ـنْ	صَ	حَتْ	خى	شى	رَسْ		صَ	كُ	كا	ثَ	ظو	غا		كا	كُ	صَ	ر	غا	ظو
ـينُ	جَميلٌ	قَمَرٌ	الْمَدْرَسَةُ	سورٌ	سامي		قَمَرٌ	جَميلٌ	الْمَدْرَسَةُ	سورٌ	حَنينُ	سامي		حَنينُ	سامي	الْمَدْرَسَةُ	قَمَرٌ	جَميلٌ	سورٌ
لَعِبَتْ سلْمى			نامَ عُمَرُ				نامَ عُمَرُ			لَعِبَتْ سلْمى				لَعِبَتْ سلْمى			نامَ عُمَرُ		

ب الثاني، الفصلَيْن الأول والثاني + الصف الثالث، الفصلين الأول والثاني

لنص الآتي. لديك دقيقة واحدة... ابدأ. (4 نصوص)

مَرَّ كَريمٌ بِجانِبِ حَديقَةِ الْحَيِّ، فَبَدَتْ نَباتاتُها وَأَزْهارُها حَزينَةً. لَمْ تَعُدْ جَميلَةً كَما كانَتْ؛ فالْقاذوراتُ والأَوْراقُ تَمْلَأُ المَكانَ. فَكَّرَ كَريمٌ: كَيْفَ يُمْكِنُ أَنْ أُعيدَ لِلْحَديقَةِ جَمالَها؟ فَقَرَّرَ الذَّهابَ إِلى الْحَديقَةِ لِتَنْظيفِها، فَشاهَدَهُ أَصْدِقاؤُهُ وَاقْتَرَحوا عليه أَنْ يُساعِدوهُ. في الْيَوْمِ التّالي، نَظَرَ كَريمٌ إِلى الْحَديقَةِ فَبَدَتْ جَميلَةً وَأَزْهارُها سَعيدَةً.	عادَتِ الْجَدَّةُ مِنَ السَّفَرِ وَمَعَها الْكَثيرُ مِنَ الْهَدايا لِلْكِبارِ وَالصِّغارِ. حَصَلَت ريما عَلى فُسْتانٍ طَويلٍ مزَرْكَشٍ وَمُلَوَّنٍ. أُعْجِبَتْ ريما بِالثَّوبِ الْجَديدِ، وَرَكَضَتْ فَرِحَةً إِلى غُرْفَتِها لِتَلْبِسَهُ، ولَكِنَّهُ كانَ ضَيِّقًا. شعَرَتْ بِالحُزْنِ قَليلًا، وَفَكَّرَتْ ثُمَّ قَرَّرَتْ أَنْ تُعْطِيَهُ لِأُخْتِها الصَّغيرَةِ. عانَقَتْ الْجَدَّةُ ريما وَشَكَرَتْها قائِلَةً: أَنا فَخورَةٌ جِدًّا بِكِ.	جَلَسَ ياسِرٌ عَـــلى شُرْفَةِ مَنْزِلِهِ في صَباحِ يَـــوْمِ الْعُـــطْلَـــةِ، يَشْرَبُ كوبًا مِنَ الْحَليبِ السّاخِنِ. وَفَجْأَةً سَمِعَ صُراخًا في الشّارِعِ. نَظَرَ مِنْ أَعْلى، فَرَأى بَعْضَ الأَطْفالِ يَتَلاعَبونَ بِطائِرٍ صَغيرٍ وَقَعَ مِنْ عُشِّهِ. نزَلَ مُسْرِعًا، وَنَصَحَهُمْ قائِلاً: أَعيدوا الطّائِرَ إِلى عُشِّهِ؛ فَهُوَ كائِنٌ ضَعيفٌ؛ يَحْتاجُ مِثْلَنا إِلى أُمِّهِ لِتَرْعاهُ فَكَّرَ الأَطْفالُ قَليلاً، فقالوا: صَدَقْتَ.	جَلَسَتِ العائِلَةُ حَوْلَ المائِدَةِ؛ لِتَناوُلِ طَعامِ الإِفْطارِ. بَعَدَ الانْتِهاءِ مِنَ الإِفْطارِ قالَ الْأَبُ: هيّا يا راما، حانَ مَوْعِدُ الذَّهابِ إِلى المَدْرَسَةِ. وَضَعَتْ راما يَدَها عَلى خَدِّها وَصَرَخَتْ: سِنّي تُؤْلِمُني. فاصْطَحَبَها أَبوها إِلى عِيادَةِ الأَسْنانِ؛ لِمُعالَجَةِ سِنِّها. في صَباحِ الْيَوْمِ التّالي قالَتْ لِأُمِّها: لَنْ أَشْتَرِيَ الْحَلْوى. أَعِدّي لي يا أمي شَطيرَةَ الْجُبْنِ.

أسئلة للتحقق من مهارات الطلبة الحسابية

سيتم توفير 3 نماذج من الأسئلة لتتغيّر مع تغيّر الطالب.
يتم اختيار 3 طلبة عشوائيًا من الصف ويطلب منهم المشرف قراءة وحلّ المسائل الآتية (ينبغي أن يكون الطلبة مختلفين في كل مرة):

ب الأول، الفصل الأول

كبر عدد ممكن من الأعداد الآتية (بالإشارة إلى الترتيب من اليسار إلى اليمين عند كل سطر من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

2	9	8	0	13		3	8	7	1	12		4	0	6	2	11
20	16	29	47	53		10	17	24	45	63		30	15	29	42	64
38	40	54	89	62		33	50	56	87	60		44	67	78	84	100
77	85	75	91	100		99	74	81	100	92		91	75	82	99	68

ب الأول، الفصل الثاني

عمليات الحسابية الآتية (بالإشارة إلى الترتيب من الأعلى إلى الأسفل عند كل عامود من اليسار إلى اليمين). لديك دقيقة واحدة... ابدأ.

2 + 5 =	8 + 6 =	2 – 1 =	15 – 8 =
3 + 4 =	9 + 8 =	5 – 2 =	16 – 9 =
3 + 6 =	7 + 7 =	4 – 3 =	14 – 2 =
14 + 2 =	2 + 12 =	10 – 2 =	17 – 7 =
11 + 6 =	10 + 4 =	17 – 11 =	15 – 10 =

1 + 6 =	9 + 5 =	3 – 2 =	16 – 7 =
2 + 5 =	8 + 7 =	6 – 3 =	17 – 10 =
4 + 5 =	6 + 8 =	5 – 4 =	15 – 3 =
11 + 5 =	1 + 13 =	9 – 1 =	18 – 8 =
13 + 4 =	4 + 10 =	18 – 12 =	16 – 11 =

5 + 2 =	6 + 8 =	4 – 3 =	17 – 9 =
4 + 3 =	8 + 9 =	7 – 4 =	15 – 8 =
6 + 3 =	7 + 7 =	6 – 5 =	13 – 1 =
2 + 14 =	12 + 2 =	12 – 4 =	16 – 6 =
6 + 11 =	4 + 10 =	19 – 13 =	14 – 9 =

ب الثاني، الفصل الأول

عمليات الحسابية الآتية (بالإشارة إلى الترتيب من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

24 + 15 =		15 + 24 =		25 + 14 =
34 + 46 =		46 + 34 =		35 + 45 =
27 – 14 =		28 – 15 =		30 – 17 =
50 – 24 =		40 – 14 =		45 – 19 =
44 – 26 =		45 – 27 =		43 – 25 =

ب الثاني، الفصل الثاني:

عمليات الحسابية الآتية (بالإشارة إلى الترتيب من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

158 + 248 =		159 + 247 =	247 + 159 =
47 + 303 =		46 + 304 =	304 + 46 =
206 – 83 =		208 – 85 =	207 – 84 =
521 – 241 =		522 – 242 =	520 – 240 =
423 – 295 =		426 – 297 =	425 – 296 =

ب الثالث، الفصل الأول

عمليات الحسابية الآتية (بالإشارة إلى الترتيب من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

١٥٨ + ٢٤٨ =		١٥٩ + ٢٤٧ =	٢٤٧ + ١٥٩ =
٤٧ + ٣٠٣ =		٤٦ + ٣٠٤ =	٣٠٤ + ٤٦ =
٢٠٦ ـ ٨٣ =		٢٠٨ ـ ٨٥ =	٢٠٧ ـ ٨٤ =
٥٢١ ـ ٢٤١ =		٥٢٢ ـ ٢٤٢ =	٥٢٠ ـ ٢٤٠ =

= ٢٩٥ - ٤٢٣		= ٢٩٧ - ٤٢٦	= ٢٩٦ - ٤٢٥

ف الثالث، الفصل الثاني

عمليات الحسابية الآتية (بالإشارة إلى الترتيب من الأعلى إلى الأسفل). لديك دقيقة واحدة... ابدأ.

= ٥١٥٧ + ١٢٤٩		= ١٢٤٧ + ٥١٥٩	= ٥١٥٩ + ١٢٤٧
= ٤٠٤ + ٣٠٠٦		= ٤٠٥ + ٣٠٠٥	= ٤٠٦ + ٣٠٠٤
= ٨٢٠٦ - ٨٨٣		= ٨٢٠٨ - ٨٨٥	= ٨٢٠٧ - ٨٨٤
= ٥٢٠٨ - ٢٤٦١		= ٥٢٠٦ - ٢٤٥٩	= ٥٢٠٧ - ٢٤٦٠
= ٤٤٢٧ - ٣٢٩٨		= ٤٤٢٦ - ٣٢٩٧	= ٤٤٢٥ - ٣٢٩٦

خامسًا: بعد الانتهاء من أسئلة التحقق من مهارات الطلبة القرائية/الحسابية، يضغط المشرف على زر الرمز (ط) وقت انتهاء الملاحظة الذي يُحدّد تلقائيًا لإنهاء الملاحظة، وينتقل إلى صفحة التغذية الراجعة حول نتائج الطلبة:

ف الأول/ الفصل الثاني (اللغة العربية)

إذا قرأ الطلبة 24 مقطعًا صوتيًا فأكثر خلال الدقيقة الواحدة، يكون الطلبة ضمن المتوسط
ول، فشجِّع المعلم على الاستمرار في تقديم الدعم للطلبة للقراءة أكثر.
إذا قرأ الطلبة أقل من 24 مقطعًا صوتيًا خلال الدقيقة الواحدة، يكون الطلبة أقل من
سط المقبول، فينبغي أن يركّز المعلم على تدريبات لطلبته بما يتعلق بأصوات الحروف.

ف الثاني/ الفصل الأول والثاني (اللغة العربية)

إذا قرأ الطلبة 26 كلمة فأكثر خلال الدقيقة الواحدة، يكون الطلبة ضمن المتوسط المقبول،
ع المعلم على الاستمرار في تقديم الدعم للطلبة للقراءة أكثر.
إذا قرأ الطلبة أقل من 26 كلمة خلال الدقيقة الواحدة، يكون الطلبة أقل من المتوسط
ول، فينبغي أن يركّز المعلم على تدريبات أكثر لطلبته بما يتعلق بالقراءة وتوفير فرص أكثر لهم
ب على القراءة.

ف الثالث/ الفصل الأول والثاني (اللغة العربية)

إذا قرأ الطلبة 30 كلمة فأكثر خلال الدقيقة الواحدة، يكون الطلبة ضمن المتوسط المقبول،
ع المعلم على الاستمرار في تقديم الدعم للطلبة للقراءة أكثر.
إذا قرأ الطلبة أقل من 30 كلمة خلال الدقيقة الواحدة، يكون الطلبة أقل من المتوسط
ول، فينبغي أن يركّز المعلم على تدريبات أكثر لطلبته بما يتعلق بالقراءة وتوفير فرص أكثر لهم
ب على القراءة.

الصف الأول/ الفصل الأول (الرياضيات)

- إذا قرأ الطلبة 15 رقمًا صحيحًا فأكثر، فإن الطلبة يمتلكون مهارة قراءة الأعداد، شجّع المعلم في الاستمرار في التركيز عليها.
- إذا قرأ الطلبة أقل من 15 رقمًا صحيحًا، فإن الطلبة لا يمتلكون مهارة قراءة الأعداد، فينبغي على المعلم التركيز عليها من خلال تقديم المفهوم بطريقة محسوسة ومجردة.

الصف الثاني/ الفصل الأول والثاني (الرياضيات)

- إذا أجاب الطلبة 12 إجابة صحيحة فأكثر، فإن الطلبة يتقنون مهارة التلاعب بالأعداد والعمليات عليها، شجّع المعلم في الاستمرار في التركيز عليها.
- إذا أجاب الطلبة أقل من 12 إجابة، فإن الطلبة لا يتقنون مهارة التلاعب بالأعداد والعمليات عليها، فينبغي على المعلم التركيز عليها.

الصف الثالث/ الفصل الأول والثاني (الرياضيات)

- إذا أجاب الطلبة 3 إجابات صحيحة فأكثر، فإن الطلبة يتقنون مهارة التلاعب بالأعداد، شجّع المعلم في الاستمرار في التركيز عليها.
- إذا أجاب الطلبة أقل من 3 إجابة صحيحة، فإن الطلبة لا يتقنون مهارة التلاعب بالأعداد، فينبغي على المعلم التركيز عليها.

سادسًا: بعد الانتهاء من نتائج أداء الطلبة، يضغط المشرف على زر "التالي" لينتقل إلى صفحة التأمّل (1) حول تطبيق مواد مبادرة القراءة والحساب التعليمية:

التأمل (1): تطبيق مواد مبادرة القراءة والحساب التعليمية	
بصفة عامّة، هل طبّق المعلم منهجيات مبادرة القراءة والحساب؟*	□ نعم □ لا
إذا كانت الإجابة لا، لا يظهر السؤال رمز (ك).	
ما مادة الحصة التي قمت بزيارتها؟	خيارات
إذا حصة اللغة العربية تظهر*: ما المهارات التي تناولها المعلم خلال الحصة؟ □ الوعي الصوتي □ صوت الحرف □ المفردات □ الاستيعاب القرائي □ الكتابة □ كتابة القصة الشخصية المصورة (مهارات غير أساسية)	
إذا حصة الرياضيات تظهر*: ما المهارات التي تناولها المعلم خلال الحصة؟ □ العدّ □ التلاعب بالأعداد □ المسائل الكلامية □ الكسور (مهارات غير أساسية)	
هل استخدمت/ وظفت دليل المعلم (لا يشترط وجود الدليل أمام المعلم، ولكن يشترط توفّره في المدرسة؟*	□ نعم □ لا
إذا نعم: □ استخدم المعلم واحد أو أكثر من الأنشطة من دليل المعلم بشكل صحيح □ استخدم المعلم واحد أو أكثر من الأنشطة من دليل المعلم مع بعض الأخطاء	

هل يتوفّر كراسة لكل طالب منذ بداية الفصل الدراسي	□ نعم □ لا]إذا كانت الإجابة لا، تظهر الرسالة: أطلب من مدير المدرسة استلامها من المديرية وتوزيعها بأقرب وقت[
برنامج تشجيع القراءة: يتوفر عدد كاف من القصص في المدرسة/ الصف.	□ نعم □ لا

يتوفر عدد كاف من سجل القراءة للطالب. يتوفر سجل القراءة للطالب قبل بدء الفصل الدراسي. يُوثّق الطالب قراءاته على سجل القراءة للطالب. يتوفر عدد كاف من سجل المعلم. يتوفر سجل المعلم قبل بدء الفصل الدراسي. يُوثّق المعلم استخدام الطلبة للقصص على سجل القراءة للطالب.	□ نعم □ لا □ نعم □ لا □ نعم □ لا □ نعم □ لا □ نعم □ لا □ نعم □ لا	
هل تم تطبيق أداة تشخيص القدرات القرائية/ الحسابية في بداية الفصل الدراسي هل تم تحديد الطلبة ذوي القدرات الأعلى والأدنى (لا تظهر إذا كانت إجابة الفقرة السابقة لا) هل تم تطبيق أداة التقييم الخاصة هل تم تحديد مستوى مهارة الطالب (لا تظهر إذا كانت إجابة الفقرة السابقة لا)	□ نعم □ لا]إذا كانت الإجابة لا، تظهر الرسالة: حمّل الأداة من موقع المبادرةrampjo.org وطبّقها لتقديم الدعم المتمايز المناسب الإثرائي والعلاجي[□ نعم □ لا]إذا كانت الإجابة لا، تظهر الرسالة: حمّل الأداة من موقع المبادرةrampjo.org وطبّقها لتقديم الدعم المتمايز المناسب الإثرائي والعلاجي[□ نعم □ لا]إذا كانت الإجابة لا، تظهر الرسالة: حمّل الأداة من موقع المبادرةrampjo.org وطبّقها بدء الدعم اللازم عند المهارة التي يحتاجها الطالب[□ نعم □ لا]إذا كانت الإجابة لا، تظهر الرسالة: حمّل الأداة من موقع المبادرةrampjo.org وطبّقها بدء الدعم اللازم عند المهارة التي يحتاجها الطالب[	
هل حضرت عملية تقييم داخل الحصة الصفية؟	□ نعم □ لا	
إذا كانت الإجابة نعم، ما الذي لاحظته خلال عملية التقييم؟ □ اتبع المعلم الإرشادات بدقة □ اتبع المعلم الإرشادات مع بعض الأخطاء □ لم يتّبع المعلم الإرشادات إطلاقًا □ استرق بعض الطلبة النظر إلى أوراق بعضهم البعض		

سابقًا: بعد الانتهاء من التأمّل (1) حول تطبيق مبادرة القراءة والحساب، يضغط المشرف على زر "التالي" لينتقل إلى صفحة التأمّل (2) حول أداء المعلم، فيسأل المشرف المعلم أسئلة تأمّلية حول أدائه من حيث الجوانب التي أتقن المعلم التعامل معها والجوانب التي يحتاج المعلم إلى تطويرها في ضوء الملاحظات (الأدلة من المواقف الصفية) ثم يناقشه فيها، ويعرض له النتائج والتوصيات في الجدول الآتي:

<table>
<tr><td colspan="2">التأمل (2): أداء المعلم</td></tr>
<tr><td>الجوانب التي يتقن المعلم التعامل معها</td><td>الجوانب التي يحتاج المعلم إلى تطويرها</td></tr>
<tr><td>ائرة حول أرقام المؤشرات التي حصل فيها المعلم على 5 درجات:
<table><tr><td>5</td><td>4</td><td>3</td><td>2</td><td></td></tr><tr><td>10</td><td>9</td><td>8</td><td>7</td><td></td></tr><tr><td>15</td><td>14</td><td>13</td><td>12</td><td></td></tr><tr><td>20</td><td>19</td><td>18</td><td>17</td><td></td></tr><tr><td>25</td><td>24</td><td>23</td><td>22</td><td></td></tr></table>مؤشرات ذات أولوية هامّة حصل فيها على 5 درجات:</td><td>ضع دائرة حول أرقام المؤشرات التي حصل فيها المعلم على درجة أو درجتين:
<table><tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td></tr><tr><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td></tr><tr><td>15</td><td>14</td><td>13</td><td>12</td><td>11</td></tr><tr><td>20</td><td>19</td><td>18</td><td>17</td><td>16</td></tr><tr><td>25</td><td>24</td><td>23</td><td>22</td><td>21</td></tr></table>ثلاث مؤشرات ذات أولوية هامّة حصل فيها على درجة أو درجتين:
1.</td></tr>
</table>

	.2 .3

ة الكلية للزيارة السابقة:	..... %	علامة فعالية التدريس للزيارة السابقة:	..... %
ة الكلية للزيارة الحالية:	..... %	علامة فعالية التدريس للزيارة الحالية:	..... %

ءات المقترحة من المشرف التربوي (يجب على المشرف تنفيذها في زياراته اللاحقة لإسناد المعلم في الأداء):

.....

.....

.....

.....

.....

توقيع المعلم	توقيع مدير المدرسة	توقيع المشرف التربوي	توقيع رئيس قسم الإشراف التربوي
_____	_____	_____	_____

ملاحظة (طريقة احتساب العلامة الكلية ومؤشر فعالية التدريس):

أولًا: العلامة الكلية

- تُحتسب العلامة الكلية بحساب مجموع تحصيل المعلم في جميع الجوانب الـ (25): **(125 /)**

- يُحتسب أداء المعلم المجموع بتقسم المجموع من 125 على 5: (/ 25)
- تُحتسب العلامة الكلية من 100 بضرب المجموع من 25 في 4: (%)

ثانيًا: مؤشر فعالية التدريس:

- يُحتسب مؤشر فعالية التدريس بحساب مجموع تحصيل المعلم على مؤشرات الأداء (1، 3، 5، 6، 8، 10، 12، 16، 17، 18، 19، 20) وضربه في 1.67: (%)
  - إذا كان نسبة مجموع تحصيل المعلم في الجوانب المستهدفة 65% فأكثر، يكون المعلم معلّمًا فعّالًا (درجة القطع ≥ 65%)

ثالثًا: مؤشر فعالية تطبيق المواد التعليمية (للمبادرة):

- يُشترط في تحقيق المعلم لمؤشر فعالية تطبيق المواد التعليمية
  - ✓ بأن يكون درجة تقديره على الجانب (24) 4 أو 5،
  - ✓ بأنه قد طبق منهجيات المبادرة (نعم) في سؤال الرمز (ي)،
  - ✓ بأنه قد طبق واحدة من مهارات القراءة/الحساب على الأقل عند سؤال الرمز (ك)،
  - ✓ بأنه قد طبق واحد أو أكثر من الأنشطة من الدليل بشكل صحيح أو مع بعض الأخطاء عند سؤال الرمز (ل).
  - ✓ بأنه قد وفّر كراسة لكل طالب منذ بداية الفصل الدراسي عند سؤال الرمز (م)،
  - ✓ بأنه أجاب بنعم على جميع فقرات برنامج تشجيع القراءة عند سؤال الرمز (ن)،
  - ✓ بأنه قام بتطبيق أداة تشخيص القدرات القرائية/ الحسابية والأداة الخاصة عند سؤال الرمز (س)،
  - ✓ بأنه قد اتبع المعلم إرشادات التقييم بدقة أو مع بعض الأخطاء عند سؤال الرمز (ع)،

رابعًا: قياس التقدّم

- يُحتسب قياس التقدّم بمقارنة نتائج المعلم على أداة الملاحظة الصفية في الزيارة الأخيرة والزيارة التي سبقتها كمًا (النتائج الرقمية) ونوعًا (مؤشرات الأداء التي أتقن المعلم التعامل معها والتي يحتاج إلى تطويرها)

ملحق (1): وصف مؤشرات الأداء

المجال الرئيسي	المجال الفرعي	مؤشر الأداء	الوصف
التعلّم والتعليم	التخطيط للتعلّم (المُلاحَظ من الحصة الصفية وليس من الخطة)	1. تنفيذ الخطط المدرسية في الموقف الصفي	يبني المعلم/ـــة خطة يومية للدرس وبشكل دقيق ومستمر ينفذها في الموقف التعليمي ويعمل على تنفيذ المهام المسندة إليه في خطط المدرسة والتي تنعكس على أداء وتحصيل الطلبة بحيث تتحقق النتائج المرجوة للطلبة وفق مجال التعلم والتعليم في الخطة التطويرية.
	تنفيذ عمليات التعلّم والتعليم	2. التمهيد للدرس ومراعاة التكامل الرأسي والأفقي	يتناول المعلم/ـة مفاهيمًا تتكامل مع مفاهيم الدرس من مواد أخرى من نفس المرحلة (التكامل الأفقي) ومن الصف السابق/اللاحق (التكامل العامودي)، ويكتب المعلم/ـة الأهداف المخطط لها للدرس على اللوح مع مرونة إضافة أهداف أخرى يحتاج الطلبة لتعلّمها كمتطلب لتعلّم الدرس، ويشارك طلبته في تحقيقها، ويُطبق أنشطة تتناسب مع تعلّم الطلبة السابق/اللاحق.
		3. مراعاة التسلسل المنطقي في تدريس المحتوى التعليمي	يراعي المعلم/ـة تسلسل المفاهيم من السهل، المعلوم، المحسوس إلى الصعب، المجهول، المجرد مع الأخذ بعين الاعتبار التعلّم السابق واللاحق، ويركّز على مدى محتوى التعلّم من معارف ومهارات، ويثريه بطريقة تناسب حاجات الطلبة لتعميق فهمهم، ويوظّف المعلم/ـة تتابع المفاهيم بجميع أشكالها (صورة، رسم، شكل، سؤال، نشاط، وسائط متعدّدة، نص، إلخ.) بما يتناسب مع اختلافات الطلبة.
		4. الاستثمار الأمثل للوقت لتحقيق النتاجات التعليمية	يُخصّص المعلم/ـة الوقت الكاف لتحقيق جميع الطلبة كل نتاج تعليمي مع الإشارة إلى تحقيقه والانتقال إلى النتاج الآخر حتى الانتهاء من تحقيق الطلبة لجميع النتاجات عند نهاية الحصة الصفية.
		5. استخدام الاتصال الفعال	يستخدم المعلم/ـة لغة سليمة ومُعبّرة، حيث تتشابه استجابات الطلبة حول مادة التعلّم ويتفق جميعهم عليها ويضيف استخدام فعال للغة الجسد ووسائل اتصال أخرى تعمل على تنظيم استجابات الطلبة.
		6. توظيف استراتيجيات التعلم النشط بفعالية وتنويعها	يُوظّف المعلم/ـة استراتيجيات متنوعة نشطة تتمحور حول الطالب وتتناسب مع حاجاتهم، ويتفاعل الطلبة في التعلّم فيما بينهم في مجموعات تعاونية ومع المعلم/ـة من خلال أنشطة ومهمات جماعية.
		7. ربط التعلّم بالحياة	يقدّم الطلبة أمثلة تطبيقية من واقع حياتهم اليومية حول مادة التعلّم.
		8. الدعم المتمايز ومراعاة الفروق الفردية	يراعي المعلم/ـة اختلاف الطلبة من حيث قدراتهم وتفضيلاتهم واتجاهاتهم، ويُخصّص الدعم والوقت لهم حسب حاجاتهم في مجموعاتهم العلاجية والمتوسطة والمتقدّمة.

	تقويم التعلّم	9. توظيف التقويم بأنواعه المختلفة واستخدام استراتيجيات التقويم وأدواته	تتنوّع استراتيجيات التقويم وأدواته لتشمل أساليب تشخيصية (أداة تشخيص القدرات القرائية/الحسابية)، وواقعية تتضمن سلالم تقدير وقوائم شطب، بالإضافة إلى أساليب وأدوات مستخدمة لرصد مدى تحقيق نتاجات التعلم.
		10. توظيف نتائج تحليل التقويم لتحسين التعلم	يتّخذ المعلم/ـة قراراته التدريسية بناءً على البيانات التي يحصل عليها نتيجة استراتيجيات التقويم المختلفة وشواهد سجلات التقويم وملف أعمال الطلبة.
بيئة التعلّم	الأوعية المعرفية	11. توظيف مصادر التعلم المتنوعة بفعالية	يُوفّر المعلم/ـة بيئة مُشجّعة يجلس فيها جميع الطلبة في مقاعدهم في مجموعات تتناسب مع أهداف الدرس وفروقهم الفردية بطريقة صحية، وتُتيح لهم التفاعل مع المعلم والطلبة والوسائل التعليمية، وهناك قيمة مضافة (توفير وقت وجهد) من استخدام التكنولوجيا.
	الدعم النفسي الاجتماعي	12. توفير بيئة تعليمية آمنة وراعية وداعمة لتعزيز فرص التعلم لدى الطلبة	يُوفّر المعلم/ـة بيئة آمنة يلتزم فيها جميع الطلبة بقواعد السلوك، ويُبادروا لتحقيق أهداف التعلّم وحصد كفايات شخصية وأكاديمية، ويقدّم التغذية الراجعة للطبة بتعزيز الأداء الصحيح للطلبة وتشجيع المحاولة، ثم يعمل بشكل جماعي مع الطلبة لتصحيح الأداء الخاطئ.
	الابتكار والإبداع	13. توفير فرص لدعم واستثمار ابداعات وابتكارات الطلبة	يُوفّر المعلم/ـة بيئة مُحفّزة للإبداع حيث يقدّم الكثير من الطلبة أفكار جديدة (أصيلة)، وطرق متعددة غير مألوفة (مرنة)، وسرعة في الأداء (طلاقة).
التعلّم للحياة	المهارات الحياتية	14. استخدام المهارات الحياتية في الموقف التعليمي	يُوزّع المعلم/ـة الطلبة في مجموعات يتفاعلون فيها إيجابيًا بأدوار متنوعة تنمي لديهم مهارات التواصل والعمل ضمن فريق وحل المشكلات، وتحثهم على بذل الجهد والمحاولة للتعلّم بدلاً عن الخوف/الخجل من الخطأ أو تدني التحصيل أو غيرها من الضغوط.
	مسؤولية التعلّم	15. توظيف كفايات التعلم الذاتي عند الطلبة	يطلب المعلم/ـة من الطلبة مراقبة أدائهم والتأمّل فيه للتوصّل إلى أفضل أداء ممكن تحقيقه في التعلّم و/أو الحلول الممكنة لتخطي مشكلات التعلّم.
التخصص	اللغة العربية	16. تطبيق الممارسة المستقلة في المهارات القرائية	يُخصّص المعلم/ـة الوقت الأكبر لممارسة الطلبة بصورة مستقلة للمهارة.
		17. تطبيق استراتيجيات الاستيعاب القرائي	يطبّق المعلم/ـة استراتيجيات الاستيعاب القرائي بشكل صحيح مع إتاحة الوقت الأكبر للطلبة للممارسة المستقلة.
		18. تطبيق الطلاقة القرائية	يطبّق المعلم/ـة أنشطة متعددة للطلاقة القرائية مراعيًا مستويات الطلبة (مثال: حائط الكلمات، تعاقب العبارات، رصد درجة الإتقان، مثلث الاستماع، الحصان الدوار، ...)، ومُقدّمًا الدعم المناسب لهم.
		19. تطبيق مهارات الكتابة	يطبّق المعلم/ـة أنشطة متعددة في الكتابة تتدرج من كتابة الحرف إلى كتابة الجملة والكتابة الوظيفية والإبداعية حسب مستوى الصف مُقدّمًا الدعم المناسب لهم.
		20. إلمام الطلبة بالأنشطة الروتينية	يشارك الطلبة بثقة وفعالية في الأنشطة حيث تبدو أنها مألوفة لهم وقد طبّقوها مرارًا مسبقًا.

		21. توفير فرص قراءة مناسبة لمستوى الطلبة	يُتيح المعلم/ـة الوقت الأكبر للطلبة لقراءة نصوص أو كلمات بشكل فردي أو ثنائي (حسب مستويات الطلبة) حيث يقرأ الطلبة نصوصًا وكلمات من خارج الكتاب المدرسي.
		22. تطبيق أنواع القراءة المختلفة (التحرّر التدريجي)	يعطي المعلم/ـة الطلبة مسؤولية القراءة بشكل متدرج وحسب مستواهم، حيث يستفيد الطلبة ذوي القراءة الضعيفة من الطلبة المتقدمين في قراءتهم في تطبيق قراءة الشريك، ويُتيح الفرصة للطلبة القراءة حسب مستواهم مع مراعاة التنقل بينهم لتقديم الدعم المناسب لهم.
		23. تطوير مهارة المحادثة	يطبّق المعلم/ـة أنشطة متعددة في المحادثة تتدرج الإجابة بنعم أو لا حتى التعبير عن أنفسهم بطريقة إبداعية حسب مستوى الصف مُقدّمًا الدعم المناسب لهم.
		24. متابعة حل تمارين كراسة الطالب	يحل الطلبة تمارين كراسة الطالب 4-5 أيام أسبوعياً وحلولهم مُصحَّحة.
		25. تعزيز الاتجاهات الإيجابية نحو اللغة العربية	يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام اللغة العربية وجمالها، ويتحرّى استخدام الطلبة لمثل هذه المفاهيم لتعزيزه.
	الرياضيات	16. استخدام الطلبة لطرائقهم الحسابية الخاصة	يُتيح المعلم/ـة الوقت الأكبر للطلبة لعرض طرائقهم في الحل مع الإشارة إلى الطرق الأكثر فاعلية.
		17. تنمية مهارة حل المسألة	يقدّم المعلم/ـة مسائل ضمن سياق الحياة ويندمج الطلبة في الحل بدون تدخل المعلم، ويعرض المعلم حلول الطلبة المختلفة لتعميق المفهوم لدى جميع الطلبة.
		18. نقاش طرق التوصّل للحل	يسأل المعلم/ـة الطلبة عن معقولية ناتج إجابتهم وكيفية التوصّل لها.
		19. دعم اكتساب الطلبة لمادة الرياضيات مفاهيميًا وليس إجرائيًا	يتأكّد المعلم/ـة من فهم الطلبة لما يُطرح مفاهيميًا وليس إجرائيًا، ويُعدّل طريقة تدريسه وفقًا لذلك.
		20. إلمام الطلبة بالأنشطة الروتينية	يشارك الطلبة بثقة وفعالية في الأنشطة حيث تبدو أنها مألوفة لهم وقد طبّقوها مرارًا مسبقًا.
		21. التدرج من المحسوس إلى المجرد (الإسقاطات النمائية في تدريس الحساب)	يُقدّم المعلم/ـة مفهوم الحس العددي وغيره من المفاهيم الرياضية للطلبة من خلال التدرج بالمفهوم من المحسوس إلى المجرد مراعيًا دعم الطلبة للوصول إلى الفهم المجرد من خلال مراعاة الإسقاطات النمائية في تدريس الحساب.
		22. التلاعب بالأعداد (الحساب الذهني)	يُطوّر المعلم/ـة استراتيجيات تُساعد الطلبة على إيجاد الحلول من خلال استراتيجيات مثل العد للوراء، الإكمال للعشرة، ... إلخ، ويُقدّم الدعم المناسب لهم.
		23. توفير فرص حل المسائل ضمن مستوى الطلبة	يُقدّم المعلم/ـة فرصًا متعددة للطلبة لحل أمثلة ومسائل ضمن مستواهم مُقدّمًا الدعم المناسب لهم لتعميق الفهم لديهم.

		24. متابعة حل تمارين كراسة الطالب	يحل الطلبة تمارين كراسة الطالب 4-5 أيام أسبوعياً وحلولهم مُصحَّحة.
		25. تعزيز الاتجاهات الإيجابية نحو الرياضيات	يستخدم المعلم/ـة مفاهيم إيجابية يعكس من خلالها تقديره لأهمية استخدام الرياضيات وتطبيقاته، ويتحرّى استخدام الطلبة لمثل هذه المفاهيم لتعزيزه.
	التربية الخاصة	16. تطبيق ادوات الكشف والتشخيص الرسمية وغير الرسمية المناسبة للفئة	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ النتاجات التعليمية والاجرائية المحددة حسبما ورد في الخطة التعليمية الفردية.
		17. تطبيق البرنامج التربوي الفردي (الخطة التربوية الفردية والخطة التعليمية الفردية)	يطبق المعلم/ـة البرنامج التربوي الفردي والخطة التعليمية الفردية وينفذ النتاجات التعليمية والاجرائية للمهارات النمائية المحددة حسبما ورد في الخطة التعليمية الفردية.
		18. تطبيق استراتيجيات التدريس المناسبة لفئة الطلبة	ينوع المعلم/ـة في تطبيق استراتيجيات تدريس ذوي الإعاقة وصعوبات التعلم (تحليل المهمة/تعددي الحواس) وتفاعل الطلبة مع المهمات.
		19. بناء المعلم خطة تعديل السلوك مكتوبة وينفذها حسب حاجات الطلبة	يبني المعلم/ـة خطة تعديل السلوك مكتوبة وينفذها ضمن حاجات الطلبة.
		20. توظيف المعلم الوسائل التعليمية الحسية وشبه الحسية وملائمتها للنتاجات التعليمية	يستخدم المعلم/ـة الوسائل التعليمية الحسية وشبه الحسية وملائمتها للنتاجات التعليمية.
		21. تطبيق أوراق عمل تناسب الطلبة	يطبق المعلم/ـة أوراق عمل تناسب وتراعي طبيعة ومستوى ونوع ودرجة الصعوبات والإعاقة لجميع الطلبة المستهدفين في الجلسة.
		22. تفعيل برامج التعزيز المناسبة والمتنوعة	يستخدم المعلم/ـة برامج التعزيز المناسبة والمتنوعة والملائمة لمستوى الطلبة.
		23. متابعة تنفيذ الواجبات والمهمات التعليمية عند الطلبة	يحل الطلبة الواجبات والمهمات بشكل يومي وتصحيح إجاباتهم.
		24. تطبيق المعلم انموذج متابعة يومي مع الطلبة في كل حصة/جلسة تدريبية بطريقة صحيحة	يفعل المعلم/ـة أنموذج المتابعة اليومي مع الطلبة في كل حصة/جلسة تدريبية بطريقة صحيحة.
		25. إعداد السجلات المحددة في بطاقة الوصف الوظيفي ويفعلها	يعد المعلم/ـة السجلات المحددة في بطاقة الوصف الوظيفي (7 سجلات) ويفعلها.

5.20. Appendix 27: ESMP Data on Facilities

Table 25: Chi-Square of Differences in extra_curricular/Sports by Schools		Presence of Sports		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Sports	No Sports				
USAID	Count	98	1	99	.853[a]	1	.356
	% of Total	21.7%	.2%	22.0%			
Neighboring	Count	343	9	352			
	% of Total	76.1%	2.0%	78.0%			
Total	Count	441	10	451			
	% of Total	97.8%	2.2%	100.0%			

Table 26: Chi-Square of Differences inextra_curricular/Art by Schools		Presence of Art		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Arts	No Arts				
USAID	Count	93	6	99	3.483[a]	1	.062
	% of Total	20.6%	1.3%	22.0%			
Neighboring	Count	307	45	352			
	% of Total	68.1%	10.0%	78.0%			
Total	Count	400	51	451			
	% of Total	88.7%	11.3%	100.0%			

Table 27: Chi-Square of Differences in rate vandalism as a problem by Schools		Rating of Vandalism as a Problem		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Moderate to Severe problem	Slight or no problem				
USAID	Count	32	67	99	.029[a]	1	.864
	% of Total	7.1%	14.9%	22.0%			
Neighboring	Count	117	235	352			
	% of Total	25.9%	52.1%	78.0%			
Total	Count	149	302	451			
	% of Total	33.0%	67.0%	100.0%			

Table 28: Chi-Square of Differences in rate student involvement in school activities by Schools		Rating of Student Involvement in School Activities		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Moderate to exemplary student involvement	Slight to no student involvement				
USAID	Count	89	10	99	.125[a]	1	.724
	% of Total	19.7%	2.2%	22.0%			
Neighboring	Count	312	40	352			
	% of Total	69.2%	8.9%	78.0%			
Total	Count	401	50	451			
	% of Total	88.9%	11.1%	100.0%			

Table 29: Chi-Square of Differences in rate parent involvement in school activities by Schools		Rating of Parental Involvement in School Activities		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Moderate to exemplary parental involvement	Slight to no parental involvement				
USAID	Count	67	32	99	5.450[a]	1	.020
	% of Total	14.9%	7.1%	22.0%			
Neighboring	Count	192	160	352			
	% of Total	42.6%	35.5%	78.0%			
Total	Count	259	192	451			
	% of Total	57.4%	42.6%	100.0%			

Table 30: Chi-Square of Differences in Toilets by Schools		Toilets		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Major Issue	Minor to No Issue				
USAID	Count	23	76	99	.225[a]	1	.636
	% of Total	5.1%	16.9%	22.0%			
Neighboring	Count	90	262	352			
	% of Total	20.0%	58.1%	78.0%			
Total	Count	113	338	451			
	% of Total	25.1%	74.9%	100.0%			

Table 31: Chi-Square of Differences in Internet by Schools			Internet		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
			Major Issue	Minor and No Issue				
	USAID	Count	21	78	99	.125[a]	1	.723
		% of Total	4.7%	17.3%	22.0%			
	Neighboring	Count	69	283	352			
		% of Total	15.3%	62.7%	78.0%			
Total		Count	90	361	451			
		% of Total	20.0%	80.0%	100.0%			

Table 32: Chi-Square of Differences in Solid Waste Management - Collection by Schools			Solid Waste Management - Collection		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
			Severe and Moderate problem	Slight and Not problem				
	USAID	Count	**10**	**89**	99	.157[a]	1	.692
		% of Total	2.2%	19.7%	22.0%			
	Neighboring	Count	31	321	352			
		% of Total	6.9%	71.2%	78.0%			
Total		Count	41	410	451			
		% of Total	9.1%	90.9%	100.0%			

Table 33: Chi-Square of Differences in External disability access ramps by Schools			External disability access ramps		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
			Available	No disability ramps				
	USAID	Count	**84**	**15**	99	25.575[a]	1	.000
		% of Total	18.6%	3.3%	22.0%			
	Neighboring	Count	201	151	352			
		% of Total	44.6%	33.5%	78.0%			
Total		Count	285	166	451			

	% of Total	63.2%	36.8%	100.0%			

Table 34: Chi-Square of Differences in Internet connection / bandwidth by Schools		Internet connection / bandwidth		Total	Pearson Chi-Square	df	Asymptotic Signif. (2-sided)
		Available and fast connection	Available and slow connection and No Internet				
USAID	Count	45	54	99	.124[a]	1	.725
	% of Total	10.0%	12.0%	22.0%			
Neighboring	Count	153	199	352			
	% of Total	33.9%	44.1%	78.0%			
Total	Count	198	253	451			
	% of Total	43.9%	56.1%	100.0%			

5.21. Appendix 28: LQAS Statistical Test Tables

Note: Scores for Mathematics included unreliable data. Data for several USAID-funded schools which had reading comprehension scores averaging between 3 and 4 had scores listed as only between 0 and 1 and averaging below 0.5 on a scale of 0 to 10.

Table 35: Oral Reading Fluency USAID vs Neighboring Parameter Estimates[a]							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	26.820	.460	25.919	27.722	58.353	4033.000	0.000
USAID	.335	.842	-1.316	1.986	.398	4033.000	.691
Neighboring	.000[b]						
a. Model: ORF = (Intercept) + Funded1							
b. Set to zero because this parameter is redundant.							

Table 36: Oral Reading Fluency JSP, JSEP vs Neighboring Parameter Estimates[a]							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	26.820	.460	25.919	27.722	58.353	4033.000	0.000
JSEP	.022	.943	-1.828	1.871	.023	4033.000	.982
JSP	1.254	1.441	-1.571	4.079	.870	4033.000	.384
Neighboring	.000[b]						
a. Model: ORF = (Intercept) + Funded							
b. Set to zero because this parameter is redundant.							

Table 37: Reading Comprehension USAID vs Neighboring Parameter Estimates[a]							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.

(Intercept)	2.294	.034	2.227	2.361	67.198	4006.000	0.000
USAID	.192	.062	.070	.314	3.082	4006.000	.002
Neighboring	.000[b]						
a. Model: Reading Comprehension Score = (Intercept) + Funded1							
b. Set to zero because this parameter is redundant.							

Table 38: Reading Comprehension JSP, JSEP vs Neighboring Parameter Estimates[a]

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	2.294	.034	2.227	2.361	67.198	4006.000	0.000
JSEP	.132	.070	-.005	.268	1.893	4006.000	.058
JSP	.369	.107	.160	.579	3.450	4006.000	.001
Neighboring	.000[b]						
a. Model: Reading Comprehension Score = (Intercept) + Funded							
b. Set to zero because this parameter is redundant.							

5.22. Appendix 29: PISA Statistical Test Tables

Table 39: PISA Parameter Estimates, Mathematics Boys vs Girls

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	402.011	1.276	399.510	404.511	315.143	4140.000	0.000
[Funded=1]	2.937	3.333	-3.597	9.470	.881	4140.000	.378
[Funded=2]	.000[b]						
a. Model: Math = (Intercept) + Funded							
b. Set to zero because this parameter is redundant.							

Table 40: PISA Parameter Estimates, Mathematics, Gender

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	408.396	1.469	405.516	411.276	278.004	4140.000	0.000

Boys	-14.454	2.427	-19.213	-9.696	-5.955	4140.000	.000
Girls + mixed	.000[b]						

a. Model: Math = (Intercept) + School_Gender

b. Set to zero because this parameter is redundant.

Table 41: PISA Parameter Estimates, Mathematics, Urban/Rural

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	370.001	4.702	360.782	379.219	78.687	4140.000	0.000
Urban	35.214	4.854	25.697	44.731	7.254	4140.000	.000
Rural	.000[b]						

a. Model: Math = (Intercept) + Area_classification

b. Set to zero because this parameter is redundant.

Table 42: PISA Parameter Estimates, Reading, USAID vs Neighboring

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	427.373	1.381	424.665	430.081	309.368	4140.000	0.000
USAID	-11.042	3.727	-18.348	-3.736	-2.963	4140.000	.003
Neighboring	.000[b]						

a. Model: Reading = (Intercept) + Funded

b. Set to zero because this parameter is redundant.

Table 43: PISA Parameter Estimates, Reading, Gender

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	440.027	1.548	436.993	443.061	284.318	4140.000	0.000
Boys	-35.174	2.619	-40.309	-30.039	-13.429	4140.000	.000
Girls + mixed	.000[b]						

a. Model: Reading = (Intercept) + School_Gender

b. Set to zero because this parameter is redundant.

Table 44: PISA Parameter Estimates, Reading, Urban/Rural

Parameter	Estimate	Std. Error	95% Confidence Interval	Hypothesis Test

			Lower	Upper	t	df	Sig.
(Intercept)	387.694	5.197	377.505	397.883	74.599	4140.000	0.000
Urban	41.124	5.360	30.616	51.633	7.672	4140.000	.000
Rural	.000[b]						

a. Model: Reading = (Intercept) + Area_classification

b. Set to zero because this parameter is redundant.

Table 45: PISA Parameter Estimates, Science, USAID vs Neighboring

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	434.734	1.325	432.137	437.332	328.084	4140.000	0.000
USAID	-3.433	3.537	-10.367	3.502	-.971	4140.000	.332
Neighboring	.000[b]						

a. Model: Science = (Intercept) + Funded

b. Set to zero because this parameter is redundant.

Table 46: PISA Parameter Estimates, Science, Gender

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	443.919	1.541	440.898	446.940	288.090	4140.000	0.000
Boys	-23.754	2.504	-28.663	-18.846	-9.488	4140.000	.000
Girls + mixed	.000[b]						

a. Model: Science = (Intercept) + School_Gender

b. Set to zero because this parameter is redundant.

Table 47: PISA Parameter Estimates, Science, Urban/Rural

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	402.392	4.419	393.728	411.057	91.049	4140.000	0.000
Urban	34.479	4.599	25.463	43.495	7.497	4140.000	.000
Rural	.000[b]						

a. Model: Science = (Intercept) + Area_classification

b. Set to zero because this parameter is redundant.

5.23. Appendix 30: NAfKE Statistical Test Tables

NAfKE Cross-cutting Skills Assessment Sub-indicators Across All Grades

Table 48: NAfKE Parameter Estimates, Communication

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	42.519	.144	42.238	42.801	296.024	23582.000	0.000
USAID	1.700	.566	.591	2.809	3.006	23582.000	.003
Neighboring	.000[b]						

Note: Model: communication percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 49: NAfKE Parameter Estimates, Problem Solving

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	36.092	.144	35.810	36.373	251.474	23582.000	0.000
USAID	1.375	.587	.224	2.526	2.341	23582.000	.019
Neighboring	.000[b]						

a. Model: problem solving percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 50: NAfKE Parameter Estimates, Applying Knowledge

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	39.609	.154	39.308	39.910	257.837	19649.000	0.000
USAID	2.286	.605	1.100	3.473	3.777	19649.000	.000
Neighboring	.000[b]						

a. Model: applying percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 51: NAfKE Parameter Estimates, Knowledge

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	42.250	.151	41.955	42.546	280.397	19649.000	0.000

USAID	1.904	.607	.714	3.093	3.137	19649.000	.002
Neighboring	.000[b]						

a. Model: knowing percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 52: NAfKE Parameter Estimates, Reasoning

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	33.720	.137	33.450	33.989	245.459	19649.000	0.000
USAID	1.187	.565	.080	2.295	2.102	19649.000	.036
Neighboring	.000[b]						

a. Model: reasoning percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

NAfKE Science Subject Assessment Sub-indicators Across All Grades

Table 53: NAfKE Parameter Estimates, Science Communication

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	43.507	.240	43.037	43.978	181.292	7901.000	0.000
USAID	1.877	.984	-.053	3.806	1.907	7901.000	.057
Neighboring	.000[b]						

a. Model: communication percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 54: NAfKE Parameter Estimates, Science Problem Solving

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	37.760	.228	37.312	38.208	165.329	7901.000	0.000
USAID	2.475	.979	.557	4.394	2.529	7901.000	.011
Neighboring	.000[b]						

a. Model: problem solving percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 55: NAfKE Parameter Estimates, Science Application of Knowledge							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	41.204	.251	40.712	41.697	164.025	7901.000	0.000
USAID	2.376	1.003	.410	4.343	2.368	7901.000	.018
Neighboring	.000[b]						
a. Model: applying percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 56: NAfKE Parameter Estimates, Science Knowledge							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	43.936	.239	43.467	44.405	183.660	7901.000	0.000
[USAID=1]	1.596	.962	-.290	3.482	1.659	7901.000	.097
[USAID=2]	.000[b]						
a. Model: knowing percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 57: NAfKE Parameter Estimates, Science Reasoning							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	38.221	.224	37.782	38.659	170.823	7901.000	0.000
[USAID=1]	2.405	.948	.546	4.263	2.536	7901.000	.011
[USAID=2]	.000[b]						
a. Model: reasoning percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

NAfKE Arabic Subject Assessment Sub-indicators Across All Grades

Table 58: NAfKE Parameter Estimates, Arabic Communication							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	48.220	.281	47.670	48.770	171.876	7853.000	0.000

USAID	.525	1.068	-1.570	2.619	.491	7853.000	.623
Neighboring	.000[b]						
a. Model: communication percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 59: NAfKE Parameter Estimates, Arabic Problem Solving

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	39.199	.296	38.619	39.780	132.351	7853.000	0.000
USAID	1.253	1.176	-1.053	3.559	1.065	7853.000	.287
Neighboring	.000[b]						
a. Model: problem solving percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 60: NAfKE Parameter Estimates, Arabic Application of Knowledge

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	48.760	.378	48.018	49.501	128.892	3920.000	0.000
USAID	.737	1.429	-2.065	3.539	.515	3920.000	.606
Neighboring	.000[b]						
a. Model: applying percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 61: NAfKE Parameter Estimates, Arabic Knowledge

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	46.875	.368	46.155	47.596	127.488	3920.000	0.000
USAID	2.674	1.460	-.188	5.536	1.832	3920.000	.067
Neighboring	.000[b]						
a. Model: knowing percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 62: NAfKE Parameter Estimates, Arabic Reasoning							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	31.905	.313	31.292	32.518	102.059	3920.000	0.000
USAID	.155	1.180	-2.158	2.468	.132	3920.000	.895
Neighboring	.000[b]						
a. Model: reasoning percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

NAfKE Mathematics Subject Assessment Sub-indicators Across All Grades

Table 63: NAfKE Parameter Estimates, Mathematics Communication							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	35.814	.197	35.428	36.200	181.912	7826.000	0.000
USAID	2.539	.790	.990	4.088	3.213	7826.000	.001
Neighboring	.000[b]						
a. Model: communication percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 64: NAfKE Parameter Estimates, Mathematics Problem Solving							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	31.295	.202	30.899	31.691	154.909	7826.000	0.000
USAID	.293	.791	-1.257	1.843	.370	7826.000	.711
Neighboring	.000[b]						
a. Model: problem solving percent score = (Intercept) + USAID							
b. Set to zero because this parameter is redundant.							

Table 65: NAfKE Parameter Estimates, Mathematics Application of Knowledge							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	33.419	.193	33.040	33.797	173.103	7826.000	0.000
USAID	2.920	.791	1.369	4.472	3.690	7826.000	.000
Neighboring	.000[b]						

a. Model: applying percent score = (Intercept) + USAID
b. Set to zero because this parameter is redundant.

Table 66: NAfKE Parameter Estimates, Mathematics Knowledge

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	38.233	.216	37.809	38.657	176.681	7826.000	0.000
[USAID=1]	1.794	.876	.077	3.510	2.049	7826.000	.041
[USAID=2]	.000[b]						

a. Model: knowing percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

Table 67: NAfKE Parameter Estimates, Mathematics Reasoning

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	30.082	.196	29.697	30.467	153.119	7826.000	0.000
USAID	.530	.792	-1.023	2.083	.669	7826.000	.503
Neighboring	.000[b]						

a. Model: reasoning percent score = (Intercept) + USAID

b. Set to zero because this parameter is redundant.

5.24. Appendix 31: Educational Quality Control Statistical Test Tables

Table 68: Grade 3, 2018, Arabic T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	20	61.25	10.114	1.119	82	0.269
JSEP+Neigh.+other	64	58.08	13.662			
Total Score by Directorate						
JSP+SKEP	20	60.1	5.911	1.422	70	0.16
JSEP+Neigh.+other	52	58.15	4.913			

Table 69: Grade 3, 2018, Mathematics T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	20	59.7	12.101	0.35	82	0.727
JSEP+Neigh.+other	64	58.41	15.045			
Total Score by Directorate						
JSP+SKEP	20	59.6	6.613	1.353	70	0.18
JSEP+Neigh.+other	52	57.58	5.296			

Table 70: Grade 3, 2018, Mathematics T-tests of Differences Across Subject by Gender and Urbanization						
	n	Mean	Std. Deviation	t	df	Signif.
School gender						
Boys	203	17.04	6.63	-3.387	540	.001
Girls or Mixed	339	19.28	7.88			
Area classification						
Urban	446	19.37	7.45	6.421	540	.000
Rural	96	14.14	6.18			

Table 71: Grade 3, 2019, Arabic T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	21	66.19	10.879	1.541	84	0.127
JSEP+Neigh.+other	65	61.49	12.52			
Total Score by Directorate						
JSP+SKEP	21	66.24	5.898	2.179	71	0.036
JSEP+Neigh.+other	52	62.92	5.851			

Table 72: Grade 3, 2019, Mathematics T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	21	66.14	12.236	1.273	84	0.206
JSEP+Neigh.+other	65	61.42	15.507			
Total Score by Directorate						
JSP+SKEP	21	66.33	6.028	2.11	71	0.041

JSEP+Neigh.+other	52	63.02	6.185			

Table 73: Grade 4, 2018, Arabic T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	24	55.46	15.337	0.745	91	0.458
JSEP+Neigh.+other	69	52.78	15.089			
Total Score by Directorate						
JSP+SKEP	24	52.5	5.381	1.02	77	0.311
JSEP+Neigh.+other	55	51.15	5.445			

Table 74: Grade 4, 2018, Mathematics T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	24	53.83	15.159	1.773	91	0.085
JSEP+Neigh.+other	69	47.78	11.943			
Total Score by Directorate						
JSP+SKEP	24	51.04	5.614	0.68	77	0.498
JSEP+Neigh.+other	55	50.13	5.44			

Table 75: Grade 4, 2018, Science T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	24	53.42	13.439	1.061	90	0.292
JSEP+Neigh.+other	68	50.24	12.342			
Total Score by Directorate						
JSP+SKEP	15	53.4	3.602	0.94	71	0.355
JSEP+Neigh.+other	58	52.33	5.031			

Table 76: Grade 4, 2018, English T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	24	54.17	16.776	1.843	90	0.069
JSEP+Neigh.+other	68	46.9	16.559			
Total Score by Directorate						
JSP+SKEP	15	50.13	5.514	1.081	71	0.283
JSEP+Neigh.+other	58	48.21	6.299			

Table 77: Grade 4, 2019, Arabic T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	21	53.57	12.488	1.136	73	0.26
JSEP+Neigh.+other	54	49.54	14.276			
Total Score by Directorate						
JSP+SKEP	21	49.48	4.07	0.541	64	0.591
JSEP+Neigh.+other	45	48.89	4.13			

Table 78: Grade 4, 2019, Mathematics T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	12	34	5.009	-1.077	73	0.288
JSEP+Neigh.+other	63	36.24	11.851			
Total Score by Directorate						
JSP+SKEP	6	34	4.517	-1.224	58	0.226
JSEP+Neigh.+other	54	36.15	4.035			

Table 79: Grade 4, 2019, Science T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	12	46.83	5.844	0.395	73	0.694
JSEP+Neigh.+other	63	45.46	11.721			
Total Score by Directorate						
JSP+SKEP	6	44.5	3.332	-0.645	58	0.521
JSEP+Neigh.+other	54	45.3	2.819			

Table 80: Grade 4, 2019, English T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	12	53.33	12.78	0.577	73	0.565
JSEP+Neigh.+other	63	50.49	16.074			
Total Score by Directorate						
JSP+SKEP	12	50.17	5.718	0.612	64	0.542
JSEP+Neigh.+other	54	49.13	5.216			

Table 81: Grade 4, 2019, Arabic T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	15	46.53	10.816	-0.796	57	0.429
JSEP+Neigh.+other	44	49.32	11.974			
Total Score by Directorate						
JSP+SKEP	15	48.07	2.789	1.317	49	0.194
JSEP+Neigh.+other	36	46.61	3.871			

Table 82: Grade 10, 2017, Mathematics T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	15	32.4	7.519	-0.725	57	0.471
JSEP+Neigh.+other	44	34.89	12.483			
Total Score by Directorate						

JSP+SKEP	15	31.73	2.12	1.08	49	0.286
JSEP+Neigh.+other	36	30.97	2.36			

Table 83: Grade 10, 2017, Science T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Significance
Total Score by School						
JSP+SKEP	15	38.87	5.939	-0.449	57	0.655
JSEP + Neighboring + other	44	39.8	7.213			
Total Score by Directorate						
JSP+SKEP	15	39.33	2.024	1.346	49	0.184
JSEP + Neighboring + other	36	38.44	2.197			

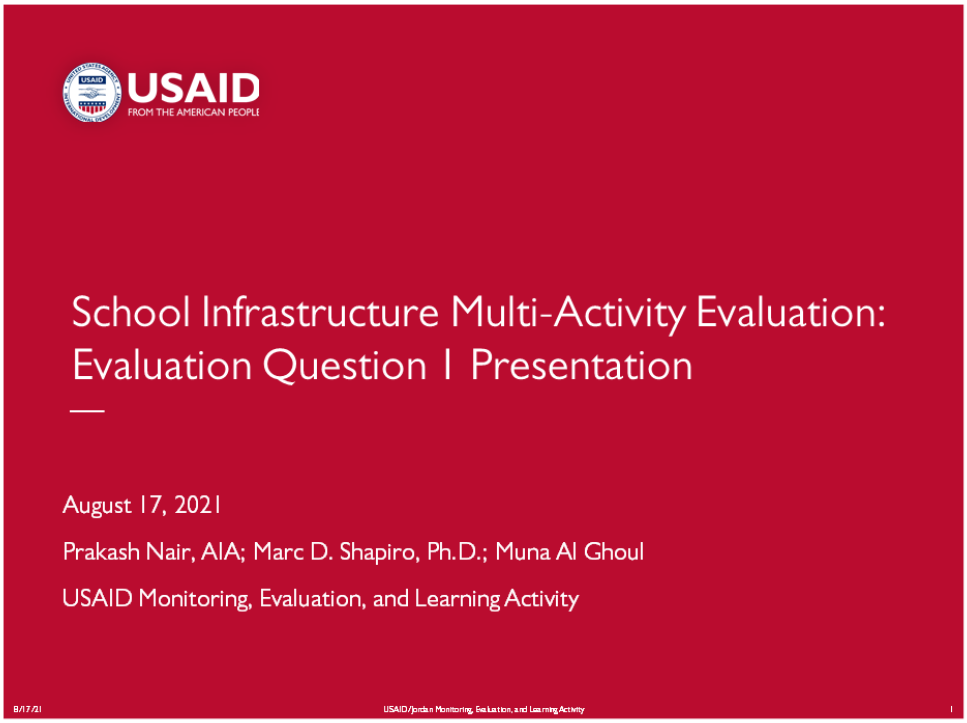
Table 84: Grade 10, 2017, English T-tests of Differences in Total Scores by Funded Type						
	n	Mean	Std. Deviation	t	df	Signif.
Total Score by School						
JSP+SKEP	15	57.07	15.636	1.676	57	0.099
JSEP+Neigh.+other	44	49.98	13.625			
Total Score by Directorate						
JSP+SKEP	15	52.6	3.851	1.127	49	0.265
JSEP+Neigh.+other	36	50.61	6.344			

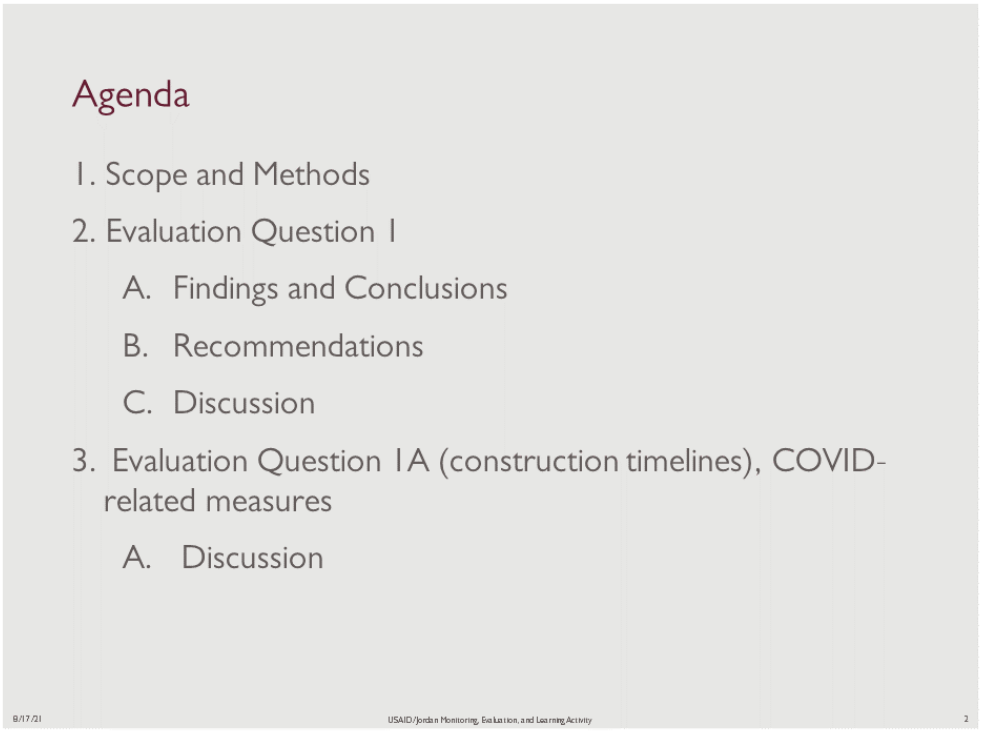
5.25. Appendix 32: TIMSS Statistical Test Tables

Table 85: Parameter Estimates, TIMSS Math							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	407.830	1.586	404.721	410.940	257.132	3585.000	0.000
USAID	-2.517	4.732	-11.795	6.760	-.532	3585.000	.595
Neigboring	.000[b]						
a. Model: Math = (Intercept) + Funded							
b. Set to zero because this parameter is redundant.							

Table 86: Parameter Estimates, TIMSS Science							
Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test		
			Lower	Upper	t	df	Sig.
(Intercept)	441.071	2.129	436.895	445.248	207.125	1839.000	0.000
USAID	-31.943	8.535	-48.682	-15.205	-3.743	1839.000	.000
Neigboring	.000[b]						
a. Model: Science = (Intercept) + Funded							
b. Set to zero because this parameter is redundant.							

5.26. Appendix 33: Stakeholder Presentation Part 1





5.27. Appendix 34: Team Members

5.34. Appendix 34: Team Members

THE KAIZEN COMPANY

Marc Shapiro, PhD.

PROFESSIONAL PROFILE

Dr. Marc Shapiro has 20 years of experience working across 23 countries in the design, implementation, and management of Monitoring, Evaluation, and Learning (MEL) initiatives in the Education, Gender Equity and Social Inclusion, and Energy & WASH Infrastructure sectors, including 11 years in leadership positions as a Chief of Party, Team Lead and Senior Education Specialist. Having served as the Project Director on 7 education reform projects, he has extensive experience in technical oversight, designing, leading, and implementing sector-wide primary to secondary school evaluations. Dr. Shapiro has served as a senior MEL consultant with cross-sectoral and regional experience, having overseen 40 studies and data collections including third-party monitoring, with expertise in quantitative and qualitative research and analysis, developing results frameworks, MEL systems, indicators and local capacity development in MEL. As Senior Education Specialist for QED and USAID/Iraq, Dr. Shapiro co-led a four-person team assessing the education sector in Iraq, emphasizing basic education. The assessment was designed to inform USAID's new strategy to assist the Government of Iraq after the US political transition. In these senior-level leadership roles, he led and mentored project teams while overseeing technical implementation. Dr. Shapiro holds a PhD. in Political Science.

EDUCATION

PhD, Political Science, University of Rochester, USA, 2000
MA, Political Science, University of Rochester, USA, 1996
BA, Political Science and Economics, Washington University, USA, 1991

PROFESSIONAL EXPERIENCE

September 2017 to November 2020	**Chief of Party, CAMRIS International, Kathmandu, Nepal** • Provided technical and program oversight to the USAID/Nepal's Monitoring, Evaluation and Learning Project ($11.75m). • Oversaw multiple method performance evaluations and assessments in education, democracy, gender equality, environment and private sector engagement project.
November 2016 to August 2017, and June 2015 to August 2015	**Consultant/ Team Lead, USAID, Nepal, Tajikistan, and Pakistan** • Provided technical and program oversight to monitoring and evaluation of Jordan-based USAID MEL Platform Yemen project ($9.5m). • Oversaw evaluation design kickoff for an impact evaluation for USAID/Nepal. • Led a performance evaluation of a Feed the Future-funded rural/agricultural land use rights project to inform the Central Asia Regional Mission with respect to agricultural productivity and anti-corruption issues. • Served as evaluation team leader for a six-person team conducting a final qualitative performance evaluation of the $300 million USAID/Pakistan's Energy Policy Program.

August 2015 to November 2016	**Chief of Party, QED Group, Cairo, Egypt** • Led client liaison and reporting to USAID missions in Egypt for $24.5m USAID-funded project to improve performance management of MEL. • Provided technical and programmatic oversight to monitoring, evaluation activities. • Established internal systems, hired staff, and put together a complicated work plan • Led the country office including human resources, operations and accounting, and programming. • Provided financial oversight including annual budget and budget monitoring. • Managed project reporting.
March 2012 to May 2015	**Chief of Party, Dts, Inc., Arlington, USA** • Managed and oversaw $12m M&E Project for USAID's Global Climate Change Office. • Provided vision regarding both impact evaluation and monitoring indicators • Grew the staff from three to fifteen plus two primary subcontractors, several local data collection agencies, and a portfolio of short-term consultants. • Established internal systems, hired staff, and put together a complicated work plan • Led the country office including human resources, operations and accounting, and programming. • Provided overall technical leadership and direction for all tasks, work planning, technical delivery, and reporting across four tasks. Oversaw and provided quality assurance of technical reports, budgets, and financials creating quality control processes
March 2009 to March 2012	**Director of Monitoring, Evaluation, and Economics, Millennium Challenge Corporation, Washington, D.C., USA** • Oversaw the implementation of impact evaluation plans and monitoring systems for over 20 MCC projects and activities worth over $1.5 billion for Mongolia, Georgia, Lesotho, and Ghana. • Involved with over 20 surveys including household income and consumption, traffic/origin-destination, environmental behavior, village-level, farm-based-organizations, business/employers, water use, health facilities and clients, livestock health, agricultural value chains, rangeland quality, and others. • Designed monitoring plans and ensured timely and relevant monitoring data on program performance for country portfolios across hundreds of indicators. • Advised working group updating the organization's management information system on M&E-related functional requirements. • Helped design learning processes and tools to lead to collaboration, learning, and adapting-like objectives for country missions and home office staff.
December 2008 to March 2009	**Principal Investigator, UN Office for the Coordination of Humanitarian Affairs, USA** • Evaluated the effectiveness, relevance and efficiency of the longest-running and one of the OCHA's largest public-private partnerships to provide

emergency telecommunications capabilities to humanitarian relief operations.

2008-2009 **Senior Education Specialist, QED Group, Iraq**

- Co-led four-person team assessing the education sector in Iraq, emphasizing basic (primary to secondary and pre-service) education.
- Assessment was designed to inform USAID's new strategy to assist the Government of Iraq after the US political transition.
- Assessment reviewed donor investments in the sector to date, identified strategic gaps, and indicated areas for additional intervention.

2008-2008 **Technical Consultant, Scientia Global Inc., Washington, D.C., USA**

- Provided technical assistance on an assessment of all U.S. civilian capacity development programs across sectors and outstanding needs among Iraqi ministries to inform development of US Embassy's strategic plan for ministerial capacity building.

2008 - 2008 **Team Leader, AMEX International, USA and Tanzania**

- Led an evaluation focused on effectiveness and efficiency, relevance, sustainability, and governance and management structure of a World Bank-launched organization working on information and communication technology for development.
- Examined Web-based tools to make aid and development efforts more effective using open-source software, common systems and open standards.
- Developed a strategic review focusing on improving mission and strategic direction, strategic coherence, NGO business models, competitive environment, strategic planning processes, and revisions to the M&E framework.
- Data collection included surveys and site visits to program implementations in Tanzania.

2007 - 2008 **Survey and Statistical Consultant, Internews Network, USA**

- HIV/AIDS Radio Programming Intervention in Africa and Asia:
- Provided technical advice to Internews Network regarding research design, sampling, indicators, measurement, and implementation to develop an M&E system for organization's first measurement of outcomes of radio programming training programs in PEPFAR countries in East Africa and Asia.

2007 - 2008 **Monitoring and Evaluation Expert, IBTCI, Iraq**

- USAID/Iraq Capacity Building Office: Program Assessment and Design.
- Served as M&E expert in three-person team assessing two public administration capacity development programs worth over $750 million to designing a new program to improve delivery of essential services at the provincial level.

- Met donors and governmental counterparts across Iraq from the governorate to ministerial levels to assess capacity development needs of ministries' representatives in the provinces
- Coordinated and conducted most team's interviews in the governorates
- Designed project's central mechanisms to maximize flexibility and variation in technical assistance desired by counterparts.

2007 - 2008 **Survey and Statistical Consultant, Campaign for Female Education International, USA, England, East Africa**

- M&E System and Survey in Rural Africa.
- Designed sampling approach and advised on research design and questionnaire for organization's first baseline surveys to both improve girls' primary to secondary education and to increase young women's empowerment in rural Tanzania, Zimbabwe, Zambia, and Uganda.

2007 - 2008 **Evaluation Team Leader, Global Development Network, Multiple Countries**

- Led an evaluation of the effectiveness, impact, relevance, cost-effectiveness, sustainability, and governance and management structure of this World Bank-launched research capacity building international organization spanning all developing regions.

2007 - 2007 **Evaluation Team Leader, PADECO, Ltd., Georgia**

- *Evaluation of World Bank-funded Georgia Education System Realignment and Strengthening Program.*
- Designed and led an evaluation examining outcomes and impact for a $24 million four-year primary to secondary reform program including Bank-funded and independent Ministry-sponsored reforms.
- Evaluation was designed to assess at system and school levels quality of teaching and learning; school physical and social environments; school decentralization and consolidation; and school management and finance.
- Managed technical proposal, negotiations over scope with client, research design, staffing a team of eight, implementation, and analysis.
- Developed almost 200 indicators and designed and pilot tested instruments with stakeholder input for implementation.

2006 - 2007 **Consultant, World Bank Institute Evaluation Group, USA**

- Evaluated cross-national pilot projects of information disclosure practices in developing country strategies and for projects under implementation as input into new policy proposals before board.
- Reviewed data collection procedures and analysis for a survey from a World Bank training course and drafted recommendations for improved analysis and reporting on results.

2006 - 2007 **Evaluation and M&E Consultant, Fundación para el Desarrollo Integral de Programas Socioeconómicos, Guatemala**

- Monitoring and Evaluation (M&E) System Capacity Building. Increased capacity in evaluation and M&E systems involving the PEVI/SALUD

(education and health sectors) division, training staff in evaluation and developing program impact surveys for four new projects across three districts.

2005 - 2006 **Senior Research Scientist, American Institutes for Research, USA and Macedonia**

- Designed and supervised ongoing evaluation at the strategic objective level of USAID-sponsored secondary education projects in Macedonia.
- Implemented culturally appropriate surveys for students and teachers and an assessment of critical thinking skills.
- Managed the Secondary Education Activity (SEA) Project, a $10 million USAID-sponsored vocational educational and decentralization reform project in Macedonia including teacher training, career skills development, and director training components.
- Oversaw addition of a novel mentoring activity to support training component and a new school board development and training component, creating a new association to increase program sustainability.
- Supervised and provided technical assistance on monitoring for all project components.

LANGUAGES

English (5S, 5R), Spanish (3S, 4R), French (2S, 2R)

CITIZENSHIP

United States

PRAKASH NAIR, AIA

Founding President & CEO
Education Design International

EXPERIENCE HIGHLIGHTS

An award-winning, world-renowned architect and futurist who has led the design of hundreds of innovative schools. Most published education architect worldwide. Author of three books on school design, two in collaboration with Harvard University.

"Over four decades of work in education, I have rarely encountered a thought leader with more wisdom and expertise than Prakash Nair. I have cherished the opportunity to interact with Prakash. He is the rare combination of visionary and practitioner."

-GARY STAGER, FOUNDER & CEO
Constructing Modern Knowledge

Prakash helped build Education Design International into one of the world's leading change agents in school design. He has led consultations in 52 countries on six continents.

He has over 30 years of experience in construction/rehabilitation of public and private schools. Over the past 15 years, hundreds of schools worldwide have used the quantitative and qualitative assessment instruments designed by Prakash as part of their infrastructure planning & design efforts.

RELEVANT EXPERIENCE

ASSESSMENTS

As **Director of Operations** for New York City's $10 Billion School Construction Program (1989 – 1999), Prakash was responsible for the execution of its *Building Condition Assessment System* that utilized quantitative and qualitative tools to assess over 1,400 school buildings

As **Founding President & CEO** of Fielding Nair International (2003, 2019), Prakash led the following Infrastructure Assessments:

Washington DC Public Schools – Over 200 schools
Puerto Rico Public Schools Over 100 schools
Cayman Islands Public Schools 15 Schools
New Zealand Ministry of Education 15 schools

Assessment Tools:

Prakash Designed The Educational Facilities Effectiveness Instrument that was used to assess the educational efficacy of more than $1 billion worth of schools internationally. Over the past two years, he has designed two other sophisticated assessment tools that are available both as desktop systems as well as APPS on the Apple iOS and Android Platforms.

OTHER

Abu Dhabi Education Council: Prakash was responsible for the development of their Education Facilities Design Manual applicable to over 300 government schools

Boulder Valley School District: Prakash Nair led an Innovation Consulting Contract in order to maximize the educational benefits of a $575 million school construction program including dozens of infrastructure improvements projects and several new schools.

Puerto Rico Public Private Partnership Authority: Prakash Nair was the consultant team leader responsible for the execution of their $800 million School Infrastructure Rebuilding Program that resulted in capital improvements to 127 schools across the commonwealth.

Government & Private Schools Worldwide: Over the past 20 + years, Prakash Nair has worked on the design of hundreds of innovative public and private construction and rehabilitation projects for schools. Clients include local, state and national governments as well as prestigious private institutions.

PUBLICATIONS (Sample Only)

BOOKS (hard copies available on Amazon.com)

Learning by Design (Co-authored with Harvard Professor Richard Elmore, Preface by Heidi Hayes Jacobs)
https://www.dropbox.com/s/t2h7gr6m60oinbz/Learning%20by%20Design%202020%20E-Book.pdf?dl=0

Blueprint for Tomorrow -- Harvard Education Press (I don't have a free electronic copy of this book but you can get a Kindle version here):
https://www.amazon.com/Blueprint-Tomorrow-Redesigning-Student-Centered-Learning-ebook-dp-B07MTLQNKW/dp/B07MTLQNKW/ref=mt_other?_encoding=UTF8&me=&qid=

Language of School Design
https://www.dropbox.com/s/9zk5luwkupkiwv4/LOSD%20For%20Amazon%20Print.pdf?dl=0

RECENT ARTICLES

Open Letter to President Joe Biden, Education Secretary Miguel Cardona and Dr. Jill Biden
https://educationdesign.com/wp-content/uploads/2021/02/Rebuild-Schools-To-Reinvent-Education-Letter-to-President-Biden-from-Prakash-Nair.pdf

School Buildings -- The Last Domino -- Harvard Education Publishing
https://www.hepg.org/blog/school-buildings-%E2%80%93-the-last-domino-it%E2%80%99s-time-for-l

Transforming School Design in a Post-COVID World
https://educationdesign.com/wp-content/uploads/2020/03/Newsletter.pdf

From Cells and Bells to Learning Communities -- Harvard Education Letter
https://educationdesign.com/wp-content/uploads/2020/03/From-Cells-and-Bells-to-Learning-Communities.pdf

Outdoor Learning -- Leave the Classroom Behind -- Association for Learning Environments
https://media.a4le.org/COVID/Outdoor%20Learning.pdf

TALKS

Dozens of Keynote and Plenary presentations at national and international conferences. Including Plenary talk at EduTech Australia (2017, 2018 and 2019), where Prakash presented to a live audience of over 7,000 attendees.

TEDx Presentation about School Design
https://www.youtube.com/watch?v=6rA92x_YJ9A&t=84s

EDUCATION

Master of Architecture: University of Illinois, Urbana-Champaign
Master of Urban Planning: City University of New York
Bachelor of Architecture: JNT University, Hyderabad India

REGISTRATIONS & AFFILIATIONS

Registered Architect, State of New York, USA
Member, American Institute of Architects
Member, Association for Learning Environments

Muna Mohammad AL-Ghoul

Tel. 0096279 580 5719
Email: Muna_gl@hotmail.com
Address: Amman-Jordan

KEY QUALIFICATIONS:

An experienced Jordanian development professional with nearly 30 years of experience in the Jordanian education sector. After developing expertise in education management as HR manager and Kindergarten Principal for Rawdat Al Ma'aref Schools & College in Amman, I transitioned into managing education programming in the development sector in 2007. My experience in the sector has included six national-level projects spanning early childhood education, TOT for capacity building, and child protection including USAID-funded ESRP and ECE programming for Save the Children and multimedia in ECE programming for INTEGRATED's project with UNICEF, as well as managing Plan International's Jordan programs. Delivered training in education on many occasions, including facilitating a high-intensity, week-long Emergency Foundation Course training course delivered to Save the Children staff as part of the Humanitarian Operations Program (HOP) accredited by Oxford Brookes University, and the two-week long Advanced Field Training in Emergency Response delivered to Save the Children staff in Wales, The UK. I hold a high diploma in School Management from the University of Jordan and a Bachelor of Arts from Yarmouk University in English Literature.

PROFESSIONAL EXPERIENCE:

EMPLOYMENT HISTORY		
From-To	**Position/ Organization**	**Description**
July 2020- November 2020	National Consultant/ **Education Development Center, Inc. ("EDC")- Washington**	**EDC Consultant- National Consultant for the Supply Chain Analysis (SCA) under the USAID Global Book Alliance in Action Project (GBAIA) – Jordan** **Responsible for:** • Providing expertise to the planning, implementation, and analysis of the book supply chain in Jordan; • Conducting interviews with key stakeholders (Ministry of Education (MoE); NGOs, and Private sector); • Providing assistance to the Technical Director for the Supply Chain Analysis to refine the data collection methodology within the Jordan context; • Contributing to the final report including writing sections as agreed with GBAIA
April 2018 – April 2020	Program Manager/ Educational Advisor **Integrated Services, Indigenous Solutions (INTEGRATED)** Amman, Jordan	**UNESCO – Research on Promising Policies for Teacher Management in Refugee Contexts in Jordan** • Responsible for overall management of the contract, including recruitment of the research team, arranging logistics for field operations, and management of field operations; • Participated in the filed work through the facilitation of Key Informant Interviews and Focus Group Discussion;

		• Supported the writing of the findings report and finalizing it as per comments from the UNESCO Team. **Plan International – Baseline Study for the Worst Forms of Child Labour in Jordan and Lebanon** • Responsible for the overall management of the assignment and assigning tasks to team members; • Supported the writing of the findings report and finalizing it as per comments from the Plan International Team. **USAID Jordan – Data and Evidence in Educational Programs (DEEP) Project** • Supported conducting DEEP's needs assessment at the Ministry of Education, including assessing capacities, and needs against the Educational Strategic Plan. **The Jordanian National Commission for Women (JNCW) - The National Strategy for Women in Jordan 2020-2025** • Participated in conducting the participatory sessions in the governorates, in an effort to collect data to inform the strategic priorities of The Government of Jordan and JNCW for the upcoming strategy; • Supported writing the Field Findings Report to aggregate the data from the field. **UNICEF – Development of Multimedia Education Materials and Teaching Aids Project;** *The project aimed to develop a comprehensive set of multi-media educational materials and teaching aids to support children's learning in 100 Double Shifting Public Schools, in the North, South and Centre of Jordan, and other educational settings served by UNICEF.* **Responsible for:** • Managing the UNICEF project, including managing relations with UNICEF, the consortium partners, and the Ministry of Education and other stakeholders; • Ensuring the roll-out of the project goes according to schedule and plan; • Designing the work plan, heavily involved in developing the project management documents, reporting to the donor, working with the project team, and facilitating smooth operations; • Managing activities, resources, and team members' performance to meet objectives; • Participating in the needs assessment by conducting qualitative data collection; producing KIIs and focus group discussion notes, and ensuring that KIIs/focus group discussion notes are produced in a timely and consistent manner;

		• Supporting logistics in the field, and conduct regular visits to the Double Shifting Schools and Makani centres as needed for proper project implementation; • Leading and managing the MoE steering committee, which was responsible for reviewing and approving the multi-media content, and the project consortium for the UNICEF project; • Supporting training 400 teachers in the targeted schools on the delivery of the multimedia content and implementation in the classroom; • Leading the follow-up team and conducting field visits to provide support to teachers implementing the project at the targeted schools.
May 2017 – April 2018	Programs Manager **PLAN International** Amman, Jordan	• Closely monitor existing partners with regular field visits and follow up; • Attend relevant programme coordination and interagency meetings; • Manage existing budgets and funding pipelines, & follow up on other related funding matters for the National Offices (Nos); • Lead on programme implementation ensuring compliance with donor requirements and Plan Inc. procedures and policies; • Lead proposal development process in coordination with NOs and Head of Mission; Maintain relationships with key Government Ministries. • Ensure accountability and feedback mechanisms are a core aspect of the programme cycle; • Work with local partners to support capacity development and programme quality; • Manage the sectors senior coordinators (Education and child protection).
August 2009 – May 2017	**Save the Children International** Amman, Jordan	• October 2015 – May 2017: Project Manager, Humanitarian Talent Development Trainee Scheme Project; • July 2015 – Oct 2015: Acting area manager for south & center region; • Sep 2014 – June 2015: Field Officer, Jordan Education Protection Needs of Syrian Refugee Children Project; • Dec 2013 – Aug 2014: Project Manager, Humanitarian Response / Canada Project; • Dec 2012 – Dec 2013: Component Officer, Early Childhood Education ERSP Project, USAID funded project; • Aug 2009 – Dec 2012: Parental Involvement Specialist, Early Childhood Education, USAID funded project; • Oct 2008 – Jan 2009: Educational Consultant and Trainer; • Aug 2006 – Nov 2008: Assistant Program Coordinator Parent Involvement Program in MOE kindergartens, USAID funded project.
1989 - 2007	**Rawdat Al Ma'aref Schools & College**	• 1998 – 2007: Kindergarten Principal • 1997-1998: Public Relations Manager

	Amman, Jordan	• 1989-1997: Human Resource Manager

OTHER QUALIFICATIONS:

FORMAL EDUCATION		
Date	**Degree**	**Educational Institute**
2006	**High Diploma** **School Management**	Jordan University
1989	**B.A. in English Literature**	Yarmouk University

AWARDS, MEMBERSHIPS, PROFESSIONAL ACTIVITIES AND LANGUAGES	
Trainings	The Conflict Between Corona Virus and The Immune System Edrak, April 2020 Principals of Scientific Research Edrak, April 2020 Plan International Budget Recovery Workshop- Nairobi Jan10th- 12th, 2018 Plan International SAP Orientation Workshop- Egypt Jan 28th- 31st, 2018 Plan International Programs Development Quality Workshop- Egypt June 18th- 22nd, 2017 Safety & Security Online Training Save the Children International (SCI- JCO) May 2015 Institutional Governance, Project Cycle Management SCI- JCO 9-12 March 2015 Literacy Boost Community Action Training of Trainers Workshop SCI- JCO 8-12 Feb. 2015 Managing for High Performance SCI- JCO, 1-4 December 2014 Conflict Sensitive Programming & Peace Building Training SCI- JCO, 11- 13 November 2015 Psychological First Aid for children & Caregivers Training SCI JCO, August 2014 Stress Management for staff Training SCI JCO, August 2014 Child Safeguarding TOT SCI JCO, June 2014

	Budget Holder Training SCI JCO, September 2013 Policy Advocacy Workshop Save the Children, 2012 Presentation Skills Workshop Whiz Kids, 2007 Training of the Trainer Workshop Whiz Kids, 2007 Together Towards Sustainable Educational Leadership: Fourth Leadership Conference Private School Council, 2006 Better Parenting Ministry of Education, 2006 Safe Environment for a Quality School: Third Leadership Conference Private School Council, 2005 International Computer Driving License (ICDL) IT University Center, 2005 Different Teaching Styles & Assessment of Student Learning Amman Baccalaureate School, 2004 Drama for KG Children Amman Baccalaureate School, 2004 Learning Disabilities and Dyslexia RAMS Amman, 2000
Languages	▪ Arabic – Native ▪ English – Fluent
Other relevant skills:	▪ Critical thinking and analytical skills ▪ High attention to details ▪ Ability to work under pressure ▪ Time management, and ability to meet deadlines ▪ Excellent communication and socializing skills

5.28. Appendix 35: Statements of Difference

MEMORANDUM

TO: **XXXXX**

FROM: **XXXXXX**

DATE: **XXXXX**

SUBJECT: **Statements of Difference for School Infrastructure Multi-Activity Evaluation Conducted by the USAID Monitoring, Evaluation, And Learning (MELA) Activity**

A. BACKGROUND

USAID developed a scope of work for a task order under the MELA contract to study different aspects of the Education and Youth Team's construction portfolio. The evaluation considered schools constructed under the Jordan School Construction and Rehabilitation Project (JSP) and Schools for a Knowledge Economy Project (SKEP), as well as schools that were expanded under the Jordan School Expansion Program (JSEP). The evaluation questions (EQ) were as follows:

- EQ 1 – What are the positive and negative aspects of the physical school environment (inside and outside spaces) that should be taken into consideration for future school construction?
    - EQ 1A – How long did it take to complete the construction work? In what ways did this deviate from the planned timeline?
    - EQ 1B – Is there evidence that SKEP school start-up teacher and principal training under the modified start-up program has resulted in use by teachers of methods and approaches that build on what the newer schools are designed to facilitate?
- EQ 2 – In what ways, if any, has the student body changed in USAID built and neighboring public schools?
- EQ 3 – Do learning outcomes (academic and non-academic) of students in newly built schools and school expansions differ from their peers in neighboring schools?

While USAID is now satisfied with the majority of the draft report, there was a need for several rounds of edits and clarifications due to inaccurate or unclear language. The draft report nevertheless still includes some statements USAID considers to be inconsistent, misleading, or not relevant for public distribution. In particular, the specialist architect contracted to oversee the data collection and analysis for EQ 1 did not travel to Jordan due to Covid-19 concerns, and therefore did not personally observe any of the schools. In light of this, USAID has removed some of the unusually strong language that appeared in the draft report and that also does not align with the findings from the evaluation tools used.

In addition, misunderstandings between USAID and MELA on the methodology the evaluation team was using for data collection and analysis for EQ 2 resulted in a narrative that only partially addressed USAID's question. USAID has therefore removed text that is not relevant to answering the question and would create confusion for an external reader.

B. PURPOSE

The purpose of this memo is to document the sections of the draft report that have been removed by USAID from the final public version because they are either:

a) unclear and would create confusion,
b) inconsistent with MELA's other findings within the report, or
c) are based on inaccurate data.

C. USAID EDITS FOR THE FINAL REPORT

The following table outlines the text or sections within the draft report that USAID has edited or removed from the final public report.

Page	Original Text from Draft Report	USAID's Rationale for Removal
p.2	"There was an absence of specialty learning spaces in many schools, including indoor gymnasiums, meeting spaces, and multi-use/hands-on learning rooms"	This note in the executive summary creates an impression that school designs as a whole did not include such spaces, but fails to clarify that JSEP school expansions were designed to add extra classrooms rather than other types of spaces to an existing school, and also that new schools were designed to have either an indoor gymnasium or a multi-purpose hall. This is then repeated again on page 8 under program deficiencies.
p. 2	"Site designs generally did not consider the possibility of future expansion."	This statement in the executive summary is misleading. USAID built and expanded schools to the maximum capacity of the available land, therefore school designs were not required to take into account additional expansion.
p. 2	"Wireless Internet was not available across and within all schools."	This statement remains in the executive summary and is misleading, because it is explained further in the main text that MoE policy currently allows only a wired network within schools and therefore there is no wireless network.

p. 2/3	"Most classrooms outside of early grades are designed predominantly with an orientation towards a teacher-centered, top-down "delivery of content" rather than active learning or team teaching. Enumerators observed that only 62% of JSP schools were organized to facilitate more than just lectures, as compared to 89% of SKEP schools. Additionally, JSP lacked learning community spaces or classroom groupings at 74% of their schools, and only 64% of JSP schools had informal group tutoring and table groupings available adjacent resource areas."	This statement fails to consider that classroom furniture and layouts can accommodate different configurations, and that resource areas within the clusters provide opportunities for students to work on projects outside of the classroom. The comments that were provided in the sidelines but not in the main text of the report were more understandable, for example that the large number of students per classroom limited the possibility of an ideal number of configurations of furniture within the classrooms. The current narrative is misleading because it implies that the school building is itself inadequate because of the direction that the furniture was positioned.
p.3	"Evaluation Question 2: Student Body Changes in USAID-built and Neighboring Schools The construction of the USAID-funded schools seems to have led to decreases in crowding among neighboring schools, with indicators between USAID-funded and neighboring schools varying only modestly over time between the two sets of schools.	The second part of this statement is unclear and is replaced with "in the first two years after construction was completed". USAID schools were built in order to reduce overcrowding in neighbouring schools by drawing students away from existing schools and therefore it was already expected that there would be a balancing out class sizes across USAID and neighbouring schools over time. The examination situation at the schools at a later time is not relevant for the purposes of answering the evaluation question. Rather, the evaluation collected data from principal interviews to compare the situation at the neighbouring schools in the year before and immediately after USAID construction provides the more relevant data about whether students from neighbouring schools were transferred to the new schools to relieve some overcrowding, per the intention of the activity.
p.3	"The difference between USAID-funded and neighboring schools in terms of numbers of students per room (counting each shift separately) declined to parity by 2018/19."	As above, this is a confusing way of presenting the information. The aim of the new construction was to reduce overcrowding in existing schools and therefore to have a more evenly spread out student population - ie. parity. This is presented in a way that indicates that this is unexpected or a negative outcome.
p. 3	According to EMIS data, a few USAID-	This statement is inaccurate, as none of the

	funded schools had rented additional buildings, though fewer rented buildings than neighboring schools[1].	USAID schools, whether JSP, JSEP, or SKEP were rented facilities. Even with the footnote, this statement gives the impression that it is possible that USAID did in fact implement construction activities in rented schools and would therefore potentially confuse an external reader.
P. 4	"Either double shifts or rented buildings suggests lower quality of learning spaces than many students experience now with details on impact across basic and secondary education depending on the strategy that would have been employed by the government. "	This is very confusingly worded and therefore is removed. The concept is explained again later in the report and that is sufficient.
P. 8	JSEP schools rated poorly on gymnasiums with enumerators reporting that few of even the new schools having a modern, indoor, gym with bleachers, and 12 of the JSP schools and one of the SKEP schools had no gym. Enumerators rated f. Few schools outside of some SKEP schools had areas available for large group meetings of over 100, with most approximately 75% of JSP new schools having dedicated or make-shift space for between 50 and 100.	These statements are misleading and incorrect. USAID expanded JSEP schools by adding classrooms, and the lack of a gymnasium was not a part of the scope or purpose. Including such a statement can create a false impression for an external reader. With respect to meeting areas for 100 persons, every new school has a multipurpose hall or gym that is designed to accommodate 100+ people. It is not evident that the enumerators or the contracted architect measured the space or reviewed the design drawings and so these statements are removed.
P. 10	the classrooms were furnished with tablet armchairs, a desk that could accommodate one to two students, or longer bench-type desks for three to four students. Plastic and metal chairs are durable but not ergonomic and not suitable for students to sit in for long periods of time. Soft or other comfortable seating like lounge chairs, sofas and foam seating were extremely rare.	This statement has been modified to reflect the fact that USAID did not provide JSEP schools with new furnishing for the entire school and so tablet armchairs and benches for 2-3 students were in the existing part of the school.
p. 12	Traditional or even partially modernized school buildings fell short when evaluated against the goals of 21st century learning.	This statement is extreme, and does not align with the data presented, in particular considering that the SKEP (and to some extent the JSP) schools scored so highly on the tool that was used in

[1] Although USAID indicates that there are no rented buildings among USAID-funded schools, it was not within the scope of the evaluation team to independently verify all data from EMIS.

	This observation applied to a greater or lesser degree to the design of all buildings (JSEP, JSP and SKEP) and not to the way they were being utilized. These findings were not surprising because older school buildings were not designed to facilitate modern methods of teaching and learning. In fact, an older school building prevents the delivery of a true 21st century education in line with ERfKE goals. If school buildings are the "hardware" within which the "software" of education runs, like any piece of hardware, every school building also has limitations on what kinds of software it can run. On the face of it, most would argue that school buildings should not dictate how we educate our children – that "construction should not drive instruction." However, it is true with the USAID schools in Jordan as it is with most schools worldwide that construction, in fact, drives, or at least defines the limits of, instruction. Given the information collected from the field observations, and with the exception of the early grade SKEP schools, all of the 104 schools surveyed could be considered "cells-and-bells" schools – that is, buildings in which students occupied and moved between relatively identical cells when the bell went off.[2] This made them educationally obsolete on the day they opened relative to the Kingdom's goals and posed a problem, because each school that was constructed like this extended a	accordance with the 75% benchmark that the contracted architect indicated would be adequate and achievable. While there are a number of recommended adjustments that could be made to the designs that would make them score better, it does not logically follow that their absence indicates that the entire physical school structure is obsolete. In particular, it is not clear that teaching practices being less collaborative, despite the inclusion of clusters with multipurpose spaces, is an inherent problem in the structure that makes the school building "obsolete". The reliance of the lead architect on photographs of parts of the schools rather than on-site visits is also problematic, as it appears that he was often referring to the existing older portions of schools that were expanded under JSEP and that were not the subject of the evaluation.

[2] The SKEP schools were designed around clusters of 3 to 8 classrooms, and the design standards suggested designs that might facilitate open design and co-teaching. Three-quarters of the enumerators indicated the SKEP school classrooms "appeared to be organized in groupings of 4-6 or in learning communities to promote collaboration", which was well above the 26% for JSP and 7% for JSEP, but still not universal. However, the photographs and enumerators ratings indicated that the contractors' ultimate designs were a bit conservative, for instance constructing few examples of openable partitions. There were examples of resource areas for dealing with special needs within clusters with theoretical capacity to use multiple classrooms in limited cases, although doing so appeared to be out of the comfort zone of some principals and teachers.

	defunct model of education for at least 30 years or more.[3]	
p. 13	EQ 2: Student Body Changes in USAID-built and Neighboring Schools	The data from this section is largely removed. It is not relevant because the methodology was not in line with what USAID thought had been agreed and that would be the most useful. Instead of considering the situation of neighbouring school overcrowding in the year before and after school construction, the methodology instead considered three points in time that did not analyze data showing student numbers immediately before and after new schools were operational. Some relevant before and after data was collected through interviews with principals, and this is retained in the document.
p. 25	"94% of ramps at USAID-funded schools were properly-designed,"	The evaluation team never confirmed the accuracy of this statement and the reason for the discrepancy. USAID assumes that this must have been a JSEP school with an existing ramp, because all newly built USAID schools are compliant per the relevant code and are inspected during multiple stages of the construction to ensure this. USAID has included a footnote to clarify this potential discrepancy.
p. 31	"One way to do so is for USAID to require designs that move away more completely from the obsolete "cells and bells" design invented during the first industrial revolution, beyond even the still somewhat-outdated SKEP school designs, towards a student-centered model with fewer traditional classrooms and more spaces for active learning."	Again, the statement that SKEP school designs are outdated and comparing them to cells and bells is not supported by the evidence presented in the relatively high scores that the schools were given under the evaluator's own tool. This statement would be acceptable if it was reworded to say "some elements of the SKEP school designs that were somewhat outdated" since a few of those were highlighted (eg. teacher resource areas).
P. 52	Appendix 8: Methods - Schools not Surveyed during the School Observations and Coding	This section outlines the names of schools/principals who refused to be interviewed as a part of the study and is not therefore required or relevant for external audiences.

[3] Blueprint for Tomorrow – Redesigning Schools for Student Centered Learning by Prakash Nair. Harvard Education Press 2014.

P 68	Appendix 11: Evaluation Question 1A – Completion of Construction Work and Timeline Deviations	
P. 91	Image of JSEP desks not supplied by USAID, as well as an image of a school classroom set up in a forward facing orientation and described as obsolete	The photos and captions are misleading. USAID did not supply the older bench style desks, those photographs were from the older, existing parts of JSEP schools that were expanded. In addition, the image of a newer school with desks facing the front, with the caption that they are indicative of "obsolete" teaching methodologies is extreme. The desks were set up for Tawjihi exams that took place when the evaluators visited the schools, and in addition they are not fixed to the ground and schools often move furniture around depending on the lessons, as is often observed by USAID during site visits.
P. 119	Appendix 26: MoE Supervisor Classroom Observation Tool in Arabic	
P. 150	Appendix 27 ESMP Data	The data from ESMP is laid out in a way that is not useful. The percentages for USAID and neighbouring schools are given as a percentage of the total rather than what percentage within each type of schools showed that there were problems with vandalism, etc.
P. 154-168	Appendix 28: LQAS Statistical Test Tables Appendix 29: PISA Statistical Test Tables Appendix 30: NAfKE Statistical Test Tables Appendix 31: Educational Quality Control Statistical Test Tables Appendix 32: TIMSS Statistical Test Tables	

THE KAIZEN COMPANY

FROM: The Monitoring, Evaluation, and Learning Activity
TO: USAID/Jordan Office of Education and Youth
DATE: March 29, 2022
SUBJECT: Response to Statement of Difference Issued by USAID for School Infrastructure Multi-Activity Evaluation

The Monitoring, Evaluation, and Learning Activity (the Activity) acknowledges the points raised in the statement of difference issued by USAID.

With reference to USAID's comment around the need for several rounds of edits and clarification, the Activity would like to note that evaluation team submitted the first draft of the evaluation report on September 16, 2021, with two rounds of edits provided on October 21 and November 25, 2021. This was not considered to be outside the norm for report review and response by USAID on evaluations. The evaluation team has undertaken USAID's feedback from the statement of difference and has submitted the final version of the report in conjunction with this letter.

As mentioned, the subject matter expert (SME) for this assignment did not travel to Jordan due to COVID-19 concerns and did not personally observe the school structures. That said, the SME designed the data collection tools for direct observation by enumerators that was reviewed and approved by USAID. Additionally, the SME reviewed photos taken by the enumerators to provide additional insights to the key findings in the final report. That said, the evaluation team softened the language based on USAID's recommendation (as outlined in Section A).

With reference to differences in understanding under evaluation question (EQ) 2, the Activity would like to note that no formal documentation of changes in approach for said evaluation question could be provided by the Mission. As such, the evaluation team followed the methodology as outlined and approved under the inception report. As a lesson identified under this assignment, the Activity has agreed with USAID to use inception reports to document any proposed modifications by either USAID or the assignment teams. Additionally, the Activity will seek USAID's written approval via email for changes documented in the inception report to be considered final.

A. USAID EDITS FOR THE FINAL REPORT AND ACTIVITY RESPONSE

To respond to USAID's edits for the final report, the team has built upon the initial table shared below and have included additional changes made to the report to ensure its finalization for public viewing. Please note that the evaluation team updated the page numbers to reflect the final version of the report to be shared with USAID.

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
p. viii	"There was an absence of specialty learning spaces in many schools, including indoor gymnasiums, meeting	This note in the executive summary creates an impression that school designs as a whole	The evaluation team agrees with the proposed deletion of the first sentence. In

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	spaces, and multi-use/hands-on learning rooms"	did not include such spaces, but fails to clarify that JSEP school expansions were designed to add extra classrooms rather than other types of spaces to an existing school, and also that new schools were designed to have either an indoor gymnasium or a multi-purpose hall. This is then repeated again on page 8 under program deficiencies.	order to ensure clarity of the following sentence, the evaluation team revised "these spaces" to state "specialty learning spaces" so as to allow the reader to understand the context of the statement.
p. viii	"Site designs generally did not consider the possibility of future expansion."	This statement in the executive summary is misleading. USAID built and expanded schools to the maximum capacity of the available land, therefore school designs were not required to take into account additional expansion.	While the evaluation team felt that this was a criterion to be evaluated through the approved data collection tools, they agree to remove this sentence.
p. viii	"Wireless Internet was not available across and within all schools."	This statement remains in the executive summary and is misleading, because it is explained further in the main text that MoE policy currently allows only a wired network within schools and therefore there is no wireless network.	The evaluation team agrees with the point made by USAID and therefore agrees to removing this language from the executive summary, where it is not nuanced.
p. viii/ix	"Most classrooms outside of early grades are designed predominantly with an orientation towards a teacher-centered, top-down "delivery of content" rather than active learning or team teaching. Enumerators observed that only 62% of JSP schools were organized to facilitate more than just lectures, as compared to 89% of SKEP schools. Additionally, JSP lacked learning community spaces or classroom groupings at 74% of their schools, and only 64% of JSP schools had informal group tutoring and table groupings available adjacent resource areas."	This statement fails to consider that classroom furniture and layouts can accommodate different configurations, and that resource areas within the clusters provide opportunities for students to work on projects outside of the classroom. The comments that were provided in the sidelines but not in the main text of the report were more understandable, for example that the large number of students per classroom limited the possibility of an ideal number of configurations of furniture within the classrooms. The current narrative is misleading because it implies that the school building is itself inadequate because of the direction that the furniture	The evaluation team deleted the first sentence of this findings at the request of USAID, given the strong opposition.

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
		was positioned.	
p.3	"Evaluation Question 2: Student Body Changes in USAID-built and Neighboring Schools The construction of the USAID-funded schools seems to have led to decreases in crowding among neighboring schools, with indicators between USAID-funded and neighboring schools varying only modestly over time between the two sets of schools.	The second part of this statement is unclear and is replaced with "in the first two years after construction was completed". USAID schools were built in order to reduce overcrowding in neighbouring schools by drawing students away from existing schools and therefore it was already expected that there would be a balancing out class sizes across USAID and neighbouring schools over time. The examination situation at the schools at a later time is not relevant for the purposes of answering the evaluation question. Rather, the evaluation collected data from principal interviews to compare the situation at the neighbouring schools in the year before and immediately after USAID construction provides the more relevant data about whether students from neighbouring schools were transferred to the new schools to relieve some overcrowding, per the intention of the activity.	The evaluation team accepted the proposed edits and deletions by USAID.
p.x	"The difference between USAID-funded and neighboring schools in terms of numbers of students per room (counting each shift separately) declined to parity by 2018/19."	As above, this is a confusing way of presenting the information. The aim of the new construction was to reduce overcrowding in existing schools and therefore to have a more evenly spread out student population - ie. parity. This is presented in a way that indicates that this is unexpected or a negative outcome.	The evaluation team has accepted USAID's deletion of this sentence for the final published report, however the evaluation team disagreed with USAID's assertion that the sentence objectively portrays a negative outcome.
p. ix	According to EMIS data, a few USAID-funded schools had rented additional buildings, though fewer rented buildings than neighboring	This statement is inaccurate, as none of the USAID schools, whether JSP, JSEP, or SKEP were rented facilities. Even with the footnote, this statement gives the impression that it is possible that USAID did in fact	Given USAID's strong feelings toward this representation of the data, the evaluation team accepted the proposed deletion of the sentence and its footnote. However,

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	schools[1].	implement construction activities in rented schools and would therefore potentially confuse an external reader.	the evaluation team would like to reiterate that the statement accurately reflects data as presented by EMIS, and the footnote states the potential for discrepancy, as verification of EMIS data was not within the scope of the evaluation.
P. x	"Either double shifts or rented buildings suggests lower quality of learning spaces than many students experience now with details on impact across basic and secondary education depending on the strategy that would have been employed by the government. "	This is very confusingly worded and therefore is removed. The concept is explained again later in the report and that is sufficient.	The evaluation team accepted USAID's proposed deletions from the executive summary.
P. 6	Interpretation of ratings		The evaluation team felt that USAID's changes to the interpretation of ratings only met part of the agreed upon rating as documented in the inception report and reflected throughout the rest of the evaluation report. The evaluation team has further expanded the scoring to show areas of improvement, desirable and achievable goals for the country, and stretch goals development programming could aim for. Please see the updated revisions made to the report.
P. 8	JSEP schools rated poorly on gymnasiums with enumerators reporting that few of even the new schools having a modern, indoor, gym with bleachers, and 12 of the JSP schools and one of the SKEP schools had no gym. Enumerators rated f. Few schools outside of some SKEP schools had areas available for large group meetings of over 100, with	These statements are misleading and incorrect. USAID expanded JSEP schools by adding classrooms, and the lack of a gymnasium was not a part of the scope or purpose. Including such a statement can create a false impression for an external reader. With respect to meeting areas for 100 persons, every	The evaluation team has agreed to the deletion of the proposed language. However, it should be noted that given the time, scope, and methodology agreed to with USAID, this evaluation was not designed to include the direct measurement of such

[1] Although USAID indicates that there are no rented buildings among USAID-funded schools, it was not within the scope of the evaluation team to independently verify all data from EMIS.

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	most approximately 75% of JSP new schools having dedicated or make-shift space for between 50 and 100.	new school has a multipurpose hall or gym that is designed to accommodate 100+ people. It is not evident that the enumerators or the contracted architect measured the space or reviewed the design drawings and so these statements are removed.	spaces.
P. 11	the classrooms were furnished with tablet armchairs, a desk that could accommodate one to two students, or longer bench-type desks for three to four students. Plastic and metal chairs are durable but not ergonomic and not suitable for students to sit in for long periods of time. Soft or other comfortable seating like lounge chairs, sofas and foam seating were extremely rare.	This statement has been modified to reflect the fact that USAID did not provide JSEP schools with new furnishing for the entire school and so tablet armchairs and benches for 2-3 students were in the existing part of the school.	The evaluation team accpeted the proposed edits by USAID.
p. 12-13	Traditional or even partially modernized school buildings fell short when evaluated against the goals of 21st century learning. This observation applied to a greater or lesser degree to the design of all buildings (JSEP, JSP and SKEP) and not to the way they were being utilized. These findings were not surprising because older school buildings were not designed to facilitate modern methods of teaching and learning. In fact, an older school building prevents the delivery of a true 21st century education in line with ERfKE goals. If school buildings are the "hardware" within which the "software" of education runs, like any piece of hardware, every school building also has limitations on what kinds of software it can run. On the face of it, most would argue that school buildings should not dictate how we educate our children – that "construction should not drive instruction." However, it is true with the USAID schools in Jordan as it is with most schools worldwide that construction, in fact, drives, or at	This statement is extreme, and does not align with the data presented, in particular considering that the SKEP (and to some extent the JSP) schools scored so highly on the tool that was used in accordance with the 75% benchmark that the contracted architect indicated would be adequate and achievable. While there are a number of recommended adjustments that could be made to the designs that would make them score better, it does not logically follow that their absence indicates that the entire physical school structure is obsolete. In particular, it is not clear that teaching practices being less collaborative, despite the inclusion of clusters with multipurpose spaces, is an inherent problem in the structure that makes the school building "obsolete". The reliance of the lead architect on photographs of parts of the schools rather than on-site visits	The evaluation team felt that this section was consistent with the data. Based on the designs shared by USAID, and as mentioned informally in meetings, the clusters were planned only for the early grades and questioned whether student-centered learning is as relevant in upper grades – where it, in fact, is most impactful. While the evaluation team accepted USAID's proposal to delete language here, the team would like to highlight that this finding was intended for the Mission to understand that it and the Ministry could do better for students and ERfKE goals if it progresses further in its construction as indicated.

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	least defines the limits of, instruction. Given the information collected from the field observations, and with the exception of the early grade SKEP schools, all of the 104 schools surveyed could be considered "cells-and-bells" schools – that is, buildings in which students occupied and moved between relatively identical cells when the bell went off.[2] This made them educationally obsolete on the day they opened relative to the Kingdom's goals and posed a problem, because each school that was constructed like this extended a defunct model of education for at least 30 years or more.[3]	is also problematic, as it appears that he was often referring to the existing older portions of schools that were expanded under JSEP and that were not the subject of the evaluation.	
p. 14-16	EQ 2: Student Body Changes in USAID-built and Neighboring Schools	The data from this section is largely removed. It is not relevant because the methodology was not in line with what USAID thought had been agreed and that would be the most useful. Instead of considering the situation of neighbouring school overcrowding in the year before and after school construction, the methodology instead considered three points in time that did not analyze data showing student numbers immediately before and after new schools were operational. Some relevant before and after data was collected through interviews with principals, and this is retained in the document.	The sections that USAID proposed deleting are in line with the approach as outlined in the inception report which was reviewed and approved by USAID. As such, the evaluation team proposes redacting the text that USAID currently is proposing (except for the section headers which will be maintained). The evaluation team feels like this meets both parties' needs – demonstrating that the evaluation team did the work as approved in the inception report, while deleting those sections USAID does not want to make public.
p. 24	"94% of ramps at USAID-funded schoo+ls were properly-designed,"	The evaluation team never confirmed the accuracy of this	The evaluation team accepts the proposed

[2] The SKEP schools were designed around clusters of 3 to 8 classrooms, and the design standards suggested designs that might facilitate open design and co-teaching. Three-quarters of the enumerators indicated the SKEP school classrooms "appeared to be organized in groupings of 4-6 or in learning communities to promote collaboration", which was well above the 26% for JSP and 7% for JSEP, but still not universal. However, the photographs and enumerators ratings indicated that the contractors' ultimate designs were a bit conservative, for instance constructing few examples of openable partitions. There were examples of resource areas for dealing with special needs within clusters with theoretical capacity to use multiple classrooms in limited cases, although doing so appeared to be out of the comfort zone of some principals and teachers.

[3] Blueprint for Tomorrow – Redesigning Schools for Student Centered Learning by Prakash Nair. Harvard Education Press 2014.

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
		statement and the reason for the discrepancy. USAID assumes that this must have been a JSEP school with an existing ramp, because all newly built USAID schools are compliant per the relevant code and are inspected during multiple stages of the construction to ensure this. USAID has included a footnote to clarify this potential discrepancy.	changes by USAID.
p. 31	"One way to do so is for USAID to require designs that move away more completely from the obsolete "cells and bells" design invented during the first industrial revolution, beyond even the still somewhat-outdated SKEP school designs, towards a student-centered model with fewer traditional classrooms and more spaces for active learning."	Again, the statement that SKEP school designs are outdated and comparing them to cells and bells is not supported by the evidence presented in the relatively high scores that the schools were given under the evaluator's own tool. This statement would be acceptable if it was reworded to say "some elements of the SKEP school designs that were somewhat outdated" since a few of those were highlighted (eg. teacher resource areas).	The evaluation team revised the sentence to put emphasis of the recommendation in moving closer to a fully student-centered model. See revisions made in the document.
P. 52	Appendix 8: Methods - Schools not Surveyed during the School Observations and Coding	This section outlines the names of schools/principals who refused to be interviewed as a part of the study and is not therefore required or relevant for external audiences.	As part of the 508 compliance, the Kaizen team will ensure that this section is redacted or removed prior to publication.
P 68	Appendix 11: Evaluation Question 1A – Completion of Construction Work and Timeline Deviations		While the evaluation team did not find any comments with reference to this section, the assumption is that USAID is asking for this section to be redacted or removed, given the specific names of entities listed. This will be considered when making the document 508 compliant.
P. 90	Image of JSEP desks not supplied by USAID, as well as an image of a school classroom set up in a	The photos and captions are misleading. USAID did not supply the older bench style	The evaluation team accepts USAID's proposal to delete this photo from

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	forward facing orientation and described as obsolete	desks, those photographs were from the older, existing parts of JSEP schools that were expanded. In addition, the image of a newer school with desks facing the front, with the caption that they are indicative of "obsolete" teaching methodologies is extreme. The desks were set up for Tawjihi exams that took place when the evaluators visited the schools, and in addition they are not fixed to the ground and schools often move furniture around depending on the lessons, as is often observed by USAID during site visits.	the final evaluation report.
P. 119	Appendix 26: MoE Supervisor Classroom Observation Tool in Arabic		In the document, USAID mentioned "Check […] whether it is actually ok to publish or if it is an internal tool." These tools are published online publicly but will be removed in the final version of the published report. The header for this Appendix will remain as it was reviewed as part of the evaluation.
P. 147	Appendix 27 ESMP Data	The data from ESMP is laid out in a way that is not useful. The percentages for USAID and neighbouring schools are given as a percentage of the total rather than what percentage within each type of schools showed that there were problems with vandalism, etc.	The manner in which the data is laid out in this section allows for clear understanding by an end user looking at comparing overall. That said, at the request of USAID, an additional excel spreadsheet will be shared in which the specific tables are calculated based on the request. This will be shared separately from the report.
P. 156-166	Appendix 28: LQAS Statistical Test Tables Appendix 29: PISA Statistical Test Tables		No comments were found in the document. The evaluation team will leave as is, but if USAID would like this redacted prior to

Page	Original Text from Draft Report	USAID's Rationale for Removal	Evaluation Team Response
	Appendix 30: NAfKE Statistical Test Tables Appendix 31: Educational Quality Control Statistical Test Tables Appendix 32: TIMSS Statistical Test Tables		publication, this can be done by the Activity.

5.29. Appendix 36: Conflicts of Interest Disclosures

The conflict of interest forms are available from the Monitoring, Evaluation, and Learning Activity upon request.