

Qatar Education Study 2018

Executive Summary
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Students' Motivation and Parental Participation Report

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I. INTRODUCTION

This report provides an overview of the main results derived from the Qatar Education Study (QES) 2018, and provides an account of the perceptions of students, parents, teachers and administrators regarding students' motivation levels at school. For purposes of the analysis, the results presented in this report are based on school type (government, international, and other schools which include Arabic private and community related schools), and gender of the students. School type will play an important role in understanding how other school systems compare with government schools, and with gender, to see if there is a gender dynamic at play concerning student motivation. With Qatar's education system having changed since the last QES report in 2015, the results should indicate changes with respect to students' motivation levels (Nasser, 2017). The results reported here shed light on three areas directly related to policy and decision-making:

- Students' motivation,
- Students' plans for higher education and future careers, and
- Parental involvement in their child's education.

Many of the topics that this report tackles deal with a variety of themes that relate to students' motivation levels, such as being absent or missing school, and having difficulty with homework. And while these topics help researchers understand students' motivation levels, the student perspective is frequently neglected. For example, homework is a key area in understanding students' motivation that is rarely talked about from the perspective of the students (Warton, 2001; Hong et al., 2015). Existing research shows that various factors account for students' low or high motivation levels, whether these reasons originate from the learning environment (Cetin-Dindar, 2016) or the teachers (Kiemer et al, 2015; Mahler et al., 2018; Omar, 2018).

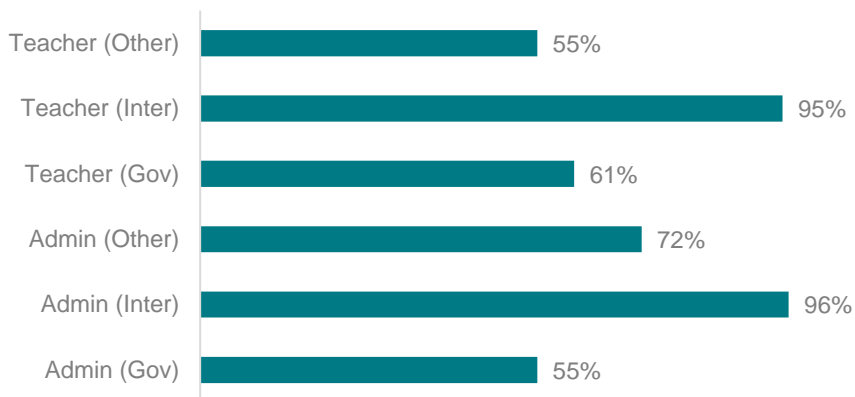
II. STUDENT MOTIVATION AND SATISFACTION

Administrators and Teachers' Perceptions of Students' Motivation are High

Administrators and teachers were asked about their general thoughts regarding their students' motivation at their current schools. As can be seen from the figure below, government school administrators were somewhat satisfied with students' motivation in their school (55%), compared to their counterparts at international schools who were very satisfied with their students' motivation (96%). An additional 72 percent of administrators at other schools pointed out they were satisfied with the level of motivation of their students.

Looking at the responses provided by the teachers, by contrast, unveils a different response pattern. Whereas 55% of teachers at other schools and 61% at government schools reported being satisfied with the motivation levels of their students, an overwhelming majority of their counterparts at international schools (95%) were satisfied with students' motivation (see Figure II-1). All administrators and teachers had somewhat high satisfaction levels with their students' motivation levels; however, it is telling that administrators and teachers at international schools were much higher. Moreover, teachers at other schools had lower satisfaction levels than the administrators in those same schools whereas in government and international schools teacher and administrator ratings were similar.

Figure II-1: Satisfaction with Students' Motivation, by School Type

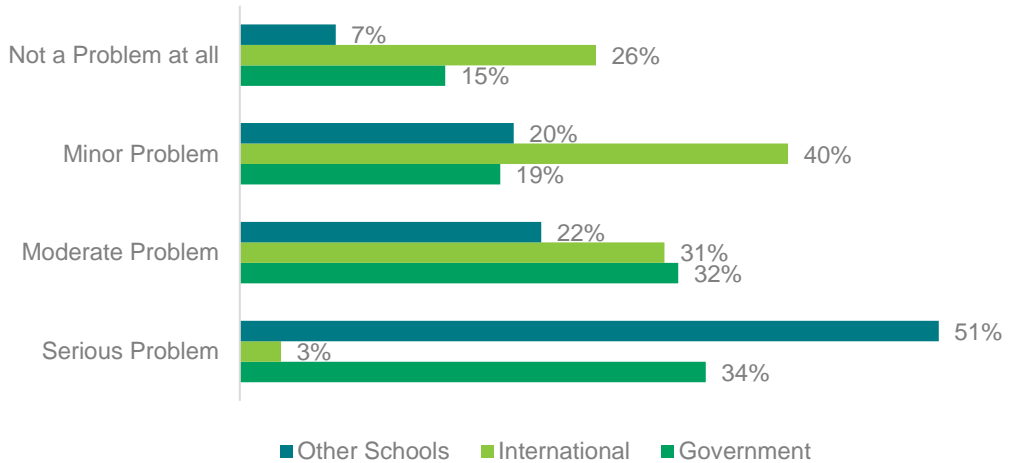


Administrators and teachers were also asked what the three most important obstacles to effective teaching and learning in their schools. Administrators and teachers were asked to select three obstacles from a list of obstacles. The number one obstacle selected by both groups of respondents was “Lack of student motivation,” showing that both administrators and teachers believe that the lack of student motivation in their schools is an important issue. Thus, 66 percent of administrators and 59 percent of teachers were of the view that lack of student motivation constitutes an obstacle to effective teaching and learning in school.

A majority of Teachers find Missing School to be a problem, unlike Parents and Students

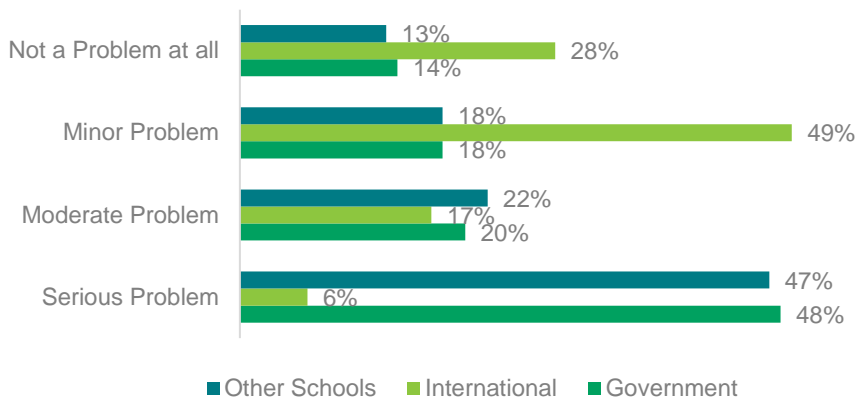
One of the major factors in low student motivation relates to students missing or being tardy to school. Missing school is detrimental to a student, especially when a student is consistently missing school or being tardy. And while missing school is just one of the reasons for low student motivation, it is heavily dependent on the parents’ efforts to bring or make sure their child gets to school. In assessing teachers, parents, and students’ views regarding missing school, the results indicate that it is a serious problem in the government and other schools in Qatar. Teachers, for example, clearly view students’ tardiness and absenteeism as a problem. In government schools, 34 percent of teachers reported student tardiness as a serious problem and around half (52%) of teachers at other schools, compared to only 3 percent of their counterparts at international schools (see Figure II-2). For the international schools, 31 percent saw it as a moderate problem but 66 percent saw it as minor or not a problem at all.

Figure II-2: Student Tardiness, as Reported by Teachers



Concerning student absenteeism, again teachers in government schools (48%) and in other schools (47%) reported this as a serious problem compared to only 6 percent of teachers in the international schools (see Figure II-3). For international schools 77 percent reported it as minor or not a problem at all.

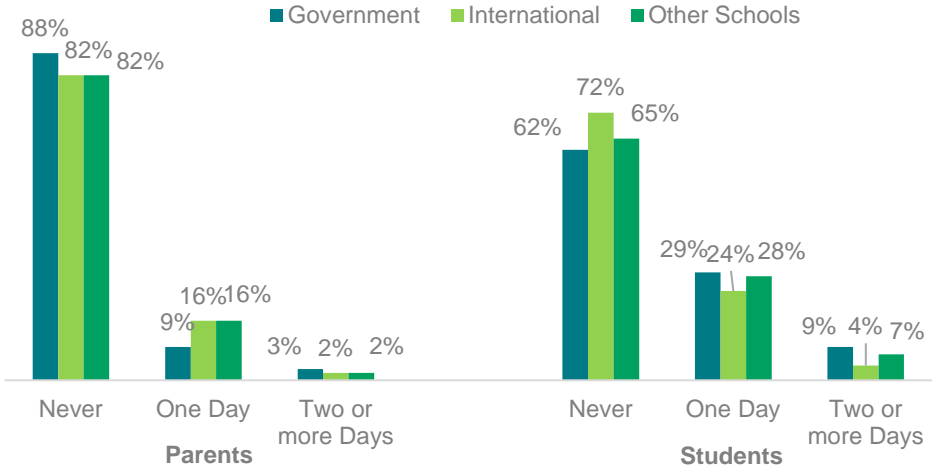
Figure II-3: Student Absenteeism, as Reported by Teachers



Whereas teachers in government and other schools report tardiness and absenteeism to be real problems in their schools, parents and students did not concur in their self-assessment. When asked, on average of a

week, if their child is absent from school, parents generally reported that their child either never misses school (88% in government, 82% in international, and 82% in other schools) or misses school only one day (9% in government, 16% in international, and 16% in other schools) (see Figure II-4) . The study’s results also show that students’ views were similar to those of their parents regarding missing school. However, students indicated missing school at a slightly higher rate than their parents reported for students had a higher response rate for missing one day of school. For the “never” missing response, 62 percent of government students and 65 percent in other schools reported this compared to 72 percent for international schools. For the response “one day” 29 percent for government, 28 percent for other and 24 percent for international (see Figure II-4). Comparing students’ and parents’ responses reveal that parent’s claim that their child is not missing school at a higher rate, especially among government school attendees. Several reasons might account for this discrepancy, including the parent not knowing their child is not going to school or that their child missed the bus. Regardless of the reasons, teachers have found tardiness and absenteeism to be major problems, especially in the government and other schools where over a third of students reported on average of a week, missing one or more days.

Figure II-4: Missing School: Parents and Students’ Perspective

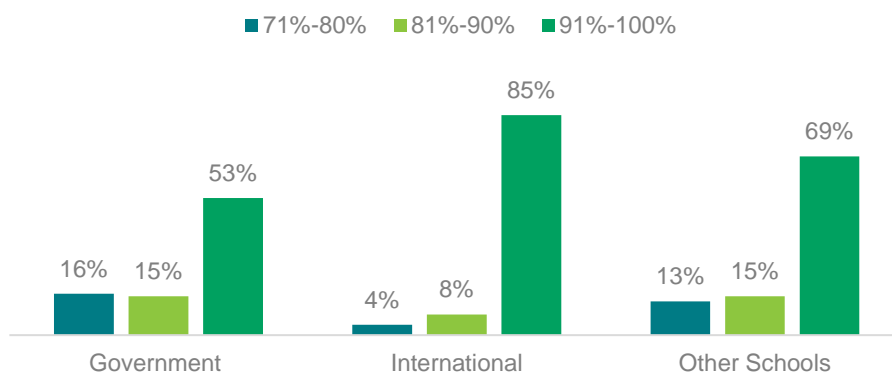


Teachers' expectations of graduating are high, but there are concerns

Understanding how teachers feel about their students graduating is a good proxy for their view of students' motivation. If teachers perceive graduation levels as low then by implication they regard their students as not motivated to succeed and graduate. First, teachers were asked to indicate what percentage of their students they expect will graduate. The percentages were then categorized for analyses purposes, and the top three were selected; 71%-80%, 81%-90%, and finally 91%-100%.

The results reveal that at the lowest (71%-80%) expected graduation level, 16 percent of government school teachers indicated this. 13 percent of other schools and only 4 percent of International school teachers expected this proportion of their students would graduate. Among teachers expecting a slightly higher graduation rate (the middle 81%-90% category), 15 percent of government school and of other school teachers expected this level, compared to only 8 percent of international school teachers. Finally, of the teachers expecting a high graduate rate (between 91%-100%), 53 percent were from government schools, 69 percent from other schools and 85 percent from international school (see Figure II-5).

Figure II-5: Graduation Expectations for High School, as Reported by Teachers



Even though most teachers had somewhat high expectations of their students likelihood of graduating, many still expressed concerns over students in the classrooms in terms of apathy and unpreparedness, both of which undermine students' success as they both reflect and cause low motivation to do well in school. Teachers in government schools reported

apathy and unpreparedness as a serious problem (66% and 59%, respectively) at the highest rate. A comparatively smaller number of teachers at other schools reported apathy and unpreparedness being a serious problem (56% and 49% respectively). In contrast, International school teachers reported that apathy and unpreparedness are a minor problem (44% and 39%, respectively) (see Figure II-6 & Figure II-7).

The results on apathy and unpreparedness indicate that while expectations of students graduating are high, students in the classroom show less motivation to do well in school and the classroom, with many doing the bare minimum in order to just graduate. These result support the contention that teachers are having a hard time with students' motivation levels in their respective schools and, in the case of government and other schools, seem to indicate that some changes are needed to raise motivation levels.

Figure II-6: Student Apathy, as Reported by Teachers

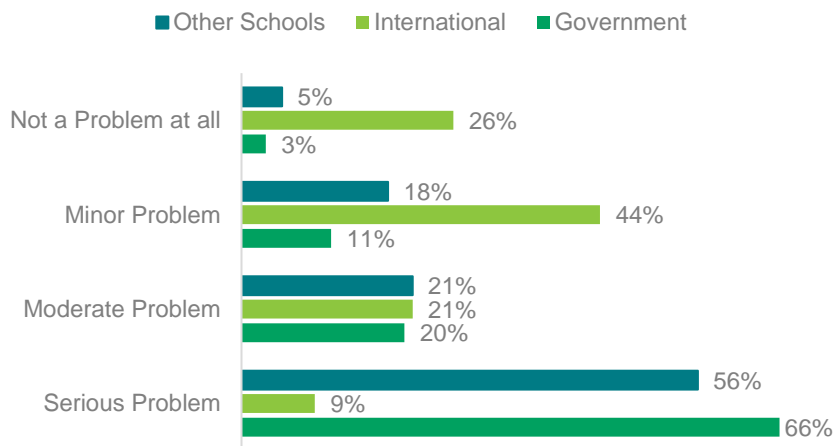
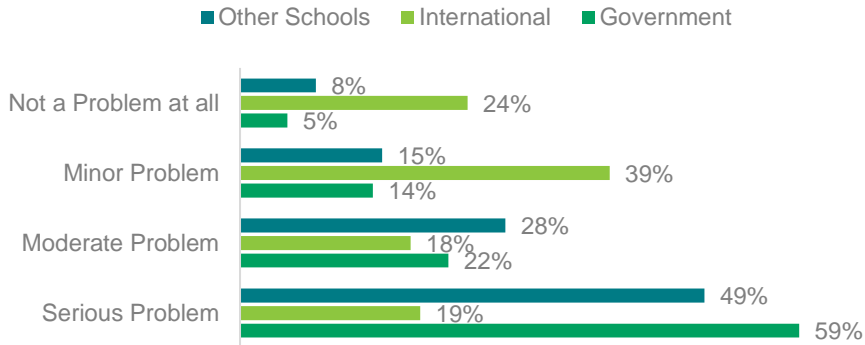


Figure II-7: Student Unpreparedness, as Reported by Teachers



Students have varied responses on their own motivation

In order to get a handle on how students' motivations might be improved, it's important to appreciate how the students themselves reflect on their own motivation levels. Indeed, oftentimes student's views on motivation are left out of discussions in the literature as to how to improve motivation. The topics covered in this section include students' thoughts on homework, excitement over different subjects, feelings of boredom, their general outlook on motivation itself, and finally whether students have consulted with an adult to improve their performance at school or to discuss school-related matters.

Are students finding their homework difficult and useful?

Starting with how they feel about their homework, students were asked about the difficulty and usefulness of their homework related to different subjects. Understanding whether homework by subject is perceived as difficult or useful provides an important insight into motivation especially as students' perspectives are rarely understood in the literature on homework. Gender is often an important factor to investigate on topics like this, but the results in this study yielded no significant gender-related variance regarding students' motivation.

Students were asked to rate the level of difficulty of homework assignments in each of the following subjects: Math, Science, English, and Arabic. For the homework on mathematics, students in all schools found math homework to be somewhat easy. In government school, for example,

66 percent of students reported their mathematics homework assignments to be easy. In the case of international schools, 55 percent found math homework easy and for other schools half (50%) reported their math homework to be easy.

Concerning science homework, students across the board found it quite easy with 78 percent of the students in government schools, 70 percent in international schools, and 77 percent in other schools reporting this. Similarly, students in government, international, and other schools reported their English homework to be quite easy (70%, 83%, and 72% respectively). And for the Arabic subject, 73 percent of students in government found the homework assignments to be easy and 27 percent difficult. In international schools 65 percent reported Arabic homework as easy and in other schools 68% of students reported it thus (see Table II-1).

Table II-1: Percentage of students who reported that homework is easy (Very easy and easy combined) in...

Dimension Surveyed	Government Schools %	International Schools %	Other Schools %	Male Students %	Female Students %
Math	66	55	50	60	61
Science	78	70	77	74	76
English	70	83	72	72	77
Arabic	73	65	68	73	70

A majority of students understand that the homework they are doing is useful

Looking at how useful students find their homework assignments in each subject, the results indicated that 87 percent of government school students, 91 percent of students in international schools, and 74 percent in other schools found mathematics homework to be useful. On science homework, a majority of students reported it as useful. Indeed, students at government (87%), international (91%) and other (85%) schools held a similar view of how useful their science homework was. Students in the government schools reported a high percentage (80%) for the usefulness of English homework, this was similar to students in international schools (79%) but lower than those in other schools (87%). Finally, for the Arabic language homework, students in government (79%), international (64%) and other (87%) schools all found the homework assignments to be useful (see Table II-2).

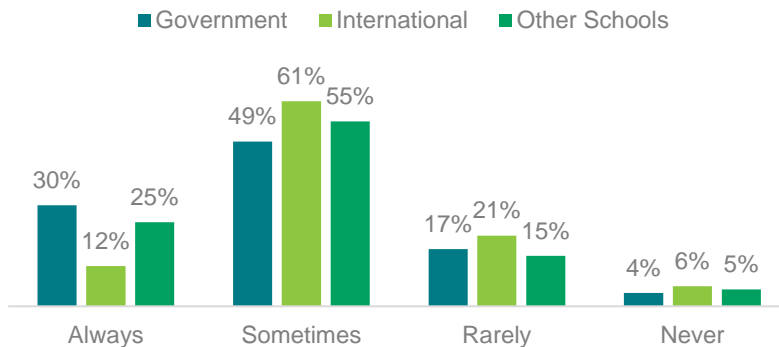
Table II-2: How Useful is Homework in... (Very useful & useful combined)

Dimension Surveyed	Government Schools %	International Schools %	Other Schools %	Male Students %	Female Students %
Math	87	91	74	86	90
Science	87	91	85	87	90
English	80	79	87	82	79
Arabic	79	64	87	78	77

Boredom seems to be high among students

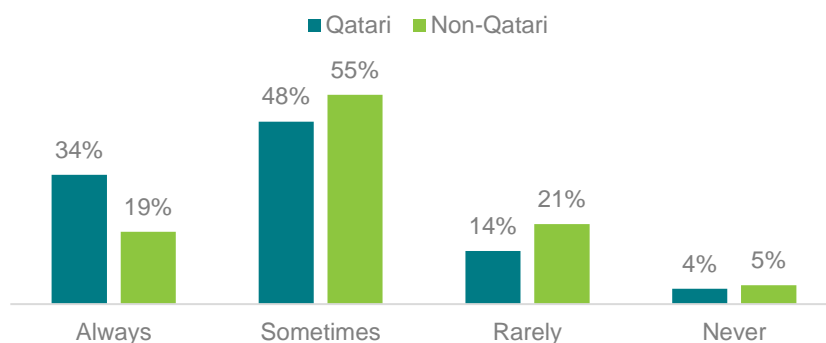
Boredom can greatly affect student motivation level in the classroom or in school. Feeling bored in school could be due to one of several reasons such as the work being perceived as too easy or as not sufficiently engaging. Among students in government schools, 30 percent reported feeling always bored, 49 percent sometimes bored, and only 21 percent said they were seldom or never bored in school. In international schools, only 12 percent of students reported feeling always bored while 61 percent said they were sometimes bored. Over a quarter (27%) reported seldom or never being bored in school. Finally, with respect to other schools, 25 percent of students said they were always bored, 55 percent sometimes bored, and one fifth (20%) indicated they were seldom or never bored in school. Reporting that they are sometimes bored seems to be the mode among students in all schools whereas being always bored is reported by sizeable proportions only in government and other schools (see Figure II-8).

Figure II-8: Boredom by School Type, as Reported by Students



Looking at differences between Qatari students and non-Qataris across all schools, the mode is again to be sometimes bored. A little over one third of Qataris self-reported being always bored while slightly less than one fifth of non-Qataris said this.

Figure II-9: Boredom by Nationality, as Reported by Students



Several factors predict student motivation, highlighting mixed results

Several other factors can also affect student motivation in school. This section takes a look at several of those factors (see Table II-3) starting with whether a student enjoys going to the school they go to. Among students in the government schools 65 percent agreed with this statement, 70 percent agreed in other schools, and in the international schools 88 percent concurred that they enjoy going to their school. Next, a high percentage of students said they agree and understand that working hard on their school work would earn praise from their teacher for their effort. Students in all schools indicated that if they work hard the teachers would praise them, which helps motivate them to continue to do better in school. Students in all schools highly agreed with this statement: 83 percent in government schools, 82 percent in international schools, and 79 percent in other schools.

Students were then asked if they agree or disagree with the following statement on whether in class they feel “put down” by their teachers, which can have a detrimental effect on student motivation. In government schools, 38 percent of students agreed with the statement, and 62 percent

disagreed. International school students also reported this proportion (38% agree and 62% disagree) while in other schools the balance was closer with 46 percent of students agreeing and 54 percent disagreeing with the statement.

With respect to the statement “Student’s efforts are reflected in their grades,” all students in all schools indicated agreement with this statement (72% in government schools, 84% in international schools, and 74% in other schools). The statement is a good indicator as to whether the student perceives the importance of receiving good grades and doing well in class.

Students were then asked about their thoughts on whether they agree or disagree with a negative statement: “I do not put in my maximum effort in studying.” About 33 percent of students in government schools agreed, 37 percent of students in international schools, and 28 percent of students in other schools agreed with the statement. The statement is asked in the negative in order to get students to reflect on their effort in studying, and this would give an indication as to how serious they are in their studies. The results show a substantial number of students admit to not putting in the maximum effort.

Note that the original set of statements was asked on paper using a four-point agreement scale (Strongly agree, Somewhat agree, Somewhat disagree, and Strongly disagree). Students selected the closest one to their opinion. For analysis purposes, we dichotomized these into “agree” and “disagree”, as is standard practice (see Table II-3 below).

Table II-3: Do You Agree with the Following Statement, as reported by Students?

DIMENSION SURVEYED	GOVERNMENT SCHOOLS %	INTERNATIONAL SCHOOLS %	OTHER SCHOOLS %	MALE STUDENTS %	FEMALE STUDENTS %
ENJOY THE SCHOOL YOU GO TO	65	88	70	71	74
TEACHER PRAISES ME	83	82	79	82	83
I AM PUT DOWN BY MY TEACHER	38	38	46	38	41

WHEN I PUT IN EFFORT, IT SHOWS IN MY GRADES	72	84	74	76	77
I PUT NO EFFORT	33	37	28	41	27

Students tend to visit their teachers or an adult relative when seeking aid to improve in school

Finally, seeking help shows that a student is interested in improving themselves in school, and suggests how motivated the student is to learn and get better grades. Specifically, students were asked who they talked with about things they studied in class: their school principal, teacher, subject coordinator, social advisor, academic advisor or another adult relative. Students reported seeing their teachers and adult relatives the most to get these answers. With respect to seeing teachers about how to improve their performance in school, males from all schools reported a higher number (70%) in comparison with their female counterparts (58%). Based on school type, 69 percent in international schools indicated seeing their teacher, 65 percent of students in government schools, and 49 percent in other schools. The next highest response was seeing an adult relative, which could include parents, siblings, or other family relatives. There was a pretty even split between genders as 52 percent of males and 50 percent for females indicated an adult relative. For school type, 55 percent of government school students selected seeing their adult relative, 46 percent for international students, and 46 percent in other schools.

Asked who they see when they want to talk about things they learned from the classroom, the two highest selections again were their teachers and adult relatives. By gender, 77 percent of males and 71 percent of females from all schools indicated their teachers. By school type, 72 percent of government, 82 percent of international students, and 66 percent of students in other schools selected seeing their teacher. For their adult relatives, 50 percent for males and 52 percent for females indicated this. And among the different school types, 54 percent for students in government schools, 46 percent for students in international schools, and 49 percent in other schools chose their teacher (see Table II-4 & Table II-5).

Table II-4: Percentage of Students Who Talked to a Teacher or Adult Relative about . . .

DIMENSION SURVEYED	GOVERNMENT SCHOOLS %	INTERNATIONAL SCHOOLS %	OTHER SCHOOLS %
IMPROVING ACADEMIC PERFORMANCE			
TEACHER	65	69	49
ADULT RELATIVE	55	46	46
THINGS STUDIED IN CLASS...			
TEACHER	72	82	66
ADULT RELATIVE	54	46	49

Table II-5: Percentage of students who talked to a Teacher or Adult relative about the following:

Dimension Surveyed	Male Students	Female Students	Qatari Students	Non-Qatari Students
Improving Academic Performance...				
Teacher	70	58	65	63
Adult Relative	52	50	58	48
Things Studied In Class...				
Teacher	77	71	72	75
Adult Relative	50	52	54	49

To better understand the extent of the student's own perspective on their motivation, we asked about their aspirations for furthering their own education. The next section of the report tackles this subject as a way to gauge how motivated students are regarding their future.

III. STUDENT PLANS FOR HIGHER EDUCATION AND CAREERS IN KNOWLEDGE ECONOMY FIELDS

The Qatar National Vision 2030 (QNV 2030), which outlines the country's long-term development policy plans, identifies human capacity as a fundamental goal for the future development of Qatar's economy and society. The QNV 2030 rests on the key principal of moving from reliance on carbon-based resources to a knowledge-based economy (QGSDP, 2008, 2011).

Critical to attaining the goals specified as strategic to Qatar's social and economic progress is education; hence the need for the provision of a system of pre-college and post-secondary education that meets international standards.

To gain a better understanding of Qatari students' future plans for higher education and careers prospects in the knowledge economy fields, we focus in this section on students' education plans. As is the case with the analysis of student motivation and parental involvement above, three variables are used to explore the QES 2018 survey data regarding students' educational and career plans. To reiterate, these are as follows:

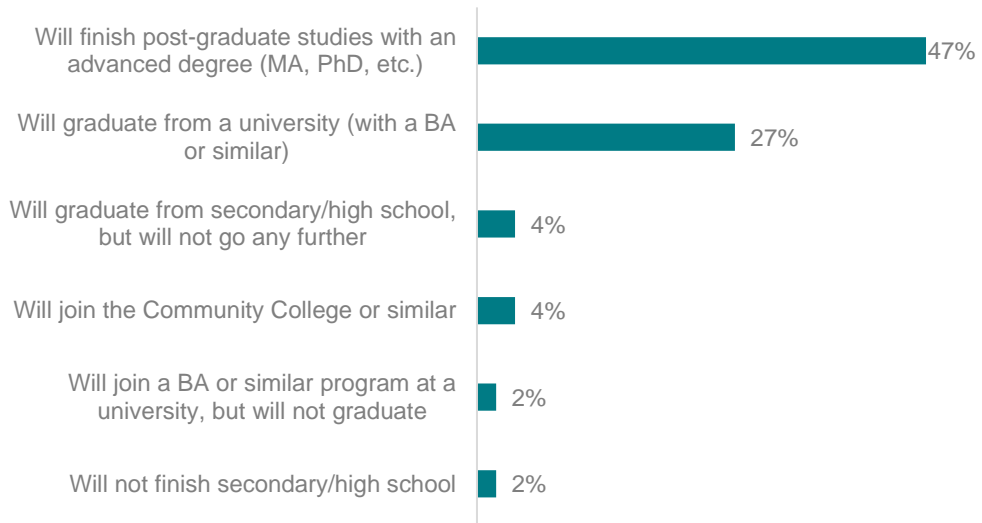
- Nationality (Qatari versus non-Qatari students),
- Gender (female versus male preparatory and secondary school students)
- School type (government versus international and other schools).

Plans to complete a university degree were reported by students

To understand respondents' educational and career aspirations, students were first asked how far in education they thought they would go and were given a list of six options to choose from. The results reveal that students generally plan on completing higher education degrees.

Indeed, whereas 27% of the students indicated they intend to complete a Bachelor's degree, close to half (47%) stated they aspire to finishing postgraduate studies with an advanced degree such as a Master's or PhD degree (Figure III-1). 12 percent said they did not expect to finish a college or higher degree comprised and the remainder said they "do not know."

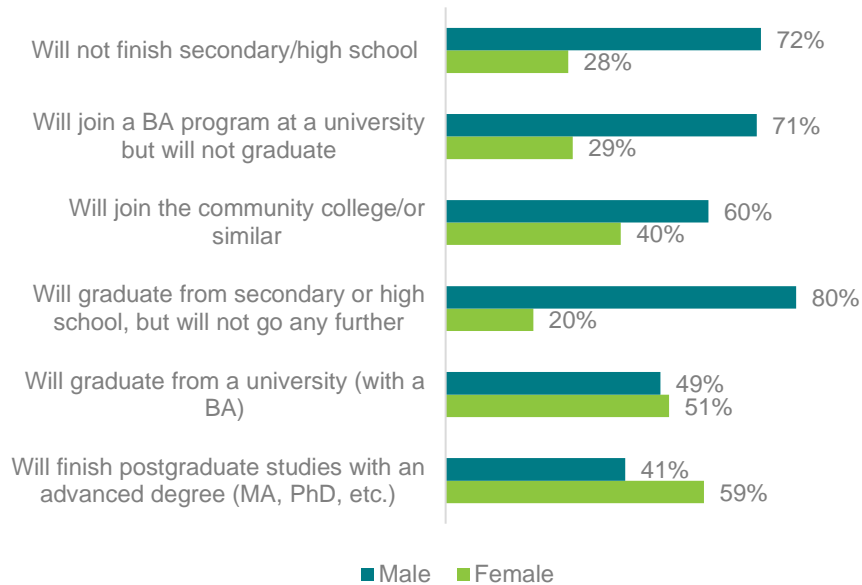
Figure III-1: Students' Educational Aspirations



Looking at gender within each of the categories in Figure III-2 shows that male students were somewhat less likely to have higher educational aspirations compared to their female counterparts. As Figure 11 shows, substantially more females than males expressed an intention to earn a postgraduate degree such as a Master's or PhD. Of the 47% of all students (Figure III-2) who plan on a postgraduate degree, 59% are female and 41% male. Of the 27 percent expecting a university degree such as a bachelor's degree, 51 percent are female and 49 percent male.

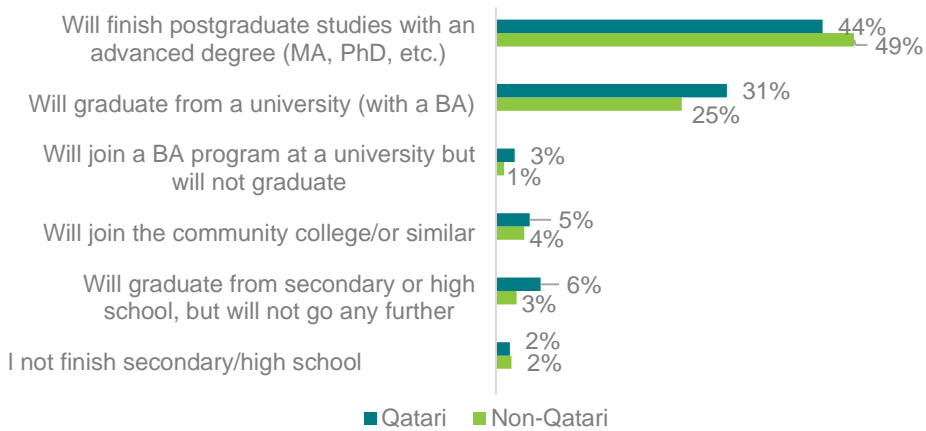
Looking at the remaining 12 percent (Figure III-2) reveals that males make up a large proportion of those who do not expect to complete a university degree (Bachelor's degree) or higher. Specifically, males constitute a large majority of those planning to "graduate from secondary school without going any further" (80%), "not finishing secondary school" (72% male), or "go to university but not graduate" (71%). It has to be noted that these are proportions within already small percentages.

Figure III-2: Students' Educational Aspirations, by Gender



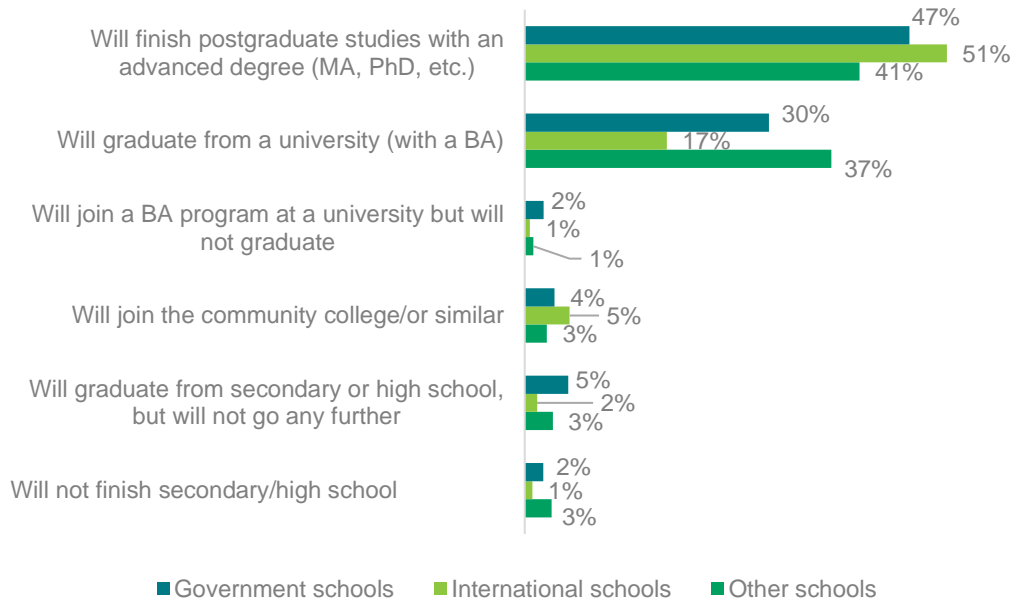
Based on the study's results, nationality does not seem to affect students' responses. Indeed, no major discrepancies emerge between Qatari and non-Qatari students. Students' responses reveal marginal differences between Qatari students and their non-Qatari counterparts for plans to (a) finish postgraduate studies with an advanced degree (44% and 49%, respectively) and (b) graduate from a university (31% and 25%, respectively).

Figure III-3: Students' Educational Aspirations, by Nationality



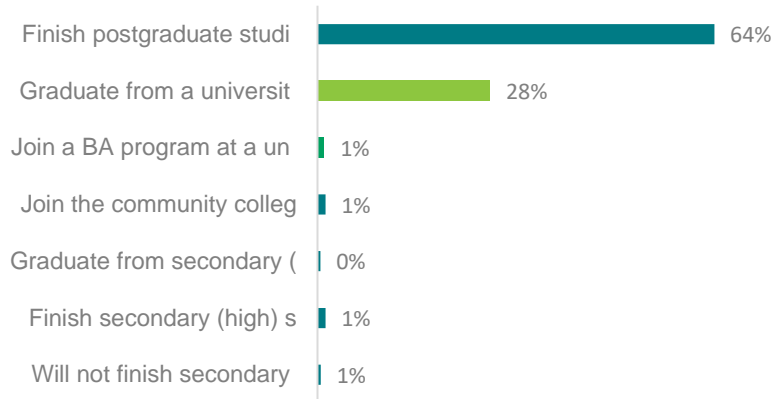
With regard to the type of school, the results indicate considerably high educational aspirations for students in all types of schools. As Figure III-4 shows, 51% of the students at international schools, 47% at government schools and 41% at other schools reported plans to finish postgraduate studies with an advanced degree. In addition, plans to graduate from a university with a Bachelor’s degree were also reported by 37% of the students at other schools, compared to 30% at government and 17% at international schools.

Figure III-4: Students' Educational Aspirations, by school type



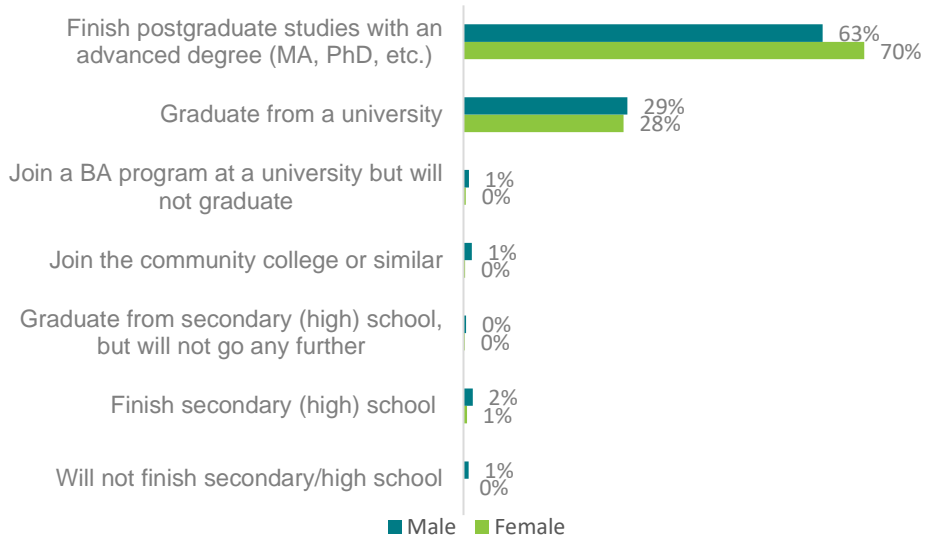
To gain an alternative perspective, parents were also asked about the highest level of education they would like to see their children complete. Taken together, parental data yield results that are consistent with those derived from student data, for 64% of the parents indicated a desire for their children to complete an advanced postgraduate degree, such as an MA or a PhD, followed by those who would like their children to graduate from a university with a Bachelor’s degree, for instance (28%) (see Figure III-5).

Figure III-5: Parents' Educational Aspirations for their Children



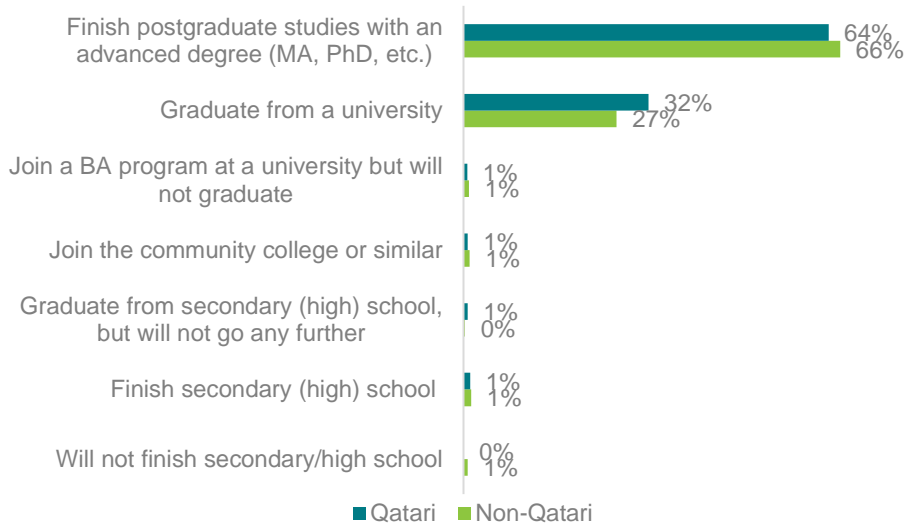
With respect to gender, the results show a dominant concentration in both male and female parents' responses regarding aspirations for their children to receive a post-secondary degree. More specifically, female parents are slightly more likely to have higher educational aspirations for their children than their male counterparts. As Figure III-6 demonstrates, 70% of the female and 63% of the male parents reported a desire to see their children complete their postgraduate studies and obtain a degree such as a Master's or PhD. An additional 29% of male and 28% female parents stated they would like their children to graduate from a university.

Figure III-6: Parents' Educational Aspirations for their Children, by Gender



A similar pattern was also observed for nationality: both Qatari and non-Qatari parents appear to have high aspirations for their children. As Figure III-7 demonstrates, 64% of Qatari parents and 66% of their non-Qatari counterparts indicated they would like their children to get an MA or a PhD. An additional 32% of Qatari and 27% non-Qatari parents indicated they want their children to earn a Bachelor's degree.

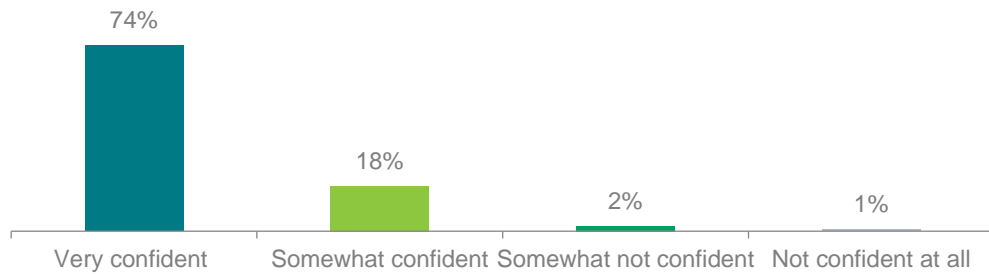
Figure III-7: Educational Aspirations for their Children, by Nationality



Very high levels of confidence in graduating from secondary (high) school were reported by students.

Elsewhere in the questionnaire, students were asked to what extent they are confident that they will graduate from secondary school. The results generally point to considerably high levels of confidence among the students. As is shown in Figure III-8 the overwhelming majority of students (92%) indicated they are either very confident (74%) or somewhat confident (18%) they will graduate from high school. Only around 3 percent mentioned they are not confident.

Figure III-8: Students' level of confidence they will graduate from secondary school

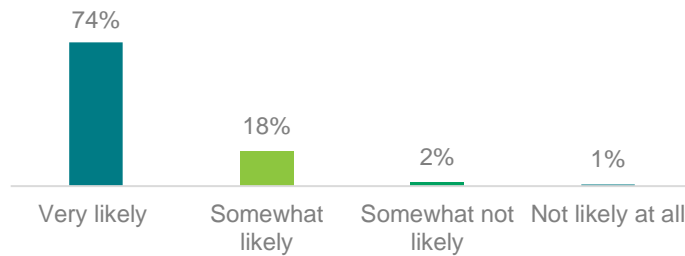


Looking at gender, the results did not reveal any significant gender gaps, as an equal proportion (92%) of both male and female students expressed confidence they will graduate with a secondary school degree. Regarding nationality, the results show that a large majority of both Qatari and non-Qatari students (92% each) reported confidence in graduating from secondary school. Similarly high levels of confidence were reported with respect to school type since 92% of the students in government schools expressed confidence they would graduate from secondary school, compared to 94% at international and 88% at other schools.

How likely are students to go to college (university) after getting a secondary school degree?

Students were also asked about the likelihood they would attend a post-secondary institution of higher education after graduating from secondary school. Results shown in Figure III-9 indicate that a majority of 92% stated they are likely to. More specifically, 74% of these indicated very likely and 18% said somewhat likely to go to college or university.

Figure III-9: Likelihood of students to go to college/university after obtaining a high school degree



When gender is factored in, the results further demonstrate female students (53%) slightly outnumber their male counterparts (47%) in the likelihood to attend a post-secondary higher education institution. Looking at nationality, 31% of the students who reported the likelihood to pursue higher education are Qatari, compared to twice as many non-Qataris (69%). However, this simply reflects their proportion within the student population. As Figure 12 above indicates, 78 percent of Qataris and 75 percent of non-Qataris expect to attend a post-secondary college or university, making these proportions comparably similar.

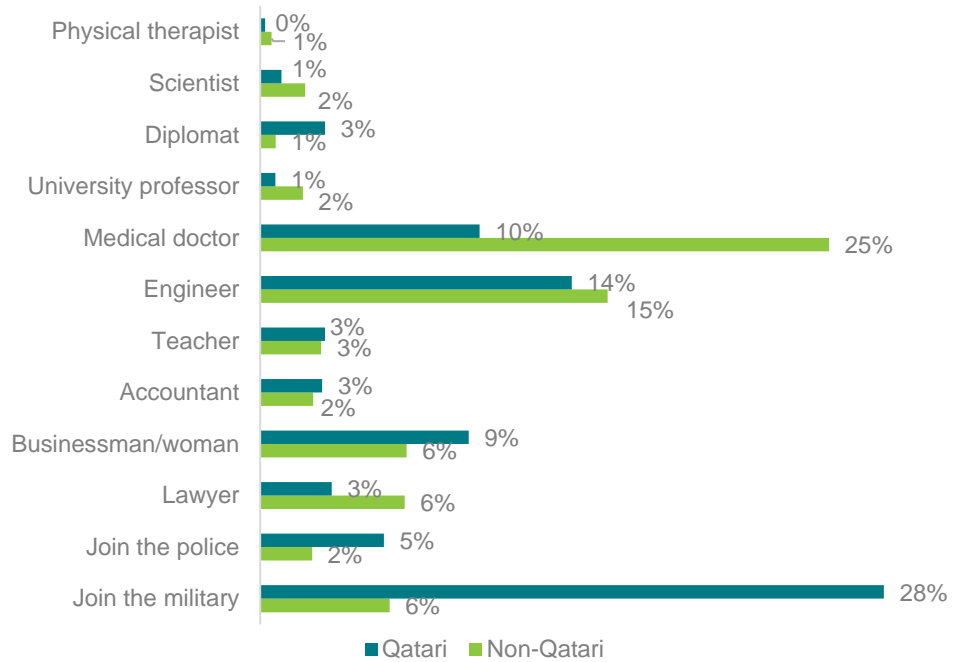
What future careers do students aspire to?

Respondents were asked about the kind of work they expect to be doing in the future and were instructed to choose one option from a list of sixteen: 1) Join the Military, 2) Join the Police, 3) Accountant, 4) Teacher, 5) Lawyer, 6) University Professor, 7) Medical doctor, 8) Nurse, 9) Clerk, 10) IT technician, 11) Physical therapist, 12) Chef, 13) Scientist, 14) Businessman/ Businesswoman, 15) Diplomat, and 16) Engineer. The list also included an “Other” option with space provided to specify their response.

As is shown in Figure III-10 below, the results derived from the respondents’ answers reveal different response patterns for Qatari and non-Qatari students regarding future career aspirations. Thus, joining the military seems to be the job most preferred by Qatari students (28%), followed by a career as an engineer (14%). In contrast, for non-Qatari

students becoming a medical doctor is the job sought after the most (25%), followed by a career in engineering (15%).

Figure III-10: Students' Future Career Aspirations (one response requested)



IV. PARENTAL INVOLVEMENT IN THEIR CHILD'S EDUCATION

The quality of teachers, effective pedagogical strategies, a solid curriculum, and student-centered learning styles are key factors that influence students' academic achievement. In addition, parental involvement also plays a very significant role in their children's education. Undoubtedly, parents should be involved at all levels of their children's schooling to have a major positive influence on their academic performance (Brewer et al., 2007; Zellman et al., 2009). In this fashion, the school community should keep in mind the importance of improving the school system by fostering productive relationships between parents and schools. As part of improving the school system, parents should be encouraged by this process to support their children's growth and accomplishments. The Qatar National Development Strategy (QNDS, 2011-2016) stresses the importance of parental participation in a child's education process by boosting extracurricular activities for families, interschool sports events as well as cultural and academic competitions. All this is in addition to being attentive to regularly updating parents on their children's academic achievements (QNDS, 2011-2016, p.152). As such, the current study of Qatar Education 2018 aims to examine relevant factors of parental involvement in their children's academic performance.

Parental Involvement in their child's school activities

For evaluation purposes, the third wave of this Qatar Education Study 2018 was comprised of several questions intended to measure the level of parental involvement in their children's education, covering their activities and degree of participation internally at home, and externally at school. Some examples of these questions included providing the frequency of their participation in the school parents' council, talking with a teacher or any school staff about their child, and checking whether their child has faithfully done their homework. To investigate parental involvement deeper, this section illustrates the extent of parental involvement based on three types of school (Government schools, International schools and other schools (i.e. Arabic Private Qatar Curriculum Schools and Community schools using the curriculum of their

embassy). In addition, comparisons will be made based on nationality (Qatari or non-Qatari) where relevant in order to clarify the consistent relationships between variables. With regard to the gender variable, the data did not reveal any significant results and, therefore, gender will not be discussed here.

Based on the three types of schools, students' parents were instructed to answer a question inquiring about how often they or a family member participated in various kinds of school activities which are comprised of 8 activities. As Table IV-1 demonstrates, a general common pattern characterizing parental involvement in their children's' activities at school in the three types of schools entails the least engagement compared to their involvement in activities at home.

Comparing Government schools with International and other schools in Qatar, the results show that parents' involvement generally occurs in most of the school activities at international schools, with 55 percent of the students' parents reporting they sometimes attend a school event in which their child participates. An additional half of the parents (50%) stated that they sometimes attend a school awards ceremony, compared to lower rates of attendance among parents at Government (27%) and other (43%) schools. Hence, a high portion of parents reported never attending such activities. Thus, 70 percent of parents whose children attend Government schools mention that they never help with school fundraising activities, and more than two thirds (68%) in other schools and half (50%) in the International Schools.

Surprisingly, a high percentage (73% Government, 53% International, and 65% other) of parents in all of the types of schools reported never participating in social, sports, and other activities apart from attending lessons in their children's classroom. This is at odds with the goal of Qatar's national development strategies (2011-2016 & 2018-2022) which encourages such activities to enhance parental involvement. Overall, Government school parents seem to be involved less with their children's activities at school compared to their counterparts at International and other schools.

Table IV-1: Parents participation in school activities, by schools type

DIMENSION SURVEYED	GOVERNMENT SCHOOLS			INTERNATIONAL SCHOOLS			OTHER SCHOOLS		
	%			%			%		
	a	b	c	a	b	c	a	b	c
Parents: attending lessons in his/her classroom	18	14	68	6	6	88	14	15	71
Parents: attending a school event in which your child participated	21	15	64	55	20	25	39	17	44
Parents: attending school award ceremony	27	12	61	50	16	34	43	6	51
Parents: helping school fundraising activities	17	13	70	34	16	50	18	14	68
Parents: participated in social, sports, and other activities	14	13	73	26	21	53	22	13	65
Parents: participated in the school parents council	44	16	40	28	13	59	47	15	38

a: Always b: Sometimes c: Never

With regard to the nationality of parents, the results in Table IV-2 shows similar patterns of low engagement by Qataris and non-Qataris with their child’s school-related activities. It is striking to note that a relatively high percentage of Qatari and non-Qatari parents indicate they never attended or participated in their child’s school activities. Thus, 61 percent of Qataris and 81 percent of non-Qataris reported they never attend lessons in their child’s classroom or participate in social, sports, and other activities with their children (73% of Qataris and 62% of non-Qataris). When parents were asked how frequently they attend school awards ceremonies, the results show that the majority of Qatari parents (63%) reported they never attended, while 47 percent of Non-Qatari parents stated so. In general, both Qatari and non-Qatari parents have relatively similar commitment levels of involvement in their children’s education process outside the home.

Table IV-2: Parents participation in school activities, by nationality

DIMENSION SURVEYED	QATARIS %			NON-QATARIS %		
	a	b	c	a	b	c
Parents: Attending lessons in his/her classroom	22	17	61	10	9	81
Parents: Attending a school event in which your child participated	27	13	60	39	18	43
Parents: Attending school award ceremony	24	13	63	40	13	47
Parents: Participated in social, sports, and other activities	17	10	73	21	17	62
Parents: Participated in the school parents council	52	15	33	34	15	51

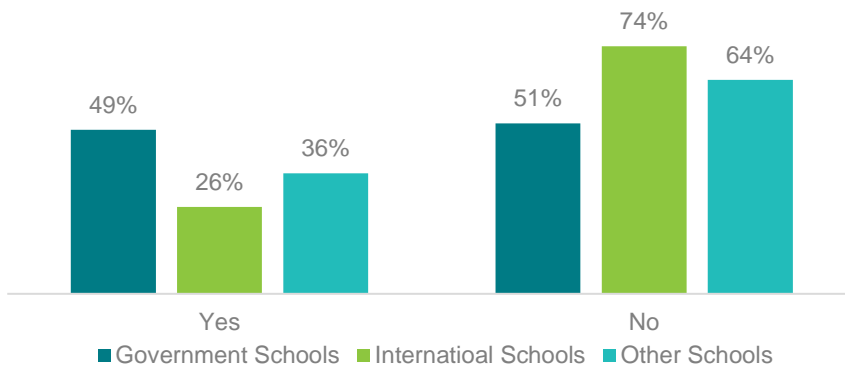
a: Always

b: Sometimes

c: Never

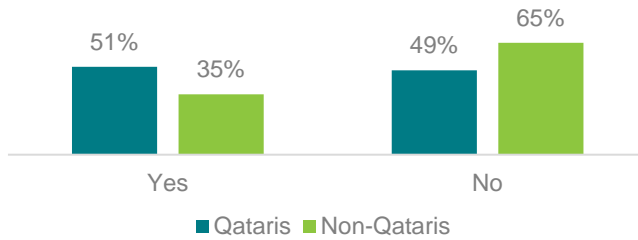
In response to the question “Have you or another adult member of your household been contacted personally by someone from the school about your child,” the results provide a relatively similar perception overall of parents in all schools. More precisely, in Government (51%), other (64%) and International schools (74%), sizeable numbers of parents reported they were not contacted by their child’s schools.

Figure IV-1: Parents have been contacted personally by someone from the school about their child, by school type



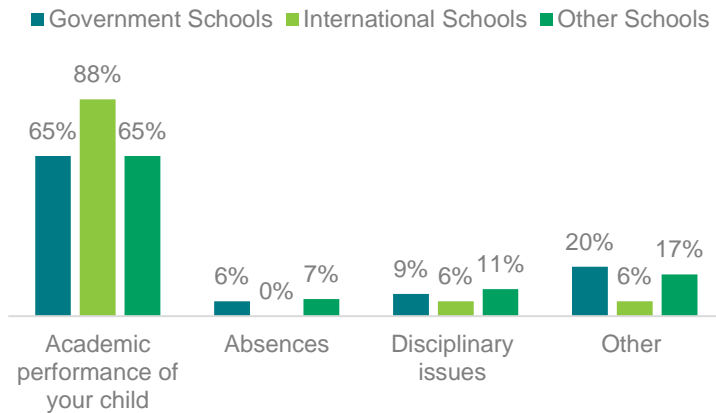
Along with school type, nationality was also included in evaluating parental involvement. Looking at these results (Figure IV-2), it appears that around half of Qataris were contacted personally by someone from the school, compared to just over a third of non-Qataris.

Figure IV-2: School officials contacting parents, by nationality



To get further insights into the results below, parents were also asked about the type of issues their child’s school discussed with them. In general, it seems that academic performance of the children is the issue most often discussed. As Figure IV-3 indicates, International schools have the highest percentage (88%) of parents reporting discussions of their children’s academic performance with the school compared to around two thirds (65%) for both Government and other schools.

Figure IV-3: Types of issues discussed with the school from parent perspective



Student-parent communication and participation in home related activities across school types and nationality

As can be observed from Table IV-3 below, it is evident that the core types of parental involvement in their children's education entail discussing and talking about school matters in general. When students were asked how often their parents or guardians talked about school or discussed a subject studied in class in the past week; most of the students at all school types reported a pretty high proportion of parental involvement. For instance, 57 percent of Government schools, 74 percent of International schools, and 54 percent of other schools students reported talking to parents or guardians about school three times a month or more. With respect to discussing a specific subject with their parents, students at Government and other schools both reported 45 percent compared to the 59 percent of International school students reporting engagement of three times a month or more with their parents. Consequentially, parents of International school students appear to communicate with their children more often than those with students in Government and other schools.

With regard to nationality, the data suggests that non-Qatari parents are communicating more with their children about school-related matters than their Qatari counterparts. For 74 percent of non-Qatari students said they talk to their parents about their school three times a month or more compared to 57 percent of Qatari students. While 52 percent of non-Qatari students reported that they discuss the subjects studied in class three times a month or more with their parents, only 41 percent of Qatari students reported this frequency of discourse with parents (see Table IV-4).

The most noteworthy result relevant to parental involvement is the comparatively low proportion of parents who report checking three times a month or more whether homework has been done. More than a third (37%) of students at Government and International schools report this which is slightly lower than the 41 percent of students at other schools. This is a low proportion for all three types of schools. A possible cause for

this is that many students use private tutoring excessively as we will see in the QES 2018 Tutoring Report¹.

Table IV-3: Parental involvement and communication with school staff from student perspective, by school type

DIMENSION SURVEYED	GOVERNMENT SCHOOLS %				INTERNATIONAL SCHOOLS %				OTHER SCHOOLS %			
	a	b	c	d	a	b	c	d	a	b	c	d
Students: talk to parents or guardians about your school	6	12	57	25	1	11	74	14	5	13	54	28
Students: discuss the subjects studied in class with either one or both of parents/guardians	14	22	45	19	7	22	59	12	11	21	45	23
Students: parents or guardians check whether or not have done a homework	22	20	37	21	26	30	37	7	17	21	41	21

a: Never b: Twice a month or less c: Three times a month or more d: I don't remember

Table IV-4: Parental involvement and communication with school staff from student perspective, by nationality

DIMENSION SURVEYED	QATARIS %				NON-QATARIS %			
	a	b	c	d	a	b	c	d
Students: talk to parents or guardians about your school	6	13	54	27	3	12	66	19
Students: discuss the subjects studied in class with either one or both of parents/guardians	14	25	42	19	10	21	52	17

¹ The Social and Economic Survey Research Institute (SESRI). (Upcoming). Qatar Education Study (QES) 2018: Tutoring Report. Doha, Qatar

Students: parents or guardians attended a school event in which you participated (for example: a party, an exhibit, a sports competition, an award ceremony, a fair)	9	8	17	66	12	17	19	52
Students: parents or guardians check whether or not you have done your homework	19	22	37	22	24	24	38	14

a: Never b: Twice a month or less c: Three times a month or more d: I don't remember

In general, when looking at the impact of school type and nationality, students indicate that their parents or guardians sometimes talk to their teacher and attend some school events with small varying differences. For instance, 56 percent of students at the Government Schools mention parents sometimes talking to their teacher about school related matters, followed by 48 percent of students at the International Schools and 58 percent of the students at the other Schools. With respect to nationality, more than two thirds (63%) of the Qatari students reported this compared with 50 percent of the Non-Qatari students.

Table IV-5: From Students Perspective: Parental Participation & Communication with School Staff across the Three School Types

DIMENSION SURVEYED	GOVERNMENT SCHOOLS			INTERNATIONAL SCHOOLS			OTHER SCHOOLS		
	%			%			%		
	a	b	c	a	b	c	a	b	c
Students: parents or guardians talked to your teacher or counselor about matters related to your school	12	56	32	2	48	50	11	58	31
Students: parents or guardians attended a school event in which you participated (for example: a party, an exhibit, a sports competition, an award ceremony, a fair)	8	24	68	16	46	38	12	32	56

a: Always b: Sometimes c: Never

Table IV-6: Parental participation and communication with school staff by Qatari and non-Qatari students' perspective

DIMENSION SURVEYED	QATARIS %			NON-QATARIS %		
	a	b	c	a	b	c
	Students: parents or guardians talked to your teacher or counselor about matters related to your school	15	63	22	6	50

a: Always b: Sometimes c: Never

Teachers were asked a number of questions concerning the frequency of discussing students' assessment and the use of multimedia technology with the school principal, vice principal for academic affairs, academic advisor, counselor or social advisor and students' parents. As can be seen from Table IV-7 below, the results show that teachers at International schools reported a higher percentage (52%) of discussions about student assessments with parents of students at the most frequent rate (three times a month or more), compared to their colleagues at Government (25%) and other schools (34%).

The results also demonstrate that government school teachers (58%) report never discussing the use of multimedia technology with students' parents as compared to teachers in other (43%) and international (17%) schools.

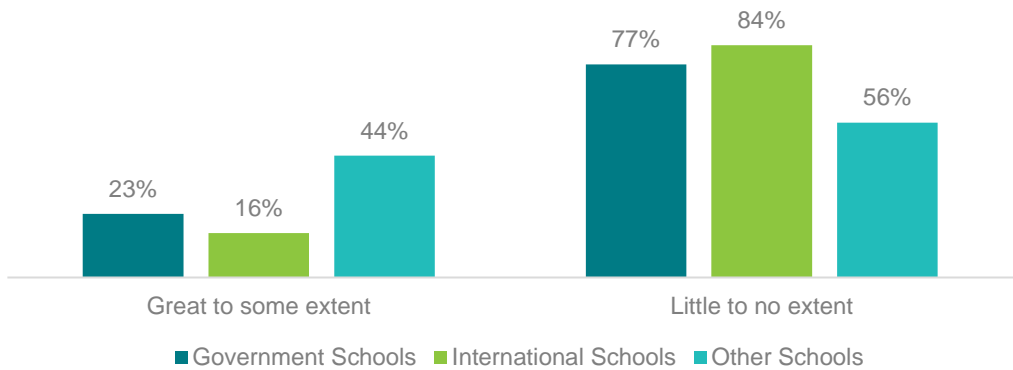
Table IV-7: Teachers discussion of students' related matters with parents

DIMENSION SURVEYED	GOVERNMENT SCHOOLS %			INTERNATIONAL SCHOOLS %			OTHER SCHOOLS %		
	a	b	c	a	b	c	a	b	c
	Teachers: discuss students' assessment with Students' parents	69	25	6	48	52	0	61	34
Teachers: discuss the use of multimedia technology with Students' parents	32	10	58	47	36	17	32	25	43

a: Twice a semester or less b: Three times a semester or more c: Never

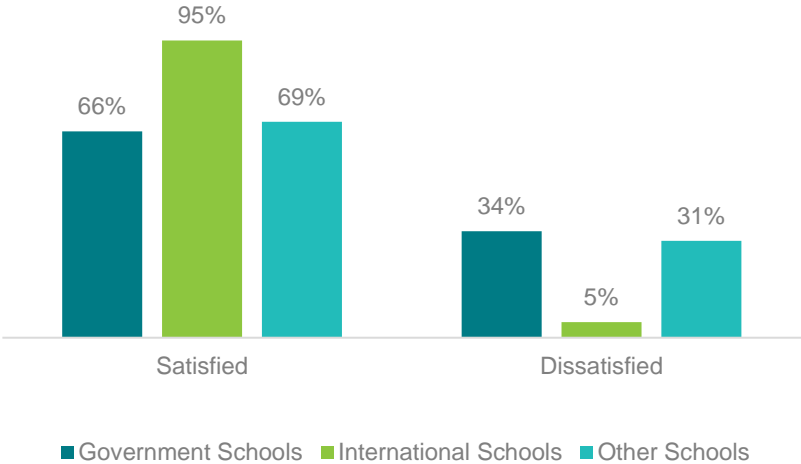
When it comes to parents' involvement in Qatar, the majority of teachers at Government, International and other schools do not consider parents' involvement as an obstacle ("from great to somewhat extent") to a good education, as is shown in Figure IV-4 below. However, in the other schools the teachers do indicate parents' involvement as a barrier ("from great to somewhat extent") at a higher rate than in the other two school types. Because while not a majority, 44 percent is still substantial compared to Government (23%) and International (16%) schools.

Figure IV-4: Teachers' Perceptions of the Extent of Parental Involvement as an Obstacle to Good Education



The last question about satisfaction with parents' involvement in the education of their children was asked of teachers, and results appear to be significantly different according to the school type. The results shown in Figure IV-5 indicate that 95 percent of International school teachers are satisfied with parents' efforts. This is substantially higher than the percentage of teachers in both Government (66%) and other (69%) schools who state they are satisfied.

Figure IV-5: Teachers' Satisfaction with Parents' Efforts in the Education Process



V. CONCLUSION

Based on the results of the QES 2018, this sections seeks to present number of important recommendations to the three discussed topics on Student Motivation, Student Plans for future education and career, and Parental Involvement. These recommendations coincide with the National Development Strategy (NDS) and Qatar National Vision (QNV) 2030.

Student motivation is an important aspect of education, where it can be used to measure how well a student can achieve in their school. While going over how administrators, teachers, parents, and students perceive student motivation, the study has found that while there are high levels of motivation amongst the students, there are also some concerns. Teachers especially felt that their students showed an unhealthy level of apathy and unpreparedness, while also indicating tardiness and absenteeism to be problematic in their schools.

And yet students and parents reported not being as absent as teachers suggest. Students in particular self-reported mixed results on their own level of motivation. Math homework caused some students problems in difficulty relative to other subjects, but students reported seeing the overall usefulness of their homework, and this is a good sign. Boredom is reported as higher for students in all schools than it should be especially amongst Qataris, and more so in Government and other schools. When asked about several statements like “do you enjoy the school you go to,” students in government schools had the lowest agreement levels. Finally, another positive highlight was the fact that students reported their teachers as improving school, as well as indicating that they discussed things learned in their classes.

Some recommendations from the results include investigating ways to target those unsatisfied with the school they go to, mechanisms to lower tardiness and absenteeism, and strategies for ameliorating apathy and unpreparedness. Also needed is a thorough investigation into Government schools to better appreciate why teachers and administrators have lower satisfaction with their students’ motivation. A further inquiry might explore which “adult relative” students are seeing the most with regard to school and class topics. Are students turning to their parents,

siblings or other outside family members? Some of these aspects should be investigated in order to make school more enjoyable for students to foster an environment where students get the best out of going to school and succeeding.

Understanding and targeting these areas can help Qatar's educational leadership in its continuous efforts to find better ways to help students with their motivation levels and to understand the importance of school and the work they do for the nation and their family. In a similar vein, when looking at the results of student's plans for the future in education and careers, some interesting conclusions and recommendations can be drawn.

Regardless of their nationality, students in Qatar have high educational aspirations. Large numbers plan on pursuing a post-graduate degrees and, on a second level, they aim to graduate from university with a Bachelor's degree or higher. This pattern is especially evident amongst female students. In the case of their parents, data from the study reveal that parents have very high educational aspirations for their children.

Interestingly, analysis of the data for the careers that students aspire to in the future reveals two clear trends. On the one hand, Qatari students seem to prefer a job in the military, followed by engineering. Non-Qatari students, on the other hand, indicated a preference for a profession as a medical doctor or an engineer.

It is self-evident that parents' involvement in their children's education process plays a key role in their academic achievement. However, more effort is needed from both sides – school officials and students' parents – to enhance the educational process along with students' performance. This study revealed that the parents of students in International schools are more involved compared to parents of students in Government and other schools. In terms of nationality, the results also showed a comparably similar pattern between Qatari and Non-Qatari parents.

Government and other schools in particular need to work on developing positive communication and relationships between school staff and parents. This process of building better bridges of communication between them can be hastened by learning from the international schools'

experience and specifically how they improved the communication mechanism with parents. A collaboration between schools across school types can become a mutually beneficial learning experience for all.

VI. REFERENCES:

- Brewer, D. J., Augustine, C. H., Zellman, G. L., Ryan, G. W., Goldman, C. A., Stasz, C., & Constant, L. (2007). Education for a new era: Design and implementation of K–12 education reform in Qatar. Rand Corp, Santa Monica, CA.
- Cetin-Dindar, Ayla. "Student Motivation in Constructivist Learning Environment." *Eurasia Journal of Mathematics, Science & Technology Education* 12.2 (2016).
- Hong, Eunsook, et al. "Effects of homework motivation and worry anxiety on homework achievement in mathematics and English." *Educational Research and Evaluation* 21.7-8 (2015): 491-514.
- Kiemer, Katharina, et al. "Effects of a classroom discourse intervention on teachers' practice and students' motivation to learn mathematics and science." *Learning and instruction* 35 (2015): 94-103.
- Mahler, Daniela, Jörg Großschedl, and Ute Harms. "Does motivation matter?—The relationship between teachers' self-efficacy and enthusiasm and students' performance." *PloS one* 13.11 (2018): e0207252.
- Nasser, R. (2017). Qatar's educational reform past and future: challenges in teacher development. *Open Review of Educational Research*, 4(1), 1-19.
- Omar, R., et al. "Importance of Teachers' Competency Through Students' Perception In Relationships Between Parental Involvement And Motivation With Students' Achievement." *Sains Humanika* 10.3-3 (2018).
- Qatar General Secretariat for Development Planning (QGSDP) (2008). Qatar national vision 2030. Retrieved from http://www.gsdp.gov.qa/portal/page/portal/gsdp_en/qatar_national_vision/qnv_2030_document on 08/04/2015.
- Qatar General Secretariat for Development Planning (QGSDP) (2011). Qatar national development strategy 2011–2016: Towards Qatar national vision 2030. Retrieved from http://www.gsdp.gov.qa/gsdp_vision/docs/NDS_EN.pdf
- Qatar National Development Strategy (QNDS). (2011-2016). Retrieved from https://www.psa.gov.qa/en/knowledge/Documents/Qatar_NDS_reprint_complete_lowres_16May.pdf
- Qatar National Development Strategy (QNDS). (2018-2022). Retrieved from <https://www.psa.gov.qa/en/knowledge/Documents/NDS2Final.pdf>
- Warton, Pamela M. "The forgotten voices in homework: Views of students." *Educational Psychologist* 36.3 (2001): 155-165
- Zellman, G. L., Salem H., Ryan G. W., Gonzalez G., Karam, R., Orr, N., Charles L., Al-Thani A., & Al-Obaidli K. (2009). Implementation of the K–12 education reform in Qatar's schools. RAND report prepared for the Supreme Education Council. Retrieved from http://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG880.pdf

VII. APPENDIX: SURVEY METHODOLOGY

Results from the Qatar Education Study (QES) come from four surveys administered under the direction of the Survey Operations Division at the Social and Economic Survey Research Institute (SESRI). The surveys were sent to central stakeholders in K-12 education: students, parents, teachers, and administrators. This survey design is especially appropriate because it paints a clear picture of the participants' school experience.

Sample design

Sampling is the process of selecting those individuals from a population to estimate characteristics of the whole population. It plays a critical part in any school survey since the ability to make valid inferences to the population, which is the target of the investigation, relies upon a rigorous sample design. In the following, we discuss issues related to the sampling design used in the QES.

Students were the target population for the survey sampling. The sampling frame, which is a list of all those individuals in a population who can be selected, was developed by SESRI based on a comprehensive list of all public and private schools in Qatar which was provided by the Supreme Council of Education. In this frame, all schools are listed with information about school names, address, school gender (boy, girl, or coed), system (Government, International or other types of school), and the number of students in grade 8, 9, 11, and 12.

Based on the information about the school size, school system, gender and grade, we divided the sampling frame into several subpopulations (i.e., stratum). This stratification divided members of the population into subgroups that are relatively homogenous before sampling begins. We tried to make every member of the population have the same probability of being selected (i.e., self-weighting) so proportionate sampling was used to make the proportion of students in each stratum similar between the frame and the sample. That means the number of sampled schools needed to be proportionate to the number of respondents across strata in the frame (assuming that the same number of students was selected from each school).

Inside each stratum, students were randomly selected following a two-stage sampling process which is probably the most commonly used sample design in educational research. In the first stage, the school was selected with probability proportionate to its size (i.e., PPS). This gives an equal chance of selection for students while allowing for a similar number of students to be chosen from each school for each strata. In the second stage, for ease of the field work, we randomly selected one class for each grade in the school and all students in the class were included in the survey.

In the student study, students in grades 11 and 12 in the secondary schools and students in grades 8 and 9 in the preparatory schools were selected. For the parent study, the parents of the students selected in the student study were sent questionnaires. Lead teachers of the classrooms selected for the study were sent questionnaires as were the administrators for the school.

We account for the complex sampling design in the data analysis to ensure the unbiasedness and efficiency of the statistical estimates. Particularly, a weighting variable was created to take into account the selection probability and the non-response. Weighting is a mathematical correction used to give some respondents in a survey more influence than others in the data analysis. This is sometimes needed so that a sample better reflects the population under study.

Sample size, non-response, and sampling error

The sample size of this survey is 42 schools. However, 8 schools refused our survey requests. For the remaining 34 surveyed schools, all students in the selected classes fully participated in the survey. In the final data, we have 1,639 students, 1,142 parents, 424 teachers, and 175 administrators from these schools. The following table is an overview of the numbers of schools and participants involved in the QES 2018:

Table VII-1: Numbers of Schools and Participants in the Qatar Education Study 2018

Total Number of surveyed schools	34 Schools		
	Government Schools 61.76% (n=21) schools	International Schools 20.59% (n=7) schools	Other Schools 17.65% (n=6) schools
Total number of surveyed students	1639 Students		
	Government Schools 52.96% (n=868) students	International Schools 29.47% (n=483) students	Other Schools 17.57% (n=288) students
Total number of surveyed parents	1142 Parents		
	Government Schools 46.58% (n=532) parents	International Schools 34.15% (n=390) parents	Other Schools 19.26% (n=220) parents
Total number of surveyed teachers	424 Teachers		
	Government Schools 62.97% (n=267) teachers	International Schools 26.42% (n=112) teachers	Other Schools 10.61% (n=45) teachers
Total number of surveyed school administrators	175 Administrators		
	Government Schools 69.71% (n=122) administrators	International Schools 13.14% (n=23) administrators	Other Schools 17.15% (n=30) administrators

With the above number of completions, the maximum sampling error for a percentage is +/-2.6 percentage points for the student survey. The calculation of this sampling error take into account the design effects (i.e., the effects from weighting, stratification, and clustering). One possible interpretation of sampling errors is: if the survey is conducted 100 times using the exact same procedure, the sampling errors would include the "true value" in 95 out of the 100 surveys. Note that the sampling errors can be calculated in this survey since the sample is based on a sampling scheme with known probabilities. This feature of random sampling is an essential element that distinguishes probability samples from other sampling methods, such as quota sampling or convenient sampling.

Questionnaire development

The questions were designed in English and then translated into Arabic by professional translators. After the translation, the Arabic version was carefully checked by researchers at SESRI who are fluent in both English and Arabic. Next, the questionnaire was tested in a pre-test of four randomly selected schools. This pretest gave valuable information allowing us to refine question wording, response categories, introductions, transitions, interviewer instructions, and interview length. Based on this information, the final version of the questionnaire was created and then programmed for data entry purpose. The questionnaires were sent to stakeholders in November 2018. Parents of the students who received the student questionnaire were also sent the parent questionnaire to be completed at home. Data were collected from teachers and administrators through interviews conducted in their respective schools.

Survey Administration

Each interviewer participated in a training program covering fundamentals of school survey, interviewing techniques, and standards protocols for administering survey instruments. All interviewers practiced the questionnaire before going to the schools. In general, interviewers were expected to:

- Locate and enlist the cooperation of schools and students.
- Motivate teachers and students to do a good job.
- Clarify any confusion/concerns.

- Observe the quality of responses.

Data were collected from students and parents using paper questionnaires (Paper-and-Pencil Interviewing – PAPI). Teachers and administrators from the selected schools were interviewed by SESRI fieldworkers using Computer-Assisted Personal Interviewing (CAPI).

Data Management

After data collection was completed, interviewers manually entered responses from students and parents into Blaise, which is a computer-assisted interviewing system and survey processing tool. The responses were then merged into a single Blaise data file. This dataset was then cleaned, coded and saved in STATA formats for analysis. After weighting the final responses, the data were analyzed using STATA 14 which is general purpose statistical software packages commonly used in the social sciences. Tables and graphs were generated in Microsoft Excel and Word.