

Early Grades Reading and Mathematics initiative (RAMP)

Lot Quality Assurance Sampling (LQAS) Final Report

The 2021-2022 End-of-First Semester

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Abbreviations

EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ETMD	Examination and Test Managing Directorate
G2	grade two
G3	grade three
GAMA	Group-Administered Mathematics Assessment
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and Evaluation
MOE	Ministry of Education
ORF	Oral Reading Fluency
RAMP	Early Grade Reading and Mathematics Initiative
USAID	United States Agency for International Development

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Overview

This report presents the Lot Quality Assurance Sampling (LQAS) assessment results relevant to reading and mathematics indicators for early grade students in Jordan. This LQAS assessment was administered at the end of the first semester of the 2021-2022 school year—in November and December 2021.

Background

The LQAS is the basis for a monitoring approach that uses binary indicators and small school sample sizes to inform decision-making and improve program effectiveness by taking remedial and improvement actions. While small sample sizes limit having accurate findings like those obtained from larger samples, the value of this approach is that it allows for rapid and reliable identification of the schools and field directorates that are most in need of additional support. This is done by specifying performance standards for selected indicators and comparing results across field directorates—the field directorates whose schools do not meet these performance standards can then be targeted for additional support.

The LQAS assessment has been applied in Jordan's Early Grade Reading and Mathematics Initiative (RAMP) seven times since the initiative started. The first time this assessment was applied was in 2016. This activity has taken two forms:

1. Traditional LQAS assessment—a sample of 19 students from each school in a sample of 19 schools from each field directorate.
2. Comprehensive LQAS assessment—a sample of 19 students from all schools where RAMP is implemented and where there are grades two and three or at least one of them.

In this iteration of the survey, which took place in November and December 2021, the traditional LQAS approach was used.

The main objective of the LQAS assessment is to identify the low-performing schools and field directorates and, therefore, require immediate action and support. Accordingly, in addition to this comprehensive report, independent reports have been prepared for all field directorates and for all sampled schools. These reports aim to help decision makers at the MOE- field directorate-, and school-levels to utilize the findings in improving student learning by addressing weaknesses and reinforcing strengths. This report focuses on identifying the field directorates most in need of support, in addition to presenting national results against the reading and mathematics benchmarks.

Sample and instruments

The LQAS is usually implemented in MOE's public schools that have grade two (G2) and/or grade three (G3) where the number of students in these two grades is 19 or more. The population of this LQAS iteration comprised 2,373 schools that had 251,858 male and female G2 and/or G3 students from all field directorates, including the Syrian refugee camps, 14,650 of whom were sampled in the study. Upon cleaning the data, the sample eventually became 14,498 students and 768 schools. Approximately 150 MOE supervisors were trained. They, in turn, assessed the randomly sampled students using the reading and mathematics tests (reading texts and mathematical problems) used in 2019.

Findings summary

The findings consist of two main parts: The first is related to the performance of field directorates against each key performance indicator, and the second is related to the results of the key performance indicators at the national level.

As for part one, the field directorates' performance, their results are summarized in **Table 1**, which shows the number of field directorates that have met benchmark—i.e. 55% in each of the performance indicators according to the decision-making statistical rule.

We notice that 6 field directorates have met the benchmark in the reading proficiency indicator; and 27 field directorates—in addition to the Syrian refugee camps; the total, therefore, is 28—have met the silent reading comprehension indicator. The findings of the latter are better than those of the former. As for mathematics, the results were very low; only one field directorate met the benchmark.

Table 1. *Numbers of field directorates that have met the benchmark (55% or more) in each indicator*

Indicators	# of field directorates meeting the benchmark (55% or more)	# of assessed field directorates
Reading proficiency	6	42
Silent reading comprehension	27 ¹	42
Mathematics	1	42

As for performance at the national level (MOE level), its results are summarized in **Table 2**, which shows the overall results of early grade students against the key indicators.

The 2021 G2 results showed a slight decrease in the reading proficiency indicator and a stability in the silent reading comprehension indicator. In mathematics, on the other hand, there was a clear decrease compared to the 2019 results. As for G3 results, they showed a slight increase in the comprehension proficiency and silent reading comprehension indicators, while there was a clear decrease in the mathematics indicator compared to the 2019 results.

¹ The Syrian refugee camps have also met the benchmark in silent reading comprehension.

Table 2. Percent of students meeting the key indicators in reading and mathematics classified by indicator, grade level, and year

Indicators	November 2019		November 2021	
	G2	G3	G2	G3
Reading proficiency	16.3%	40.6%	14.5%	42.9%
Silent reading comprehension	28.8%	52.7%	28.5%	56.6%
Mathematics	16.3%	38.3%	7.7%	27.2%

Conclusions

Overall, the results of this assessment tend to show a similar performance level in reading skills between 2019 and 2021. However, they indicate greater concerns about the low proficiency in mathematics skills. The decrease was greater among G2 students than it was among G3 students.

In general, the decline in G2 and G3 students' results in 2019 compared to 2019 was caused by the interruption of face-to-face learning and the shift toward distance learning due to Covid-19. Distance learning started in mid-March in the second semester of the school year 2019-2020 and continued until the start of the first semester of the school year 2020-2021. Additionally, this LQAS assessment was implemented at the end of November after the students had had less than three months of face-to-face learning. It was also noticed that the decline in G2 students' skills was significantly greater than it was in G3 students' skills.

We can notice that the students' reading skills have not been affected since 2019; they have rather improved among G3 students. This also applies to silent reading comprehension and zero scores. Although there were concerns that lower-performing students may suffer the greatest losses during school closures—which has been hypothesized globally—the results showed no increases in the proportions of G2 and G3 learners who were unable to identify a single item across subtasks correctly (i.e. 'zero scores'). Conversely, results showed significant reductions in zero scores for G3 and G2 students in. These reductions in 'zero scores' from 2019 to 2021 are arguably the result of RAMP and MOE's focus on low-performing children and differentiated instruction over the past two years. In addition, time-limited learning contributes to achieving the minimum level of learning, but it is difficult for this type of learning to elevate students to higher levels. Furthermore, numerous parents possess low capabilities and they lack the skills and expertise possessed by classroom teachers.

Despite the difference in the used tools and the implementation conditions, these LQAS results remain better than the results of the national survey conducted in March 2021, particularly the G2 results. This can be attributed to the remedial programs carried out by the MOE in cooperation with RAMP during the summer break and the first semester. These programs, which aimed to address students' learning loss, included conducting workshops for all concerned personnel in the field directorates (technical directors, heads of supervision divisions, and early grade supervisors) to present the national survey results and then agree on technical support plans along with remedial interventions. These plan and interventions included in-class coaching visits, communities of practice, developing and administering diagnostic tools at the beginning of the first semester of the school year 2021-2022, designing and remedial activities to be implemented during free activity lessons, and designing a remedial program on which early grade teachers are then trained.

As for mathematics, the G2 and G3 mathematics skills have declined in this LQAS assessment compared to the 2019 assessment. These results, however, are still much better than the results students achieved in the national survey that took place in March 2021, especially for G3 students. This progress can be attributed to the aforementioned actions taken by the MOE and RAMP.

The rationale behind this decline in mathematics skills is a set of factors. First, the uniqueness of mathematics necessitates a specialized teacher and face-to-face instruction for the concrete, semi-concrete, and abstract sequencing—which is difficult to achieve in distance learning. Second, the students need materials and tools to help them learn mathematics. Third, due to the need for constant practice that cannot be achieved in distance learning, mathematical skills are quite forgettable. Finally, the limited mathematics skills of parents prevent them from following up with their children at home.

As for rotational schools, students there achieved a slightly higher percentage than the national average in all reading and mathematics skills. This can be attributed to several reasons. First, the number of students inside rotational classrooms is less than the number of students in the non-rotational classrooms. Second, the rotational schools are located in city centers and in places with high population density where student performance is usually better than the performance of students in smaller schools. Third, teachers in rotational schools prioritize the foundational reading and mathematics skills. Finally, parents of children in rotational schools tend to be more involved in their children's learning and not rely on school teaching because their children stay at home for some time during weekdays.

As for the schools that implement the Senior Teacher program, whose students demonstrated lower performance in this iteration compared to 2019, which was close to the national performance or slightly lower, this can be attributed to the expansion of the Senior Teacher program to include 17 field directorates. The teachers were not able to provide adequate support to the teachers due to the short implementation period because of the school closures. Furthermore, senior teachers normally work at already low-performing schools.

As for the decline in the performance of Syrian students outside the refugee camps, this can be attributed to poor training and capacities of the substitute teachers there. Another reason is the prolonged pandemic-induced school closures during which teachers did not monitor students, as

learning was limited to the online “Darsak” platform. On the other hand, a significant decline was observed in the results of students in refugee camps. The rationale behind this could be the varying expertise of teachers in RAMP since all teachers in the camps are substitute teachers most of whom have not been trained on the RAMP methodologies. Another reason could be the economic and psychological conditions from which the camp residents and learners are suffering.

As for gender, female students have scored slightly higher than male students have in reading skills. This result does not differ from the pattern found in the results of students at the different levels of learning in Jordan. Female students outperform their male peers in all Jordanian education indicators, whether at the level of general education or higher education. However, male students have achieved higher performance than female students have in all mathematics skills due to the specificity of the non-achievement mathematics subject.

Recommendations

- It is necessary that the MOE provides support to the low-performing field directorates, which in turn provide support to the low-performing schools based on the performance reports that are provided to them by the MOE.
- Implement special programs to enable parents to teach their children effectively, especially in mathematics, and to provide them with the necessary tools such as videos and others.
- Design and implement programs to develop the capabilities of early grade teachers in mathematics skills. The impact of these programs is then assessed.
- Teachers need to focus on foundational skills in reading and mathematics. The number of weekly mathematics lessons needs to increase due to the difficulty of the new curriculum. Instead of classroom teachers, mathematics teachers should be the ones assigned to teach mathematics to early grade students.
- The MOE needs to establish a new schooling system that includes three semesters, one of which to be dedicated to addressing students' weak foundational skills in reading and mathematics.
- Continue to build teachers' capacities—with a focus on effective classroom management skills, formative assessment, and the use of multiple and diverse teaching strategies that consider students' different abilities and learning styles. There should be another focus on developing students' foundational skills in reading and mathematics.
- Provide school principals and supervisors with capacity building on student assessment methodologies—particularly the LQAS assessments—in terms of planning, implementation, data analysis, and extracting and utilizing the findings.
- Monitor the supervisors who provide in-class technical coaching to teachers to ensure quality control. Supervisors should not be tasked with administrative or technical work outside the scope of their main work.
- Benefit from the success stories of the field directorates that achieved high scores in the instruction effectiveness indicator and high rates of student learning outcomes in reading and mathematics, and investigate the reasons that prevent these successes from being achieved in other field directorates.

- Activate professional accountability processes for teachers and schools based on students' learning outcomes in reading and mathematics.

Introduction

The Early Grade Reading and Mathematics Initiative (RAMP) is a development program adopted by the MOE and funded by the United States Agency for International Development (USAID). RAMP aims to consolidate methodologies and practices for learning reading and mathematics in early grades in all Jordanian public schools. The initiative seeks to improve the performance levels of early grade students in reading and mathematics and make them able to read with fluency and comprehension, and to do mathematics with understanding.

In 2012, a national survey of reading and mathematics was conducted. It showed that most early grade students in public schools in Jordan could neither read fluently and comprehensively, nor solve mathematical problems with understanding. Consequently, a pilot intervention was implemented in 2014 aimed at improving the skills of early grade students. Another national survey was implemented in the same year and its findings showed the success of the pilot intervention in improving students' skills in reading and mathematics.

To achieve the goal of improving students' learning outcomes in reading and mathematics, the RAMP initiative was launched in April 2015. The initiative implements a set of planned activities, including providing technical in-class coaching to teachers through the MOE educational supervisors. During the coaching visits, the supervisors also evaluate the effectiveness of teachers' instruction using a classroom observation tool, which is a rubric.

To identify the extent to which students acquire reading and mathematics skills, and to monitor the performance of schools and field directorates, RAMP assesses students' learning annually by administering the LQAS assessment, which is usually done at the end of the first semester of each school year. As for the national surveys, which are conducted using the Early Grade Reading Assessment (EGRA) and the Early Grade Mathematics Assessment (EGMA), they are administered once every two years and at the end of the second semester.

The LQAS methodology is the basis of a monitoring approach that uses binary indicators. It uses small school samples to collect and process data quickly to inform decision makers of results and improve the effectiveness of projects and programs. The LQAS methodology is suitable for continuous project and program monitoring because it allows for low-cost, routine, and relatively rapid monitoring; provides detailed, disaggregated, and actionable data; and it identifies the encountered challenges to timely implementation in target areas.

The LQAS methodology was first developed in the 1920s for use in manufacturing industries as a means of production quality control. A small sample of the product is randomly selected from each production "lot" and checked for defects. If the number of defective items is greater than the pre-specified sample level, the whole lot is rejected. Many manufacturers are starting to prefer the LQAS methodology because it does not require inspecting all produced items. The only outcomes resulting from this approach are 'acceptable' or 'unacceptable'; there are no varying levels of non-acceptance.

When compared to conventional surveys, LQAS is a fast and relatively inexpensive data collection method. It uses smaller sample sizes and allows for more sampling than standard probability surveys. A

pre-selected area is sampled; and then, if the result of this sample indicator is acceptable, the indicator as a whole is considered acceptable; and if the result of the sample is not acceptable, then the result of the indicator as a whole is not acceptable.

The LQAS methodology is particularly suitable for the education sector where many governments are seeking to decentralize education responsibilities. Local managers, therefore, need a method through which they can monitor programs or communities in their areas and identify the areas that “achieve certain goals and objectives.”

There are several key characteristics associated with this methodology that should be noted. First, the LQAS divides the population into “administrative units” where local supervisors can ensure the quality of effective administration and teaching in these units. Units must be small enough to be homogeneous in nature, and with similar socioeconomic characteristics. In education, units are usually defined as learning areas. Second, as a classification tool, LQAS identifies areas that meet performance expectations and areas that do not. Framing the analysis in this binary way means that only a relatively small sample is needed. This methodology combines small random sample sizes with binary questions. Eventually, data would be available and could be recorded and analyzed relatively quickly and easily. District-level results are usually available in just a few days and can be easily tabulated with pen and paper. Third, although this methodology is designed to estimate binary outcomes at the field directorate level, data can be aggregated to estimate district or national averages. LQAS allows us to classify field directorates or schools, as meeting or not meeting the minimum student performance standards, by aggregating students' results at the district or national level.

In Jordan, the LQAS assessment was applied in the education sector for the first time through the RAMP initiative in 2016. It was thereafter conducted seven consecutive times, the last of which was in November 2021 when it was applied to a sample of 19 schools from each field directorate. The sampled schools had to have G2 and G3 students. Reading and mathematics assessments were administered to 19 randomly selected students from each sampled school. A report is usually prepared for each school that includes its results in reading and mathematics. Similarly, a brief report is prepared at the field directorate level with the results of its sampled schools.

The findings in this report are designed to measure progress in four key indicators as follows:

Oral Reading Fluency (ORF) Zero Scores: The percent of learners who are unable to read at least one word from the ORF passage—i.e. a zero score in ORF.

Reading Comprehension: The percent of learners who demonstrate proficiency in reading comprehension—i.e. $\geq 80\%$ correct answers to the comprehension questions about reading passage.

Silent Reading Comprehension: Percent of learners who demonstrate silent reading comprehension proficiency—i.e. $\geq 80\%$ correct answers to the comprehension questions in the silent reading comprehension task.

Mathematics Proficiency: The percent of learners who demonstrate their mastery of mathematics—i.e. $\geq 80\%$ correct answers to the level-two addition/subtraction task, plus $\geq 70\%$ correct answers in the missing number task.

This report presents the overall 2021 LQAS results with comparisons with the 2019 and 2018 LQAS results.

LQAS assessment objectives

This LQAS iteration aimed to achieve two objectives:

- Identify student performance in reading and mathematics skills at the field directorate level to provide appropriate support to low-performing schools and field directorates.
- Identify student performance in reading and mathematics skills at MOE level through the key performance indicators.

To achieve the abovementioned objectives, we need to answer the following questions:

1. What is the level of disparities in students' reading and mathematics skills between the field directorates?
2. What is the percentage of G2 and G3 students who meet the benchmark of reading with fluency and comprehension?
3. What is the percentage of G2 and G3 students who meet the benchmark of silent reading comprehension?
4. What is the percentage of G2 and G3 students who meet the benchmark of doing mathematics with understanding?
5. What is the percentage of G2 and G3 students who got zero scores in ORF?
6. Is there a correlation between:
 - A. Having a Senior Teacher at schools and the students' results in LQAS assessments; and
 - B. Rotational schools and students' results?

Limitations

The study had the following limitations:

1. Spatial limitations: The study was implemented in a sample of MOE public schools that have G2 and/or G3 provided that the number of students in these grades is not fewer than 19 students—19 schools from each field directorate, and from the refugee camps.
2. Time limitations: The study was implemented at the end of the first semester of the school year 2021-2022.
3. Human limitations: The study was represented by a sample of 19 male and female students randomly selected from each school that had G2 and/or G3—10 students from G2 and 9 from G3 or vice versa.
4. Reading and mathematics assessments were used to collect data related to this study according to the set implementation and procedural plans that suit the objectives of the study.

Methodology and procedures

Population and sample

The population consisted of all MOE's public schools that have G2 and/or G3 where the number of students in these two grades is 19 or more. The total was 2,373 schools that had 251,858 G2 and G3 students. Eventually, 14,498 students from 768 schools from all field directorates and refugee camps were sampled in the study. The assessments were administered by a team of assessors comprising 150 MOE supervisors.

Instruments

To collect the data from the G2 and G3 students, the assessors—in this 2021 LQAS study—used the reading and mathematics tests used in 2019.

Data collection and analysis

- Visiting the sampled schools by the assessors according to a previously set schedule
- Selecting a random sample of 19 students in each school—10 G2 students and 9 G2 students or vice versa
- Conducting the Group-Administered Mathematics Assessment (GAMA) according to the specified instructions, marking the assessments, and documenting the results electronically on a tablet
- Administering the electronic reading assessment to each student individually and documenting the results on a tablet
- Auditing, cleaning, and analyzing the data; extracting the results; and writing the report by the MOE's Examination and Test Managing Directorate (ETMD) with support from the Monitoring and Evaluation (M&E) team in RAMP

Implementation procedures

1. Coordinating with the MOE to collaborate in the implementation of the study
2. Reviewing the study instruments (the tests), which are the same ones used in 2019, through a joint team comprising members from both the MOE and RAMP
3. Uploading the study instruments on RAMP electronic system and testing them
4. Preparing enough mathematics assessment sheets for all students to whom the test will be administered
5. Preparing the tablets that will be used to collect the data
6. Selecting the schools, from which data will be collected, that meet the conditions—having 19 G2 and/or G3 students or more
7. Selecting a group of schools where the assessors will pilot the instruments in the three regions in Jordan
8. Obtaining official letters from the MOE to facilitate the tasks of the data collectors
9. Obtaining permits from the relevant authorities to enter schools located in the Syrian refugee camps in Mafraq and Zarqa governorates

10. Selecting the people who will administer the assessments to students—those people comprise 150 MOE supervisors (early grade supervisors and ETMD supervisors from the MOE’s center)
11. Training the assessors on the use of the instruments (assessments) and the tablet—the training includes school visits during which, as practical training, the instruments are piloted with the students.
12. Collecting data from the sampled schools by the assessors and uploading it to the tablets
13. Conducting quality control visits by the ETMD team
14. Daily monitoring of the data entered into the electronic system by the ETMD and M&E teams
15. Completing the data collection from the targeted schools
16. Examining, cleaning, and analyzing the data to get results related to the study questions; and then writing the report

Final sample

The reading and mathematics assessments were administered to 14,498 students in 768 schools across all field directorates. Below are the types and numbers of schools where the assessments were administered, and the numbers of assessed students.

- 1- The assessments were conducted in at MOE public schools, including Syrian student schools (afternoon schools, and refugee camp schools). The results were analyzed according to the classification displayed in **Table 3**, which shows the types of schools along with their numbers and percentages. This classification includes basic sample schools, Syrian student (afternoon) schools, Syrian refugee camp schools, Senior Teacher schools, and rotational schools.

Table 3. Numbers and percentages of assessed schools classified by type and year

School type	2017 LQAS	2018 LQAS	2019 LQAS	2021 LQAS	
				Number of schools	percentage
Total schools	1,967	2,083	2,131	768	
Basic sample schools	-	-	-	749	97.5%
Syrian schools	8.3%	8.6%	7.9%	20	2.6%
Refugee camp schools	0.0%	0.8%	1%	19	2.5%
Senior Teacher schools	3.6%	3.6%	3.7%	160	20.8%
Rotational schools	-	-	-	382	49.7%

The assessments were administered to 14,498 students in 2021. **Table 4** shows the numbers and percentages of the assessed students classified by year and school type.

Table 4. Numbers and percentages of assessed students classified by year and school type

School Type	2017 LQAS	2018 LQAS	2019 LQAS	2021 LQAS
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				Number of Students	percentage
Total schools	36,704	39,126	39,678	14,498	
Basic sample schools				14,137	97.5%
Syrian schools	8.4%	8.6%	7.8%	378	2.6%
Refugee camp schools	-	0.8%	1%	361	2.5%
Senior Teacher schools	3.6%	3.7%	3.7%	3,009	20.8%
Rotational schools				7,207	49.7%

- 2- The 2021 assessments were administered to 6,589 male students and 7,909 female students—i.e. 45.5% males and 54.5% females. The numbers and percentages of the assessed students classified by year and gender are shown in **Table 5**.

Table 5. Numbers and percentages of assessed students classified by year and gender

Student's gender	2017 LQAS	2018 LQAS	2019 LQAS	2021 LQAS	
				Number of Students	percentage
Total students	36,704	39,126	39,678	14,498	
Males	48.6%	49.2%	47.3%	6,589	45.5%
Females	51.4%	50.8%	52.7%	7,909	54.5%

- 3- The 2021 assessments were administered to 7,082 G2 students and 7,416 G3 students—i.e. 48.8% G2 students and 51.2% G3 students. The numbers and percentages of the assessed students classified by grade and year are listed in **Table 6**.

Table 6. Numbers and percentages of assessed students classified by year and grade level

Grade	2017 LQAS	2018 LQAS	2019 LQAS	2021 LQAS	
				Number of Students	percentage
Total students	36,704	39,126	39,678	14,498	
Grade 2	48.0%	47.0%	46.4%	7082	48.8%
Grade 3	52.0%	53.0%	53.6%	7416	51.2%

Findings

The findings are designed to measure progress in four key indicators as follows:

Oral Reading Fluency (ORF) Zero Scores: The percent of learners who are unable to read at least one word from the ORF passage—i.e. a zero score in ORF.

Reading Comprehension: The percent of learners who demonstrate proficiency in reading comprehension—i.e. $\geq 80\%$ correct answers to the comprehension questions about reading passage.

Silent Reading Comprehension: Percent of learners who demonstrate silent reading comprehension proficiency—i.e. $\geq 80\%$ correct answers to the comprehension questions in the silent reading comprehension task.

Mathematics Proficiency: The percent of learners who demonstrate their mastery of mathematics—i.e. $\geq 80\%$ correct answers to the level-two addition/subtraction task, plus $\geq 70\%$ correct answers in the missing number task.

Although the ultimate goal is having at least 55% of students at the national level meeting each of these indicators, it is important to note that data were collected in November and December 2021—i.e. during the first semester of the school year 2021-2022. Therefore, these findings should not be directly compared to end-of-school-year goals; instead, these findings should be used to identify low-performing field directorates that require additional support. That is why the national average (and results in nearly all field directorates) is expected to be less than the 55% benchmark at this point in the school year.

Additionally, we have included the detailed results of the key performance indicators at the field directorate level to examine the performance of early graders in reading and mathematics after receiving the Learning Loss Compensatory (Remedial) Program implemented by RAMP in cooperation with the MOE during the summer break and the first semester. The results were disaggregated by basic sample, gender, Syrian afternoon schools, refugee camp schools, Senior Teacher schools, and rotational schools.

Part 1: The field directorates’ results based on the decision-making rule—55% of the schools, or more, meet the benchmark

Table 7 shows that only 6 out of the 42 field directorates meet the reading proficiency benchmark, 27 field directorates—in addition to Syrian refugee camps—meet the silent reading comprehension benchmark, and only one field directorate meets the mathematics benchmark.

Table 7. *Field directorates that meet the benchmarks of the different indicators*

Indicator	Meeting Benchmark (55% and more)	# of assessed field directorates
Reading proficiency	6	42

Silent reading comprehension	27 ²	42
Mathematics	1	42

Table 8 shows the detailed results of each field directorate for each of the three indicators, in addition to the zero scores in ORF. The scores highlighted in green indicate that those field directorates are either at or above the target—i.e. 55% of their schools meet the benchmark; they are making sufficient progress. The scores highlighted in red indicate that those field directorates are below the benchmark; and, therefore, require more attention and support.

² The Syrian refugee camp schools also meet the silent reading comprehension benchmark

Table 8. The results of all field directorates and their performances against the 55% benchmark of each indicator

Field directorate	No. of tested schools	No. of tested Students	No. of students who scored Zero in ORF	Reading Comprehension (Meeting Benchmark 55% and more - Yes, No)	Reading Comprehension (The achievement of the FD)	Silent Reading (Meeting Benchmark 55% and more Yes, No)	Silent Reading (The achievement of the FD)	Mathematics (Meeting Benchmark 55% and more Yes, No)	Mathematics (The achievement of the FD)
Al qwesmeh	19	360	39	No	35%	Yes	65%	No	Less than 20%
Al taibeh& Al wasteiah	19	361	4	Yes	70%	Yes	85%	Yes	60%
Aljamaah	19	359	17	No	50%	Yes	90%	No	30%
Amman Qasbah	15	284	45	No	35%	No	45%	No	Less than 20%
Bani Obaid	19	361	16	Yes	55%	Yes	85%	No	25%
Bsaira	12	226	9	No	45%	Yes	90%	No	Less than 20%
Irbid Qasbah	18	341	23	No	50%	Yes	90%	No	45%
Jeze	19	356	12	No	45%	Yes	90%	No	30%
Marka	19	361	18	No	40%	Yes	85%	No	25%
Mowaqar	19	361	61	No	Less than %20	No	20%	No	Less than 20%
Naaor	19	357	49	No	30%	Yes	65%	No	Less than 20%
Sahab	16	299	50	No	20%	No	40%	No	Less than 20%
WadiAlseer	19	361	18	No	25%	Yes	60%	No	Less than 20%
Ain Albasha	19	360	4	Yes	70%	Yes	85%	No	Less than 20%
Ajloun	18	336	18	No	35%	Yes	55%	No	25%
Alkoura	19	360	31	No	40%	Yes	60%	No	25%
Alqaser	19	361	6	No	45%	Yes	70%	No	Less than 20%
Aqaba	19	350	41	No	25%	No	50%	No	Less than 20%
Bani kenana	19	339	8	No	35%	Yes	60%	No	40%
DairAlla	19	359	42	No	20%	No	35%	No	Less than 20%
Jarash	19	359	33	No	20%	Yes	65%	No	Less than 20%
KarakQasbah	19	361	4	No	45%	Yes	75%	No	25%
Ma an	19	379	51	No	40%	Yes	80%	No	35%
Madaba	19	361	8	No	35%	Yes	55%	No	Less than 20%
MafrqQasbah	19	358	54	No	%20Less than	No	35%	No	Less than 20%
North East Badia	15	278	32	No	45%	Yes	75%	No	50%
North Ghour	19	354	73	No	20%	No	30%	No	Less than 20%
North Mazar	19	359	19	No	45%	Yes	55%	No	20%
North West Badia	19	358	42	No	35%	No	50%	No	25%
Petra	14	262	1	Yes	80%	Yes	75%	No	20%
Ramtha	19	359	31	No	25%	No	45%	No	Less than 20%
Rusifa	19	361	78	No	25%	No	35%	No	Less than 20%
Salt	19	361	18	No	40%	Yes	65%	No	25%
Shobak	5	95	8	No	No enough sample	No	No enough sample	No	No enough sample
South Badia	20	378	95	No	20%	No	25%	No	20%
South Ghour	15	285	87	No	%20Less than	No	35%	No	Less than 20%
South Mazar	19	357	12	Yes	85%	Yes	80%	No	30%
South Shouna	17	322	15	No	25%	Yes	65%	No	Less than 20%
Tafila	14	266	44	No	20%	No	40%	No	Less than 20%
Theeban	19	356	5	No	25%	Yes	95%	No	30%
Zarqa 1	19	361	8	Yes	85%	Yes	95%	No	25%
Zarqa 2	19	355	89	No	%20Less than	No	35%	No	Less than 20%
Syrian Camps	19	361	64	No	30%	Yes	60%	No	25%
Total	768	14,498	1,382						

Part 2: Overall results and the field directorate results against the key performance indicators

In this part, the detailed results of all field directorates are specified for each key performance. The results are disaggregated by basic sample schools, gender, Syrian afternoon schools, refugee camp schools, Senior Teacher schools, and rotational schools. **Table 9** displays the numbers of assessed schools and students classified by sample type: basic sample schools, gender, Syrian afternoon schools, refugee camp schools, Senior Teacher schools, and rotational schools

Table 9. *Numbers of assessed schools and students by sample type*

Sample type	Number of schools	Number of students
Basic sample schools (includes the Syrian, rotational, and Senior schools)	749	14,137
Syrian student schools	20	378
Refugee camp schools	19	361
Rotational schools	382	7,207
Senior teacher schools	160	3,009

Table 10 shows the general G2 results in the key performance indicators classified by grade level, basic sample schools, gender, Syrian refugees outside and inside the camps, Senior Teacher schools, and rotational schools.

In G2, we notice that the reading comprehension and silent reading comprehension indicators were not affected by gender, while the rotational schools had the highest results in these two indicators.

As for the mathematics and the ORF zero score indicators, they were affected by gender. It is worth mentioning that the Syrian students inside the camps had the highest results in these two indicators.

Table 10. G2 key performance indicator results by basic sample schools, gender, Syrian student schools, Refugee camp schools, Senior Teacher schools, and rotational schools

Indicator	Basic (gender)			Syrian schools	Camp schools	Rotational schools	Senior teacher schools
	Male	Female	All students				
Reading proficiency	14.4%	14.9%	14.5%	8.7%	9.7%	16.6%	10.2%
Silent reading comprehension	28.7%	28.3%	28.5%	19.8%	20.5%	30.8%	26.3%
Mathematics	9.6%	6.2%	7.7%	4.1%	10.0%	8.4%	6.4%
ORF zero scores	16.2%	10.7%	13.4%	14.7%	25.3%	11.6%	14.5%

Table 11 shows the general G3 results in the key performance indicators classified by grade level, basic sample schools, gender, Syrian refugees outside and inside the camps, Senior Teacher schools, and rotational schools.

In G3, we notice that the reading comprehension, silent reading comprehension, and mathematics indicators were all affected by gender, while the rotational schools had the highest results in reading comprehension and mathematics indicators. Syrian student schools, on the other hand, achieved the highest result in the silent reading comprehension indicator.

Table 11. G3 key performance indicator results by basic sample schools, gender, Syrian student schools, Refugee camp schools, Senior Teacher schools, and rotational schools

Indicator	Basic (Gender)			Syrian schools	Camp schools	Rotational schools	Senior teacher schools
	Male	Female	All student				
Reading proficiency	41.6%	44.2%	42.9%	41.2%	36.8%	44.5%	40.5%
Silent reading comprehension	57.6%	55.9%	56.6%	62.7%	51.4%	57.1%	52.0%
Mathematics	30.5%	25.0%	27.2%	26.2%	27.7%	28.3%	20.8%

Table 12 shows the key indicator results of G2 students in the basic sample schools classified by field directorate and gender. The results highlighted in green either meet or exceed the benchmark, the results highlighted in yellow are approximately 2% below the national benchmark, and the results highlighted in red are more than 2% below the benchmark. The red results mean that those field directorates require more attention and support.

Table 12. Results and performance of G2 in basic sample schools against the key performance indicators classified by field directorate and gender

Field directorate	G2 ORF zero scores			G2 ORF reading comprehension			G2 silent reading comprehension			G2 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Al qwesmeh	17.9%	14.1%	15.8%	8.3%	11.1%	9.8%	22.6%	18.2%	20.2%	10.7%	2.0%	6.0%
Al taibeh& Al wasteiah	1.3%	0.0%	0.6%	30.3%	32.7%	31.6%	53.9%	53.1%	53.4%	31.6%	31.6%	31.6%
Aljamaah	9.9%	5.8%	7.5%	21.1%	19.4%	20.1%	36.6%	33.0%	34.5%	11.3%	7.8%	9.2%
Amman Qasbah	28.4%	12.1%	20.3%	4.5%	12.1%	8.3%	20.9%	18.2%	19.5%	1.5%	3.0%	2.3%
Bani Obaid	6.2%	8.3%	7.3%	25.9%	19.8%	22.6%	46.9%	42.7%	44.6%	12.3%	7.3%	9.6%
Bsaira	8.5%	5.0%	7.2%	16.9%	17.5%	17.1%	31.0%	32.5%	31.5%	2.8%	2.5%	2.7%
Irbid Qasbah	7.6%	9.9%	9.0%	21.2%	19.8%	20.4%	37.9%	42.6%	40.7%	37.9%	15.8%	24.6%
Jeze	6.4%	2.0%	3.9%	7.7%	13.0%	10.7%	37.2%	41.0%	39.3%	9.0%	15.0%	12.4%
Marka	8.1%	4.5%	6.8%	19.8%	25.8%	22.0%	40.5%	37.9%	39.5%	4.5%	1.5%	3.4%
Mowaqar	22.1%	23.7%	23.0%	2.6%	2.1%	2.3%	11.7%	10.3%	10.9%	5.2%	1.0%	2.9%
Naaor	28.4%	13.3%	20.1%	6.2%	10.2%	8.4%	13.6%	27.6%	21.2%	1.2%	1.0%	1.1%
Sahab	26.2%	18.4%	21.6%	9.8%	10.3%	10.1%	16.4%	23.0%	20.3%	1.6%	2.3%	2.0%
WadiAlseer	7.0%	6.5%	6.7%	12.8%	8.6%	10.6%	32.6%	25.8%	29.1%	5.8%	1.1%	3.4%
Ain Albasha	1.3%	2.3%	1.8%	26.6%	20.5%	23.4%	24.1%	31.8%	28.1%	8.9%	4.5%	6.6%
Ajloun	15.1%	3.7%	9.6%	12.8%	9.9%	11.4%	25.6%	23.5%	24.6%	9.3%	8.6%	9.0%
Alkoura	14.3%	7.4%	11.0%	17.6%	18.5%	18.0%	29.7%	29.6%	29.7%	13.2%	9.9%	11.6%
Alqaser	3.9%	2.1%	2.9%	13.2%	7.2%	9.8%	19.7%	18.6%	19.1%	6.6%	3.1%	4.6%
Aqaba	18.8%	16.5%	17.5%	10.0%	9.3%	9.6%	22.5%	15.5%	18.6%	1.3%	0.0%	0.6%
Bani kenana	2.4%	2.4%	2.4%	6.0%	13.3%	9.6%	21.4%	21.7%	21.6%	14.3%	21.7%	18.0%
DairAlla	27.4%	13.0%	19.4%	5.5%	5.4%	5.5%	16.4%	15.2%	15.8%	4.1%	1.1%	2.4%
Jarash	15.2%	12.7%	14.0%	5.1%	6.3%	5.6%	17.2%	26.6%	21.3%	9.1%	1.3%	5.6%
KarakQasbah	3.5%	1.1%	2.3%	11.8%	14.1%	13.0%	29.4%	33.7%	31.6%	4.7%	10.9%	7.9%
Ma an	14.1%	21.1%	17.6%	21.7%	11.6%	16.6%	43.5%	33.7%	38.5%	9.8%	9.5%	9.6%
Madaba	3.9%	2.0%	2.9%	10.5%	11.1%	10.9%	35.5%	33.3%	34.3%	7.9%	8.1%	8.0%
MafragQasbah	29.0%	14.6%	22.3%	8.6%	6.1%	7.4%	15.1%	17.1%	16.0%	5.4%	0.0%	2.9%
North East Badia	25.5%	7.2%	14.5%	18.2%	21.7%	20.3%	40.0%	47.0%	44.2%	32.7%	36.1%	34.8%
North Ghour	27.2%	22.1%	24.6%	4.9%	9.3%	7.2%	19.8%	16.3%	18.0%	3.7%	2.3%	3.0%
North Mazar	13.0%	4.3%	8.2%	14.3%	18.3%	16.5%	24.7%	34.4%	30.0%	3.9%	8.6%	6.5%
North West Badia	14.8%	17.4%	16.2%	8.6%	7.6%	8.1%	17.3%	16.3%	16.8%	9.9%	9.8%	9.8%
Petra	0.0%	1.6%	0.8%	27.1%	19.0%	23.0%	33.9%	23.8%	28.7%	16.9%	9.5%	13.1%
Ramtha	16.8%	10.1%	14.2%	5.6%	10.1%	7.4%	15.0%	15.9%	15.3%	3.7%	1.4%	2.8%
Rusifa	36.8%	22.6%	29.8%	12.6%	8.3%	10.5%	21.8%	16.7%	19.3%	1.1%	0.0%	0.6%
Salt	16.5%	4.4%	10.3%	11.8%	12.2%	12.0%	30.6%	21.1%	25.7%	7.1%	6.7%	6.9%
Shobak	20.0%	14.3%	17.4%	4.0%	0.0%	2.2%	24.0%	19.0%	21.7%	4.0%	0.0%	2.2%
South Badia	35.7%	41.6%	39.1%	8.3%	6.2%	7.1%	11.9%	10.6%	11.2%	4.8%	4.4%	4.6%
South Ghour	45.2%	45.5%	45.3%	1.4%	1.5%	1.4%	12.3%	12.1%	12.2%	4.1%	1.5%	2.9%
South Mazar	6.4%	4.2%	5.2%	30.8%	40.0%	35.8%	39.7%	49.5%	45.1%	9.0%	10.5%	9.8%

South Shouna	10.9%	4.3%	7.0%	7.8%	14.9%	12.0%	28.1%	35.1%	32.3%	4.7%	3.2%	3.8%
Tafila	29.0%	13.9%	20.9%	8.1%	12.5%	10.4%	19.4%	22.2%	20.9%	4.8%	0.0%	2.2%
Theeban	2.4%	2.1%	2.2%	10.7%	11.7%	11.2%	44.0%	30.9%	37.1%	13.1%	12.8%	12.9%
Zarqa 1	6.8%	0.9%	3.3%	37.8%	30.3%	33.3%	51.4%	47.7%	49.2%	6.8%	3.7%	4.9%
Zarqa 2	39.4%	29.5%	34.9%	3.2%	5.1%	4.1%	17.0%	12.8%	15.1%	2.1%	0.0%	1.2%

Table 13 shows the key indicator results of G3 students in the basic sample schools classified by field directorate and gender. The results highlighted in green either meet or exceed the benchmark, the results highlighted in yellow are approximately 2% below the national benchmark, and the results highlighted in red are more than 2% below the benchmark. The red results mean that those field directorates require more attention and support.

Table 13. Results and performance of G3 students in basic sample schools against the key performance indicators classified by field directorate and gender

Field directorate	G3 ORF reading comprehension			G3 silent reading comprehension			G3 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All
Al qwesmeh	48.4%	36.3%	40.7%	65.6%	48.7%	54.8%	35.9%	25.7%	29.4%
Al taibeh& Al wasteiah	59.5%	73.1%	67.4%	72.2%	74.1%	73.3%	53.2%	55.6%	54.5%
Aljamaah	53.0%	62.2%	58.9%	72.7%	73.9%	73.5%	34.8%	42.0%	39.5%
Amman Qasbah	29.6%	40.0%	35.1%	39.4%	53.8%	47.0%	15.5%	20.0%	17.9%
Bani Obaid	49.4%	62.9%	57.1%	65.8%	78.1%	72.8%	31.6%	42.9%	38.0%
Bsaira	51.7%	59.6%	55.7%	63.8%	77.2%	70.4%	20.7%	19.3%	20.0%
Irbid Qasbah	50.0%	47.4%	48.3%	76.7%	79.8%	78.7%	60.0%	40.4%	47.1%
Jeze	44.3%	48.1%	46.6%	67.1%	68.5%	68.0%	30.0%	37.0%	34.3%
Marka	55.3%	50.0%	52.7%	76.6%	63.3%	70.1%	41.5%	30.0%	35.9%
Mowaqar	16.4%	27.2%	23.0%	30.1%	28.9%	29.4%	15.1%	13.2%	13.9%
Naaor	37.6%	41.9%	39.9%	57.6%	60.2%	59.0%	18.8%	10.8%	14.6%
Sahab	25.8%	41.6%	35.1%	37.1%	51.7%	45.7%	11.3%	16.9%	14.6%
WadiAlseer	34.9%	41.7%	38.5%	53.5%	55.2%	54.4%	32.6%	21.9%	26.9%
Ain Albasha	67.0%	62.5%	64.8%	77.3%	65.6%	71.5%	33.0%	33.3%	33.2%
Ajloun	31.8%	39.8%	36.7%	59.1%	55.3%	56.8%	33.3%	30.1%	31.4%
Alkoura	32.1%	38.5%	35.6%	40.5%	46.2%	43.6%	25.0%	25.0%	25.0%
Alqaser	50.0%	45.1%	47.3%	61.6%	57.8%	59.6%	25.6%	21.6%	23.4%
Aqaba	35.7%	38.8%	37.6%	45.7%	45.6%	45.7%	7.1%	8.7%	8.1%
Bani kenana	40.7%	47.7%	44.2%	65.1%	57.0%	61.0%	52.3%	41.9%	47.1%
DairAlla	21.1%	28.8%	25.3%	38.9%	41.3%	40.2%	12.2%	1.9%	6.7%
Jarash	31.7%	46.8%	38.1%	51.0%	45.5%	48.6%	24.0%	22.1%	23.2%
KarakQasbah	57.3%	50.0%	53.3%	69.5%	60.8%	64.7%	37.8%	22.5%	29.3%
Ma an	41.2%	50.5%	46.4%	61.2%	56.1%	58.3%	31.8%	27.1%	29.2%
Madaba	39.1%	27.9%	31.7%	54.7%	46.7%	49.5%	17.2%	18.0%	17.7%
MafrqQasbah	15.8%	29.0%	23.5%	38.2%	37.4%	37.7%	15.8%	10.3%	12.6%
North East Badia	40.9%	35.4%	37.1%	29.5%	44.8%	40.0%	52.3%	33.3%	39.3%
North Ghour	6.8%	23.2%	15.5%	20.5%	42.4%	32.1%	8.0%	9.1%	8.6%
North Mazar	32.9%	54.2%	45.0%	47.6%	55.1%	51.9%	26.8%	37.4%	32.8%
North West Badia	44.6%	37.2%	39.5%	57.1%	39.5%	44.9%	37.5%	23.3%	27.6%
Petra	67.6%	75.0%	71.4%	69.1%	59.7%	64.3%	42.6%	23.6%	32.9%

Ramtha	35.7%	42.4%	39.3%	44.0%	46.5%	45.4%	22.6%	25.3%	24.0%
Rusifa	27.3%	23.0%	24.7%	41.6%	40.7%	41.1%	24.7%	11.5%	16.8%
Salt	47.4%	55.5%	52.2%	64.5%	50.9%	56.5%	36.8%	24.5%	29.6%
Shobak	54.2%	48.0%	51.0%	58.3%	72.0%	65.3%	16.7%	16.0%	16.3%
South Badia	25.0%	24.0%	24.3%	31.7%	25.6%	27.6%	11.7%	14.0%	13.3%
South Ghour	17.6%	15.4%	16.4%	42.6%	28.2%	34.9%	13.2%	3.8%	8.2%
South Mazar	64.9%	72.9%	69.6%	68.8%	69.2%	69.0%	29.9%	42.1%	37.0%
South Shouna	29.4%	37.5%	34.1%	45.6%	56.3%	51.8%	14.7%	15.6%	15.2%
Tafila	21.9%	44.1%	33.3%	32.8%	48.5%	40.9%	14.1%	10.3%	12.1%
Theeban	38.6%	44.4%	41.6%	63.6%	71.1%	67.4%	29.5%	30.0%	29.8%
Zarqa 1	74.0%	70.3%	71.9%	85.7%	78.2%	81.5%	36.4%	30.7%	33.1%
Zarqa 2	13.7%	21.6%	17.5%	41.1%	34.1%	37.7%	11.6%	3.4%	7.7%

Table 14 shows the key indicator results of G2 in Syrian student schools (second-shift/afternoon shift) classified by field directorate and gender.

Table 14. Percent of G2 students in Syrian student schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G2 ORF zero scores			G2 ORF reading comprehension			G2 silent reading comprehension			G2 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Aljamaah	16.7%	0.0%	10.0%	16.7%	0.0%	10.0%	50.0%	0.0%	30.0%	0.0%	0.0%	0.0%
Amman Qasbah	0.0%	0.0%	0.0%	0.0%	25.0%	12.5%	50.0%	25.0%	37.5%	0.0%	0.0%	0.0%
Marka	0.0%	0.0%	0.0%	0.0%	50.0%	22.2%	0.0%	25.0%	11.1%	0.0%	0.0%	0.0%
Mowaqar	25.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sahab	33.3%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	33.3%	22.2%	0.0%	0.0%	0.0%
Ain Albasha	0.0%	0.0%	0.0%	0.0%	20.0%	10.0%	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%
Ajloun	28.6%	0.0%	20.0%	0.0%	0.0%	0.0%	0.0%	33.3%	10.0%	0.0%	0.0%	0.0%
Alkoura	80.0%	33.3%	62.5%	20.0%	0.0%	12.5%	20.0%	0.0%	12.5%	20.0%	0.0%	12.5%
Aqaba	0.0%	20.0%	10.5%	22.2%	0.0%	10.5%	33.3%	0.0%	15.8%	11.1%	0.0%	5.3%
Bani kenana	0.0%	16.7%	11.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.3%	55.6%
Jarash	16.7%	0.0%	11.1%	0.0%	0.0%	0.0%	16.7%	33.3%	22.2%	0.0%	0.0%	0.0%
KarakQasbah	0.0%	0.0%	0.0%	40.0%	0.0%	22.2%	60.0%	0.0%	33.3%	20.0%	0.0%	11.1%
Ma'an	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	37.5%	40.0%	0.0%	0.0%	0.0%
Madaba	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.4%	0.0%	44.4%	11.1%	0.0%	11.1%
MafrqQasbah	33.3%	75.0%	50.0%	16.7%	0.0%	10.0%	16.7%	0.0%	10.0%	33.3%	0.0%	20.0%
Ramtha	25.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Rusifa	60.0%	75.0%	66.7%	20.0%	0.0%	11.1%	40.0%	25.0%	33.3%	0.0%	0.0%	0.0%
South Mazar	50.0%	20.0%	33.3%	0.0%	0.0%	0.0%	25.0%	0.0%	11.1%	0.0%	0.0%	0.0%
Zarqa 1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	14.3%	0.0%	0.0%	0.0%

Table 15 shows the key indicator results of G3 in Syrian student schools (second-shift/afternoon shift) classified by field directorate and gender.

Table 15. Percent of G3 students in Syrian student schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G3 ORF reading comprehension			G3 silent reading comprehension			G3 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All
Aljamaah	0.0%	44.4%	44.4%	0.0%	55.6%	55.6%	0.0%	22.2%	22.2%
Amman Qasbah	66.7%	40.0%	54.5%	66.7%	60.0%	63.6%	16.7%	20.0%	18.2%
Marka	33.3%	57.1%	50.0%	100.0%	71.4%	80.0%	33.3%	42.9%	40.0%
Mowaqar	0.0%	25.0%	10.0%	33.3%	0.0%	20.0%	16.7%	0.0%	10.0%
Sahab	40.0%	40.0%	40.0%	40.0%	60.0%	50.0%	0.0%	40.0%	20.0%
Ain Albasha	33.3%	83.3%	66.7%	100.0%	100.0%	100.0%	33.3%	66.7%	55.6%
Ajloun	33.3%	33.3%	33.3%	83.3%	33.3%	66.7%	16.7%	0.0%	11.1%
Alkoura	33.3%	0.0%	18.2%	16.7%	0.0%	9.1%	0.0%	0.0%	0.0%
Aqaba	40.0%	23.1%	27.8%	40.0%	53.8%	50.0%	0.0%	30.8%	22.2%
Bani kenana	42.9%	33.3%	40.0%	57.1%	33.3%	50.0%	14.3%	0.0%	10.0%
Jarash	0.0%	16.7%	10.0%	25.0%	33.3%	30.0%	0.0%	0.0%	0.0%
KarakQasbah	66.7%	71.4%	70.0%	100.0%	100.0%	100.0%	66.7%	28.6%	40.0%
Ma'an	0.0%	57.1%	44.4%	50.0%	57.1%	55.6%	0.0%	14.3%	11.1%
Madaba	40.0%	0.0%	40.0%	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%
MafrqQasbah	0.0%	22.2%	22.2%	0.0%	44.4%	44.4%	0.0%	22.2%	22.2%
Ramtha	33.3%	42.9%	40.0%	100.0%	71.4%	80.0%	0.0%	71.4%	50.0%
Rusifa	28.6%	0.0%	20.0%	42.9%	33.3%	40.0%	0.0%	0.0%	0.0%
South Mazar	0.0%	42.9%	30.0%	0.0%	57.1%	40.0%	66.7%	42.9%	50.0%
Zarqa 1	50.0%	66.7%	58.3%	83.3%	100.0%	91.7%	66.7%	0.0%	33.3%

Table 16 shows the key indicator results of G2 in Syrian refugee camp schools classified by field directorate and gender.

Table 16. Percent of G2 students in Syrian refugee camp schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G2 ORF zero scores			G2 ORF reading comprehension			G2 silent reading comprehension			G2 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
North West Badia	7.5%	19.0%	14.6%	10.0%	7.9%	8.7%	15.0%	23.8%	20.4%	7.5%	22.2%	16.5%
Zarqa 2	32.6%	50.0%	39.7%	14.0%	6.7%	11.0%	25.6%	13.3%	20.5%	2.3%	0.0%	1.4%

Table 17 shows the key indicator results of G3 in Syrian refugee camp schools classified by field directorate and gender.

Table 17. Percent of G3 students in Syrian refugee camp schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G3 ORF reading comprehension			G3 silent reading comprehension			G3 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All
North West Badia	40.5%	37.7%	38.7%	48.6%	59.4%	55.7%	27.0%	37.7%	34.0%
Zarqa 2	40.5%	27.0%	34.2%	52.4%	37.8%	45.6%	16.7%	21.6%	19.0%

Table 18 shows the key indicator results of G2 at Senior Teacher schools classified by gender and field directorate. A Senior Teacher is an early grade teacher who serves as a school-based supervisor who provides technical support and coaching to fellow early grade teachers at the same school.

Table 18. Percent of G2 students in Senior Teacher schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G2 ORF zero scores			G2 ORF reading comprehension			G2 silent reading comprehension			G2 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Aljamaah	0.0%	2.6%	1.8%	43.8%	28.2%	32.7%	56.3%	41.0%	45.5%	25.0%	10.3%	14.5%
Bsaira	7.3%	3.6%	6.0%	12.7%	17.9%	14.5%	29.1%	39.3%	32.5%	1.8%	0.0%	1.2%
Jezeah	0.0%	0.0%	0.0%	8.1%	16.9%	13.5%	43.2%	50.8%	47.9%	13.5%	23.7%	19.8%
Mowaqar	22.2%	24.3%	23.4%	3.7%	1.4%	2.3%	11.1%	9.5%	10.2%	5.6%	1.4%	3.1%
Naaor	14.3%	8.6%	10.7%	4.8%	8.6%	7.1%	14.3%	22.9%	19.6%	0.0%	2.9%	1.8%
Sahab	27.3%	23.8%	25.0%	13.6%	7.1%	9.4%	18.2%	19.0%	18.8%	0.0%	2.4%	1.6%
Ajloun	19.4%	6.5%	12.9%	25.8%	9.7%	17.7%	45.2%	25.8%	35.5%	16.1%	3.2%	9.7%
Aqaba	20.0%	13.5%	16.3%	10.0%	15.4%	13.0%	20.0%	25.0%	22.8%	0.0%	0.0%	0.0%
DairAlla	30.0%	10.0%	20.0%	5.0%	5.0%	5.0%	13.3%	13.3%	13.3%	1.7%	1.7%	1.7%
Jarash	20.9%	7.9%	14.8%	9.3%	7.9%	8.6%	25.6%	28.9%	27.2%	9.3%	2.6%	6.2%
Ma'an	20.0%	7.7%	14.3%	26.7%	15.4%	21.4%	53.3%	15.4%	35.7%	6.7%	0.0%	3.6%
MafrqQasbah	7.7%	19.4%	14.0%	7.7%	6.5%	7.0%	23.1%	25.8%	24.6%	11.5%	0.0%	5.3%
North East Badia	19.0%	0.0%	11.4%	4.8%	0.0%	2.9%	33.3%	35.7%	34.3%	19.0%	14.3%	17.1%
North Ghour	25.7%	19.6%	22.0%	2.9%	8.9%	6.6%	17.1%	17.9%	17.6%	5.7%	1.8%	3.3%
North West Badia	5.9%	3.3%	4.3%	0.0%	3.3%	2.1%	5.9%	30.0%	21.3%	5.9%	6.7%	6.4%
Petra	0.0%	0.0%	0.0%	28.6%	11.1%	20.0%	32.1%	14.8%	23.6%	14.3%	7.4%	10.9%
South Badia	33.3%	43.8%	39.5%	3.0%	4.2%	3.7%	6.1%	6.3%	6.2%	0.0%	2.1%	1.2%
South Ghour	15.4%	0.0%	10.5%	7.7%	0.0%	5.3%	38.5%	0.0%	26.3%	7.7%	0.0%	5.3%
South Shouna	6.1%	3.7%	4.6%	6.1%	8.5%	7.6%	28.6%	32.9%	31.3%	6.1%	3.7%	4.6%
Zarqa 2	36.4%	33.3%	34.8%	0.0%	6.3%	3.3%	18.2%	14.6%	16.3%	0.0%	0.0%	0.0%

Table 19 shows the key indicator results of G3 in the Senior Teacher schools classified by field directorate and gender.

Table 19. Percent of G3 students in Senior Teacher schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G3 ORF Reading Comprehension			G3 Silent Reading Comprehension			G3 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All
Aljamaah	66.7%	70.5%	69.5%	80.0%	79.5%	79.7%	46.7%	36.4%	39.0%
Bsaira	47.8%	54.8%	51.1%	63.0%	71.4%	67.0%	23.9%	19.0%	21.6%
Jeze	66.7%	61.4%	63.3%	87.9%	87.7%	87.8%	33.3%	43.9%	40.0%
Mowaqar	17.0%	25.3%	22.5%	31.9%	28.6%	29.7%	12.8%	13.2%	13.0%
Naaor	30.0%	40.0%	36.4%	50.0%	60.0%	56.4%	35.0%	14.3%	21.8%
Sahab	27.3%	38.3%	34.8%	31.8%	42.6%	39.1%	18.2%	10.6%	13.0%
Ajloun	27.3%	54.5%	45.5%	54.5%	68.2%	63.6%	31.8%	25.0%	27.3%
Aqaba	50.0%	34.5%	40.2%	52.9%	36.2%	42.4%	8.8%	5.2%	6.5%
DairAlla	20.0%	34.3%	26.9%	36.0%	41.4%	38.6%	12.0%	1.4%	6.9%
Jarash	34.0%	48.8%	41.1%	48.9%	48.8%	48.9%	29.8%	27.9%	28.9%
Ma'an	53.8%	60.0%	57.1%	69.2%	60.0%	64.3%	7.7%	13.3%	10.7%
MafrqQasbah	27.8%	43.2%	38.2%	44.4%	37.8%	40.0%	16.7%	10.8%	12.7%
North East Badia	31.6%	31.8%	31.7%	31.6%	40.9%	36.6%	47.4%	31.8%	39.0%
North Ghour	8.3%	23.7%	17.9%	30.6%	47.5%	41.1%	8.3%	10.2%	9.5%
North West Badia	50.0%	50.0%	50.0%	75.0%	62.5%	64.6%	37.5%	20.0%	22.9%
Petra	69.2%	84.8%	78.0%	73.1%	69.7%	71.2%	57.7%	30.3%	42.4%
South Badia	33.3%	22.4%	25.7%	23.8%	22.4%	22.9%	9.5%	6.1%	7.1%
South Ghour	50.0%	29.4%	31.6%	100.0%	52.9%	57.9%	0.0%	11.8%	10.5%
South Shouna	30.2%	42.0%	37.3%	49.1%	64.2%	58.2%	18.9%	18.5%	18.7%
Zarqa 2	14.0%	25.0%	20.0%	44.2%	40.4%	42.1%	14.0%	5.8%	9.5%

Table 20 shows the key indicator results of G2 students in rotational schools classified by field directorate and gender. Rotational schools are schools with large numbers of students, so each classroom is divided into two groups so that the two groups attend school in rotation.

Table 20. Percent of G2 students in rotational schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field directorate	G2 ORF zero scores			G2 ORF reading comprehension			G2 silent reading comprehension			G2 mathematics		
	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female	All
Al qwesmeh	17.9%	14.1%	15.8%	8.3%	11.1%	9.8%	22.6%	18.2%	20.2%	10.7%	2.0%	6.0%
Al taibeh & Al wasteiah	0.0%	0.0%	0.0%	37.0%	32.6%	34.2%	70.4%	60.9%	64.4%	37.0%	39.1%	38.4%
Aljamaah	8.7%	5.2%	6.8%	20.3%	20.8%	20.5%	36.2%	36.4%	36.3%	11.6%	9.1%	10.3%
Amman Qasbah	28.0%	6.9%	20.3%	2.0%	17.2%	7.6%	18.0%	24.1%	20.3%	2.0%	0.0%	1.3%
Bani Obaid	3.9%	7.5%	5.8%	23.7%	20.0%	21.8%	46.1%	41.3%	43.6%	11.8%	7.5%	9.6%
Bsaira	15.8%	11.1%	13.5%	15.8%	22.2%	18.9%	26.3%	27.8%	27.0%	0.0%	0.0%	0.0%
Irbid Qasbah	9.4%	11.5%	10.7%	20.8%	20.5%	20.6%	35.8%	43.6%	40.5%	45.3%	20.5%	30.5%
Jezeah	13.0%	4.3%	8.7%	4.3%	0.0%	2.2%	30.4%	17.4%	23.9%	8.7%	0.0%	4.3%
Marka	9.1%	3.3%	6.7%	25.0%	27.9%	26.2%	45.5%	39.3%	43.0%	3.4%	1.6%	2.7%
Mowaqar	24.2%	18.4%	21.0%	3.2%	1.3%	2.2%	11.3%	9.2%	10.1%	4.8%	1.3%	2.9%
Naaor	5.0%	0.0%	2.7%	10.0%	5.9%	8.1%	15.0%	23.5%	18.9%	0.0%	0.0%	0.0%
Sahab	25.0%	15.4%	18.4%	16.7%	15.4%	15.8%	16.7%	30.8%	26.3%	0.0%	0.0%	0.0%
WadiAlseer	6.7%	6.6%	6.6%	10.0%	9.8%	9.9%	28.3%	21.3%	24.8%	3.3%	0.0%	1.7%
Ain Albasha	1.5%	3.0%	2.3%	23.1%	17.9%	20.5%	21.5%	29.9%	25.8%	10.8%	4.5%	7.6%
Ajloun	12.0%	5.0%	8.9%	20.0%	20.0%	20.0%	40.0%	40.0%	40.0%	8.0%	10.0%	8.9%
Alkoura	11.8%	7.4%	9.7%	14.5%	17.6%	16.0%	26.3%	29.4%	27.8%	6.6%	4.4%	5.6%
Alqaser	0.0%	0.0%	0.0%	22.2%	11.1%	16.7%	22.2%	33.3%	27.8%	0.0%	0.0%	0.0%
Aqaba	4.5%	7.7%	6.3%	13.6%	7.7%	10.4%	22.7%	11.5%	16.7%	0.0%	0.0%	0.0%
Bani kenana	1.9%	1.9%	1.9%	9.6%	14.8%	12.3%	28.8%	29.6%	29.2%	21.2%	20.4%	20.8%
DairAlla	23.1%	15.8%	18.8%	7.7%	5.3%	6.3%	20.5%	17.5%	18.8%	2.6%	1.8%	2.1%
Jarash	14.6%	15.6%	15.1%	4.2%	4.4%	4.3%	14.6%	22.2%	18.3%	4.2%	2.2%	3.2%
Karak Qasbah	3.8%	0.0%	2.2%	11.5%	19.5%	15.1%	34.6%	26.8%	31.2%	1.9%	7.3%	4.3%
Ma'an	11.1%	7.7%	9.3%	33.3%	20.5%	26.7%	55.6%	35.9%	45.3%	16.7%	17.9%	17.3%
Madaba	4.7%	3.0%	3.6%	16.3%	10.4%	12.7%	32.6%	26.9%	29.1%	9.3%	4.5%	6.4%
MafragQasbah	18.8%	0.0%	10.5%	6.3%	8.0%	7.0%	12.5%	24.0%	17.5%	3.1%	0.0%	1.8%
North East Badia	26.9%	7.6%	15.3%	13.5%	21.5%	18.3%	38.5%	49.4%	45.0%	34.6%	35.4%	35.1%
North Ghour	27.0%	25.0%	26.0%	6.3%	8.8%	7.6%	20.6%	13.2%	16.8%	3.2%	2.9%	3.1%
North Mazar	13.3%	2.3%	7.9%	17.8%	9.1%	13.5%	31.1%	22.7%	27.0%	2.2%	6.8%	4.5%
North West Badia	15.6%	20.0%	17.9%	10.9%	8.6%	9.7%	20.3%	14.3%	17.2%	12.5%	10.0%	11.2%
Petra	0.0%	11.1%	11.1%	0.0%	11.1%	11.1%	0.0%	11.1%	11.1%	0.0%	0.0%	0.0%
Ramtha	16.0%	8.0%	13.0%	7.4%	8.0%	7.6%	18.5%	18.0%	18.3%	4.9%	2.0%	3.8%
Rusifa	37.3%	22.8%	30.2%	12.0%	8.9%	10.5%	21.7%	17.7%	19.8%	1.2%	0.0%	0.6%
Salt	19.7%	6.4%	13.9%	14.8%	12.8%	13.9%	32.8%	25.5%	29.6%	1.6%	0.0%	0.9%
South Badia	0.0%	0.0%	0.0%	80.0%	75.0%	77.8%	80.0%	100.0%	88.9%	60.0%	75.0%	66.7%
South Mazar	2.3%	0.0%	1.0%	40.9%	54.2%	48.5%	45.5%	55.9%	51.5%	13.6%	13.6%	13.6%
South Shouna	0.0%	2.8%	1.8%	5.3%	8.3%	7.3%	31.6%	41.7%	38.2%	5.3%	0.0%	1.8%
Tafila	22.0%	12.8%	17.0%	9.8%	19.1%	14.8%	24.4%	31.9%	28.4%	4.9%	0.0%	2.3%
Theeban	0.0%	3.2%	1.8%	16.7%	16.1%	16.4%	62.5%	29.0%	43.6%	8.3%	12.9%	10.9%
Zarqa 1	6.3%	0.0%	2.0%	50.0%	30.3%	36.7%	62.5%	48.5%	53.1%	6.3%	6.1%	6.1%
Zarqa 2	42.9%	32.2%	38.0%	4.3%	6.8%	5.4%	17.1%	10.2%	14.0%	1.4%	0.0%	0.8%

Table 21 shows the key indicator results of G3 students in rotational schools classified by field directorate and gender.

Table 21. Percent of G2 students in rotational schools who meet the benchmarks of the key performance indicators by field directorate and gender

Field Directorate	G3 ORF and Reading Comprehension			G3 Silent Reading with Comprehension			G3 Mastering Mathematics Skills		
	Male	Female	All	Male	Female	All	Male	Female	All
Al qwesmeh	48.4%	36.3%	40.7%	65.6%	48.7%	54.8%	35.9%	25.7%	29.4%
Al taibeh& Al wasteiah	75.0%	76.5%	75.9%	82.1%	74.5%	77.2%	75.0%	58.8%	64.6%
Aljamaah	54.0%	63.4%	59.6%	74.6%	74.2%	74.4%	34.9%	37.6%	36.5%
Amman Qasbah	30.0%	40.5%	34.8%	40.0%	54.8%	46.7%	14.0%	23.8%	18.5%
Bani Obaid	49.3%	63.5%	57.5%	63.4%	78.1%	71.9%	29.6%	40.6%	35.9%
Bsaira	44.4%	52.4%	48.7%	50.0%	57.1%	53.8%	0.0%	4.8%	2.6%
Irbid Qasbah	42.9%	45.2%	44.4%	73.8%	80.6%	78.5%	52.4%	41.9%	45.2%
Jezeh	26.3%	12.0%	18.2%	47.4%	32.0%	38.6%	36.8%	16.0%	25.0%
Marka	54.7%	48.8%	51.6%	76.0%	61.3%	68.4%	45.3%	30.0%	37.4%
Mowaqar	19.3%	27.8%	24.5%	28.1%	27.8%	27.9%	17.5%	14.4%	15.6%
Naaor	36.0%	50.0%	40.5%	40.0%	58.3%	45.9%	28.0%	16.7%	24.3%
Sahab	33.3%	33.3%	33.3%	55.6%	45.8%	48.5%	22.2%	29.2%	27.3%
WadiAlseer	33.8%	42.5%	38.6%	52.3%	58.8%	55.9%	27.7%	23.8%	25.5%
Ain Albasha	62.8%	54.7%	58.8%	73.1%	57.3%	65.4%	37.2%	29.3%	33.3%
Ajloun	30.8%	50.0%	44.9%	61.5%	66.7%	65.3%	23.1%	30.6%	28.6%
Alkoura	29.3%	33.3%	31.4%	41.3%	44.0%	42.8%	25.3%	21.4%	23.3%
Alqaser	66.7%	62.5%	65.0%	66.7%	75.0%	70.0%	25.0%	37.5%	30.0%
Aqaba	35.7%	42.3%	40.0%	50.0%	50.0%	50.0%	7.1%	3.8%	5.0%
Bani kenana	47.9%	49.1%	48.5%	64.6%	60.0%	62.1%	66.7%	38.2%	51.5%
DairAlla	28.3%	32.2%	30.4%	43.4%	40.7%	42.0%	13.2%	3.4%	8.0%
Jarash	39.6%	38.3%	38.9%	54.2%	34.0%	44.2%	20.8%	29.8%	25.3%
KarakQasbah	50.0%	34.5%	41.2%	64.3%	49.1%	55.7%	26.2%	16.4%	20.6%
Ma'an	52.9%	51.2%	51.9%	76.5%	48.8%	61.0%	50.0%	27.9%	37.7%
Madaba	31.7%	26.0%	28.0%	56.1%	33.8%	41.5%	19.5%	13.0%	15.3%
MafragQasbah	18.2%	50.0%	37.0%	40.9%	50.0%	46.3%	4.5%	3.1%	3.7%
North East Badia	38.1%	35.2%	36.2%	28.6%	44.3%	39.2%	54.8%	35.2%	41.5%
North Ghour	7.6%	21.7%	15.4%	19.7%	45.8%	34.2%	6.1%	8.4%	7.4%
North Mazar	46.8%	55.8%	51.5%	53.2%	59.6%	56.6%	29.8%	30.8%	30.3%
North West Badia	50.0%	38.4%	42.3%	60.0%	41.4%	47.7%	40.0%	30.3%	33.6%
Petra	0.0%	57.1%	57.1%	0.0%	14.3%	14.3%	0.0%	0.0%	0.0%
Ramtha	38.7%	47.9%	43.7%	46.8%	53.4%	50.4%	27.4%	26.0%	26.7%
Rusifa	27.8%	23.1%	25.0%	41.7%	42.6%	42.2%	23.6%	11.1%	16.1%
Salt	48.1%	55.9%	52.5%	63.5%	51.5%	56.7%	28.8%	19.1%	23.3%
South Badia	75.0%	83.3%	80.0%	100.0%	83.3%	90.0%	100.0%	100.0%	100.0%
South Mazar	79.1%	80.0%	79.6%	76.7%	70.0%	72.8%	34.9%	41.7%	38.8%
South Shouna	25.0%	38.5%	33.9%	55.0%	66.7%	62.7%	10.0%	17.9%	15.3%
Tafila	25.0%	48.7%	36.1%	34.1%	48.7%	41.0%	18.2%	15.4%	16.9%
Theeban	39.4%	46.2%	42.4%	54.5%	88.5%	69.5%	15.2%	23.1%	18.6%
Zarqa 1	84.6%	75.8%	78.3%	100.0%	72.7%	80.4%	38.5%	33.3%	34.8%

Zarqa 2	14.3%	20.6%	17.3%	44.3%	34.9%	39.8%	15.7%	4.8%	10.5%
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To track the changes that have occurred in the students' results based on the key performance indicators for this year compared to the previous years' results. Below are the LQAS general results related to the key performance indicators classified by basic sample schools, Syrian student schools (Second-shifted/afternoon schools), Syrian refugee camp schools, Senior Teacher schools, rotational schools, and gender.

First, to get the percentage of students who read a text fluently and with comprehension, the number of the students who answer 80% of the questions about the text is calculated and divided by the total number of the assessed students who read a text aloud for one minute. The results of this indicator are tabulated in **Table 22** classified by school, year, and grade level in 2021.

We notice that percentage of the students who achieved the benchmark in reading proficiency in the basic sample schools remained stable in 2019 and 2021. However, this percentage has declined in Syrian student schools—inside and outside the refugee camps—and in Senior Teacher schools.

Table 22. *Percent of the students who achieved the reading proficiency benchmark by school type, year, and grade.*

School type	2017	2018	2019			2021		
			G2+G3	G2	G3	G2+G3	G2	G3
Basic sample schools	-	-	29.3%	16.3%	40.6%	29.0%	14.5%	42.9%
Syrian student schools	-	-	31.5%	-	-	26.1%	8.7%	41.2%
Refugee camp schools	-	-	25.1%	-	-	23.5%	9.7%	36.8%
Senior Teacher schools	-	-	37.8%	-	-	27.0%	10.2%	40.5%
Rotational schools	-	-	-	-	-	29.2%	16.6%	44.5%

Table 23 shows the percentage of G2 and G3 students who achieved the reading proficiency benchmark in the basic sample schools classified by gender, grade, and year.

We notice that the percentage of the students who achieved the reading proficiency benchmark in the basic sample schools remained stable in 2019 and 2021, while it declined in the basic female student schools and increased in the male student schools.

Table 23. *Percent of the students who achieved the reading proficiency benchmark in the basic sample schools by grade, gender, and year*

Student gender	2017	2018	2019	2021		
			G2+G3	G2+G3	G2	G3
All Students	-	-	29.3%	29%	14.5%	42.9%
Boys	-	-	26.2%	27.40%	14.4%	41.6%
Girls	-	-	32.1%	30.50%	14.9%	44.2%

Second, to calculate the percentage of the students who read **a text with comprehension (silent reading)**, the number of students who answer 80% of the questions correctly is calculated and divided by the total number of the students who were assessed by having them read a text silently for two minutes. The 2021 results are tabulated by in **Table 24** by sample type, year, and grade level. We notice that the percentage of students who achieved the benchmark of silent reading comprehension in the basic sample schools has slightly increased in 2021 compared to the percentage in 2019.

Table 24. *Percent of the students who achieved the silent reading comprehension benchmark by school type, grade, and year*

School type	2017	2018	2019			2021		
			G2+ G3	G2	G3	G2+ G3	G2	G3
Basic sample schools	-	-	41.6%	28.8%	52.7%	42.9%	28.5%	56.6%
Syrian student schools	-	-	-	-	-	42.4%	19.8%	62.7%
Refugee camp schools	-	-	-	-	-	36.3%	20.5%	51.4%
Senior Teacher schools	-	-	-	-	-	40.9%	26.3%	52.0%
Rotational schools	-	-	-	-	-	42.9%	30.8%	57.1%

Table 25 shows the percentage of G2 and G3 students who achieved the benchmark in silent reading comprehension classified by gender, grade level, and year. We notice that the percentage of the students who achieved this benchmark in the basic sample schools slightly increased in 2021 compared to the 2019 percentage.

Table 25. *Percent of the students who achieved the silent reading comprehension benchmark in the basic sample schools by gender, grade, and year*

Gender	2017	2018	2019	2021
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	G2+G3	G2+G3	G2+G3	G2+G3
All students	-	-	41.6%	42.9%
Males	-	-	-	42.6%
Females	-	-	-	43.0%

Third, to calculate the percentage of the students who **do mathematics with understanding**, the number of the students who answer 80% of addition and subtraction level 2 questions and 70% of the missing number questions is divided by the total number of the assessed students.

Table 26 shows the detailed results of the basic sample schools, Syrian Student schools (Second-shift/afternoon schools), refugee camp schools, Senior Teacher schools, and rotational schools. The results are also classified by year and grade.

We notice that the percentage of the students who achieve the mathematics benchmark has significantly declined in the basic sample schools, Syrian student schools, and Senior Teacher schools in 2021 compared to 2019. This percentage slightly increased in the refugee camp schools.

Table 26. *Percent of the students who achieved the mathematics benchmark by school type, year, and grade*

School type	2017	2018	2019			2021		
	G2+ G3	G2+ G3	G2+ G3	G2	G3	G2+ G3	G2	G3
Basic sample schools	28.2%	29.8%	28.1%	16.3%	38.3%	17.7%	7.7%	27.2%
Syrian student schools	23.9%	24.0%	29.0%	-	-	15.9%	4.1%	26.2%
Refugee camp schools	-	19.6%	17.6%	-	-	19.1%	10.0%	27.7%
Senior Teacher schools	35.5%	47.2%	47.8%	-	-	14.4%	6.4%	20.8%
Rotational schools	-	-	-	-	-	18.1%	8.4%	28.3%

Table 27 shows the percentage of G2 and G3 students who achieved the mathematics benchmark classified by gender, grade level, and year. We notice that the percentage of female and male students who achieved the mathematics benchmark in the basic sample schools dropped in 2021 compared to 2019, while noting that male students' results remained better than those of female students.

Table 27. *Percent of the students who achieved the mathematics benchmark by gender, grade, and year*

Gender	2017	2018	2019	2021		
	G2+G3	G2+G3	G2+G3	G2+G3	G2	G3
All students	28.2%	29.8%	28.1%	17.67%	7.7%	27.2%
Males	28.6%	30.6%	25.0%	19.5%	9.6%	30.5%
Females	27.8%	29.1%	30.9%	16.2%	6.2%	25.0%

Table 28 shows the percentage of G2 and G3 students in the basic sample schools who achieved the mathematics benchmark classified by grade level and year.

We notice that the percentage of G2 and G3 students who achieved the mathematics benchmark in the basic sample schools declined in 2021 compared to 2019.

Table 28. *Percent of the students who achieved the mathematics benchmark by grade and year*

Grade level	2017	2018	2019	2021
All students	28.2%	29.8%	28.1%	17.7%
Grade 2	16.4%	16.3%	16.3%	7.7%
Grade 3	39.3%	41.7%	38.3%	27.2%

Fourth, to calculate the percentage of students **who got zero scores in ORF**, the number of students who could not read aloud any word in the text is divided by the total number of the assessed students. **Table 29** shows the results classified by year and grade level in 2021.

We notice that the percentage of students who got zero scores in ORF in the basic sample schools slightly increased in 2021 compared to 2019.

Table 29. *Percent of the students who achieved zero scores in ORF classified by school type, grade, and year*

School type	2017	2018	2019			2021		
	G2+ G3	G2+ G3	G2+ G3	G2	G3	G2+ G3	G2	G3

Basic sample schools	14.6%	16.6%	9.1%	11.7%	6.7%	9.4%	13.4%	5.7%
Syrian student schools	-	-	-	-	-	9.4%	14.7%	3.9%
Refugee camp schools	-	-	-	-	-	17.7%	25.3%	10.7%
Senior Teacher schools	-	-	-	-	-	9.0%	14.5%	7.0%
Rotational schools	-	-	-	-	-	8.4%	11.6%	5.4%

Table 30 shows the percentage of G2 and G3 students who got zero scores in ORF classified by gender, year, and grade level in 2021.

Table 30. *Percent of the students who achieved zero scores in ORF classified by gender, year, and grade level*

Gender	2017	2018	2019	2021		
	G2+G3	G2+G3	G2+G3	G2+G3	G2	G3
All students	-	-	-	9.4%	13.4%	5.7%
Males	-	-	-	11.8%	16.2%	7.0%
Females	-	-	-	7.4%	10.7%	4.6%

Discussions, conclusions, and recommendations

Discussion of Findings

Regarding the findings of field directorates based on the decision-making rule, they varied according to the different indicators. Six field directorates achieved the decision-making benchmarks for the reading proficiency indicator while 27 field directorates, in addition to the Syrian refugee camps, achieved the silent reading comprehension benchmarks. However, the mathematics results benchmarks were significantly low; only one field directorate achieved the benchmark for this indicator.

Although the ultimate goal is having at least 55% of students, nationally, meeting each of these indicators at the end of the school year, it is important to remember that data was collected in November and December of 2021—i.e. before the end of the first semester of the 2021-2022 school year and after a long interruption of face-to-face education. Therefore, the national average (and the results of nearly all field directorates) is expected to be less than the 55% benchmark at this time of this school year. Consequently, these results should not be directly compared to the goals of the end of the school year. The purpose is to use the results to identify the seemingly low-performing field directorates that need additional support.

As for the results related to the RAMP key performance indicators, the results indicated the following:

Regarding the **reading proficiency results**, the general percentage of G2 and G3 students combined who read fluently and with comprehension remained stable compared to the 2019 percentage—it was 29.3% in 2019 and became 29.0% in 2021. However, there was a slight decline in the percentage of G2 students who read fluently and with comprehension; the percentage decreased from 16.3% in 2019 to 14.5% in 2021. But it remains higher than the percentage that was achieved in the 2021 national survey, which was 10.7% (taking into account the differences in the implementation conditions, in the tools used, and in the national survey, and in the objectives of each survey). On the other hand, regarding G3 results, there has been progress in this percentage—it became 42.9% after it was 40.6% in the 2019 LQAS and 39.4% in the 2021 national survey.

Moreover, the reading proficiency results showed that the performance level is similar between the G2 male and female students— 14.9% for females and 14.4% for males. As for G3, however, female students outperformed their male counterparts (44.2% compared to 41.6%). A decline was noted in the performance of the Syrian students in refugee camps and in afternoon-shift schools—the percentage of G2 and G3 students combined in the afternoon schools declined from 31.5% to 26.1%, while in camp schools that percentage declined from 25.1% to 23.5%. Syrian students outside the camps are still outperforming their counterparts inside the camps. As for Senior Teacher schools, the performance of G2 and G3 students combined dropped from 37.8% to 27.0%, which is a significant decline. It was also noticed that the students' performance in rotational schools was a bit better than the national average. G2 students achieved 16.6% while G3 students achieved 44.5%.

As for the silent reading comprehension results, the overall percentage of G2 and G3 students combined who read a text silently and with comprehension rose to 42.9% from 41.6% in 2019. In other words, a slight improvement has occurred. The biggest progress was made by G3 students who achieved 56.6%

in this test compared to 52.7% in the 2019 LQAS, 43.8% in the 2021 national survey. This shows that G3 students have made a huge improvement between March and November of the same year. As for G2 students, there was congruence between the current result—which was 28.5%—and the 2019 result—which was 28.8%—but it is still better than the 2021 national survey, which was 12.9%.

In addition, the results of the students who read silently and with comprehension showed that there is a similarity between G2 and G3 students combined—43.0% for females compared to 42.6% for males. It was also noticed that the performance of Syrian students in refugee camps was less than the national percentage while the performance of the Syrian students in afternoon schools was similar to the national percentage. The performance of the students in the Senior Teacher schools was similar to the national percentage, and this applies to the rotational schools.

Regarding the mathematics mastery results, the overall percentage of G2 and G3 students combined who master mathematics skills declined to 17.7% in this LQAS compared to 28.1% in 2019. The percentage of G3 students was 27.2% compared to 38.3% in 2019; but it is still much better than the percentage achieved in the 2021 national survey, which was only 7.5%. As for G2, the percentage declined from 16.3% in 2019 to only 7.7% in this LQAS assessment, compared to 6.1% in the 2021 national survey.

Mathematics results also indicate that male students outperform their female counterparts in both G2 and G3. In G2, the percentage was 9.6% for male students and 6.2% for females. In G3, the percentage was 30.5% for males and 25.0% for females. It was also noticed that the performance of the Syrian students in the afternoon schools was less than the national percentage while the results of camp students were better than the national percentage, especially in G2, but it was similar to G3 results. As for the performance of the students in the Senior Teacher schools, it was relatively lower than the national level while the rotational school results had a slightly better performance than that of the national percentage.

Regarding the students who got zero scores in ORF, the overall percentage of G2 and G3 students combined was 9.4% compared to 9.1% in the 2019 LQAS—i.e. the performance is relatively stable. As for G3, the percentage was 5.7% compared to 6.7% in 2019, which indicates a decline in performance. G2 students achieved 13.4% compared to 11.7% in the 2019 LQAS and 21.3% in the 2021 national survey—i.e. a slight decline compared to the previous LQAS results, but it a significant improvement compared to the national survey results.

Results also indicate that the percentage of male students who got zero scores is higher than that of female students in both G2 and G3. In G2, the 16.2% of male students got zero scores compared to 10.7% of female students. In G3, the percentage was 7.0% for male students and 4.6% for female students. It was noticed that the percentage of the Syrian students in afternoon schools who got zero scores was identical to the national percentage, which was 9.4% for G2 and G3 students combined with a slight discrepancy in this percentage for the two grades separately. However, the results of camp students—which was 17.7% for G2 and G3 students combined—were much lower than the national percentage. Regarding the students in the Senior Teacher schools, their percentage was slightly lower than the

national percentage. As for rotational schools, their percentage was slightly better than the national percentage.

Overall, the results of this assessment tend to show a similar performance level in reading skills between 2019 and 2021. However, they indicate greater concerns about the low proficiency in mathematics skills. The decrease was greater among G2 students than it was among G3 students.

In general, the decline in G2 and G3 students' results in 2019 compared to 2019 was caused by the interruption of face-to-face learning and the shift toward distance learning due to Covid-19. Distance learning started in mid-March in the second semester of the school year 2019-2020 and continued until the start of the first semester of the school year 2020-2021. Additionally, this LQAS assessment was implemented at the end of November after the students had had less than three months of face-to-face learning. It was also noticed that the decline in G2 students' skills was significantly greater than it was in G3 students' skills.

We can notice that the students' reading skills have not been affected since 2019; they have rather improved among G3 students. This also applies to silent reading comprehension and zero scores. Although there were concerns that lower-performing students may suffer the greatest losses during school closures—which has been hypothesized globally—the results showed no increases in the proportions of G2 and G3 learners who were unable to identify a single item across subtasks correctly (i.e. 'zero scores'). Conversely, results showed significant reductions in zero scores for G3 and G2 students in. These reductions in 'zero scores' from 2019 to 2021 are arguably the result of RAMP and MOE's focus on low-performing children and differentiated instruction over the past two years. In addition, time-limited learning contributes to achieving the minimum level of learning, but it is difficult for this type of learning to elevate students to higher levels. Furthermore, numerous parents possess low capabilities and they lack the skills and expertise possessed by classroom teachers.

Despite the difference in the used tools and the implementation conditions, these LQAS results remain better than the results of the national survey conducted in March 2021, particularly the G2 results. This can be attributed to the remedial programs carried out by the MOE in cooperation with RAMP during the summer break and the first semester. These programs, which aimed to address students' learning loss, included conducting workshops for all concerned personnel in the field directorates (technical directors, heads of supervision divisions, and early grade supervisors) to present the national survey results and then agree on technical support plans along with remedial interventions. These plan and interventions included in-class coaching visits, communities of practice, developing and administering diagnostic tools at the beginning of the first semester of the school year 2021-2022, designing and remedial activities to be implemented during free activity lessons, and designing a remedial program on which early grade teachers are then trained.

As for mathematics, the G2 and G3 mathematics skills have declined in this LQAS assessment compared to the 2019 assessment. These results, however, are still much better than the results students achieved in the national survey that took place in March 2021, especially for G3 students. This progress can be attributed to the aforementioned actions taken by the MOE and RAMP.

The rationale behind this decline in mathematics skills is a set of factors. First, the uniqueness of mathematics necessitates a specialized teacher and face-to-face instruction for the concrete, semi-concrete, and abstract sequencing—which is difficult to achieve in distance learning. Second, the students need materials and tools to help them learn mathematics. Third, due to the need for constant practice that cannot be achieved in distance learning, mathematical skills are quite forgettable. Finally, the limited mathematics skills of parents prevent them from following up with their children at home.

As for rotational schools, students there achieved a slightly higher percentage than the national average in all reading and mathematics skills. This can be attributed to several reasons. First, the number of students inside rotational classrooms is less than the number of students in the non-rotational classrooms. Second, the rotational schools are located in city centers and in places with high population density where student performance is usually better than the performance of students in smaller schools. Third, teachers in rotational schools prioritize the foundational reading and mathematics skills. Finally, parents of children in rotational schools tend to be more involved in their children’s learning and not rely on school teaching because their children stay at home for some time during weekdays.

As for the schools that implement the Senior Teacher program, whose students demonstrated lower performance in this iteration compared to 2019, which was close to the national performance or slightly lower, this can be attributed to the expansion of the Senior Teacher program to include 17 field directorates. The teachers were not able to provide adequate support to the teachers due to the short implementation period because of the school closures. Furthermore, senior teachers normally work at already low-performing schools.

As for the decline in the performance of Syrian students outside the refugee camps, this can be attributed to poor training and capacities of the substitute teachers there. Another reason is the prolonged pandemic-induced school closures during which teachers did not monitor students, as learning was limited to the online “Darsak” platform. On the other hand, a significant decline was observed in the results of students in refugee camps. The rationale behind this could be the varying expertise of teachers in RAMP since all teachers in the camps are substitute teachers most of whom have not been trained on the RAMP methodologies. Another reason could be the economic and psychological conditions from which the camp residents and learners are suffering.

As for gender, female students have scored slightly higher than male students have in reading skills. This result does not differ from the pattern found in the results of students at the different levels of learning in Jordan. Female students outperform their male peers in all Jordanian education indicators, whether at the level of general education or higher education. However, male students have achieved higher performance than female students have in all mathematics skills due to the specificity of the non-achievement mathematics subject.

Recommendations

- It is necessary that the MOE provides support to the low-performing field directorates, which in turn provide support to the low-performing schools based on the performance reports that are provided to them by the MOE.
- Implement special programs to enable parents to teach their children effectively, especially in mathematics, and to provide them with the necessary tools such as videos and others.
- Design and implement programs to develop the capabilities of early grade teachers in mathematics skills. The impact of these programs is then assessed.
- Teachers need to focus on foundational skills in reading and mathematics. The number of weekly mathematics lessons needs to increase due to the difficulty of the new curriculum. Instead of classroom teachers, mathematics teachers should be the ones assigned to teach mathematics to early grade students.
- The MOE needs to establish a new schooling system that includes three semesters, one of which to be dedicated to addressing students' weak foundational skills in reading and mathematics.
- Continue to build teachers' capacities—with a focus on effective classroom management skills, formative assessment, and the use of multiple and diverse teaching strategies that consider students' different abilities and learning styles. There should be another focus on developing students' foundational skills in reading and mathematics.
- Provide school principals and supervisors with capacity building on student assessment methodologies—particularly the LQAS assessments—in terms of planning, implementation, data analysis, and extracting and utilizing the findings.
- Monitor the supervisors who provide in-class technical coaching to teachers to ensure quality control. Supervisors should not be tasked with administrative or technical work outside the scope of their main work.