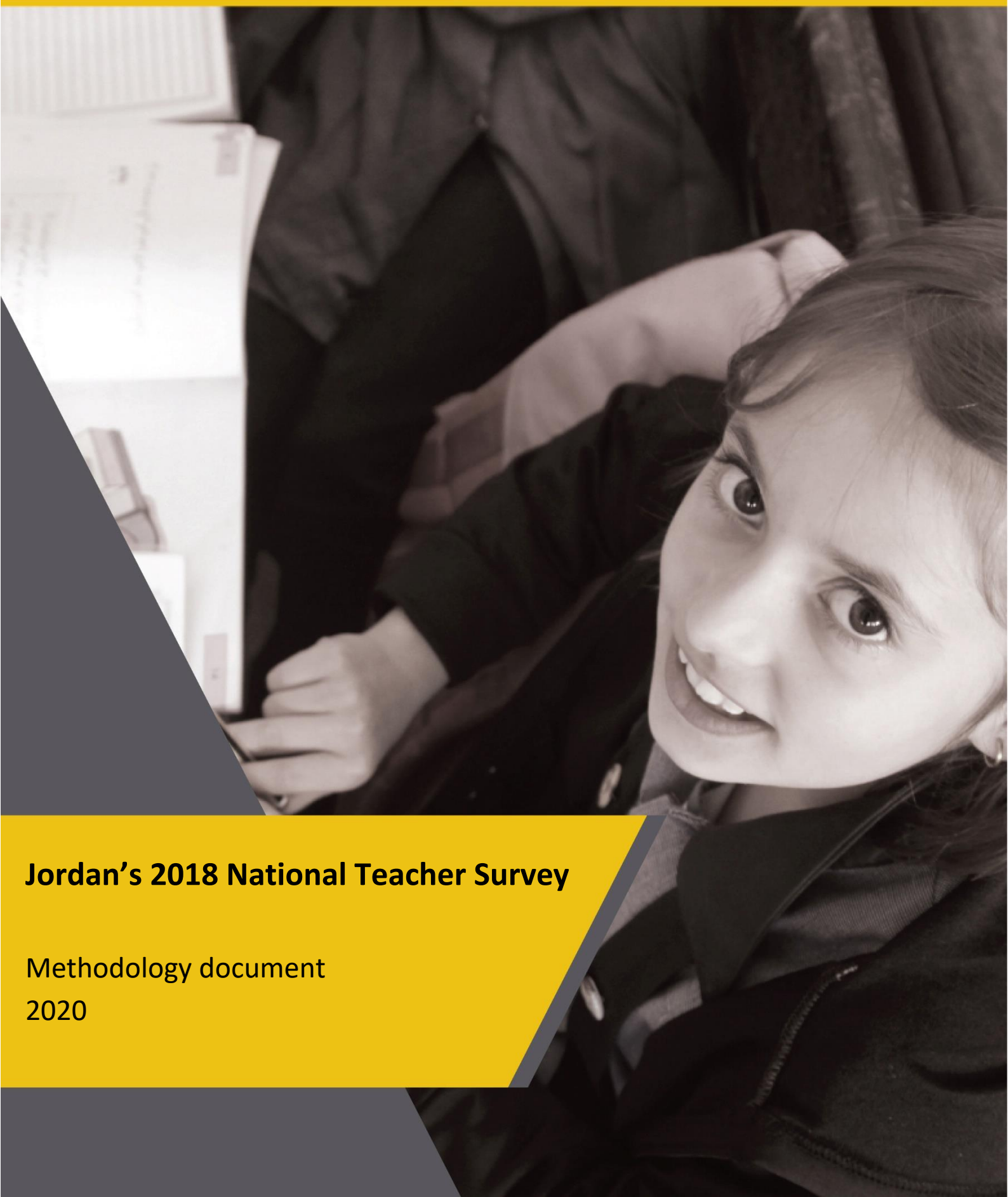

Jordan's 2018 National Teacher Survey

Methodology document

2020

Contents

Methodology

1. Objectives

The National Teacher Survey (NTS) is a comprehensive nationally representative survey conducted by the Queen Rania Foundation for Education and Development (QRF) in coordination with Jordan's Ministry of Education (MoE) as part of the Evidence-Driven Results in Learning project (EDRiL), with funding from the United Kingdom Department for International Development (DfID) and Canada.

The survey explored Jordanian teachers' educational backgrounds, experience, training, attitudes, pedagogical practices, challenges and experiences serving refugee students in various contexts. School and classroom climates were also explored. The survey design and instruments were aligned with the Organization for Economic Cooperation and Development's (OECD) Teaching and Learning International Survey (TALIS),[1] allowing comparisons to be made with other TALIS-participating countries. As such, some of the survey research questions were aligned with the TALIS research questions, while other questions related to policy-relevant issues for Jordan's education system, outlined below.

NTS research questions

1. What are teachers' motivations and attitudes about joining and continuing in the profession?
2. What are teachers' pedagogical practices and beliefs?
3. What is the nature of pre-service and in-service training provided to teachers?
4. What kind of professional support is provided to teachers inside schools, whether by principals, peers, supervisors or others?
5. What are teachers' experiences in serving refugee students in various contexts?
6. What further support do teachers serving refugee students need?
7. What are the school and classroom climates in Jordanian schools?
8. What challenges are teachers facing?
9. How do Jordanian teachers' experiences, backgrounds and beliefs compare to those of teachers participating in TALIS?

In order to address these research questions, 5,722 teachers of basic-level education (i.e. grades 1-10) were surveyed, along with their school principals[2] from 361 MoE, private and United Nations Relief and Works Agency (UNRWA) schools. A full description of the sample is outlined in section 2. The quantitative survey was followed by a set of six focus groups with teachers and principals to provide context and deeper understanding of preliminary survey findings.

[1] The publicly available 2013 TALIS technical guidelines were used for aligning the NTS methodology, which are very similar to the 2018 technical guidelines.

[2] In cases where the principal was not available, and was not going to become available within the data collection period to take the survey, an assistant principal, administrator or senior teacher took the questionnaire on behalf of the principal. There were 30 such cases in the NTS.

2. Survey sample

2.1 School sample

The sample aimed to achieve coverage of basic education in MoE, private and UNRWA schools in Jordan, with a sample specific to the International Standard Classification of Education (ISCED) level 2 to allow for comparison with TALIS (UNESCO-UIS, 2012).[3] This was achieved by disaggregating schools into two groups: schools serving grades 1-6 (ISCED level 1) and those serving grades 7-10 (ISCED level 2). [4]

The sampling was conducted by John Heward Gough, a statistics consultant specialized in sample survey design and sampling, and reviewed by Jean Dumais, the head sampling overseer for TALIS.[5] In order to select the sample, QRF obtained the 2017-2018 schools' database from the MoE's Education Management Information System (EMIS). Some schools were excluded from the sampling frame. This included schools with less than 5 basic education level teachers,[6] schools that did not serve ISCED levels 1 and 2, and schools governed by the Ministry of Awqaf and Islamic Affairs, Ministry of Higher Education and Ministry of Defence.[7] The total population of schools following these exclusions were 5522, from which the survey sample was chosen, as outlined below.

In alignment with TALIS standards, 200 schools per ISCED level were chosen (Organisation for Economic Cooperation and Development, 2014). The total number of schools sampled was 370; where 170 schools were chosen to represent the ISCED level 1 population, 170 schools represented the ISCED level 2 schools and teachers, and 30 schools were selected for both ISCED levels 1 and 2.[8]

Using the schools' database, systematic probability proportional to size sampling was conducted to select the schools. The measure of size was the number of basic education level teachers within a school (i.e. teachers of grades 1-10) as data regarding number of teachers serving each grade or ISCED level were not available.

The school population was stratified into 7 explicit strata (Table 1). The first level of stratification was governing authority, with three groups: MoE, private and UNRWA. Within these strata, there was implicit stratification[9] by region (North, South and Central) and school size, as indexed by the

[3] TALIS reporting that compares countries with one another is generally based on samples of teachers serving ISCED 2 level only.
[4] ISCED classifications for the NTS were based on UNESCO'S international classification of grade levels for Jordan.
[5] Based on Jean Dumais' review, the NTS sample complies and aligns with TALIS technical standards (Appendix A).
[6] Schools with fewer than 5 teachers constituted fewer than 3% of schools in Jordan, and were excluded to minimize data collection costs. However, during data collection, if one of the sampled schools was found to have fewer than 5 teachers, it was included in the sample.
[7] Schools governed by the Ministry of Awqaf and Islamic Affairs, Ministry of Higher Education and Ministry of Defence constituted fewer than 1% of schools in Jordan in 2017-2018. As such, they were excluded from the sample to decrease data collection costs.
[8] Schools which served ISCED levels 1 and 2 were in both sampling frames; the ISCED level 1 sample frame and the ISCED level 2 sample frame. Hence, there was a chance for such schools to be selected twice; once for the ISCED level 1 sample, and once for the ISCED level 2 sample.
[9] Implicit stratification was done by ordering the sampling frame by Region first, and then by school size.

number of basic education level teachers. No further stratification was done for the private and UNRWA strata. Within the MoE stratum, the second level of explicit stratification was refugee context, including: 1. Regular MoE schools, 2. Syrian second shift schools and 3. Camp schools (Zaatari and Al-Azraq refugee camp schools). The camp schools' stratum was not further stratified due to its small size. Regular MoE schools and MoE Syrian second shift schools were further stratified by area type (urban and rural).[10]

Table 1: *Number of schools **sampled** within each stratum, by ISCED level targeted*

		Number of Schools			
Authority & Refugee Setting	Area Type	ISCED level 1 only	ISCED level 2 only	ISCED levels 1 & 2	*Total*
MoE	Urban	40	44	2	*86*
MoE	Rural	36	38	0	*74*
MoE - Syrian Second Shift	Urban	16	18	6	*40*
MoE - Syrian Second Shift	Rural	14	14	4	*32*
MoE - Camp Schools	All	11	5	7	*23*
UNRWA	All	18	20	4	*42*
Private	All	35	31	7	*73*
Total		*170*	*170*	*30*	*370*

At the time of sample selection, two replacement schools were identified for each selected school, from the same stratum with similar characteristics. Replacements were only contacted in case a school declined participation. Schools deemed out of scope (i.e. not serving the ISCED level the school was sampled for) during data collection were not replaced.

2.2 Within school sampling

Both teachers and principals participated in the survey. Equal probability systematic random sampling of teachers was conducted to select the sample of in-scope teachers within each selected school to participate in the survey. Based on TALIS guidelines, in-scope teachers were all subject teachers, including substitute teachers who had been working at the school for more than 6 weeks at the time of data collection. Nurses, librarians and other support staff were not considered in-scope (Organisation for Economic Cooperation and Development, 2014).

Once selected for participation, schools were contacted to provide a list of all teachers in the school along with information on whether they served ISCED level 1, level 2, both, or neither ISCED level 1 nor ISCED level 2 grades. For schools selected for only one ISCED level, this information was entered into an Excel tool with a macro function allowing for random selection of the appropriate number of in-scope teachers at the school. The total number of teachers sampled was contingent upon the total number of in-scope teachers at a school, according to the following rules:

- If there were 30 in-scope teachers or less, all in-scope teachers were selected.

[10] Classification of schools as either urban or rural was based on their classification in the 2017-2018 EMIS database.

- If there were more than 30 in-scope teachers, 20 teachers were randomly selected using the Excel macro.[11]

Within-school sampling for schools selected for both ISCED levels (30 such cases in the NTS sample) required careful within-school sampling procedures. In these schools, it was considered that 3 strata of teachers exist: those who teach ISCED level 1 only, those who teach grades covering both ISCED level 1 and level 2, and those who only teach ISCED level 2, referred to as stratum A, B and C, respectively. Up to 20 teachers were selected to represent ISCED level 1 from strata A and B, and up to 20 teachers were selected to represent ISCED level 2 from strata B and C. Rounded proportional allocation was used to identify how many teachers from stratum B (those who teach both ISCED levels) would be allocated to strata A and C (i.e. how many teachers from the ones that teach both ISCED levels will be considered part of the ISCED level 1 sample, and how many will be considered part of the ISCED level 2 sample). Teachers selected from stratum B were only given one questionnaire to fill, either as part of the ISCED level 1 or the ISCED level 2 sample. The rest of the sample for strata A and C were then taken from strata A and C, respectively, to obtain a total of 20 teachers for ISCED level 1 and 20 teachers for ISCED level 2 where possible.[12]

The list of teachers selected from the eligible teachers indicated teachers' ID numbers assigned for the survey, serial numbers and whether they were assigned to receive the ISCED level 1 or the ISCED level 2 version of the questionnaire. These selected teacher lists were provided within a worksheet in the Excel tool which allowed enumerators to fill in the data collection result: whether it was successful or not, reasons for unsuccessful data collection, and any instance of teacher refusal, absence or teachers being deemed out of scope.[13] As opposed to school-level sampling, teacher replacement was not allowed.

The school principal was also surveyed in order to obtain information about the school, principal background experience, opinions and beliefs. If the principal was not available and was not going to become available within the data collection period to take the survey, an assistant principal, administrator or senior teacher took the questionnaire on the principal's behalf.

2.3 Achieved sample

The final sample achieved consisted of 361 schools (Table 2). Twenty-one schools refused participation and were successfully replaced with schools of similar characteristics. Only one school was not replaced, as both its replacements declined participation. Seven schools were deemed out of scope during the data collection period because they were determined to not serve the ISCED level for which the school was selected. The out of scope schools were not replaced.[14]

[11] The Excel macro was developed by QRF and reviewed by TALIS consultant Jean Dumais.
[12] Teacher sampling for schools selected for both samples (ISCED level 1 and level 2) was reviewed by the TALIS consultant Jean Dumais.
[13] In some cases, teachers were deemed out of scope due to inaccurate initial teacher lists received from schools.
[14] One school which was selected for ISCED levels 1&2 had no in-scope teachers for ISCED level 1. As such, the survey was completed with only ISCED level 2 teachers at that school, and was deemed out of scope for the ISCED level 1 sample.

Table 2: *The distribution of the achieved school sample within each stratum, by ISCED level targeted*

		Number of Schools			
Authority and Refugee Setting	Area Type	ISCED level 1 only	ISCED level 2 only	ISCED levels 1&2	Total
MoE - Regular	Urban	40	43	2	*85*
	Rural	36	37	0	*73*
MoE - Syrian Second Shift	Urban	16	18	6	*40*
	Rural	14	12	4	*30*
MoE - Camp Schools	All	11	5	7	*23*
UNRWA	All	17	18	4	*39*
Private	All	34	29	8	*71*
Total		*168*	*162*	*31*	*361*

A total of 5,722 teachers and 360 principals completed the survey from the 361 schools. The achieved distribution of principal respondents largely mirrors the school sample in Table 2; however, one principal was not available to participate, and there were no eligible staff members to take the survey on the principal's behalf. One of the private schools chosen to represent both ISCED levels 1 and 2 filled two principal surveys; the main school principal filled in the ISCED level 1 survey, and the assistant principal filled in the ISCED level 2 survey. The achieved sample of teachers for ISCED levels 1 and 2 is outlined in Tables 3 and 4, respectively.

Table 3: *The achieved ISCED level 1 teacher sample*

Authority and Refugee Setting	Area Type	Selected	Completed	Declined	Absent	Out of scope	Response rate[15]
MoE - Regular	Urban	773	679	15	63	16	90%
	Rural	545	473	6	47	19	90%
MoE - Syrian Second Shift	Urban	385	346	1	30	8	92%
	Rural	234	219	0	14	1	94%
MoE - Camp Schools	All	295	278	0	14	3	95%
UNRWA	All	377	340	5	20	12	92%
Private	All	718	648	7	40	23	93%
Total		**3,327**	**2,983**	**34**	**228**	**82**	**92%**

Table 4: *The achieved ISCED level 2 teacher sample*

Authority and Refugee Setting	Area Type	Selected	Completed	Declined	Absent	Out of scope	Response rate
MoE - Regular	Urban	888	784	15	67	22	91%
	Rural	601	543	3	44	11	92%
MoE - Syrian Second Shift	Urban	285	267	2	12	4	95%
	Rural	137	128	0	6	3	96%
MoE - Camp Schools	All	203	182	1	13	7	93%
UNRWA	All	387	332	9	34	12	89%
Private	All	557	503	13	32	9	92%
Total		**3,058**	**2,739**	**43**	**208**	**68**	**92%**

[15] The response rate was calculated based on the total completed surveys divided by the total selected, excluding out-of-scope teachers.

The teacher response rate was 92% for both ISCED levels 1 and 2 (Table 3 & 4). Out of the 6,385 selected teachers, only 77 teachers declined participation. Other teachers were either absent on the day of data collection, or were deemed out of scope for the survey.[16] In keeping with TALIS standards, non-responding teachers were not replaced under any circumstance.

2.4 Weighting

The final datasets were weighted to represent the distribution of teachers and principals in the MoE's 2017-2018 EMIS data. Weighting was conducted by John Heward Gough, an expert survey statistician and reviewed by Jean Dumais, an expert on TALIS sampling and weighting procedures.

Table 5 shows the demographic characteristics of the final weighted teacher sample, which align well with other available statistics on the population of teachers in Jordan. For example, the MoE Statistical Yearbook 2017-2018[17] indicates that 63% of grades 1-10 MoE teachers, 50% of grades 1-10 UNRWA teachers, and 92% of grades 1-10 private school teachers are female.

Table 5: *The demographics of ISCED level 1 and ISCED level 2 respondents – based on weighted data*[18]

		ISCED level 1			ISCED level 2		
		MoE	UNRWA	Private	MoE	UNRWA	Private
Gender	Female	71%	47%	95%	61%	69%	89%
	Male	29%	53%	5%	39%	31%	11%
Age	21 to 30	18%	17%	57%	22%	12%	50%
	31 to 40	55%	36%	30%	52%	41%	36%
	41 to 50	22%	30%	11%	23%	36%	11%
	51 or older	4%	17%	2%	4%	12%	3%
Academic qualifications	Less than Bachelor's	5%	1%	18%	3%	1%	10%
	Bachelor's or higher	95%	99%	82%	97%	99%	90%
Agglomeration	Urban	51%	81%	92%	52%	100%	96%
	Rural	50%	19%	8%	48%	0%	4%
Region	Central	45%	73%	75%	44%	68%	76%
	North	38%	27%	19%	40%	32%	18%
	South	17%	0%	6%	16%	0%	6%

[16] Out of scope teachers were considered those who: 1) did not teach the ISCED level that the school was sampled for, 2) did not complete 6 weeks at the school at the time of data collection, 3) had moved schools post receiving teacher lists, or 4) were on maternity or long sick leaves such that if the data collection window was shifted slightly, they would still not be present at the school.

[17] Available online: http://www.moe.gov.jo/sites/default/files/ltqryr_lhsyy_llm_ldrsy2017-2018nskh_nhyy.pdf

[18] Some totals exceed 100% due to rounding

3. Questionnaire development

Two questionnaires were developed, one for teachers and one for principals. Approximately 50% of questions for both were borrowed with permission from OECD's TALIS questionnaires for 2013,[19] [20] some of which were reworded or adapted to suit the local context. Other questions were adapted from QRF's 2014 National Teacher Survey (Qarout, Pylvainen, Dahdah, & Palmer, 2015), and Cetic.br's (2018) survey on information communication technology (ICT) in education. Additional questions were added by QRF based on input from local stakeholders and researchers from the University of Sussex who were engaged in another EDRiL study. The questionnaires for the survey were also reviewed by multiple stakeholders, including the United Nations Children's Fund (UNICEF), the Queen Rania Teacher Academy (QRTA), researchers from University of Sussex, UNRWA, the MoE training department and the MoE donor coordination unit.

The questionnaires were programmed into online survey software and compatible with tablet-based administration by the data collection vendor (Ipsos). Four versions of the questionnaire were created for each population group: English and Arabic versions for each ISCED level. Questions on the ISCED level 1 and ISCED level 2 versions were identical, but they directed teachers and principals to respond about the ISCED level for which they were sampled.

4. Qualitative pilot

Ipsos organized and conducted the focus groups for the survey instruments in early October 2018. Two focus groups were held: one with teachers and one with principals from private, UNRWA and MoE schools. During both discussions, each question and item was read aloud to participants. The focus groups yielded feedback on questionnaire clarity, length, whether questions are comprehensible, and whether there were any questions or items not already covered that could enrich the questionnaire.

5. Training

Three training sessions were held; one for callers to obtain teacher lists from schools, and two for enumerators regarding data collection procedures and the survey more generally. Ipsos organized these sessions, which were attended by QRF.

5.1 Training of callers

A one-hour training session was held with the team responsible for calling schools to obtain teacher lists. They were informed of the survey's objectives, the general guidelines of the survey (e.g. definitions of in-scope and out of scope teachers), and how to use the Excel-based teacher selection workbook developed by QRF. The callers' usage of the Excel tool was tested with QRF and the Ipsos team.[21]

[19] The OECD provided QRF with the Arabic version of the 2013 TALIS surveys used in the U.A.E. (Abu Dhabi).
[20] The majority of questions borrowed from the OECD 2013 TALIS questionnaires were the trend questions, which were also included in the 2018 TALIS cycle to enable comparisons between Jordan and TALIS-participating countries.
[21] Although this training was conducted, the calling process was revisited and restructured due to issues that arose during the quantitative pilot. The full survey procedure is outlined in section 7.

5.2 Training of enumerators

Ipsos created a training manual for the enumerators for the survey, which contained the survey objectives and guidelines and general survey procedures. QRF reviewed this manual to ensure alignment with TALIS guidelines and added project specifications and clarifications.

Enumerators underwent a full day training by Ipsos prior to the quantitative pilot and main survey data collection. Enumerators were also briefed on the survey objectives and relevant TALIS procedures by QRF, such as ensuring there is no teacher replacement, following the selected teacher list and ensuring teachers meet the criteria for inclusion in the study. During the training, the questionnaires were explained thoroughly, question by question, to ensure enumerators were familiar with the content in case teachers or principals asked questions. However, enumerators were trained to only clarify any recurring questions, but not aid or lead teachers in determining their responses any way, as TALIS is a self-administered survey.

Following the quantitative pilot, there was a refresher training for enumerators conducted by Ipsos, focusing on issues that arose during the pilot.

6. Quantitative pilot

The quantitative pilot was conducted mid-October with a sample of 15 MoE, private and UNRWA schools in the Central region of Jordan (Table 6).[22] [23] These schools were selected from the 2017-2018 EMIS schools database, which was filtered to only show schools in the Central region that had not been selected for the main survey[24] and then sorted by school size as indexed by number of basic-education level teachers. Quasi-random selection was then conducted, ensuring coverage of all governing authorities, school gender, and area types.

Table 6: *Number of schools sampled for the NTS pilot, by governing authority, ISCED level sampled and area type*

		Number of schools			
Authority	Area type	ISCED level 1 only	ISCED level 2 only	ISCED levels 1 & 2	*Total*
Private	Rural	-	1	-	*1*
	Urban	-	2	2	*4*
MoE	Rural	1	1	1	*3*
	Urban	2	1	1	*4*
UNRWA	Rural	1	-	-	*1*
	Urban	1	-	1	*2*
Total		*5*	*5*	*5*	*15*

QRF attended the pilot at seven of the schools to observe the procedures, make note of any unclear questions, and to ensure enumerators are following both NTS and TALIS guidelines. Following the pilot, the enumerators were further trained and revisions were made to the questionnaire. The

[22] 15 schools were initially sampled, but one school refused participation.

[23] The Central region was chosen for logistical purposes.

[24] QRF ensured the pilot schools were not selected for the main survey, whether as a main school from the 370 targeted or the replacement schools.

process for obtaining teacher lists was revisited, as calling schools was deemed ineffective; Ipsos would call schools several times without obtaining the needed information, as some schools would not pick up or would not send the teacher lists in time. Therefore, Ipsos began visiting schools in order to physically collect hard copies of the teacher lists required for teacher selection.

Ipsos shared the data from the pilot school sample. Amendments to the questionnaires were made based on preliminary analysis of the pilot data. Challenges noted in the observation of data collection in pilot schools, relating to comprehension of questions and questionnaire length, were also taken into account when updating the questionnaire.

7. Main survey procedures

Data collection began towards the end of October 2018, lasting until late December 2018. Prior to data collection, QRF obtained approvals from the MoE for conducting the survey in private and MoE schools, the Syrian refugee directorate for refugee camp schools, and the UNRWA Jordan field office for UNRWA schools.

Schools were called or visited in order to obtain a full list of all teachers in the school along with information about the grades they taught. The calls and visits began prior to data collection, and continued in parallel with data collection. Once lists were obtained, teacher information was entered by Ipsos into the Excel teacher selection workbook for that school. The selection workbooks were then sent to QRF, who ran the teacher selection using the pre-designed macro. The list of selected teachers was then sent back to Ipsos, who printed the selected teacher lists before visiting the school. Only selected teachers would participate in the survey.

Enumerators coordinated with principals to have teachers take the survey either during free periods or, if necessary, teachers were excused from their lessons. The number of teachers taking the survey at any one time ranged depending on number of tablets available or number of teachers available. Teachers were briefed on the scope and purpose of the survey and indicated their consent on the tablet. Respondents would fill in the questionnaire individually on their own tablets, and no discussion among teachers was allowed. The principal was also given a tablet to fill in the principal questionnaire over the course of the data collection period, typically in a room separate from the one where teachers were taking the survey.

Enumerators documented data collection outcomes on the selected teacher list form. If more than 20% of the selected teachers were absent or otherwise unable to complete the survey, enumerators revisited the school to conduct the survey with the remaining teachers from the list.

8. Quality assurance (QA)

QRF and Ipsos were responsible for ensuring the quality of the data and survey administration. QRF observed data collection at 24 schools over the course of the study to ensure adherence to data collection procedures in alignment with TALIS standards.[25] To ensure systematic quality monitoring, QRF observers used a checklist of key data collection quality indicators, including whether teachers

[25] Half of the schools were observed for a full day, and half for a half day.

were informed of the survey prior to the start and whether enumerators adhered to the selected teacher list. Quasi-random selection was conducted to choose the schools to be observed (Table 7).[26] Additionally, the two survey statisticians were consulted when any methodological issues were faced during the data collection period, to advise on the most comprehensive and TALIS-aligned methods to tackle the issues.

Table 7: *Number of schools observed for quality assurance, by region, ISCED level sampled and governing authority*

		Number of schools visited			
Authority	Region	ISCED level 1 only	ISCED level 2 only	ISCED levels 1&2	*Total*
MoE	Central	-	2	-	*2*
	North	4	5	1	*10*
	South	-	2	-	*2*
Private	Central	2	4	-	*6*
UNRWA	Central	-	-	1	*1*
	North	-	3	-	*3*
Total		*6*	*16*	*2*	*24*

Ipsos' has several QA measures taken to ensure quality of the data. First, they were responsible for debugging the tablet version of the questionnaire. They also ensured the presence of data collection supervisors at 20% of schools and conducting call backs to a minimum of 30% of the respondents to check the quality of the data. The call backs included asking the respondents questions from the questionnaire, to ensure their answers matched the responses they provided during data collection. Call backs were also used to clarify issues identified during data cleaning and validation. Ipsos also monitored all incoming data to flag any issues as they occurred so that they were tackled during the call backs. Finally, Ipsos is a member of The World Association of Research Professionals (ESOMAR), hence they adhere to all their stipulated research procedures and quality control standards.

9. Follow-up focus groups

Following initial data exploration, six focus group discussions were held with the principals and teachers who participated in the survey. There were four focus groups with teachers and two focus groups with principals from the North and Central regions of Jordan. The aim of these focus groups was to get insight on specific questions where the results did not match publicly available figures.

10. Survey limitations

Although rigorous methods were followed to ensure high quality data, some limitations are worth noting. The questionnaires were long and in some cases required up to 60 minutes to complete, which may have led to respondent fatigue nearing the end of the survey.

Conducting the survey in the fall also posed some challenges. Several new teachers at the beginning of the year had not completed 6 weeks at the school, meaning they were out of scope and could not

[26] Quasi-random selection was for logistical purposes, accounting for weather conditions, staff availability and scheduling.

be included in the survey. This issue was more common during the pilot rather than the main field trial, but is worth noting for future surveys. Conducting the survey in the fall also caused complications as some teachers were being transferred between schools to adjust for shifting enrollment. Additionally, teachers who were surveyed earlier in the school year may not have had as strong of a recollection of their teaching experiences following summer break as those who were surveyed later, or as teachers who participate in TALIS, which is administered in the spring.

Another limitation is related to the classification of ISCED level 1 teachers in the NTS. Based on UNESCO's international classifications, ISCED level 1 in Jordan spans teachers serving grade 1 to 6. This was the basis used for grouping teachers into ISCED levels 1 and 2, which allowed for comparisons to be made with TALIS. However, teachers of grades 1 to 3 are classroom teachers, while there are specific subject teachers for grades 4 to 6. Typically, ISCED level 1 teachers are classroom teachers, where there is one main teacher for the class (OECD, Eurostat & UNESCO-UIS, 2015). Future studies in Jordan may consider further disaggregating the teacher population sample to account for the different characteristics of classroom teachers.

Other issues included the method of administration; tablet-based administration on school premises. While using tablets ensured yielding high-quality data, as it decreased the possibility of human error associated with data entry for paper-based administration, tablet-based administration may have affected responses if teachers were not familiar or comfortable using tablets. Additionally, considering that the questionnaires were administered during school hours, teachers may have felt rushed to complete the questionnaire to return to their lessons or pressured to answer in a specific way. Some discussion between teachers would also commence during data collection, but this was immediately tackled by the enumerators, who would ensure that teachers fill questionnaires in without discussion.

Finally, challenges were faced with specific questions on the questionnaire as a result of several different reasons. First, a lack of clear understanding of the question or specific terms. Although definitions were provided, comprehension of certain terms or concepts was still an issue. Second, issues with questions may have occurred due to response styles. Response styles refer to how a respondent has a systematic tendency to answer questionnaire items in a way that is different than what the item was designed to measure (Paulhus, 1991). Some response styles include an acquiescent response style; where respondents tend to agree with question items regardless of the content, or mild response styles where respondents avoid the extreme ends of a scale (Vaerenbergh & Thomas, 2013). Third, responses on specific questions may have been influenced by respondents' social desirability bias, which is a bias resulting from self-report measures that are influenced by the respondents' desire to project a certain image (Fisher, 1993). Finally, although respondents' privacy and confidentiality were ensured, potential fear of repercussion may have altered responses on certain questions given that the survey was government-sponsored.

11. Author

Ghalia Ghawi

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14. References

Cetic.br. (2018). ICT in Education 2017: Survey on the Use of Information and Communication Technology in Schools. Retrieved from https://www.cetic.br/media/docs/publicacoes/2/tic_edu_2017_livro_eletronico.pdf

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, *20*(2). https://doi.org/10.2307/2489277

OECD/Eurostat/UNESCO Institute for Statistics (2015), "ISCED 2011 Level 1: Primary education", in ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, OECD Publishing, Paris. https://doi.org/10.1787/9789264228368-5-en

Organisation for Economic Cooperation and Development. (2014). TALIS 2013 Technical Report.

Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightman (Eds.), *Measurement of personality and social psychological attitudes* (pp. 17-59). San Diego: Academic Press.

Qarout, D., Pylvainen, H., Dahdah, S., & Palmer, R. (2015). Jordan's Teachers: QRF National Teacher Survey 2014. Retrieved from https://www.qrf.org/sites/default/files/2019-05/qrf_teacher_survey_en.pdf

UNESCO-UIS. (2012). *International Standard Classification of Education: ISCED 2011*. Montreal. Retrieved from http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf

Vaerenbergh, Y. Van, & Thomas, T. D. (2013). Response Styles in Survey Research: A Literature Review of Antecedents, Consequences and Remedies. *International Journal of Public Opinion Research*, *25*(3), 195–217.