Comprehensive School Assessment

Upper Secondary Education – Sector Development Project 2

MINISTRY OF EDUCATION, YOUTH, & SPORT

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PHNOM PENH, CAMBODIA

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List of Abbreviations

ADB	Asian Development Bank
CAPI	Common Application Program Interface
CPD	Continuous Professional Development
DOE	District Office of Education
EEQP	Enhancing Educational Quality Project
ESDP III	Education Sector Development Project III
ESP	Education Strategic Plan
FGD	Focus Group Discussion
GPI	Gender Parity Index
ICT	Information & Communication Technology
KAPE	Kampuchean Action to Promote Education
LSE	Lower Secondary Education
MoEYS	Ministry of Education, Youth, & Sport
NGO	Non-governmental Organization
NGS	New Generation School
NIE	National Institute of Education
NS	Network School
NSDP	National Strategic Development Plan
PIC	Project Implementing Consultants
PLC	Professional Learning Community
PMU	Project Management Unit
POE	Provincial Office of Education
SBM	School-based Management
SIP	School Improvement Plan
SRC	School Resource Center
SRCAP	School Resource Center Action Plan
SRS	Secondary Resource Schools
SSC	School Support Committee
USE	Upper Secondary Education
USE-SDP 2	Upper Secondary Education Sector Development Project 2
VSO	Volunteers Serving Overseas

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EXECUTIVE SUMMARY

PURPOSE AND GOALS:

At the request of the Ministry of Education, Youth, & Sport, KAPE was asked to carry out two assessments of the situational context in selected school sites that will host the *Upper Secondary Education – Sector Development Project 2 (USE-SDP2).* The first assessment was a rapid survey that occurred in September 2019 while the second assessment (i.e., the current survey), which is more comprehensive in scope, occurred during the period November 2020 to February 2021. The Rapid Survey was intended to collect information quickly to give MoEYS a quick overview of important issues in the implementation context while the second survey is much more comprehensive in scope and takes in nearly the entire population of what are known as Secondary Resource Schools (SRS) of which there are 50 throughout the country.

Although the two surveys differed significantly in scope, their goals were highly similar. In this respect, there were two key goals underlying both assessments that include the following:

1. Improve the MoEYS' understanding of the problems and issues in target schools that will benefit from USE-SDP 2 investment.
2. Gather information that will assist KAPE and VSO to better support the project technically by improving understanding about the implementation context.

The present Comprehensive Survey encompassed consultations at 47 SRS's in all provinces (except Sihanoukville)[1] that sought to simply provide some sense of the key issues in the implementing environment as well as the degree of convergence among stakeholders with regards to these views. The technical areas investigated are summarized in the box to the right. The stakeholders consulted were diverse and included school managers, teachers (mainly technical subject leaders), students, and community members. The sample of those consulted (chosen purposively) was relatively large in terms of absolute numbers and included 2,221 respondents (of whom 1,351 were students). The assessment focused primarily on stakeholders' perceptions of the educational context in the areas identified. These areas were discussed and agreed with USE-SDP's managing committee.

AGREED INVESTIGATIVE AREAS

1. *Planning & Management Issues*
2. *School Perceptions & Concepts of Educational Quality/Services*
3. *Enabling Environments*
4. *School Outreach*

KEY FINDINGS:

Needed Pre-requisites for Successful Investment: The current assessment sought to determine the degree to which situational pre-requisites are in place for successful investments. Indications in this regard were generally positive. For example, most resource center schools are conducting their planning regularly, including a plan for Resource Center utilization, known as the School Resource Center Action Plan (SRCAP). School managers and community members (but notably not teachers) tend to express their top planning priorities in terms of student learning. About 90% or more of stakeholders also reported that their schools do not suffer from major teacher shortages

[1] Cancelled due to Covid19 community spread conditions.

(although a notable exception in this regard relates to ICT teachers) and security conditions are also generally good. Similarly, nearly all respondents (90%) reported that their schools had at least some access to internet, which is a fundamental requirement for bringing digital resources into the centers. In addition, most school-level stakeholders report a high degree of openness to life skills programming and advising students on their careers. In terms of school management issues, most school managers (about 80%) seem to express a strong predisposition to reasonable risk-taking in their management, which is a key attribute of a successful manager. These findings would all suggest that there are multiple pre-requisites in place for successful investment, notwithstanding some of the constraints discussed below.

Resource Center Utilization: A key part of USE-SDP programming relates to investments in Resource Centers to enhance the quality of existing SRS's and ensure that new centers profit from the lessons learned at older sites. Investigations in this area were, therefore, an important focus of data collection. Overall, stakeholders seem to feel that utilization rates of the centers were moderate to low. School managers were amongst those most likely to express a view towards high utilization rates while students diverged sharply from this assessment towards moderate to low rates of utilization. Teachers' views were somewhere in the middle. During the Rapid Assessment carried out in 2019, very few network schools indicated that they relied heavily on the centers either. This last finding provides a good justification for current project planning to emplace libraries and science labs at network schools.

Reported constraints in utilizing the Centers included low teacher capacity, short classroom periods, teachers' private classes, maintenance issues, and lack of materials. These findings suggest the need for structural changes at the schools (besides more training) such as reducing class sizes, modifying the timetable to increase the amount of time available for a classroom period, and inhibiting private classes to the extent that this is possible. Thus, project programmers should not limit their efforts to increase Resource Center utilization rates simply to more capacity-building activities only but rather to key structural features in the school environment as well.

Capacity-building Needs: The stakeholders that contributed to this assessment generally seemed very receptive to planned investments in capacity-building, even though many said that they had already received a great deal of training on various topics such as leadership and management. In terms of teacher capacity-building areas, there was high congruence between managers and teachers in the topical areas where teachers should receive more support. The top priority topical area identified in this regard was 'How to Use ICT' followed by 'How to do Experiments' and 'General Teaching Methods.'

In spite of all the previous training received by teachers and managers, however, many stakeholders still seemed to be very misinformed about some very basic concepts. For example, only about one-third of school managers and teachers could correctly define what *School-based Management* is even though this is supposed to be one of the key thrusts of the project. Similarly, almost three-fourths of teachers indicated that they had never even heard of the concept of *Professional Learning Community* and many teachers indicated that they were not familiar with the concept of *Inclusive Education*. Given these and similar gaps in knowledge and understanding among school-based stakeholders about some very fundamental concepts, future efforts to map out capacity-building needs should take into consideration that stakeholders are themselves unsure of what technical areas they most need to develop in themselves.

Other Key Constraints for Proposed Programming: One of the key constraints found in this investigation relates to the high degree of divergence among stakeholders in certain areas, particularly in the way in which they prioritize key issues facing the school. School managers and community managers tended to be more convergent in their viewpoints while teachers frequently expressed somewhat different priorities relating to their salaries, private classes, and class sizes. As noted earlier, school managers tended to voice more optimistic assessments about access to SRS services such as libraries and labs whereas teachers and especially students were much more pessimistic in their assessments. This marked another major area of divergence among stakeholder groups. Bridging these areas of divergence will be very important to efforts to achieve consensual planning.

Other important constraints in the implementation context were also identified that should be considered carefully by program planners. Most prominent on this list of constraints is the role of private classes (i.e., *rien kua*) that are a standard part of the routine of many teachers, especially those teaching Grade 12 students. Although private classes have been found to frequently undermine MoEYS investments in facilities because teachers put a higher priority on their private classes than they do on utilizing these new facilities, this assessment found that most teachers see the practice of organizing private classes as perfectly fine. This finding suggests that any efforts to root out private classes or even curtail them are likely to be met with fierce opposition.

Other important programmatic constraints to consider relate to the limited amount of time that comprises a subject period (see above) and the challenges this presents for effectively using the science and ICT labs. In addition, the labs are not designed for the large class sizes that often characterize many project schools, which also presents problems for high utilization of the Resource Center. Similarly, some of the schools where the Resource Centers have been placed have extremely large enrollments, exceeding 2,000, 3,000, and in some cases 4,000 students. Even though the centers have two science labs and two ICT labs, this is not nearly enough to ensure access to all students. The current strategy of converting normal classrooms into science labs, as is currently proposed is, therefore, highly advised.

RECOMMENDATIONS:

Assessors have made the following recommendations based on assessment findings:

1. ***Address Divergent Stakeholder Views:*** Workshop facilitators who are tasked with key project roles such as supporting school planning should be oriented to the areas of stakeholder divergence as part of the ToT preparation and equipped with skills that promote conflict resolution and consensus-building.
2. ***Address ICT Teacher Shortages:*** Shortages of ICT teachers were highlighted as a key deficiency by most stakeholders.
3. ***Consider Restructuring the School Timetable:*** Multiple stakeholder groups have indicated that class periods are too short to effectively plan and execute experiments in SRS labs. The timetable should be re-structured in a way to maximize the time available to do experiments in SRS labs.
4. ***Review the Availability of Resource Center Supplies and Materials:*** It seems surprising that teachers and students should highlight this as an issue given the sizable investments made in each SRS. Nevertheless, inventories and stocks of

consumable supplies should be reviewed in each province to ensure that there are no shortages.

5. ***Incorporate Definitions of Key Concepts such as Inclusive Education and PLCs into all Workshop Designs:*** Future capacity-building workshops should include more attention to better defining these concepts and providing guidelines to how they can be practically applied in each school.
6. ***Focus on Incorporating ICT in Education, Techniques of Experimentation, and General Methodology into Planned Teaching Methodology Workshops:*** These three topical areas of capacity-building support were expressly requested by a majority of school managers and teachers. This request should guide the design of all teacher methodology workshops planned for SRS teachers.
7. ***Consider Posting Teacher Mentors to SRS's to Boost Teacher Capacity to More Effectively Utilize Resource Centers:*** The project may consider addressing deficits in teachers' ability to use resource centers by employing school-based mentors who are trained at the National Institute of Education and posted to SRS sites with the technical support of teachers as their primary task. These mentors should be linked to the NIE for systematic back-up support through the use of mentoring software in which they can share problems with master mentors at the Institute and seek advice. Training courses should be intensive and at least 4 months in duration to avoid superficial one and two-week training workshops that are not very effective.
8. ***Standardize the Definition of School-based Management:*** There does not seem to be a uniform understanding of what School-based Management is nor how it should be applied in project sites in a way that is consistent with key SBM concepts. A streamlined manual comprising consistent definitions of SBM concepts; easy to use session plans designed to support facilitators; and participant course materials that support session plans should be developed with all haste to support planned SBM capacity-building workshops.
9. ***Equip Libraries with Digital Resources:*** Stakeholders consistently asked for more investment in libraries leading to the availability of digital resources. This might include tablets-on-wheels programming, m-learning services, and television screens to facilitate more activities where students can do research on the web and access specialized educational software.
10. ***Reduce the Occurrence of Private Classes as They Undermine the Utilization of Resource Centers:*** While MoEYS may not be able to eradicate the practice of 'rien kua', it should at least be regulated. This might include prohibiting 'rien kua' during working hours, on school premises, or with one's own students. The less 'rien kua' activities occur, the more likely utilization rates for resource centers will increase.

1. INTRODUCTION

1.1 Purpose of the Present Survey

The present survey is the second of two assessments that the Ministry of Education, Youth, and Sport (MoEYS) requested for the *Upper Secondary Education – Sector Development Program,* which is funded by the Asian Development Bank and the Royal Cambodian Government. The first assessment was commissioned as a Rapid Survey at the request of the Minister of Education, Youth, and Sport in order to provide quick but insightful information about the implementation environment at target schools in order to better inform the development of new programming. However, the Rapid Assessment was limited by its small sample size (i.e., 10 schools only) and the fact that it occurred during the summer vacation when students were not available to participate in survey activities. The present report is more comprehensive in scope and includes consultations with students as well as school managers, teachers and community members. It provides an assessment of nearly all schools in the project that possess Resource Center buildings, giving them the designation of Secondary Resource Schools (SRS). There are 50 such schools (already established or in planning) in the program and they will play a key role in supporting improvements in educational services to another 87 secondary schools that are known as network schools. It is hoped that the present assessment report will provide useful insights to modifying on-going programming as the project moves forward with its implementation.

1.2 Background on the Project

The ADB financed *Upper Secondary Education - Sector Development Project (USESDP 2*) is focused on improving the access, quality and relevance of upper secondary education (USE) and strengthening the institutional capacity for planning, management and service delivery of the Ministry of Education, Youth and Sport (MoEYS). It is an extension of the ADB financed Third Education Sector Development Project (ESDPIII), which was designed and implemented to improve the equity, quality and efficiency of education services of the Lower Secondary Education (LSE) sector in Cambodia.

USE-SDP2 is funded through ADB Loan 3427-CAM (COL) amounting to $30 million, supplemented by Government's contribution in kind to the tune of $3 million. The project aims to support the implementation of key priorities of MoEYS' Education Strategic Plan (ESP) 2014-2018, in compliance with the National Strategic Development Plan (NSDP) 2014-2018, with emphasis on improving access to and the quality and relevance of USE.

As one of the unique provisions of the design of USE-SDP 2, both MoEYS and ADB have agreed to include the involvement of civil society organizations with strong reputations for high quality programming in project implementation. In this respect, MoEYS has included the involvement of two NGOs to assist the project with specialized technical implementation in diverse areas including School Planning, Life Skills Education, Career Counseling, Teacher Mentoring, Library Development, and several others. The NGOs tasked with this technical assistance include a national organization, Kampuchean Action to Promote Education (KAPE) and Volunteers Serving Overseas (VSO), which is international. KAPE was selected for its role in the project because it also implements the *New Generation School Initiative (NGS)* with direct funding from MoEYS. NGS is a program that the Ministry hopes USE-SDP 2 can borrow some programmatic ideas from in order to better realize goals relating to educational quality. Similarly, VSO has played

key roles in assisting MoEYS to implement Continuous Professional Development (CPD) activities at many levels. Both agencies have been in negotiation with MoEYS since June 2019 to formalize agreements and contracts so that their support may start by the end of 2019 or the beginning of 2020. Due to bureaucratic delays, both agencies did not start their contracts until the end of 2020.

1.3 Goals of the Comprehensive Assessment and Investigative Areas

As noted above, MoEYS developed a Terms of Reference for KAPE's role in the implementation of USE-SDP 2 that both includes a technical support role and an assessment role that is not summative but rather designed to better help Ministry modulate programming to improve effectiveness. The latter of these roles entails the compilation of the present comprehensive survey report. In this respect, there are two key goals underlying the present assessment. These include the following:

1. Improve the MoEYS' understanding of the problems and issues in target schools that will benefit from USE-SDP 2 investment.
2. Gather information that will assist KAPE and VSO to better support the project technically by improving understanding about the implementation context.

Although KAPE joined the project somewhat later than anticipated due to the lengthy process of issuing a contract, the agency has sought to catch up by accelerating the implementation schedule of the present Comprehensive Assessment. The assessment focuses primarily on stakeholders' perceptions of the educational context in the areas identified in Box 1.1. These areas and accompanying subtopics were discussed and agreed with the Project Management Unit (PMU).

It should be noted that the assessment survey was not really an 'evaluation' of the programming context in the common sense but rather sought to better understand how stakeholders perceived and understood each of the issues identified. These 'perceptions' and understandings should provide a useful starting point for formulating training and technical inputs so that the project does not make any fatal assumptions that are relevant to stakeholder expectations of the project.

BOX 1.1: Agreed Investigative Areas

1. Planning & Management Issues
- Concepts of Leadership and Management
- Understanding of Planning Concepts
- Frequency of Planning

2. School Perceptions & Concepts of Educational Quality/Services
- School Stakeholder Perceptions of Quality
- Concepts of Educational Quality
- Concepts of Professionalism

3. Enabling Environments
- Physical Constraints (e.g., infrastructure, equipment, etc.)
- Teacher Availability
- ICT Issues
- School Security
- Availability of School Services (for students)

4. School Outreach
- Interaction with Community
- Methods of Communication in the School

2. ASSESSMENT METHODOLOGY

2.1 General Considerations and Investigative Areas

As noted above, the present assessment focuses heavily on understanding the 'perceptions' of different stakeholders in the educational environment. Although 'perceptions' are not the same thing as 'reality,' it is understood that people's behaviors are generally based on what they perceive to be reality, even though these perceptions may actually be wrong.[2] Differences in perception are a common source of conflict and misunderstanding, which can undermine the implementation of projects such as USE-SDP 2. A good example of how differences in perception may play out relates to the way in which stakeholders prioritize the educational needs in a school. In this respect, communities may place a very high priority on investments in infrastructure and equipment whereas teachers may see their own salaries as a matter of the highest priority, a finding that was actually validated by this assessment. Better understanding how stakeholders perceive issues should be very useful to project implementers so that interventions can be structured in a way to ensure that everyone is on the same page. Thus, the approach used in this survey has been to *reconstruct* the perceptions of important groups of stakeholders to better understand how they perceive the 'reality' of the local educational context. This is why the same questions have frequently been administered to the same stakeholders in order to triangulate the responses.

The areas of inquiry for the assessment focused on four investigative areas including: (i) Planning & Management; (ii) Educational Quality and Services; (iii) Enabling Environments; and (iv) School Outreach. A total of 13 discrete variables were identified that fall under each of these investigative areas along with other operationalizing criteria. These are summarized in **Annex 1.**

2.2 Sample Construction

In general, investigators primarily used non-probability-based sampling techniques when constructing the assessment sample for various sampling units and stakeholder participants. Investigations were carried out in 47 Secondary Resource Schools or 94% of the school population of SRS's. This included SRS's in nearly every province (except for Sihanoukville). The schools visited and details on stakeholders are summarized in **Annex 2.** Some schools could not participate due to their location in Covid19 hot spot areas (e.g., Sihanoukville). As noted earlier, the primary emphasis of this survey was on the population of 50 resource schools due to the key role that they play in implementing the USE-SDP 2 Program.

The assessment team collected information from four stakeholder groupings including school managers (both directors and vice directors), teachers (technical subject leaders), community members (SSC members, parents, etc.), and students. The Comprehensive Assessment Survey differs from the Rapid Assessment Survey in that it includes students whereas the latter survey was conducted during the school vacation and was not able to include students. A purposive sampling method was used to identify those individuals who would participate in the assessment following mainly the roles that they played at the school (e.g., director, technical leader, etc.). In all, a total of 2,221 individuals participated in the assessment across the 47 visited target schools (see Table

[2] https://www.psychologytoday.com/us/blog/the-power-prime/201908/perception-is-not-reality

2.1). The number of actual respondents in the survey was somewhat less than anticipated (2,480 versus 2,221) due to the dropout of three schools.

Table 2.1: Summary of Data Collection Methodologies Employed by Key Informant

Stakeholder Grouping	Data Collection Method			Selection Formula	Proposed Number of Respondents	Actual Respondents
	Interview	*Questionnaire*	*Focus Group Discussion*			
School Managers	x	x		50 schools x 4 persons	200	182
Teachers (Technical Subject Leaders)		x		50 schools x 15 persons	750	661
Community Members			x	5 schools x 6 persons	30	27
Students		x		50 schools x 30 persons	1,500	1,351
Total					**2,480**	**2,221**

The gender make-up of the sample tended to be skewed towards men among school managers and teachers (as it is in actual life) but included somewhat more girls than boys among students. This latter feature of the sample may suggest the increasing predisposition of male adolescents and young men to migrate in search of work rather than staying in school. The gender breakdown of the sample is provided in Table 2.2 below.

Table 2.2: Gender Make-up of the Assessment Sample

Gender	School Managers		Teachers		Student	
	No	%	No	%	No	%
Female	33	18.1	228	34.5	802	59.4
Male	149	81.9	433	65.5	549	40.6
Total	182	100.0	661	100.0	1351	100.0

2.3 Data Collection Methods

Three data collection methodologies were used to collect information including questionnaires (for school managers, teachers, and students), short interviews to follow up on open-ended questions in the questionnaire (for school managers only), and focus group discussions (community members). Focus group discussions were only conducted in five schools. The methods of data collection for each stakeholder grouping are summarized in Table 2.1 above.

It should be noted too that when completing questionnaires, stakeholders were *not* asked to identify themselves so that investigators could assure them of their anonymity. This was done in order to prevent *social desirability bias* in responding patterns.[3]

The development of data collection tools was preceded by a process of generating discrete variables for study, as noted above, based on a review of the key investigative areas. Each question developed for use in investigatory tools was cross-referenced with these factors to ensure high levels of content validity during tool development. The in-

[3] In social science research, social-desirability bias is a type of **response bias** that is the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting "good behavior" or under-reporting "bad", or undesirable behavior.

vestigators designed and administered five data collection tools, which were developed for the purpose. These tools were reviewed with MoEYS staff and VSO in order to modulate them to current data collection needs. The tools used for the assessment are summarized in **Annex 3.**

In order to expedite the data collection process, data collection forms were converted into an electronic format so that data could automatically be tabulated into a central file at the same time that the data was being collected. In order to facilitate this 'real-time data collection approach,' investigators used a software program called *CS-Pro software* for this purpose. This software is among the most flexible data collection software on the market and can be adapted easily to multiple data collection formats.

It should be noted that this survey was conducted as Covid19 community spread was beginning to accelerate during the period November 2020 to February 2021, causing some disruption in the agreed survey schedule (see **Annex 4**). School visits started in November 2020 but then needed to stop when schools were reclosed in the middle of December 2020. The survey restarted in the middle of January 2021 when schools reopened for the new academic year but then were affected by the rapid resurgence of Covid19 in certain areas, especially Sihanoukville. Data collection activities were formally completed on 25 February 2021.

2.4 Data Management

Investigators used electronic data collection methods employing *Common Application Program Interface* or CAPI for data collection and quality control. This facility provided the assessment team with data collection of high quality, accuracy, and cost-effectiveness. CAPI facilities helped to indicate the current location (GIS mapping) and actual time of an interview being conducted by an enumerator. This allowed KAPE to control the quality of the data collection and fieldwork over the internet.

All survey materials displayed in software with CAPI capability shows the observation form, back-check form, daily contact sheet (interviewee), and database spreadsheet. These forms can be accessed on any mobile device encoded with the required software and data. CAPI also allows for database retrieval and synchronization of data to the server each time a data collection form is completed. Tablet-based databases have logic codes to help easily detect skip patterns, robust error and inconsistencies in checking to ensure the quality and accuracy of data.

In order to provide high quality survey data, investigators developed a tablet-based database using *CSPro*, an open-source software from the US Census Bureau. This software is commonly used for large-scale research projects involving data entry with high quality controls (logic checks, cross tabulations, data verification and data checks) so that only complete and validated questionnaires are entered and only skipped questions are left blank. Data for this assessment was entered using a method that automatically restricts out-of-range variables, checks for inconsistencies, does not allow missing fields where they are not appropriate, and ensures the accuracy of the entered data. After the fieldwork teams had completed their interviews, the data was automatically synchronized to a server. Then the indoor quality controller checked all of the data to ensure data quality and accuracy.

2.5 Data Treatment

Standardized spreadsheets were prepared for each data collection tool involving interviews while composite responding forms were used in the case of focus group discussion forms. Data cleaning was greatly facilitated by electronic data collection. Quantitative data generated by interview schedules was analyzed using descriptive statistics such as frequency counts, percentage conversions, ranking, and mean scores where appropriate. No inferential statistical analysis techniques were employed for purposes of the present investigation. Disaggregation of the data by key variables such as stakeholder group membership was also undertaken where required. Statements in the narrative relating to percentage values are often rounded up or down depending on the decimal value.

Qualitative data collected from focus group discussions and interviews was analyzed using thematic analysis. Investigators read all transcripts from the data collection forms and used coding to identify key themes. Themes were described in the context of the project and the project indicators. The analysis and writing phase describing assessment findings has sought to triangulate the quantitative data collected with emerging qualitative data themes that were detected during focus group discussions.

3. ASSESSMENT FINDINGS

3.1 Management and Planning Issues

3.1.1 Views about School Leadership

One of the first areas of inquiry under the assessment focused on how school managers thought about their own leadership ability. In this respect, a majority of managers (65%) indicated that they had already received a great deal of training on leadership issues. About 35% had said that they had only received 'some' or 'no' training on leadership issues. Among those indicating that they had received a great deal of training already, a majority (47%) indicated that more was still desirable (see Table 3.1). This finding has significance for the receptivity of school managers to additional training in this area by USE-SDP 2.

Table 3.1: Training on Leadership Until Now

Statement	No	%
Received a great deal of training on leadership but more is desirable	85	46.7
Received a great deal of training on leadership already	34	18.7
Have received some training on leadership	30	16.5
Have received no training on leadership	33	18.1

N=182

Investigators also explored manager views about risk-taking behavior since such behavior is clearly a key indicator of the kind of leadership style among school directors. Investigators make an assumption in this regard that those managers who are willing to take reasonable risks in improving their schools are more likely to demonstrate strong leadership whereas those that avoid risk are more likely to be weak leaders. School managers were given four statements and were asked to show their level agreement with one or more of these statements. The first two statements indicate viewpoints that are 'pro-risk' while the third and fourth statements indicated a more risk-averse orientation. Based on a review of the responding patterns among school managers, about 83% or more of school managers expressed support of statements that indicate a willingness to take risks in running their schools (i.e., Statements 1 and 2) (see Table 3.2). On the other hand, about one-fifth of respondents indicated their agreement with more risk-averse statements. (i.e., Statements 3 and 4) This should be very useful information when formulating school leadership training materials and particularly discussions relating to the role of risk in decision-making.

Table 3.2: School Manager Views About Risk-Taking Behaviors (N=32)

Statement	No	%	Kinds of Risk Statements
Taking risks will lead to progress	155	46.7%	*Pro-risk Statement*
Taking risks is necessary aspect of decision-making	121	36.4%	
Taking risks will get you into trouble	36	10.8%	*Risk-Averse Statements*
Risk is a bad thing	20	6.0%	

N=182

The assessment also sought to better understand how teachers viewed the leadership styles of the managers at their respective schools. In this respect, more than half of teachers viewed the management styles at their schools as 'very democratic' (see Table 3.3). About a third viewed management as only 'somewhat democratic' while only a very small number of teachers (2%) viewed management as not very democratic at all. These perceptions suggest either a very high level of satisfaction with the manner in which school managers manage their schools or it could be an indication of 'socially desirable response bias.'

Table 3.3: Teacher Perception on Management Practices

How would you descript the management practices at school	No	%
Somewhat democratic	379	57.3
Very democratic	249	37.7
Not very democratic	16	2.4
Hard to say	17	2.6

N=661

3.1.2 Views about School Planning

Another key area of investigation related to school planning. Questions along these lines sought to discover information about the various kinds of planning documents that schools prepare including the annual School Improvement Plan (SIP) as well as the School Resource Center Action Plan (SRCAP), which resource schools are supposed to produce each year to ensure effective utilization of the resource center. Data collection activities indicated strong convergence between both school managers and teachers affirming that SIPs and SRC Action Plans were in place. In this regard, all managers and 91% of teachers indicated that the school had an SIP while 92% and 86% of managers and teachers, respectively, indicated that the school had an SRC Action Plan. (see Table 3.4). Thus, there appears to be high compliance among SRS's in complying with expectations to develop these planning documents.

Table 3.4: Incidence of School Planning and Participation

Statement	Reported by School Managers		Reported by Teachers	
	No	%	No	%
Schools with a Annual School Improvement Plan (Yes)	182	100.0	605	91.5
Schools reporting that all or most of the Annual Plan was implemented	158	86.8	401	60.7
Schools with an SRC Action Plan (Yes)	168	92.3	567	85.8
Schools reporting that all or most of the SRC Action Plan was implemented	150	82.4	357	54.0
Schools reporting participation in planning by:				
School managers	180	98.9%	-	-
Grade leaders	174	95.6%	-	-
All teachers	150	82.4%	-	-
Community representatives	150	82.4%	-	-
Commune representatives	102	56.0%	-	-
Students	76	41.8%	-	-
Local authorities (police, soldiers, etc.)	56	30.8%	-	-
Monks	40	22.0%	-	-

N=182 (School Managers); N=661 (Teachers)

In terms of the degree of implementation of the various plans during the school year, school managers tended to take a more sanguine view of how much of the plan had been implemented. While 87% of school managers indicated that all or most of the SIP had been implemented, only 61% of teachers concurred with this assessment. Similarly, 82% of school managers indicated that all or most of the SRCAP had been implemented whereas only 54% of teachers supported this view. These findings would suggest implementation of the plans is not going as smoothly as it could.

In terms of participation in school planning, school managers indicated high levels of participation from various stakeholders (see Table 3.5). Those stakeholders with the highest participation levels included school managers, technical subject leaders, and community representatives. Only about 40% or less of school managers indicated participation in planning by students, local authorities, or monks.

The frequency of school level meetings reported by both school managers and teachers was highly encouraging. About 90% of managers indicated that Administration Meetings occur regularly (once a month) while about 89% of teachers indicated the same (see Table 3.5). In terms of Technical Meetings, almost 96% of school managers reported that such meetings occurred monthly while 84% of teachers reported this degree meeting frequency. Responding patterns by school managers and teachers in this regard were highly convergent for Administrative Meetings but somewhat less so for Technical Meetings. Nevertheless, the vast majority of interviewed stakeholders reported that Technical Meetings occurred with monthly frequency.

Table 3.5: Reported Frequency of School Meetings

Meeting Frequency	Reported by School Managers		Reported by Teachers	
	No	%	No	%
Administration Meetings				
Occur every month	164	90.1	591	89.4
Once every two months	13	7.1	42	6.4
Once a semester	4	2.2	11	1.7
Once a year	1	0.5	0	0
Never	0	0.0	7	1.1
Sometimes	-	-	6	0.9
When necessary	-	-	4	0.6
Other	0	0.0	0	0
Technical Meetings				
Occur every month	174	95.6	555	84.0
Once every two months	5	2.7	52	7.9
Once a semester	3	1.6	33	5.0
Never	0	0	11	1.7
Once every week	-	-	6	0.9
Sometimes	-	-	2	0.3
When necessary	-	-	2	0.3
Other	0	0	0	0

N=182 (School Managers); N=661 (Teachers)

The use of School-based Management (SBM) has been a central strategy of MoEYS to improve the quality of school planning and management in the secondary education sector. To assess how well the meaning of SBM is understood among stakeholders, school managers and teachers were presented with four different definitions of SBM and asked to identify the definition that best matched their understanding of SBM. The correct definition is based on a global definition of

BOX 3.1: Alternative Definitions of School-based Management

- A management strategy in which authority for all operational aspects of a school is transferred from managers to community members.
- A management strategy to improve education by transferring significant decision-making authority from central level offices to individual schools. (✓)
- A management strategy that enables schools to comply strictly with the rules and policies set at central level.
- A management strategy whereby the control of decision-making at a school is moved to local authorities such as the Commune Council Office.

School-based Management according to a review of international literature on the topic.[4] The four definitions presented to stakeholders are displayed in Box 3.1. The 'correct' definition is the one presented in the second bullet point. When these definitions were presented to stakeholders, only about 39% of school managers were able to correctly define SBM while even fewer teachers were able to do so (33%). **That is, about two out of three stakeholders could *not* correctly define this planning concept.** These findings suggest that most training workshops to date have not yet been able to effectively convey to a majority of stakeholders the core meaning of SBM principles, at least as they are based on the international literature (see Table 3.6). Alternatively, this finding could also suggest that there is not much consensus among MoEYS trainers about the meaning of SBM or that currently used definitions do not match global definitions. These findings have significant implications for efforts by development partners to design training materials for SBM workshops and planned follow-up activities.

Table 3.6: School Personnel Able to Correctly Define School-based Management

Stakeholder Ability to Define SBM	School Managers		Teachers	
	No	%	No	%
Able to Define SBM Correctly	70	38.5	217	32.8
Unable to Define SBM Correctly	112	61.5	444	67.2

N=182 (School Managers); N=661 (Teachers)

3.1.3 How Stakeholders Prioritize Issues in their Planning

Another important area of investigation under the assessment of school management related to how stakeholders prioritized the key issues and problems affecting their schools and how these perceptions differed among stakeholders. As part of the exercise to determine priority rankings, respondents were given 8 'stars' and asked to allocate the stars to various issues presented in Table 3.7 below to indicate how important that issue was to them. The more stars that they allocated to an issue, the higher the priority attached to that issue. If they preferred not to allocate any stars to an issue, they were also allowed to do so. Based on an average of the number of stars allocated to each issue, investigators determined priority rankings for each of the issues shown in the table below (see Table 3.7). The higher the number, the higher the priority assigned.

Table 3.7: How School Stakeholders Prioritize Educational Issues

Priority Educational Issues Presented to Stakeholders	Priority Ranking *(Based on the Number of Allocated Stars)*		
	School Managers	Teachers	Community Members
Infrastructure upgrading	1.32 (3)	0.98	1.6 (3)
Students are learning well	1.64 (1)	1.34 (3)	2.2 (1)
Teachers demonstrate high levels of professionalism	1.31	1.40 (2)	1.4
Teachers have adequate salaries	1.49 (2)	2.10 (1)	1.8 (2)
Parents should be satisfied with the instruction at the school	0.90	0.92	0.8
School has a proper gate	0.40	0.35	0.0
Students dress properly	0.61	0.61	0.2
School has a flagpole	0.34	0.32	0.0

N=182 (School Managers); N=661 (Teachers); N=27 (Community) (Top Issues are highlighted in grey scale.

[4] For example, International Institute of Educational Planning (IIEP)/UNESCO, Paris https://learningportal.iiep.unesco.org/en/glossary/school-based-management

BOX 3.2: Summary of Top-scoring Priorities among Stakeholders

- Infrastructure upgrading
- Students are learning well
- Teachers demonstrate high levels of professionalism
- Teachers have adequate salaries

A review of priority rankings indicated in the table suggests that there is some degree of divergence between school managers, teachers, and community members in how they prioritize issues. For example, 'Student Learning' is the number one priority for school managers and community members while for teachers this issue was given a priority ranking of '3'. For teachers, the top priority issue was their 'Salaries,' a surprising finding given that MoEYS has raised teacher salaries by a factor of almost 'three' over the last 5 years. To be sure, several of the issues identified by managers, community members, and teachers as the highest priorities do fall within their top three picks as a common theme among stakeholder groupings. Top priority areas are summarized in Box 3.2. A major exception in this regard was the finding that teachers also placed a high priority on 'Teacher Professionalism' as a key priority and were the only stakeholder to place this issue in one of the top three issues. Nevertheless, some of the divergence is still surprising, especially when teachers tend to subordinate the learning of their students to their own salaries. Happily, issues relating to flagpoles and school gates received the lowest priority ranking among all respondents, which has not always been the case in the past.

In a variation of the above exercise, stakeholders were also allowed to identify what the biggest problems at their schools were without choosing from a list of pre-determined issues. That is, they could free-associate any problems that stood out to them. For this particular activity, students were also asked to express a view. Some of the most frequently recurring responses to this open question are summarized in Box 3.3 below. Once again, responses indicated a large degree of divergence in how stakeholders prioritized the problems at their schools. Among school managers, *infrastructure, teacher shortages (especially of technical teachers), dropout,* and *low teacher professional standards and discipline* stood out. Among teachers, *infrastructure* was also a major concern (as it was among school managers) along with *student absenteeism, weak school management*, *lack of educational materials,* and *low community engagement.* Teachers alone among stakeholders cited *student access to Resource Centers* as a major concern. Among community representatives, *teacher shortages, student absenteeism* (also cited by teachers), *Covid19 interruptions,* and exorbitant *'rien kua' fees*[5] are cited as leading problems. Not surprisingly, this last problem relating to *rien kua* was not cited by either school managers or teachers but seems to be a burning issue among community members and parents. Among students, the leading problems seemed to be *subject teacher shortages, student and teacher discipline, school environments,* and *Covid19 interruptions.*

The list of problems in Box 3.3 is organized so that it is easy to see points of convergence and divergence in how stakeholders prioritize problems. Problems with the highest convergence are indicated with a score of 4 or 3 while those problems evincing lower levels of convergence are indicated by a 1 or 2. The problems of highest priority that everyone seems to agree on appears to be the shortage of technical teachers (especially math and science), which all stakeholders cited as a key problem (Convergence Score = 4) followed by student/teacher discipline (Convergence Score = 3) and student drop-

[5] 'Rien Kua' is a Khmer Language term referring to private classes by public school teachers among their own students. Public school teachers often rely on such classes to supplement their income. Non-paying students are not allowed to participate in these classes.

out/absenteeism Convergence Score = 3). Other problems cited by stakeholders only received convergence scores of 1 or 2.

The apparent divergence in the perception of local educational problems among stakeholders is a key finding of this investigation that suggests extreme caution when conducting school improvement planning sessions at target schools. Since building a consensus among all stakeholders is an important goal during school planning, it is apparent that reaching a consensus about planning priorities will likely be a key challenge.

BOX 3.3: Biggest Problems Cited by School Stakeholders

School Managers	Teachers	Community	Students	Degree of Stakeholder Convergence
• Shortage of technical subject teachers	• Shortage of technical subject teachers e.g., ICT, Science, etc.)	• Shortage of science teachers	• Shortage of subject teachers.	4
• Some teachers lack discipline and moral ethics	• Teacher and student discipline needs strengthening	--	• Teachers come late and are poorly prepared. • Weak student discipline	3
• High student drop-out	• High student absenteeism	• Students are poor which interrupts school attendance • High absenteeism and dropout due to economic factors	--	3
• The lack of physical facilities such as buildings, classrooms, library etc. (biggest problem)	• Lack of classrooms for study, computer and science labs, toilet and materials.	--	--	2
• Improving infrastructure (e.g., building toilets, upgrading environment, etc.)	--	--	• School environments are not clean and lack toilets, clean water, & garbage management	2
• Poor communication with parents and low parental participation	• Low community participation	--	--	2
• School management needs strengthening	• Lack of good school management including administration and discipline.	--	--	2
• Lack of educational materials	--	• Lack of study materials, computer and science materials.	--	2
--	--	• Covid19 keeps on interrupting the school year	• Difficult to study online during the Covid19 period	2
• Effective use of science lab materials.	--	--	--	1
• Some teachers have limited capacity	--	--	--	1
--	--	• Economic factor as teachers need to teach 'rien kua'. • 'Rien kua' hurts poorest students and discourages them from continuing their education	--	1
--	• Many students are unable to use the Resource Center	--	--	1

3.2 School Perceptions and Concepts of Educational Quality/Services

3.2.1 General Impressions about Quality among Stakeholders

Following the survey of issues relating to Planning and Management Issues, investigators next turned to an examination of stakeholder views about Educational Quality and the nature of Educational Services provided by the school. A general line of inquiry asked stakeholders to compare their school with other schools in terms of school quality. Both teachers and students seemed to exhibit high convergence in their views. About two-thirds of respondents in both groups felt that their school was about the same as other schools (see Table 3.8), in spite of significant investment in resource centers. Only about one-fourth of teachers and students felt that their school was actually better than other schools and a few (about 3%) stated that their school was worse than other schools. School Managers were more likely to give high marks to the quality of their school with about 57% indicating that they felt that their school was better than most other schools while 42% said it was about the same as other schools. Nevertheless, it seems surprising that the majority of respondents among students and teachers feel that their school is no different from other schools in spite of the significant amount of investment in Resource Center facilities and the SRS network.

Table 3.8: Stakeholder Perceptions of School Quality

Stakeholder Perceptions of School Quality	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
About the same as other schools	103	56.6	445	67.3	911	67.4
Better than most other schools	76	41.8	163	24.7	350	25.9
Worse than other schools	1	0.5	17	2.6	40	3.0
Difficult to say	2	1.1	36	5.4	50	3.7

N=182 (School Managers); N=661 (Teachers); N=1,351

Stakeholder views of teacher attendance are generally very positive. Nearly all respondents indicated that 'nearly all' or 'most' teachers come to work on time (see Table 3.9). School managers, teachers, and students all appeared to be largely convergent in their assessments of this issue with students affirming high attendance regularity at the highest rate (59%). This finding seems to be somewhat at odds with what was reported in Box 3.3, which perhaps suggests that respondents in that case were referring to a much narrower group of teachers with irregular attendance/discipline.

Table 3.9: Stakeholder Perceptions of Teacher Attendance

Stakeholder Assessment of Teacher Attendance	School Managers		Teachers		Students	
	No	%	No	%	No	%
Nearly all the teachers come to work on a regular basis.	89	48.9	325	49.2	800	59.2
Most teachers come to work on a regular basis but some are tardy.	90	49.5	314	47.5	457	33.8
About half of the teachers come to work on a regular basis but half are often tardy.	2	1.1	16	2.4	75	5.6
Less than half of the teachers come to work on a regular basis.	1	0.5	6	0.9	19	1.4

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

In the same way, there is also a generally very positive view about student motivation. About 95% of school managers and 84% of teachers felt that 'all' or 'most' students really want to attend school (see Table 3.10). Oddly, both school managers and teachers have a higher opinion of student motivation to attend than do students themselves where about 82% expressed the view that most students want to attend school. In focus

group discussions, Community members also did not generally question students' motivation to attend school, but they did note that student absenteeism is a major problem from their perspective, as noted in Box 3.3.

Table 3.10: Stakeholder Perceptions of Student Motivation

Stakeholder Perceptions of Student Motivation	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Many children really want to attend school but a few feels that it is not so important	76	41.8	414	62.6	842	62.3
Most children really want to attend school	96	52.7	144	21.8	276	20.4
About half the children here really want to attend school but the other half feel that it is not so important	8	4.4	80	12.1	152	11.3
Few of the children here feel that attending school is very important	2	1.1	23	3.5	81	6.0

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

The issue of *'rien kua'* (i.e., private classes in public schools) is a very sensitive topic in the Cambodian public education system because in many cases, teachers can make more money from their private classes than they do from their state salaries. Thus, any effort to curtail these activities usually meets with fierce resistance from teachers. Nevertheless, many critics of the practice argue that it is immoral and unprofessional of teachers to charge such fees because they work in what is usually thought of as a 'helping profession'. In addition, charging fees creates a conflict of interest for teachers because the profit-motive argues that they should never 'fail' paying customers. From the perspective of projects such as USE-SDP 2, such classes also undermine investments in science and computer labs because teachers often prioritize their time to focus on their private classes rather than using facilities put in place by projects, at considerable expense to the National Treasury. In the present survey, community members seemed to be the stakeholder group with the strongest views against the 'rien kua' practice, as voiced during focus group discussions citing its 'unfairness' to poor students who cannot pay, which in turn demotivates them and encourages student dropout.

Table 3.11: Stakeholder Perceptions of 'Rien Kua' Practices

Stakeholder Perceptions of Rien Kua	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Perceptions of Rien Kua						
It's a practice that is both good and bad	147	80.8	466	70.5	502	37.2
It's a good practice	22	12.1	174	26.3	836	61.9
It's a bad practice	13	7.1	21	3.2	13	1.0
What effect would stopping rien kua practices have at your school?						
It would have no effect	79	43.4	287	43.4	503	37.2
Make things better	73	40.1	166	25.1	172	12.7
Make things worse	30	16.5	208	31.5	676	50.0

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

In spite of the controversy surrounding *'rien kua'* practices, investigators decided to include some questions about this issue during survey activities (see Table 3.11). In this

respect, it was found that about 26% of teachers felt that *'rien kua'* is absolutely a 'good' practice. The majority of teachers (71%), however, indicated that it was a practice with both good and bad points, which represents a more balanced view. The majority of school managers (81%) were generally in agreement with teachers in their view that it was a practice with both good and bad points though about 7% of school managers felt that it was absolutely a 'bad' practice, compared to only 3% of teachers who held this view. What was most surprising in this survey was the finding that students generally support the 'rien kua' practice with only 1% expressing the view that it was a 'bad' practice. This may reflect the view of paying students that paying for one's grade ensures the best result with minimum effort.

Another surprising finding was that about two-thirds of teachers indicated that abolishing 'rien kua' would either have 'no effect' on the school or would actually make things 'better.' On the other hand, 31% of teachers indicated that abolishing the practice would make things 'worse,' suggesting that this is about the number of teachers who would resist any move to curtail the practice, if the project ever took any measures to do so.

3.2.2 Issues Regarding Management of the Resource Centers

Through the Enhancing Educational Quality Project (EEQP), MoEYS has made significant investment in the establishment of resource centers in 50 schools.[6] The construction of even more centers is planned under USE-SDP 2 and many of these were coming on line as the survey was occurring. These resource centers, which are equipped with both science and ICT labs, are designed to enable teachers to move their teaching from theory to practice as well as enable students to acquire digital literacy.

Table 3.12: Student Assessment of the Impact of Resource Centers on their Schools

How big of a difference has the Resource Center made at your school in terms of the quality of education?	No	%
A big difference	443	32.8
A medium difference	641	47.4
Only a small difference	100	7.4
No difference	31	2.3
Difficult to say	102	7.5

N=1,351

During the survey, a large number of students were asked about the impact of the centers on the quality of education at their schools. About a third of those surveyed (33%) indicated that the centers had made a 'big' difference in the quality of education while about half (47%) indicated that they had a 'medium' impact (see Table 3.12). Slightly less than a fifth said that they had made no or little difference or had no opinion on the matter. While these results are not necessarily bad, one would have hoped for a better assessment than this from the primary users of the centers, given the magnitude of the investments made by MoEYS.

In order to better understand the challenges of operating the centers, stakeholders were asked to pick the three biggest problems that they have encountered since the centers were established, which for some schools happened during the EEQP Project (2009-14) while for others it was more recently during USE-SDP. These challenges are summarized in Table 3.13.

The challenges identified in managing resource centers varied somewhat among stakeholders with school managers tending to show somewhat less convergence in their views than did students and teachers. For managers, the number one problem was that

[6] Under EEQP, 18 resource centers were built; ESDP I built 14 and ESDP II built 18 more for a total of 50 resource centers.

teachers really did not know how to use the centers (1), followed by issues relating to maintenance (2), and utilities (3).

Teachers took a somewhat different view in describing the challenges of operating the centers. Their number one issue was that the centers had too few materials (1). Other key issues most frequently identified by teachers included the low capacity of teachers to effectively use the centers (2), which was the same view as school managers, and the lack of time in the school timetable (3). This refers to the 40-minute periods in the timetable, which is too little time to organize experiments in the science labs. Surprisingly, the number one issue for teachers (lack of materials) was not chosen by any school managers as a major problem during the survey. However, students seemed to agree with teachers on the materials issue, as they also cited this as their number one issue (1). Other issues of key importance for students included a lack of time in the timetable to effectively use the facilities (2) (also the same view as teachers) and Other Issues (3), which ran the gamut from intermittent availability of electricity to incomplete construction issues, perhaps because new centers were still coming online as the survey was taking place. These are all very useful viewpoints that will be very helpful to USE-SDP 2 planners, as they formulate training workshops to improve center utilization.

Table 3.13: Key Challenges Identified by School Stakeholders in Managing the Resource Center

Key Challenges Cited	School Managers		Teachers		Students	
	No	%	No	%	No	%
Teachers don't know how to use them	99	30.7 (1)	227	18.4 (2)	60	2.8
Maintaining the facilities	94	29.1 (2)	87	7.1	188	8.6
Teachers know how to use them but put more emphasis on their private classes	36	11.1	17	1.4	56	2.6
There is not enough time in the timetable to use the facilities	28	8.7	224	18.2 (3)	405	18.6 (2)
Paying for the utilities	40	12.4 (3)	-	-	-	-
Not enough time for administrators to effectively manage the facilities	26	8.0	-	-	-	-
The facilities are too small	-	-	141	11.4	234	10.7
The facilities have too few materials to be effective	-	-	439	35.6 (1)	809	37.1 (1)
The facilities are often locked	-	-	20	1.6	122	5.6
Class sizes at the school is very big	-	-	14	1.1	16	0.7
Other	0	0.0	30	2.4	290	13.3 (3)

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); *Top ranked issues or problems (highlighted in grey scale)

3.2.3 Teacher Capacity Issues

Given the primacy of investments to strengthen the capacity of teachers at both SRS's (and network schools), the survey also undertook to determine stakeholders' perceptions of teacher capacity in a number of areas including general professional standards (defined as the degree of motivation to help students), English Language proficiency, ICT Literacy, and other areas. It is important to remember that these subjective assessments were made by school managers and the technical subject leaders in each school. They are not objective measures of teacher capacity but rather based on the perceptions of stakeholders, which can nevertheless have their own reifying effect.

Table 3.14: Stakeholder Perceptions of Teacher Professionalism

Stakeholder Assessment of Teacher Professionalism	School Managers		Teachers		Student	
	No.	%	No.	%	No.	%
Nearly all are highly motivated and interested in helping students	69	37.9	236	35.7	901	66.7
Most are highly motivated and interested in helping students	75	41.2	258	39.0	388	28.7
Some are highly motivated but others less so	34	18.7	137	20.7	40	3.0
Difficult to say	4	2.2	30	4.5	22	1.6

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

In terms of teacher professionalism (defined as motivation and interest in helping students), both school managers and technical subject leaders generally gave high marks to regular teachers with regards to their level of professionalism, defined as the degree to which teachers were motivated to help their students. In this respect, about 79% of managers indicated that 'nearly all' or 'most' of their teachers are 'professional' while 75% of teachers said the same. These sentiments were echoed by about 95% of students who also voiced very high appraisals of teacher professionalism, which seems surprisingly high. Still, about a fifth of school managers and subject leaders were less sanguine in their assessment saying that only 'some' teachers are motivated to help their students (see Table 3.14).

Investigators also sought to determine stakeholders' attitudes about ICT and English language proficiency of teachers. Response patterns indicated that about half of school managers (48%) felt confident that 'most' of their teachers were proficient in using ICT whereas teachers were somewhat more conservative in their view. In this regard, only about third of teachers indicated that 'most' teachers were proficient in using ICT. In contrast, the vast majority of teachers (two-thirds) felt that only 'some' teachers were proficient in using ICT. Students were once again an outlier with over 55% feeling that most of their teachers were proficient in using ICT.

When asked about the degree to which teachers actually use ICT in their teaching, responses were much more conservative. In this regard, very few teachers (6%) and no students (0%) expressed the view that 'most' teachers were using ICT in their regular classroom instruction. The majority view seemed to be that only 'some' or 'few' teachers actually use ICT in their teaching. In this case, school managers seemed to be a bit of an outlier where almost a fifth voiced the view that 'most' teachers use ICT in their teaching, though about 80% tended to agree with the more negative assessment voiced by teachers and students. Given the increasing emphasis of the education system on digital education, the reluctance of most teachers to use ICT in their teaching is going to be a major challenge for the project.

Table 3.15: Teacher Proficiency Level in ICT

Teacher Use of ICT in Education	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Perceptions of Teachers Who are Proficient in Using Computers						
All of them	2	1.1	1	0.2	52	3.8
Most of them	88	48.4	216	32.7	751	55.6
Some of them	90	49.5	412	62.3	393	29.1
Few of them	2	1.1	31	4.7	58	4.3
None of them	0	0	1	0.2	1	0.1
Don't know	-	-	-	-	96	7.1

Perceptions of Teachers Who Actually Use ICT in Classroom Teaching						
All of them	1	0.5	1	0.2	0	0
Most of them	35	19.2	39	5.9	0	0
Some of them	102	56.0	350	53.0	659	48.8
Few of them	42	23.1	231	34.9	0	0
None of them	2	1.1	40	6.1	688	50.9
Don't know	-	-	-	-	4	0.3

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

Stakeholder perceptions about the English language proficiency among teachers and administrators were much lower than those expressed about ICT proficiency. A majority of stakeholders voiced the view that only 'some' administrators and teachers were proficient in English Language (defined as an intermediate level or higher). For teachers, this assessment was voiced by 87% of school managers and 90% of teachers. Students on the other hand had a much higher opinion of the English language proficiency of their teachers with about 46% believing that half or more of teachers had an intermediate level of English or higher. This relatively more positive perception of teachers' English Language proficiency may have been a result of a relative comparison with their own level of proficiency (see Table 3.16). Responses among school managers about their own level of English proficiency paralleled those of teachers with 69% of those managers surveyed indicating that only 'some' school administrators have high proficiency in English Language.

Table 3.16: Teacher Proficiency Level in English

Teacher Proficiency in English	**School Managers**		**Teachers**		**Student**	
	No.	**%**	**No.**	**%**	**No**	**%**
Perceptions of Teachers' English Language Proficiency (Intermediate Level or Higher)						
Most of them are intermediate or higher	6	3.3	18	2.7	314	23.2
About half of them are intermediate or higher	16	8.8	47	7.1	305	22.6
Some of them are intermediate or higher	158	86.8	596	90.2	578	42.8
None of them are intermediate or higher	2	1.1	0	0	1	0.1
Don't know	-	-	-	-	153	11.3
Perceptions of Administrators' English Language Proficiency (Intermediate Level or Higher)						
Most of them are intermediate or higher	8	4.4	-	-	-	-
About half of them are intermediate or higher	13	7.1	-	-	-	-
Some of them are intermediate or higher	126	69.2	-	-	-	-
None of them are intermediate or higher	35	19.2	-	-	-	-

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

One of the most important issues looked at by investigators related to the identification of specific areas of capacity building needed by teachers. This information will be very valuable in helping project advisers determine the content of capacity-building programming. Based on a list of 7 topical areas indicated in Table 3.17, stakeholders were asked to indicate the top 'two' areas where they felt that the most support was needed at their school. There was remarkable congruence between school managers and teachers in selecting the most needed areas of support, which included (i) 'Using ICT' as the

most commonly chosen area; (ii) 'How to Do Experiments' as the second most commonly chosen area; and (iii) 'General Teaching Methods' as the third most commonly chosen area. All other topical areas only scored in the low single digits. These findings do not necessarily suggest that some of the other topical areas that had a lower priority among stakeholders will not receive any attention in project programming, only that the project should consider what the key training priorities seem to be for most stakeholders.

Table 3.17: Stakeholder Perceptions of Teacher Training Needs

Areas Where Teachers Are Perceived to Have the Most Training Needs	School Managers		Teachers	
	No.	%	No.	%
General Teaching Methods	76	21.2 (3)	314	24.3 (3)
Classroom Management	15	4.2	50	3.9
Student Assessment	18	5.0	35	2.7
How to do experiments	104	29.1 (2)	341	26.4 (2)
How to use ICT	107	29.9 (1)	408	31.6 (1)
How to better use the library for student learning	17	4.7	39	3.0
How to teach soft skills	21	5.9	106	8.2
Other	0	0.0	0	0

N=182 (School Managers); N=661 (Teachers); *Top ranked topic (highlighted in grey scale)

Another equally important area of inquiry in this survey related to an assessment of teaching methods at stakeholders' schools. In this regard, school managers, teachers, and students were asked to characterize the most dominant teaching methodology used at their school. Stakeholders seemed very much split on the continuum of different practices that were presented to them, ranging from 'strong focus on group work and student projects' on one end to a combination of 'lecturing and some practical group exercises' on the other. Because this survey did not include classroom observations, it was not possible to independently verify stakeholder sentiment and this caveat should be kept in mind when considering stakeholder views on this topic. The largest group of stakeholders (46% of school managers, 38% of teachers, and 44% of students) expressed the view that most teachers use a combination of lecturing and some practical exercises' (see Table 3.18). This was where response frequencies tended to cluster (as noted in the table). School managers seemed to be the most optimistic in their expressed view of teaching practice, where 42% indicated there is a strong focus on 'practical group work and student projects.' In contrast, only about a third of teachers (35%) and a quarter of students (27%) expressed this view. Hardly anyone indicated that 'lecturing' is the predominant teaching method at their school even though this is usually the most commonly observed method of instruction that anecdotal reporting most often indicates. Thus, stakeholders seemed to be very much split on how teachers generally teach, indicating that there is likely great diversity in the teaching methodologies used, an issue that certainly needs further exploration.

Table 3.18: Stakeholder Perceptions of Teaching Methods Used

Stakeholder Perceptions of How Teachers Teach	School Managers		Teachers		Students	
	No.	%	No.	%	No	%
A strong focus on practical group work and student projects.	76	41.8	228	34.5	364	26.9
A good balance of lecturing and practical group exercises.	16	8.8	140	21.2	297	22.0
A combination of lecturing and some practical group exercises.	84	46.2	252	38.1	595	44.0
Lecturing is the predominant method	4	2.2	19	2.9	61	4.5
Hard to say	2	1.1	22	3.3	34	2.5

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); Frequencies highlighted in grey scale indicate where most responses tended to cluster.

Another set of responses that help to shed more light on how most teachers teach concerns student responses about the use of teaching aids. When asked how frequently their teachers use teaching aids, the majority of students indicated that the frequency of use is generally low (e.g., from time to time, not very often, or never). In this respect, 68.7% of students indicated this response. Only about a third of students indicated higher frequencies of teaching aid usage than this (see Table 3.19). These findings do not do much to validate the idea that teachers spend a lot of time on group work since the latter usually requires some preparation for teaching and learning aids.

Table 3.19: Student Perceptions of the Use of Teaching Aids in Their Schools (N=1,351)

How frequently do your teachers use teaching aids during their teaching?	No	%
Very frequently	67	5.0
Frequently	348	25.8
From time to time	687	50.9
Not very often	185	13.7
Never	50	3.7
Difficult to say	14	1.0

3.2.4 Life Skills and Career Counseling Services

Under the USE-SDP Project design, life skills and student counseling services will be a major focus of investment. Thus, some number of questions was put to stakeholders about the incidence of life skills teaching and counseling and its role in their school's educational programming. The vast majority of stakeholders working at the school indicated that their schools do teach life skills (87% among managers and 76% teachers); however, this view was not fully corroborated by students where only 60% indicated that their school taught life skills. A similar contrast in views occurred when stakeholders were asked how 'big' a role life skills played at their school (see Table 3.20). Among school managers, 82% indicated that life skills played a 'big' role in school programming, while 72% of teachers expressed this view. Only half has many students (42%), however, expressed this view. Once again, investigators were not able to independently verify the contrasting views of stakeholders through actual observation but it does indicate a cause for concern when stakeholders have such divergent perceptions of the life skills situation at their schools.

In terms of the need for specialized life skills facilities and teachers, there seemed to be strong agreement among managers and teachers that their schools need investments in these areas to implement life skills more effectively. Response frequencies approximated between 98% to 99% in this regard (see Table 3.20).

Table 3.20: Perceptions of Life Skills Services at Schools

Stakeholder Perceptions of Life Skills Instruction	School Managers		Teachers		Students	
	No.	%	No.	%	No	%
Are there Life Skills Activities						
Yes	158	86.8	502	75.9	817	60.5
No	24	13.2	661	100.0	534	39.5
How big a role does Life Skills play at the school						
Big role	149	81.9	475	71.9	571	42.3
Medium-sized role	32	17.6	166	25.1	630	46.6
Small Role	1	0.5	19	2.9	132	9.8
No Role	0	0	1	0.2	18	1.3
Does the school need specialized facilities for life skills?						
Yes	181	99.5	656	99.2	-	-
No	1	0.5	5	0.8	-	-

Does the school need specialized guidance or trained teacher for life skills?						
Yes	179	98.4	648	98.0	-	-
No	3	1.6	13	2.0	-	-

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students);

The survey also investigated the availability of career counseling services and the role it plays in the school. These questions occurred in the context of conscious efforts by MoEYS to emplace counseling services in secondary schools, but these efforts are often hobbled by the lack of available teachers (who often have to split their time between regular teaching and counseling) as well as a lack of counseling expertise with the result that such services often take a very *ad hoc* character. In response to questions shown in Table 3.21, 36% of managers and 47% of teachers indicated that 'none' of their students receive counseling services. Another 46% of managers and 38% of teachers ventured the view that only 'some' of their students received counseling services. Hardly any stakeholders expressed the view that most students received such services and indeed 39% of students reported that they 'never' received counseling services while 61% indicated that they receive some services but 'not so often.' These responding patterns are occurring against a backdrop where about half of teachers indicated that they provide counseling support to students of an informal nature 'from time to time' while 44% of managers reported that there is some sort of counseling program in place at their school. These findings suggest that there are serious gaps in student support with regards to how much guidance that they receive during their studies at their respective schools.

Table 3.21: Availability of Career Counseling Services

Stakeholder Perceptions of Career Counseling Services	**School Managers**		**Teachers**		**Students**	
	No.	**%**	**No.**	**%**	**No**	**%**
How many students receive career counseling services at the school						
Most of them	26	14.3	52	7.9	-	-
Some of them	84	46.2	254	38.4	-	-
A few of them	3	1.6	30	4.5	-	-
None of them	65	35.7	311	47.0	-	-
All of them	4	2.2	14	2.1	-	-
Have you ever provided career counseling to any students?					***Received career counselling***	
Yes, frequently	-	-	160	24.2	-	-
From time to time	-	-	322	48.7	-	-
No, never	-	-	82	12.4	523	38.7
Not so often	-	-	97	14.7	828	61.3
Are there Career Counselling programs at your school?						
Yes	81	44.5	164	24.8	577	42.7
No	101	55.5	497	75.2	774	57.3
Is the Career Counselling program important at your school?					***Important for their future***	
No	1	0.5	13	2.0	16	1.2
Yes	181	99.5	648	98.0	1335	98.8
Does the school need specialized guidance or trained teachers for career counselling?						
Yes	180	98.9	651	98.5	-	-
No	2	1.1	10	1.5	-	-

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

3.2.5 Issues Relating to Educational Inclusion

The final area of inquiry under the investigation of *educational quality and school services* related to school-based inclusiveness. In this regard, stakeholders were asked to self-assess their own understanding of the concept of inclusiveness and indicate their perception of how inclusive their school was with regards to various vulnerable groups (e.g., girls, minorities, etc.). In terms of their own self-assessment of understanding the concept of inclusiveness, about three-quarters of school managers described their understanding as either 'high' or 'medium' but assessors were surprised that only about 40% of teachers could do so. The majority of teachers (61%) described their understanding of Educational Inclusion as 'low' (see Table 3.22). Indeed, assessors reported that in many schools, teachers asked them to define the meaning of the term, 'inclusion.'[7] Many indicated that they had often heard this term but did not know exactly what it meant.

Relatedly, most respondents also indicated medium to high levels of inclusiveness for all of the key vulnerable groups in Cambodian society, based on their own perceptions (e.g., girls, minority groups, etc.). In general, school managers tended to give higher assessments of inclusiveness at their schools than did teachers. For example, 87% of school managers described their school as 'highly inclusive' for girls whereas only 66% of teachers gave this assessment (see Table 3.22). The same pattern held true for minority groups (90% versus 70%), the disabled (95% versus 82%), and the poor (97% versus 82%). Once again, it was difficult to independently verify these perceptions; however, community members voiced strong views that they felt that many teachers were highly discriminatory in the way that they treated poor students when teaching *rien kua* classes, as noted previously. Thus, it may be useful to help stakeholders to introspect about their attitudes towards student inclusion and whether their schools are actually as inclusive as they think.

Table 3.22: Stakeholder Understanding & Perceptions of Educational Inclusion

Understanding & Perception of Educational Inclusion	School Managers		Teachers	
	No.	%	No.	%
Self-Assessment of Understanding of Educational Inclusion				
I have high understanding	33	18.1	59	8.9
I have satisfactory understanding	104	57.1	200	30.3
I have low understanding	45	24.7	402	60.8
Assessment of the Inclusiveness of Your School by Risk Group				
Girls				
High Inclusion	156	86.7	433	66.3
Medium Inclusion	23	12.8	197	30.2
Low Inclusion	1	0.6	23	3.5
Minority Groups				
High Inclusion	54	90.0	152	70.4
Medium Inclusion	5	8.3	51	23.6
Low Inclusion	1	1.7	13	6.0
Physically Challenged				
High Inclusion	169	94.9	529	82.1
Medium Inclusion	7	3.9	101	15.7
Low Inclusion	2	1.1	14	2.2
Poor Students				
High Inclusion	176	97.2	539	81.9
Medium Inclusion	3	1.7	106	16.1
Low Inclusion	2	1.1	13	2.0

N=182 (School Managers); N=661 (Teachers)

[7] Translated as: ការអប់រំបរិយាបន្ន

3.3 Enabling Environments

Investigations in this area sought to determine the degree to which facilities and local conditions support some of the key services that Secondary Resource Schools are supposed to provide. This includes such things as security conditions, the availability of utilities, teacher availability, and specific Resource Center services such as libraries and laboratories. Poor enabling conditions have major implications for the effectiveness of the investments that MoEYS has made in the Secondary Resource Schools. Thus, this section seeks to determine to what degree enabling conditions exist to support effective operation.

3.3.1 Security Status and Utilities

Security conditions at all schools participating in the survey appear to be good to satisfactory suggesting low risk from external sources when making major investments in equipment and materials (see Table 3.23). Given the value of expensive equipment placed in these schools, assessments of good security are re-assuring.

About 84% of school managers indicated that all classroom buildings have access to electricity while only a very small fraction indicated that they had limited or no electricity (see Table 3.24). This situation bodes well for the ability of SRS's to play the role of 21st Century facilities by being able to support the use of laptops, LCD projectors, etc.

Internet access was reported to be more patchy. Only 16% of school managers reported that 'all' buildings in their school have internet access while about 40% reported that there is 'no' internet access at all in the school or that it is limited mainly to the school office. These findings would suggest that a large number of SRS's have only limited access to the internet. Access to internet services is clearly key to modernizing educational services in project schools and some of these prerequisites do not yet appear to be in place in a large number of schools.

Table 3.23: Assessment of School Security

Security Assessment	School Managers		Teachers		Students	
	No.	%	No.	%	No.	%
Security is very good	146	80.2	455	68.8	709	52.5
Security is satisfactory	35	19.2	193	29.2	614	45.4
Security is not so good	1	0.5	13	2.0	28	2.1

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

Table 3.24: School Access to Electricity and Internet

Description of Access to Electricity	School Managers	
	No.	%
All buildings have electricity	152	83.5
Only some buildings have electricity	28	15.4
Only the office has electricity	2	1.1
There is no electricity	0	0.0
Description of Access to Internet		
All buildings have internet	29	15.9
Only some buildings have internet	81	44.5
Only the office has internet	51	28.0
There is no internet	21	11.5

N=182 (School Managers)

3.3.2 Science Lab Services

A science lab at one of the Resource Centers visited by the survey team.

Each Resource Center in an SRS has two science labs designed to promote practical work in teaching students about chemistry, physics, and biology. Investigators tried to assess the degree of student access to the labs and some of the key challenges in optimizing such access as well as their effective use. When asked about student access, school managers tended to give the most positive assessments with 57% indicating that 'students use the labs a great deal.' However, only 41% of teachers expressed this view while among students the response frequency was only 8%. Indeed, the highest response frequencies registered by students were for 'use the labs some of the time' (43%) and 'do not use the labs much' (34%) (see Table 3.25). This pattern of response demonstrates a major divergence in views among key stakeholders that may suggest that school managers (and to a lesser degree teachers) are deceiving themselves about the rate of lab utilization.

Table 3.25: Student Access to Science Labs

Description of Access to Science Labs	School Managers		Teachers		Students	
	No.	%	No.	%	No	%
Students use labs a great deal	103	56.6	273	41.3	104	7.7
Students use labs some of the time	48	26.4	245	37.1	581	43.0
School does not have a science lab	23	12.6	72	10.9	177	13.1
Students do not use the labs much	8	4.4	71	10.7	462	34.2
Not relevant subject to use	-	-	-	-	27	2.0

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

Stakeholders were also asked to identify the two biggest challenges that they face in effectively utilizing the science labs at their schools. Selected responses were tabulated in terms of those that occurred with the greatest frequency and are ranked in terms of the first, second, and third most occurring responses (see Table 3.26). School managers cited three main challenges more frequently than any others including the view that there are not enough labs for all the students (1), the labs are too small and class sizes are very big (2), and teachers don't really know how to use the labs (3).

The key challenge for teachers was that the labs are too small to accommodate the large number of students at the school (1), which was also a key challenge voiced by school managers. But the other key challenges identified by teachers were different than those voiced by school managers and included the 'lack of materials and equipment' (2) and the short time periods in the school timetable that comprise only 40 to 45 minutes (3). Teachers felt that it is very difficult to set up experiments and clean up afterwards within this very short time frame. These are important structural issues that the project

should seek to address, particularly when some of the SRS's have enrollments of over 3,000 students.

The responses of students in this area tended to converge most with teachers. The most important challenge identified by students was that 'there is not enough time in the day to use the lab' (1). Their second most frequently cited challenge was that 'classroom periods are very short' as well as the 'lack of materials and equipment' (2) (the same observations as teachers), and that the 'labs are too few in number' (3) (same observation as school managers). Some of these challenges are going to be difficult to address by the project given that the centers have already been built and it will be difficult to increase either the size or number of labs. However, it might be possible to address such issues as teacher capacity, the organization of the timetable, and the availability of materials and equipment.

Table 3.26: Identification of Key Challenges in Utilizing Science Labs

Challenges Identified by Stakeholders in Using Science Labs	**School Managers**		**Teachers**		**Students**	
	No.	**%**	**No.**	**%**	**No**	**%**
Teachers do not know how to use the labs.	66	14.8 (3)	116	10.1	14	0.6
Teachers prefer to teach theory more than practice.	44	9.8	97	8.4	215	9.8
Teachers have no time to use the labs because they are too busy with their private classes.	7	1.6	10	0.9	13	0.6
The labs are too few in number to be accessible to all students.	86	19.2 (1)	154	13.4	330	15.0 (3)
There is not enough time in the day to use the lab.	36	8.1	133	11.6	434	19.8 (1)
The classroom periods are too short to effectively use the labs.	52	11.6	164	14.2 (3)	358	16.3 (2)
Students study the science subjects only one or two hours per week.	25	5.6	95	8.3	112	5.1
The labs lack materials and equipment.	47	10.5	166	14.4 (2)	358	16.3 (2)
The labs are too small to accommodate a full class of students.	81	18.1 (2)	174	15.1 (1)	236	10.8
The labs are rarely open.	1	0.2	7	0.6	78	3.6
There is no one to regularly maintain the labs and so they fall into disrepair.	2	0.4	13	1.1	41	1.9
The labs are not relevant to subject matter.	-	-	22	1.9	-	-
Other	0	0	0	0	6	0.3

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); Top ranked challenges are highlighted in grey scale.

3.3.3 Library Services

Each Resource Center also contains a student library that is designed to promote research and the reinforcement of reading skills. Once again, investigators both sought to assess the degree of student access to the library and the challenges in library utilization. Responses by stakeholders tended to parallel those relating to science labs. School managers tended to express the most optimistic views of library access while students expressed more pessimistic assessments, and teachers were somewhere in the middle. About two-thirds of school managers expressed the view that there was very high access to the libraries (64%), a view echoed by slightly more than a third (38%) of the teachers interviewed (see Table 3.27). Students were much less inclined to report high

library utilization rates with only 18% expressing this point of view. Thus, the project will need to consider how it can make the library more attractive to students as well as make structural changes to the timetable to facilitate student access.

Table 3.27: Student Access to Libraries

Description of Access to Libraries	School Managers		Teachers		Students	
	No.	%	No.	%	No	%
Students use library a great deal	116	63.7	248	37.5	243	18.0
Students use library some of the time	55	30.2	325	49.2	686	50.8
School does not have a library	1	0.5	1	0.2	12	0.9
Students do not use the library much	10	5.5	87	13.2	410	30.3

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

The most daunting challenges in making the library function as cited by stakeholders were highly convergent (see Table 3.28). All stakeholders consistently identified two challenges as among the most important. These included the observation that students have little time to utilize the library and that there are no digital or internet services. Although stakeholders differed slightly in how they ranked these challenges, all identified them as among the top three issues. Teachers and students also agreed that the lack of materials and research books was a key concern; each of them ranked this challenge as (2). Lesser challenges that nevertheless had high rates of responding included the observation that 'teachers lack capacity to link the libraries with their teaching' (a major concern among school managers) and that they have 'no time' to do so (a concern expressed by teachers). These observations will be very useful to programmers as they start to formulate technical inputs to improve library services, especially as this concerns considerations of digital resources, timetables, and additional research materials.

Resource Center Libraries provide books but no digital resources for students

Table 3.28: Identification of Key Challenges in Utilizing the School Library

Challenges Identified by Stakeholders in Using Science Labs	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Teachers do not know how to link their teaching with library services.	64	17.9 (3)	90	7.0	60	2.4
Teachers have no time to link their teaching with library services.	28	7.8	122	9.5 (3)	266	10.6
Students have little time to effectively utilize the library.	80	22.3 (2)	316	24.6 (1)	759	30.2 (1)
There are no digital or internet facilities in the library.	83	23.2 (1)	299	23.3 (2)	454	18.1 (3)
Librarians have no leadership skills.	55	15.4	72	5.6	49	2.0
Library operating hours are too	1	0.3	44	3.4	147	5.9

Challenges Identified by Stake-holders in Using Science Labs	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
short.						
Library is too small	3	0.8	6	0.5	27	1.1
Library is frequently closed.	1	0.3	34	2.7	127	5.1
Library lacks materials and re-search books.	43	12.0	299	23.3 (2)	615	24.5 (2)
Other	0	0	0	0	6	0.2

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); Top ranked challenges are highlighted in grey scale.

3.3.4 ICT Lab Services

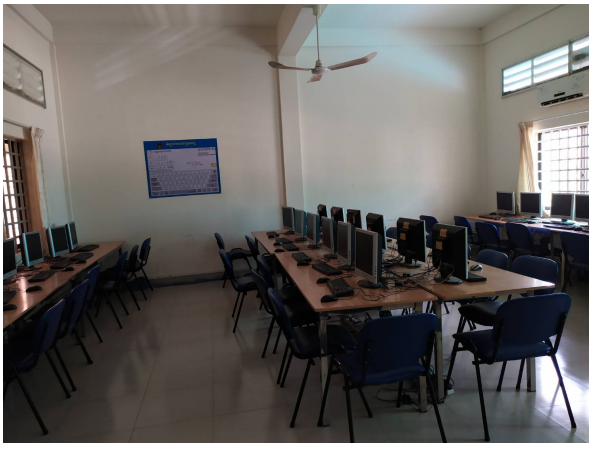
The final educational pillar in the student services provided at each SRS is the ICT Lab of which there are two in each center. Each lab has about 25 workstations. The lab is a facility that is heavily dependent on the availability of electricity and internet service to be effective. Each SRS receives a fixed budget of 35 million CR each year (almost $9,000) from MoEYS to ensure that the school can pay for both utility costs and maintenance to keep the labs running smoothly. As we have seen in surveys of access on some of the other services offered by the resource centers, there seems to be a sliding scale of optimism about access ranging from high to low depending on which stakeholder one asks. In this respect, assessors found that a large majority of school managers (71%) feel that there is high access to the labs ('students use the labs a great deal') while only about 15% of students share this view. Teachers once again lie somewhere in the middle (45%) (see Table 3.29). Since students are the primary users of the labs, one should probably err towards their assessment of lab access, suggesting the need to find ways to increase rates of lab utilization, given the very large investments made by MoEYS in these facilities.

Table 3.29: Student Access to ICT Labs

Description of Access to Libraries	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Students use ICT labs a great deal	130	71.4	299	45.2	202	15.0
Students use ICT labs some of the time	31	17.0	235	35.6	506	37.5
School does not have an ICT Lab	14	7.7	32	4.8	176	13.0
Students do not use ICT labs much	7	3.8	95	14.4	467	34.6

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students)

As was done for science labs and libraries, stakeholders were asked to prioritize what they felt were the key challenges that prevented schools from maximizing the effectiveness of the ICT labs. These challenges are summarized in Table 3.30. When classifying the most frequently occurring challenges, assessors once again found a high degree of convergence between the responses of teachers and students who generally prioritized challenges in about the same way. Nevertheless, the number one challenge identified by school managers, teachers, and students was that the 'labs are



Computer Lab with 25 Workstations in a Resource Center

too few in number to be accessible to all students.' This is particularly true in large Secondary Resource Schools with enrollments of thousands of students.[8] Other key issues identified by teachers and students included the lack of time to utilize the labs (ranked [3] by teachers and [2] by students) and the shortness of classroom periods (ranked [2] by teachers and [3] by students). School managers included other challenges of priority that were somewhat different from teachers and students including the smallness of the labs (2) and the lack of materials for the labs (3). Once again, it will be difficult to address issues relating to the number of labs and their size since the centers have already been built but it might be possible to address issues relating to timetables and the availability of materials.

Table 3.30: Identification of Key Challenges in Utilizing the ICT Lab

Challenges Identified by Stakeholders in Using Science Labs	School Managers		Teachers		Student	
	No.	%	No.	%	No	%
Teachers do not know how to use the labs.	10	3.0	60	4.9	11	0.5
shortage of computer teacher	3	0.9	9	0.7	1	0.0
Teachers have no time to use the labs because they are too busy with their private classes.	3	0.9	10	0.8	16	0.7
The utility costs of maintaining the ICT labs means that it is not possible to keep them running regularly.	10	3.0	13	1.1	34	1.5
Utility Budget from MoEYS comes too late to keep the labs running regularly.	24	7.3	56	4.5	48	2.1
The labs are too few in number to be accessible to all students.	109	33.1 (1)	377	30.6 (1)	635	28.1 (1)
There is not enough time in the day to use the lab.	22	6.7	176	14.3 (3)	452	20.0 (2)
The classroom periods are too short to effectively use the labs.	30	9.1	188	15.2 (2)	382	16.9 (3)
There are no available hours in the timetable to use ICT labs.	5	1.5	29	2.4	75	3.3
The labs lack materials and equipment.	39	11.9 (3)	151	12.2	334	14.8
More computer not work	1	0.3	9	0.7	21	0.9
The labs are too small to accommodate a full class of students.	70	21.3 (2)	127	10.3	179	7.9
The labs are rarely open.	2	0.6	8	0.6	40	1.8
There is no one to regularly maintain the labs and so they fall into disrepair.	1	0.3	15	1.2	25	1.1
Other	-	-	5	0.4	-	-
Don't know	-	-	-	-	5	0.2

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); Top ranked challenges are highlighted in grey scale.

3.3.5 Teacher Availability and Professional Learning

The final element in the assessment of the enabling environment at target schools and the extent to which this environment supports high quality educational services, relates to the availability of teachers and supporting structures for professionalism. Teacher shortages in rural areas in particular have been reported as a major problem in many

[8] To give some perspective on this issue, the Ministry's New Generation School Program has established standards for investment in science and ICT facilities whereby each school must have 1 science lab per 4 classes and 1 ICT lab per 9 classes. In cases where an SRS has 50 or more classes (which is not uncommon), there is a major mismatch between supply and demand.

Cambodian schools that often undermine the ability of schools to provide effective educational services. Often this requires over-utilizing teachers, asking teachers to teach subjects in which they have no expertise, and increasing class sizes. Although community members in focus group discussions highlighted the lack of teachers as a serious problem, and particularly science teachers, at local schools, most stakeholders in the surveyed schools themselves did not see teacher shortages as a major issue. Responding frequencies relating to the statement, 'there is a major shortage of teachers' registered in the single digits across all stakeholder groups (school managers, teachers, and students). However, about 43% of school managers indicated that shortages are growing as did 27% of teachers and 19% of students indicating that this could be a problem for their school in the future (see Table 3.31). Most stakeholders described the teacher availability situation as slight or none at all.

In terms of responding about those teachers who are in the shortest supply, there seemed to be remarkable convergence among key informants regarding those subject teachers who are most needed. The most important shortage of teachers relates to those who are teaching ICT. School managers, teachers, and students all identified the shortage of *ICT Teachers* as the most critical. Other subject teachers who are also in short supply appear to be *Earth Science Teachers* and *History Teachers.* Students also identified *Mathematics Teachers* as a subject teacher in short supply. These responses tend to differ somewhat from the perceptions of Community Members who remarked that technical teachers such as those teaching Physics, Chemistry, and Biology are those who are most needed.

Table 3.31: Description of Teacher Shortages

Stakeholder Assessment of Teacher Shortages	**School Managers**		**Teachers**		**Student**	
	No.	**%**	**No.**	**%**	**No**	**%**
There is a major shortage of teachers	11	6.0	38	5.7	23	1.7
There is a growing shortage of teachers	78	42.9	180	27.2	256	18.9
There is a slight teacher shortage	78	42.9	325	49.2	463	34.3
There is no teacher shortage	15	8.2	118	17.9	476	35.2
Don't know	-	-	-	-	133	9.8
Kind of Teacher Shortages	**School Managers**		**Teachers**		**Student**	
	No.	**%**	**No**	**%**	**No**	**%**
Khmer	48	8.5	82	5.2	74	4.4
Math	39	6.9	106	6.7	131	7.8 (3)
Physic	23	4.0	72	4.6	102	6.1
Chemistry	15	2.6	78	4.9	112	6.7
Biology	32	5.6	132	8.4	122	7.3
Earth Science	72	12.7 (2)	236	14.9 (2)	115	6.9
Moral-civics	47	8.3	152	9.6	75	4.5
History	69	12.1 (3)	212	13.4 (3)	157	9.4 (2)
Geography	68	12.0	194	12.3	99	5.9
ICT	92	16.2 (1)	244	15.5 (1)	404	24.1 (1)
English	36	6.4	71	4.5	107	6.4
Life skill	24	4.2	-	-	-	-
Librarian	3	0.5	-	-	-	-
Don't know	-	-	-	-	180	10.7

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students); Top ranked teacher shortages are highlighted in grey scale.

Professional Learning Communities (PLCs) are one means through which USE-SDP 2 hopes to improve teacher practice at target schools. Such communities enable teachers

to learn from one another and also share materials. Creating PLCs has often been problematic at Cambodian secondary schools because of the practice of *rien kua,* where teachers do not look upon one another as colleagues but rather as competitors trying to get as many student 'customers' as possible. As a result, there is often little sharing of materials or mutual assistance. Thus, the conventional logic is that PLCs are not thriving in Cambodian schools. The present survey tended to validate these presuppositions. In Table 3.32 below, it is rather revealing to know that 71% of the Technical Subject Leaders surveyed did not even know what a PLC is. Among those that did know what a PLC is, only 4% said that the PLC at their school was 'alive and vibrant.' The remaining 25% of teachers felt that PLCs at their school either do not exist at all or are not very active. These findings are very important in that they demonstrate a key area of needed intervention. Nevertheless, the project will be greatly challenged in strengthening a PLC culture as long as *rien kua* practices push hard against inter-teacher cooperation.

Table 3.32: Teacher Perceptions of Professional Learning Communities

How would you describe the professional learning community at your school?	**No**	**%**
The PLC is alive and vibrant	25	3.8
The PLC exists but it is not very active	17	2.6
There is no PLC of any substance at the school	147	22.2
I don't understand what a PLC is to adequately answer this question	472	71.4

N=661 (Teachers)

One of the planned interventions in USE-SDP 2 schools will be to set up extra-curricular student clubs that have teacher advisers to facilitate them. Such activities can have a dramatic impact on heightening student motivation and bringing book-learning to life. The present survey, therefore, sought to determine the receptivity of teachers to volunteering for such extra work. Responses among teachers indicate that this activity should be feasible, as about a fifth of teachers (23%) indicated that there would be 'many' teachers (perhaps including themselves) who would be receptive to working with such clubs (see Table 3.33). For these clubs to work, it is not necessary for all teachers to be involved but one-fifth should provide the needed critical mass necessary.

Table 3.33: Teacher Receptiveness to Organizing Student Subject Clubs

If teachers at your school received special training about organizing student subject clubs, how many of them do you think would be interested in volunteering to provide this service?	**No**	**%**
Many of them	149	22.5
Some of them	336	50.8
A Few of them	68	10.3
None of them	11	1.7
Don't know	97	14.7

N=661 (Teachers)

3.4 Stakeholder Outreach

The assessment of issues in this section relates mainly to the role of the School Support Committee (SSC) in developing the school and the quality of school-community relations. Once again, these assessments are based on attitudinal perceptions rather than objective metrics. One of the important goals in this assessment is to determine the degree of convergence or divergence between the viewpoints of different stakeholders as a starting point for the design and modulation of different project interventions.

3.4.1 The Role of the School Support Committee in Education

All school directors (though surprisingly not all teachers) attested to the existence of a School Support Committee at their school. The main kinds of support provided by the committee seems to be general financial support, furniture, and teaching materials with near total agreement by both school managers and teachers that these are the key areas of SSC support (see Table 3.34). Surprisingly, support for building construction seemed to be far down on the list, suggesting that the role of communities in their schools has been evolving.

Table 3.34: Perceptions of the Role of School Support Committees at Schools

Presence of an SSC	**School Managers**		**Teachers**	
	No.	**%**	**No.**	**%**
Yes	182	100.0	641	97.0
No	0	0	20	3.0
Don't know	-	-	0	0.0
Kinds of Support from SSC, if one exists				
Financial Support	96	29.2	346	29.8
Furniture	74	22.5	251	21.6
Teaching aids/materials	54	16.4	287	24.7
Ideas and school activities	38	11.6	23	2.0
Infrastructure	28	8.5	17	1.5
Buildings	24	7.3	135	11.6
No support	15	4.6	19	1.6
Don't know	-	-	84	7.2

N=182 (School Managers); N=661 (Teachers)

Descriptions about the level of support from the SSC tended to gravitate towards the middle of the response spectrum with about 41% of school managers and 46% of teachers stating that the SSC supports the school to a 'medium degree.' Although an equal number of school managers indicated that SSC's support their school a 'great deal', fewer teachers seemed to share this perception (27%). Only between 16% to 17% of respondents expressed the view that communities provide little or no support. (see Table 3.35).

In terms of the frequency of SSC meetings with the school, the most frequently occurring response among school managers and teachers was that meetings occurred 'once a semester' (46% of managers expressed this view while of teachers did so). On the other hand, slightly more than a third of managers and about a quarter of teachers indicated that meetings occur every one to two months (see Table 3.36). The second most frequently occurring response from teachers to this question was, 'don't know,' which along with the highly divergent response patterns in comparison to school managers would indicate that many teachers seem to have little contact with SSCs and really have little idea about the extent of their involvement in the school's affairs.

Table 3.35: Perceptions of the Degree to Which SSC Supports the School

Degree of SSC Support to the School	School Managers		Teachers	
	No.	%	No.	%
Supports the school a great deal	77	42.3	181	27.4
Supports the school to a medium degree	74	40.7	306	46.3
Only provides a little support to the school	31	17.0	103	15.6
Does not provide any support	0	0	5	0.8
Don't know	-	-	46	7.0

N=182 (School Managers); N=661 (Teachers)

Table 3.36: Perceived Frequency of SSC Meetings

SSC Meeting Frequency	School Managers		Teachers	
	No.	%	No.	%
Once a month	23	12.6	87	13.2
Once every two months	42	23.1	76	11.5
Once a semester	83	45.6	171	25.9
Once a year	18	9.9	91	13.8
Sometimes	1	0.5	16	2.4
When necessary	12	6.6	11	1.7
Never	3	1.6	37	5.6
Don't know	-	-	152	23.0
Other	0	0	1	1.1

N=182 (School Managers); N=661 (Teachers); Shaded cells indicate highest occurring frequency.

3.4.2 Perceptions of School-Community Relations

The survey's assessment of stakeholder perceptions of school-community relations was generally positive. Well over 90% of both school managers and teachers indicated that relations with the community were either 'very strong and active' or 'moderately strong and active' (see Table 3.37). Hardly anyone said that relations were not strong. Similarly, most school managers and teachers (between 72% to 75%) indicated that when there is a break down in communication between school and community, it is likely the fault of both parties and not just the community. Only about 20%+ of school-based stakeholders tended to put more blame on the community (see Table 3.38).

Table 3.37: Perceived Relationship between School and Community

How Stakeholders Describe the Relationship between their School & Community	School Directors		Teachers	
	No.	%	No.	%
Very strong and active	68	37.4	167	25.3
Moderately strong and active	110	60.4	451	68.2
Not very strong and active	2	1.1	14	2.1
Hard to say	2	1.1	29	4.4

N=182 (School Managers); N=661 (Teachers)

Table 3.38: Perceived Attribution of Cause for Poor School-Community Relations

When communities and parents are not involved in education, it is usually:	School Directors		Teachers	
	No.	%	No.	%
The fault of both the school and the community.	136	74.7	476	72.0
The fault of the community	37	20.3	144	21.8
The fault of the school	9	4.9	26	3.9
Other	0	0.0	15	2.3

N=182 (School Managers); N=661 (Teachers)

Focus Group Discussion with Community Representatives at a Secondary Resource School.

In spite of the hopeful findings suggested above, there is often a tendency among many Cambodian educators to attribute certain attitudes to parents that communities often reject. For example, school managers and teachers often suggest that parents do not value education or fail to make time to be involved in school affairs. Open-ended responses by those participating in the survey by school managers and teachers tended to confirm that these biases do still exist among many of the individuals in surveyed schools (see selected responses in Box 3.4). These responses suggest a failure to look critically at one's own behaviors where many teachers prioritize their private classes over regular public teaching, extort money from students, and discriminate against poor students. Many school managers similarly turn a blind eye to these practices. Is it any wonder then that parents might put a low priority on working with schools and their operators? Focus group discussions with community members on the other hand found that parents take a much more cheerful view of things and stated that school-community relations were quite good and had few obstacles (see Box 3.4). These patterns of responding once again show a high degree of divergence in attitudes among key school stakeholders on the same topic and suggest the need for considerable bridge building activities during the design and implementation of project interventions.

BOX 3.4: Perceived Greatest Obstacles to Good School-Community Relations

School Directors

- Most communities are poor, lack transportation, and are busy with their business or work.
- The communication between school and communities is not good.
- Communities do not participate/support schools because they do not have enough time.
- Parents do not understand the importance of education and pay little attention to their children's study.
- Covid19 has made many things worse in communities

Teachers

- There is a lack of communication and engagement from communities and parents.
- Parents and communities do not have time to join meetings and or collaborate with schools. They are busy and don't value education.
- Lack of transportation to join meetings.
- Parents are busy with their work or business.

Community Members

- The communication between community and school is good.
- The community helps the school to prevent student absenteeism and supports school activities.
- The school uses communities to help disseminate information on student enrollment, absenteeism, etc.
- The community supports schools to improve infrastructure.

3.4.3 Communication Channels between School and Stakeholders

There are several measures that USE-SDP 2 is considering to leverage new technologies that will help improve the delivery of educational services in target schools. This includes adding digital resources to libraries, introducing teacher-mentoring software to improve the support of classroom practices, and initiating e-counseling services, among

others. It is, therefore, important to have a better understanding about the availability of electronic communication channels and the ubiquity of technology in target areas.

The survey presented below is once again a review of stakeholders' perceptions of social media and the availability of technology in the local area; these perceptions could not be objectively verified. Nevertheless, they provide some basis for making conclusions about the nature of the local context and how this could affect programming in the project's efforts to promote digital education. In terms of social media use, school managers were most likely to express the view that it is widely used in their schools (68%) (see Table 3.39). In contrast, only about 38% of teachers expressed this view followed by 26% of students. Teachers (48%) and students (42%) tended to hold the view that social media is only used 'to some degree' at their schools. Only small minorities of stakeholders of 19% or less held the view that social media is used 'little' or 'not at all' in their schools. Overall, these responses suggest that there is a strong foundation for social media use at most SRT sites.

Table 3.39: Perceived Degree of Utilization of Social Media to Communicate with Stakeholders

Degree to Which Social Media is Used to Communicate with Different Stakeholders	**Response Rate (%)**		
	School Managers	***Teachers***	***Students***
Social media is used a great deal at my school	68.1	38.1	25.9
Social media is used to some degree at my school	29.1	47.5	41.5
Social media is used very little at my school	2.2	13.0	18.9
Social media is not used at my school	0.5	1.4	5.0
Don't know	-	-	8.8

N=182 (School Managers); N=661 (Teachers); N=1,351 (Students);

Stakeholders also indicated that smartphones are widely used by both teachers and students. As reported by teachers and school managers, over 90% of teachers are thought to be in possession of a smartphone. A survey question directed to all stakeholders suggested that about three-fourths of students (78%) are thought to own a smartphone. On the other hand, laptops appear to be much less ubiquitous with respondents reporting that only about 28% of teachers are in possession of such a device. Nevertheless, this information suggests that there is a strong foundation for introducing interventions that will surely depend on the availability of mobile technology and social media.

Table 3.40: Perceptions of Teacher & Student Access to Electronic Equipment

Kinds of Equipment to Which Teachers & Students Have Access	**Average Percentage (%)**	
Estimated Percentage of Teachers with:	***Resource Schools***	***Network Schools***
Laptops (N = 843)	28.0	n/a
Smartphones (N = 843)	90.8	n/a
Estimated Percentage of Students with:		
Smartphones – (N=2,194)	77.9	n/a

4. CONCLUSIONS

4.1 General Impressions

The present Comprehensive Assessment has found findings that in many ways parallel the Rapid Assessment done at the end of 2019. Unlike the Rapid Assessment, it has been possible to include the views of students as well, which has provided an additional angle of triangulation when comparing stakeholder views. Both assessments focused heavily on efforts to gauge the perceptions and attitudes of stakeholders on various issues of key import to the implementation of the *Upper Secondary Education Sector Development Project 2.* The assessment's focus on stakeholders' attitudes is based on the premise that subjective perceptions of individuals tend to 'reify' the construction of reality, which in turn has a profound influence on people's behaviors. That is, even if something is not true, people will act in accordance with what they believe to be true.

What the assessment has found is that stakeholders, including school managers (school directors and vice directors), teachers, community members, and students have attitudes about education that are frequently divergent on many issues. For example, teachers do not seem to be well-informed about school-community relations; stakeholders often seem to prioritize problems and issues very differently, and they have very different views of the issue of private classes, linked to the delivery of the state curriculum (among others). This is not to say that there has been no convergence in viewpoints (there has been), only that more divergence was reported than was originally expected, particularly in the perception of problems. In general, school managers and community members tend to be more convergent in their views than are teachers whose attitudes frequently diverge from other stakeholder groups. Understanding these points of divergence (as well as convergence) will be very useful to those providing training support to stakeholders and will help programmers to avoid some fatal assumptions about what stakeholders think or do not think.

The exterior of a school Resource Center in a surveyed school

It important to note, however, that when it came to an assessment of school services, school managers tended to voice the most optimism about such issues as access to labs and libraries, the implementation of school plans, and the availability of internet, among others. Teachers tended to be more pessimistic in their assessments of school services and students were the least optimistic of all. These findings paint a complex picture of convergence between the views of teachers and students but one of divergence when compared to the views of school managers. At the same time, school directors and community members seemed to most frequently express convergent views about many issues investigated in the assessment, especially as this pertains to setting priorities.

In spite of these observations, the overall impression of the context in target schools is a positive one. Most schools are conducting their planning, including a plan for Resource Center utilization. School managers and community members tend to express their pri-

orities in terms of student learning, which was one of the most positive examples of stakeholder convergence that was found during the survey (though the same could not be said for teachers). Stakeholders also reported that most schools do not suffer from major teacher shortages (except in the case of ICT teachers) and security conditions are also generally good. Most school-level stakeholders report a high degree of openness to life skills programming, advising students on their careers, and supervising student subject clubs. These findings indicate a high degree of receptiveness to planned investments in counseling, life skills, and student clubs. In addition, most school managers (about 80%) seem to express a strong predisposition to reasonable risk-taking in their management, which is a key attribute of a successful manager. These findings would all suggest that there are multiple pre-requisites in place for successful investment, even though there are also some key constraints that the project must consider. These are more fully elaborated below.

4.2 Key Findings and Their Import for Future Programming

School Planning: Stakeholders reported that key planning documents in need of completion each year (e.g., SIPs, SRCAPs) were indeed in place and that these documents had been developed with broad participation from various stakeholder groupings (e.g., teachers, community members, etc.). However, there seemed to be serious disagreement about how much of this planning had actually been implemented, particularly with respect to the SRCAP. In this regard, only between 50 to 60% of surveyed teachers reported that most of the plans had been implemented with teachers tending to report much lower levels of implementation than school managers.

Low rates of planning implementation may be related to significant amounts of divergence among stakeholders in terms of how they prioritize issues. Table 4.1 below summarizes the top issues identified by stakeholders with rankings provided parenthetically. In terms of the number one issue identified, school managers and community members converge on one key issue (students are learning well) while teachers are largely divergent with respect to their stated number one priority, which relates to the adequacy of their salaries. To be sure, teachers did identify student learning as their number three priority. Nevertheless, it surely must be difficult to develop unified planning when stakeholders lack a consensus on what the key priority issues even are. Thus, this finding should figure prominently in efforts to design training materials on school planning and implementation.

Table 4.1: Divergence among Stakeholders in Prioritizing Important Educational Issues

Priority Educational Issues Presented to Stakeholders	**Priority Ranking of Educational Issues** *(Based on the Number of Allocated Points)*		
	School Managers	**Teachers**	**Community Members**
Infrastructure upgrading	1.32 (3)	0.98 (4)	1.6 (3)
Students are learning well	1.64 (1)	1.34 (3)	2.2 (1)
Teachers demonstrate high levels of professionalism	1.31 (4)	1.40 (2)	1.4 (4)
Teachers have adequate salaries	1.49 (2)	2.10 (1)	1.8 (2)

Note: Areas of the highest priority for each stakeholder group are highlighted in grey scale.

Capacity-building Needs: The stakeholders that contributed to this assessment generally seemed very receptive to planned investments in capacity-building, even though many said that they had already received a great deal of training on various topics such as leadership and management. In terms of teacher capacity-building areas, there was

high congruence between managers and teachers in the topical areas where teachers should receive more support (see Table 4.2). The top priority topical area identified in this regard was 'How to Use ICT' followed by 'How to do Experiments' and 'General Teaching Methods.'

In spite of all the previous training received by teachers and managers, however, many stakeholders still seemed to be very misinformed about some very basic concepts. For example, only about one-third of school managers and teachers could correctly define what *School-based Management* is (based on an international definition[9]) even though this is supposed to be one of the key thrusts of the project. Similarly, almost three-fourths of teachers indicated that they had never even heard of the concept of *Professional Learning Community,* let alone whether one existed at their school and many teachers indicated that they were not familiar with the concept of *Inclusive Education* (though they had heard the term used many times). Given these and similar gaps in knowledge and understanding among school-based stakeholders about some very fundamental concepts, future efforts to map out capacity-building needs should take into consideration that stakeholders are themselves unsure of what technical areas they most need to develop in themselves.

Table 4.2: Priority Ranking of Training Areas Identified by School Managers and Teachers

Areas Where Teachers Are Perceived to Have the Most Training Needs	School Manager Priority Ranking	Teacher Priority Ranking
How to use ICT	(1)	(1)
How to do experiments	(2)	(2)
General Teaching Methods	(3)	(3)

Nevertheless, there do seem to be in place some of the most needed pre-requisites for planned capacity-building activities, particularly those that rely on increased use of technology to improve educational services. For example, most teachers possess smartphones and there is internet access in at least one or more buildings in most target schools. The same is true for electricity service. In addition, about one-third of teachers reportedly have high proficiency in using ICT (as self-reported by teachers), which should also prove to be enough of a solid foundation to start introducing digital resources into the library, mentoring software, and e-counseling services.

Resource Center Utilization: Given that additional investments are planned in Resource Centers as well as expanded investments in libraries and science labs in network schools, the findings relating to Resource Center Utilization rates could prove to be very useful. Overall, stakeholders seem to feel that utilization rates of the centers were moderate to low. School managers were among those most likely to express a view

BOX 4.1: Summary of the Top Challenges in Utilizing Resource Centers Cited by School Managers & Teachers

- Teachers don't know how to use the Centers
- Maintaining the facilities
- Teachers know how to use the Center but put more emphasis on their private classes
- There is not enough time in the timetable to use the facilities
- Paying for the utilities
- The facilities have too few materials to be effective

[9] The definition of School-based Management has increasingly become a contentious issue in the education system, as different programs compete with each other to promote their own applications of this concept. Given this lack of unanimity in the way that SBM is defined and applied, even within the Ministry, it perhaps should not be surprising that many stakeholders are not clear about its meaning.

towards high utilization rates while students diverged sharply from this assessment towards moderate to low rates of utilization. Teachers' views were somewhere in the middle. During the Rapid Assessment carried out in 2019, very few network schools indicated that they relied heavily on the centers either. This last finding provides a good justification for current project planning to emplace libraries and science labs at network schools. But some of the other constraints in utilizing the Centers (see Box 4.1) suggest the need for structural changes in the organization of schools, as well (besides more training). These structural changes include reducing class sizes, modifying the timetable, and inhibiting private classes to the extent that this is possible (see below). Thus, project programmers should not limit their efforts to increase Resource Center utilization rates simply to more capacity-building activities only but rather to key structural features in the school environment as well.

Desired Areas of Project Assistance: The four stakeholder groups consulted during this assessment were also given the opportunity to indicate where their highest priorities are for project assistance. Some of these requests (organized by stakeholder grouping) are provided in Box 4.2 below. The primary request with the most convergence among stakeholders related to upgraded facilities (e.g., computers, science labs, library). These investments are already under way and in many cases already completed even though stakeholders expressed the view that two science labs and two ICT labs are not enough to accommodate their large school enrollments. Other requests evidenced less convergence among stakeholders (i.e., two stakeholder groups or less) and included training on ICT issues and general methodology (managers and teachers); improving the school environment (managers and students); increased internet access (managers and students); expanded availability of teaching materials (teachers and community members); scholarships for poor students (teachers and students); and reducing the practice of 'rien kua' (community members and students). The challenge faced by the project will be to prioritize these requests for assistance in a way that satisfies the greatest number of stakeholders, especially in instances where there is a low degree of convergence.

BOX 4.2: Summary of Priorities for Project Assistance

School Managers	Teachers	Community	Students	Degree of Convergence
• School directors requested that they need budget (on time), followed by facilities. Infrastructure, computers, and science labs, library and study materials.	• Provide resource centers with library and science labs for students to use and do research. • Improve facility infrastructure such as classroom buildings and toilets.	Improve school infrastructure and facilities such as buildings, science labs, computer labs, and library.	• Students want to have more facilities with computers, labs, science materials, and library books.	4
• Reduce technical teacher shortage and provide training on ICT & science lab	• Provide support to ICT and science. Building teachers' capacity by providing training to teachers.	--	--	2
• Train teachers so they have enough capacity to transfer their knowledge to students. Especially, train them on teaching methods linked to their specific subjects.	• Support teaching methods by providing training and modern study materials such as computers, science labs, etc. • Train teachers in using technology, and science subjects to facilitate effective experimentation.	--	--	2

BOX 4.2: Summary of Priorities for Project Assistance				
• Improve school environments to attract students.	--	--	• Good and clean school environment including library room and science lab.	2
• Provide internet	--	--	• Provide digital devices and internet for study.	2
--	• Provide more teaching and learning materials.	• Provide more teacher and learning materials especially modern materials so students can practice important skills for the future	--	2
--	• Provide scholarships to poor students	--	• Provide study materials and books for free. • Provide scholarship for poor students.	2
--	--	• Stop the practice of 'rien kua' and move tutoring back into normal classes	• Teaching English, life skill,s and technical subjects for free.	2
--	• Provide teacher incentives to help students	--	--	1

4.3 Key Constraints to Consider

Stakeholder divergence in attitudes about various education issues has already been cited as one key constraint that project programmers will have to deal with as the project moves forward, particularly with respect to achieving consensual planning. But there are also other factors to consider. Most prominent on this list of constraints is the role of private classes (i.e., *rien kua*) that are a standard part of the routine of many teachers, especially those teaching Grade 12 students. Aside from the fact that teaching private classes to one's own students is generally seen as unethical and a clear conflict of interest, there are other practical reasons why this practice may undermine USE-SDP 2 programming. Mainly this refers to the observation that teachers often prioritize their private classes to the detriment of educational investments made by the Ministry such as the Resource Center. Indeed, many stakeholders (especially school managers and community members) identified this as a major factor that accounts for underutilization of the Resource Center because teachers place a higher priority on their own private classes (see Box 4.1). In addition, this assessment found that most teachers see the practice of organizing private classes as perfectly fine, indicating that any efforts to root it out or even curtailing it are likely to be met with fierce opposition.

Other important constraints to consider relate to the limited amount of time that comprise a subject period (usually 40 to 45 minutes) and the challenges this presents for using the science and ICT labs. Some of these challenges have also been laid out in Box 4.1, as well. In addition, the labs are not designed for the large class sizes that often characterize many project schools, which also presents problems for high utilization of the Resource Center. Similarly, some of the schools where the Resource Centers have been placed have extremely large enrollments, exceeding 2,000, 3,000, and in some cases 4,000 students. Even though the centers have two science labs and two ICT labs, this is not nearly enough to ensure access to all students. The current strategy of converting normal classrooms into science labs as is currently proposed is, therefore, highly advised and may help to address some of these constraints.

4.4 Key Recommendations

Based on the findings presented above, investigators offer the following recommendations to improve the implementation of USE-SDP 2 programming:

1. ***Address Divergent Stakeholder Views:*** Workshop facilitators who are tasked with key project roles such as supporting school planning should be oriented to the areas of stakeholder divergence as part of the ToT preparation and equipped with skills that promote conflict resolution and consensus-building.
2. ***Address ICT Teacher Shortages:*** Shortages of ICT teachers were highlighted as a key deficiency by most stakeholders. This may be addressed by working with Personnel Departments in each province to ensure that ICT teacher placements are prioritized for all SRS's.
3. ***Consider Restructuring the School Timetable:*** Multiple stakeholder groups have indicated that class periods are too short to effectively plan and execute experiments in SRS labs. The timetable should be structured in such a way that two time periods for a single subject be paired together so that teachers have at least 80 minutes (two 40-minute periods combined) in which to organize and execute an experiment in an SRS lab.
4. ***Review the Availability of Resource Center Supplies and Materials:*** It seems surprising that teachers and students should highlight this as an issue given the sizable investments made in each SRS. Nevertheless, inventories and stocks of consumable supplies should be reviewed in each province to ensure that there are no shortages.
5. ***Incorporate Definitions of Key Concepts such as Inclusive Education and PLCs into all Workshop Designs:*** Consultations found surprising deficits in the understanding of key concepts such as Inclusive Education and PLCs among large majorities of teachers. Future capacity-building workshops should include more attention to better defining these concepts and providing guidelines to how they can be practically applied in each school.
6. ***Focus on Incorporating ICT in Education, Techniques of Experimentation, and General Methodology into Planned Teaching Methodology Workshops:*** These three topical areas of capacity-building support were expressly requested by a majority of school managers and teachers. This request should guide the design of all teacher methodology workshops planned for SRS teachers.
7. ***Consider Posting Teacher Mentors to SRS's to Boost Teacher Capacity to More Effectively Utilize Resource Centers:*** Teachers in Secondary Resource Schools have already received extensive capacity-building support in previous projects, which does not seem to have had much effect on teacher's ability to effectively use the labs based on observations from stakeholders. The project may consider the use of school-based mentors who are trained at the National Institute of Education and posted to SRS sites with the technical support of teachers as their primary task. These mentors should be linked to the NIE for systematic back-up support through the use of mentoring software in which they can share problems with master mentors at the Institute and seek advice. Training courses should be intensive and at least 4 months in duration to avoid superficial one and two-week training workshops that are not very effective.

8. ***Standardize the Definition of School-based Management:*** There does not seem to be a uniform understanding of what School-based Management is nor how it should be applied in project sites in a way that is consistent with key SBM concepts. A streamlined manual comprising consistent definitions of SBM concepts; easy to use session plans designed to support facilitators; and participant course materials that support session plans should be developed with all haste to support planned SBM capacity-building workshops.
9. ***Equip Libraries with Digital Resources:*** Stakeholders consistently asked for more investment in libraries leading to the availability of digital resources. This might include tablets-on-wheels programming, m-learning services, and television screens to facilitate more activities where students can do research on the web and access specialized educational software.
10. ***Reduce the Occurrence of Private Classes:*** The existence of 'rien kua' activities has historically undermined MoEYS investment in science/ICT labs and libraries. This problem is not going away, even with efforts to nearly triple teacher salaries over the last five years. The practice is particularly unpopular with many community members., as noted in this survey. While MoEYS may not be able to eradicate the practice, it should at least be regulated. This might include prohibiting 'rien kua' during working hours, on school premises, or with one's own students. The less 'rien kua' activities occur, the more likely utilization rates for resource centers will increase.

ANNEX 1: Identification of Investigative Areas

Ministry of Education, Youth, & Sport

Investigative Areas for USE-SDP Quick Assessment Survey

Investigative Area	Stakeholder Grouping			
	School Managers	Teachers	Community Members	Students
A. Concepts of Leadership and Management • Risk taking behavior • Decision-making (Auto-cratic-Democratic) • Level of awareness of School Based Management guidance • Accountability (i.e. holding teachers to account for quality of teaching) • What formal leadership and management training have directors had?	x	x	--	
B. Understanding of Planning Concepts • Setting priorities • Problem Identification • Participation	x	x	x	
C. Frequency of Planning	x	x	x	
D. School Stakeholder Perceptions of School Quality • Comparisons with other schools • Working Conditions	x	x	x	x
E. Concepts of Educational Quality • Inclusion (i.e. that learning is for everyone): What is directors' and teachers' level of awareness? • School Environment (Access to facilities, utilization of facilities/ Use of Science Labs and the Available) • Content of Education (Curriculum) • Extracurricular activities • Educational Outcomes (How does the assess outcomes – tests, projects, school efficiency measures, etc.) • Processes of Learn-	x	x	x	x

Investigative Area	Stakeholder Grouping			
	School Managers	Teachers	Community Members	Students
ing/How Teachers teach • Which qualifications do teachers currently have?				
F. Concepts of Professionalism • Role modeling • Acceptability of private classes • Utilization of facilities among teachers • ICT Literacy among teachers • Incidence of Mentoring Support • Attitudes towards students • What are the current and desired mechanisms for Teacher Professional Development?	x	x	--	x
G. Physical Constraints • Access to electricity • Access to internet • Infrastructure Conditions	x	x	--	--
H. Teacher Availability • Shortage or Surplus	x	x	x	x
I. ICT Issues • Literacy among Teachers • ICT infrastructure esp. the availability of internet in school/classroom and (if possible) the school catchment area	x	x	--	x
J. School Security	x	x	x	x
K. Availability of School Services (for students) • Life Skills Classes • Counseling services • Library availability • Science Labs • ICT Labs	x	x	x	x
L. Interaction with Community • Frequency of Interaction • How the school interacts with community (Big Meetings, individualized Meetings, etc.) • Kinds of Community Support (financial, in-kind, etc.)	x	x	x	--

Investigative Area	Stakeholder Grouping			
	School Managers	**Teachers**	**Community Members**	**Students**
M. Methods of Communication in the School • Social Media Groups • Meetings • SMS Messaging • Announcements • Use of Smartphones (how many teacher have access to a smartphone) • Student and Parent Access to Smartphones • Other	x	x	--	x

ANNEX 2:
Population of Secondary Resource Schools

School Name	Province	Enrollment		Level of Cooperation
		Total	Female	
1. Krong Poipet HS	Banteay Meanchey	920	470	Full
2. Chub Vary HS	Banteay Meanchey	1349	743	Full
3. Hun Sen Klakon HS	Banteay Meanchey	926	516	Full
4. Net Yang HS	Battambang	2032	862	Full
5. Bovel HS	Battambang	2634	1462	Full
6. Phnom Sampov HS	Battambang	1557	834	Full
7. Preah Sihanouk HS	Kampong Cham	3103	1628	Full
8. Hun Sen Skun HS	Kampong Cham	2187	1155	Would not Participate
9. Preahbath Soramarith HS	Kampong Chhnang	2818	1499	Full
10. Hun Sen Boribo HS	Kampong Chhnang	1832	999	Full
11. Kampong Speu HS	Kampong Spue	2082	1086	Full
12. Oudong HS	Kampong Spue	1410	755	Full
13. Hun Sen Balang HS	Kampong Thom	1292	682	Full
14. Kampong Thom HS	Kampong Thom	2732	1389	Full
15. Kampong Thmor HS	Kampong Thom	1236	684	Full
16. Hun Sen Sereipheap HS	Kandal	4252	2153	Full
17. Hun Sen Koh Thom HS	Kandal	1512	835	Full
18. Tep Pranam HS	Kandal	1206	650	Full
19. Hun Sen Chamkadoung HS	Kep	813	448	Full
20. Koh Kong HS	Koh Kong	1621	782	Full
21. Sre Ambil HS	Koh Kong	1258	660	Full
22. Preah Reach Samphea HS	Kompot	748	399	Full
23. Hun Sen Chhouk HS	Kompot	2439	1301	Full
24. Kratie Krong HS	Kratie	1228	669	Full
25. Hun Sen Sophakborak HS	Kratie	787	411	Full

School Name	Province	Enrollment		Level of Cooperation
		Total	Female	
26. Hun Sen Mondulkiri HS	Mondul Kiri	1163	615	Full
27. Hun Sen Odar Mean Chey HS	Odar Meanchey	1224	668	Full
28. Anlong Veng HS	Odar Meanchey	1760	904	Full
29. Hun Sen Krong Tep Nimit HS	Pailin	1979	1069	Full
30. Hun Sen Chumpouvoan HS	Phnom Penh	5970	2968	Full
31. Chbar Ampov HS	Phnom Penh	3403	1730	Full
32. Chea Sim Tbeng Meanchey HS	Preah Vihea	1880	953	Full
33. Roveang HS	Preah Vihea	1056	577	Full
34. Preah Angdoung HS	Prey Veng	1824	922	Full
35. Hunsen Kampong Popil HS	Prey Veng	1649	878	Full
36. Peam Ro HS	Prey Veng	1807	968	Full
37. Pursat HS	Pursat	1713	904	Full
38. Hun Sen Krako HS	Pursat	840	452	Full
39. Samdach Ov Samdach Mae HS	Ratanak Kiri	2440	1204	Full
40. Angkor HS	Siem Reap	4531	2523	Full
41. Kralanh HS	Siem Reap	1408	762	Full
42. Preah Reachbochani-kech HS	Steung Treng	1841	927	Full
43. Svay Rieng HS	Svay Reang	3088	1661	Full
44. Hun Sen Prasot HS	Svay Reang	1554	825	Full
45. Chea Sim Takeo HS	Takeo	2224	1109	Full
46. Samdach Ov HS	Takeo	1064	531	Full
47. Samdach Decho Hun Sen Soung HS	Tboung Khmum	2683	1431	Full
48. Hun Sen O'Oraing Ov HS	Tboung Khmum	2004	1121	Full
49. Krong Preah Sihanouk HS	Sihanuk Ville	997	502	Cancelled due to Covid19
50. Hun Sen Vealrinh HS	Sihanuk Ville	1592	787	

ANNEX 3: Data Collection Tools

Second Upper Secondary Education – School Development Program

Survey Form – Teachers

Interviewee Name:	_____	**Sex:**	**M F**
School Name:	_____	**Interviewer Name:**	_____
Province:	_____	**Position:**	_____
District:	_____	**Date:**	_____
Working duration:	_____ **Years**	**How old are you?**	_____

No.	Question	Variable Reference
	Section 1: Management and Planning Issues	A, B
1.	How would you describe the management practices at your school? ☐ Very democratic ☐ Somewhat democratic ☐ Not very democratic ☐ Hard to say	A
2.	Does your school have an annual plan? Yes ☐ No ☐ Don't know ☐	B
3.	If you have a plan, did you participate in the planning. Yes ☐ No ☐	B
4.	If you have a plan, how much of the annual plan was implemented? ☐ All of it ☐ Most of it ☐ Some of it ☐ None of it ☐ Don't know	B
5.	Does the school have an SRC Action Plan? *(For Resource Center School Only)* Yes ☐ No ☐ Don't know ☐	
6.	If you have an SRC Action Plan, how much of the plan was implemented? *(For Resource Center School Only)* ☐ All of it ☐ Most of it ☐ Some of it ☐ None of it ☐ Don't know	B
7.	How often do you join school administration meetings? Every month ☐ Once every two months ☐ Once a semester ☐ Never ☐ Other ☐ _____	B
8.	How often do you join school technical meetings? Every month ☐ Once every two months ☐ Once a semester ☐ Never ☐ Other ☐ _____	B
9.	Which of the following definitions of School-based Management best matches your own understanding of SBM? _____ ☐ A management strategy in which authority for all operational aspects of a school is transferred from managers to community members. ☐ A management strategy to improve education by transferring significant decision-making authority from central level offices to individual schools. ☐ A management strategy that enables schools to comply strictly with the rules and policies set at central level.	A

No.	Question	Variable Reference
	☐ A management strategy whereby the control of decision-making at a school is moved to local authorities such as the Commune Council Office. ☐ I don't know the meaning of SBM.	
10.	To answer the following question, you will have to use 8 stars (★). Draw one or more stars in front of each the areas below to show how much priority you put on it. The more stars you draw in front of something, the higher the priority you think it has. If you feel that something has hardly any priority, just leave it blank. Be sure you do NOT use more than 8 stars. 1. _____ Infrastructure upgrading 2. _____ School has a flagpole 3. _____ Students are learning well 4. _____ Teachers have adequate salaries 5. _____ Teachers demonstrate high levels of professionalism 6. _____ Students dress properly 7. _____ Parents are satisfied with the instruction at the school 8. _____ School has a proper gate	B
	Section 2: School Perceptions and Concepts of Educational Quality/Services	C, D, E, H, J
11.	Complete the following statement: *The biggest problem in my school is:* _____	C
12.	Complete the following statement: *The one thing that I am most proud of during my time as a teacher of this school is:* _____	D
13.	Complete the following statement in any way that you would like: *If I were a very rich person and wanted to improve the education system, I would:* _____	C
14.	What are some of the key challenges you face in utilizing the Resource Center? *(Pick the top 2 issues for you only)* ☐ The facilities are not well maintained. ☐ The facilities are too small. ☐ The facilities have too few materials to be effective. ☐ The facilities are often locked. ☐ I don't know how to use them. ☐ I know how to use them but am too busy with my private classes to use them. ☐ There is not enough time in the timetable to use the facilities ☐Other: Please specify: _____	D
15.	How would you describe the attendance of teachers in general at your school? ☐ Nearly all the teachers come to work on a regular basis ☐ Most teachers come to work on a regular basis but some are tardy ☐ About half of the teachers come to work on a regular basis but half are often tardy ☐ Less than half of the teachers come to work on a regular basis	D, E

No.	Question	Variable Reference
	If teachers don't come on a regular basis, what is usually the reason? ☐ Busy with 'rien kua' ☐ Busy with personal thing or business ☐ Busy with their study ☐ Busy with meeting ☐ Don't know ☐ Other (specify_____)	
16.	How would you describe the other teachers in your school? ☐ Nearly all are highly motivated and interested in helping students ☐ Most are highly motivated and interested in helping students ☐ Some are highly motivated but others less so ☐ Difficult to say	D, E
17.	How would you describe the Professional Learning Community (PLC) at your school? ☐ The PLC is alive and vibrant ☐ The PLC exists but it is not very active ☐ There is no PLC of any substance at the school ☐ I don't understand what a PLC is to adequately answer this question	D,E
18.	How would you describe the quality of education at your school? ☐ Better than most ☐ About the same as most ☐ Worse than most ☐ Difficult to say	C, D
19.	How would you describe the attitudes of children at your school towards education? Please pick the statement that best describes the situation at your school. ☐ Most children really want to attend school ☐ Many children really want to attend school but a few feel that it is not so important ☐ About half the children here really want to attend school but the other half feel that it is not so important ☐ Few of the children here feel that attending school is very important	C
20.	How many of the teachers in this school are proficient in using computers? ☐ All of them ☐ Most of them ☐ Some of them ☐ None of them	E, H
21.	How many of the teachers at this school actually use ICT in their classroom teaching? ☐ All of them ☐ Most of them ☐ Some of them ☐ Few of them ☐ None of them	E, H
22.	What are the most important areas where teachers at your school need more training? Please choose the top two areas in your opinion. ☐ General Teaching Methods ☐ Classroom Management ☐ Student Assessment ☐ How to do experiments ☐ How to use ICT ☐ How to better use the library for student learning ☐ How to teach soft skills	E

No.	Question	Variable Reference
	☐ Other. Please Specify: _____	
23.	Which statement below best describes how the majority of teachers at your school teach? (Choose only ONE statement) ☐ Lecturing is the predominant methodology. ☐ A combination of lecturing and some practical group exercises. ☐ A good balance of lecturing and practical group exercises. ☐ A strong focus on practical group work and student projects. ☐ Hard to say	E
24.	Do you have any life skills program in your school? Yes ☐ No ☐ If Yes, Name of life skills ☐ Rice, ☐ Frog/fish raising ☐ Sewing ☐ Vegetable growing ☐ HIV/AIDS ☐ Safe migration ☐ Auto mobile repairing ☐ Electronic/air conditioner ☐ Other	
25.	How big a role does life skills instruction play in your school? ☐ A very big role ☐ A medium sized role ☐ A small role ☐ No role	D, J
26.	Do you think the school should has specialized facilities to teach life skills? Yes ☐ No ☐	
27.	Do you think life skill's teacher need specialized guidance or training to help their teaching? Yes ☐ No ☐	
28.	How many hours per week does your school teaches life-skills for each class? ☐ One hour per week ☐ Two hour per week ☐ Three hour per week ☐ More than three hour per week	
29.	Does your school have a career counselling program? Yes ☐ No ☐	
30.	How many of the students at your school receive career counseling? ☐ All of them ☐ Most of them ☐ Some of them ☐ Few of them ☐ None of them	D, J
31.	Have you personally ever provided career counseling to your students? ☐ Yes, frequently ☐ From time to time ☐ Not so often ☐ No, never	D, J

No.	Question	Variable Reference
32.	Do you think career counseling is important for students? Yes ☐ No ☐	
33.	Do you think the school needs specialized guidance or trained teachers for career counseling program? Yes ☐ No ☐	
34.	How would you describe the practice of 'rien kua?' ☐ A good practice ☐ A bad practice ☐ A practice that is both good and bad	D
35.	What effect would stopping 'rien kua' at your school have on your school? ☐ It would make things worse ☐ It would make things better ☐ It would have no effect	D
36.	How many of the teachers at your school have an intermediate level of English proficiency or higher? ☐ Most of them ☐ About half of them ☐ Some of them ☐ None of them	E
37.	If teachers at your school received special training about organizing student subject clubs, how many of them do you think would be interested in volunteering to provide this service? ☐ Many of them ☐ Some of them ☐ Few of them ☐ None of them ☐ Don't know	D
38.	How would you describe your understanding about concepts of 'educational inclusion?' ☐ High understanding ☐ Satisfactory Understanding ☐ Low Understanding	D
39.	How would you describe the inclusiveness of your school for each of the following kinds of student groupings? *(If you do not have this group, please leave blank)*	D
	Girls ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Minorities: ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Physically Challenged ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Poor Students ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion	D
40.	If you are a Network School, how heavily do you rely on the Resource Center School? ☐ Rely a great deal ☐ Rely to some degree ☐ Rely to a small degree ☐ Don't rely at all	C,D
41.	Of all the different kinds of assistance that a project could provide to your school to improve educational quality, what single input do you think is the most important? _____	D, J
	Section 3: Enabling Environments	F, G, H, I
42.	How would you describe security in your school? ☐ Very Good ☐ Satisfactory ☐ Not so good	I

No.	Question	Variable Reference
43.	To what extent do your students utilize the science labs at your school? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no science labs	F
44.	What are the challenges in effectively utilizing the science lab at your school? Pick the two most important issues at your school. *(For Resource Center School Only)* ☐ Teachers do not know how to use the labs. ☐ Teachers prefer to teach theory more than practice. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab. ☐ The classroom periods are too short to effectively use the labs. ☐ Students study the science subjects only one or two hours per week. ☐ The labs lack materials and equipment. ☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	F
45.	To what extent do your students utilize the library? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no library	F
46.	What are the challenges in effectively utilizing the library at your school? Pick the two most important issues at your school. ☐ Teachers do not know how to link their teaching with library services. ☐ Teachers have no time to link their teaching with library services. ☐ Students have little time to effectively utilize the library. ☐ There are no digital or internet facilities in the library. ☐ Librarians have no leadership skills. ☐ Library operating hours are too short. ☐ Library is frequently closed. ☐ Library lacks materials and research books. ☐ Other: _____	F
47.	To what extent do your students utilize the ICT labs at your school? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no ICT labs	F, H
48.	What are the challenges in effectively utilizing the ICT labs at your school? Pick the two most important issues at your school. *(For Resource Center School Only)* ☐ Teachers do not know how to use the labs. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The utility costs of maintaining the ICT labs means that it is not possible to keep them running regularly. ☐ Utility Budget from MoEYS comes too late to keep the labs running regularly. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab. ☐ The classroom periods are too short to effectively use the labs. ☐ There are no available hours in the timetable to use ICT labs. ☐ The labs lack materials and equipment.	F, H

No.	Question	Variable Reference
	☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	
49.	How would you describe the teacher shortage at your school? ☐ There is no shortage ☐ There is a slight shortage ☐ There is a growing shortage ☐ There is a major shortage	G
50.	What kind of teacher shortage is there? ☐ Khmer ☐ Math ☐ Physic ☐ Chemistry ☐ Biology ☐ Earth Science ☐ Moral-civics ☐ History ☐ Geography ☐ ICT ☐ Other (specify_____)	
51.	In general, how often do you utilize the Resource Center? ☐ Very Frequently ☐ Frequently ☐ Once in a while ☐ Not so much	F
	Section 4: Stakeholder Outreach	K, L
52.	Is there a School Support Committee (or PTA) at the school? ☐ Yes ☐ No If yes, in what ways does the school support committee help the school? (Check all that apply) ☐ Furniture ☐ Teaching aids/materials ☐ Buildings ☐ Financial Support ☐ No support ☐ Others _____ ☐ Don't know	K
53.	To what degree does the SSC support the school? ☐ A great deal ☐ Support a medium amount ☐ Only provides a little support ☐ Does not provide any support ☐ Don't know	K
54.	How often does the School Support Committee meet to discuss school issues? ☐ Once a month ☐ Once every two months ☐ Once a semester ☐ Once a year ☐ Never ☐ Other _____ ☐ Don't know	K, I
55.	Complete the following statement based on your personal experience. Choose only ONE response. *When communities and parents are not involved in education, it is usually:* ☐ the fault of the community ☐ the fault of the school ☐ the fault of both the school and the community. ☐ None of these answers matches my view. My view is that _____	K, I
56.	How would you describe the relationship between the school and community? ☐ Very strong and active ☐ Somewhat strong and active ☐ Not very strong and active ☐ Hard to say What do you see as the single greatest obstacle to maintaining good relations with	K

No.	Question	Variable Reference
	the local community? _____	
57.	To what degree does your school use social media to communicate with stakeholders such as teachers, parents, students, community members, etc. ☐ A great deal ☐ Use it to some degree ☐ Very little ☐ Not at all ☐ Don't know	I
58.	Approximately what percentage of teachers have smartphones? _____%	I
59.	Approximately what percentage of students have smartphones? _____%	I

Upper Secondary Education – Sector Development Program
Survey Form – School Directors

Interviewee Name:	_____	**Sex:**	**M F**
School Name:	_____	**Interviewer Name:**	_____
Province:	_____	**Position:**	_____
District:	_____	**Date:**	_____

No.	Question	Variable Reference
	Section 1: Management and Planning Issues	A, B
1.	Which of the following best describes your view about taking risks to improve your school? Check as many as might apply. ☐ Risk is usually a bad thing to be avoided whenever possible. ☐ Taking risks is a necessary aspect of decision-making. ☐ Taking risks will get you into trouble with higher authorities and so should generally be avoided. ☐ The only way to gain progress is by taking risks, as long as the risks seem acceptable.	A
2.	How would you feel about sharing more of your authority with a committee who would help oversee any grant funds provided? ☐ I would support this idea ☐ I am not sure if I would fully support this idea ☐ I would be against this idea ☐ I cannot really say how I would feel	A
3.	How much training on Leadership Issues have you received from MoEYS? ☐ A great deal ☐ Quite a bit but more training is desirable ☐ Some Training ☐ None at all	A
4.	Does your school have an annual plan? Yes ☐ No ☐	B
5.	If you have a plan, indicate who was involved in the planning. If you do NOT have a plan, leave this question blank. Check all that apply. ☐ School managers ☐ Grade leaders ☐ All teachers ☐ Community representatives ☐ Commune representatives ☐ Monks ☐ Students ☐ Local authorities (police, soldiers, etc.) ☐ Others: _____	B
6.	If you have a plan, how much of the annual plan was implemented? ☐ All of it ☐ Most of it ☐ Some of it ☐ None of it	B
7.	Does the school have an SRC Action Plan? Yes ☐ No ☐	

No.	Question	Variable Reference
8.	If you have an SRC Action Plan, how much of the plan was implemented? ☐ All of it ☐ Most of it ☐ Some of it ☐ None of it	B
9.	How often do you have school administration meetings? Every month ☐ Once every two months ☐ Once a semester ☐ Never ☐ Other ☐ _____	B
10.	How often do you have school technical meetings? Every month ☐ Once every two months ☐ Once a semester ☐ Never ☐ Other ☐ _____	B
11. 12.	Which of the following definitions of School-based Management best matches your own understanding of SBM? ☐ A management strategy in which authority for all operational aspects of a school is transferred from managers to community members. ☐ A management strategy to improve education by transferring significant decision-making authority from central level offices to individual schools. ☐ A management strategy that enables schools to comply strictly with the rules and policies set at central level. ☐ A management strategy whereby the control of decision-making at a school is moved to local authorities such as the Commune Council Office. ☐ I don't know the meaning of SBM.	A
13.	To answer the following question, you will have to use 8 stars (★). Draw one or more stars in front of each the areas below to show how much priority you put on it. The more stars you draw in front of something, the higher the priority you think it has. If you feel that something has hardly any priority, just leave it blank. Be sure you do NOT use more than 8 stars. 9. _____ Infrastructure upgrading 10. _____ School has a flagpole 11. _____ Students are learning well 12. _____ Teachers have adequate salaries 13. _____ Teachers demonstrate high levels of professionalism 14. _____ Students dress properly 15. _____ Parents are satisfied with the instruction at the school 16. _____ School has a proper gate	B
14.	**Section 2: School Perceptions and Concepts of Educational Quality/Services**	C, D, E, H, J
15.	Complete the following statement: *The biggest problem in my school is:* _____	C
16.	Complete the following statement: *The one thing that I am most proud of during my time as director/vice director of this school is:* _____	D
17.	Complete the following statement in any way that you would like: *If I were a very rich person and wanted to improve the education system, I would:* _____	C

No.	Question	Variable Reference
18.	What are some of the key challenges you face in managing the Resource Center? *(Pick the top 2 issues for you only)* ☐ Maintaining the facilities ☐ Paying for the utilities ☐ Teachers don't know how to use them ☐ Teachers know how to use them but put more emphasis on their private classes ☐ There is not enough time in the timetable to use the facilities ☐ Not enough time for administrators to effectively manage the facilities ☐Other: Please specify: _____	D
19.	How would you describe the attendance of teachers at your school? ☐ Nearly all the teachers come to work on a regular basis ☐ Most teachers come to work on a regular basis but some are tardy ☐ About half of the teachers come to work on a regular basis but half are often tardy ☐ Less than half of the teachers come to work on a regular basis If teachers don't come on a regular basis, what is usually the reason? ☐ Busy with 'rien kua' ☐ Busy with personal thing or business ☐ Busy with their study ☐ Busy with meeting ☐ Don't know ☐ Other (specify_____)	D, E
20.	How would you describe the teachers in your school? ☐ Nearly all are highly motivated and interested in helping students ☐ Most are highly motivated and interested in helping students ☐ Some are highly motivated but others less so ☐ Difficult to say	D, E
21.	How would you describe the quality of education at your school? ☐ Better than most ☐ About the same as most ☐ Difficult to say	C, D
22.	How would you describe the attitudes of children at your school towards education? Please pick the statement that best describes the situation at your school. ☐ Most children really want to attend school ☐ Many children really want to attend school but a few feel that it is not so important ☐ About half the children here really want to attend school but the other half feel that it is not so important ☐ Few of the children here feel that attending school is very important	C
23.	How many of your teachers are proficient in using computers? ☐ All of them ☐ Most of them ☐ Some of them ☐ Few of them ☐ None of them	E, H
24.	How many of your teachers actually use ICT in their classroom teaching. ☐ All of them ☐ Most of them ☐ Some of them ☐ Few of them ☐ None of them	E, H

No.	Question	Variable Reference
25.	What are the most important areas where teachers need more training? Please choose the top two areas in your opinion. ☐ General Teaching Methods ☐ Classroom Management ☐ Student Assessment ☐ How to do experiments ☐ How to use ICT ☐ How to better use the library for student learning ☐ How to teach soft skills ☐ Other. Please Specify: _____	E
26.	Which statement below best describes how the majority of teachers at your school teach? (Choose only ONE statement) ☐ Lecturing is the predominant methodology. ☐ A combination of lecturing and some practical group exercises. ☐ A good balance of lecturing and practical group exercises. ☐ A strong focus on practical group work and student projects. ☐ Hard to say	E
27.	Do you have any life skills program in your school? Yes ☐ No ☐ If Yes, Name of life skills ☐ Rice, ☐ Frog/fish raising ☐ Sewing ☐ Vegetable growing ☐ HIV/AIDS ☐ Safe migration ☐ Auto mobile repairing ☐ Electronic/air conditioner ☐ Other	D, J
28.	How big a role does life skills instruction play in your school? ☐ A very big role ☐ A medium sized role ☐ A small role ☐ No role	D, J
29.	Do you need specialized facilities to teach life skills? Yes ☐ No ☐	D, J
30.	Do you need specialized guidance or trained teachers for life-skills program? Yes ☐ No ☐	
31.	How many hours per week does your school teaches life-skills for each class? ☐ One hour per week ☐ Two hour per week ☐ Three hour per week ☐ More than three hour per week	

No.	Question	Variable Reference
32.	Does your school have a career counselling program? Yes ☐ No ☐	
33.	If yes, How many of your students receive career counseling at your school? ☐ All of them ☐ Most of them ☐ Some of them ☐ Few of them ☐ None of them	D, J
34.	If yes, Do you think career counseling is important for students? Yes ☐ No ☐	
35.	If yes, Do you need specialized guidance or trained teachers for career counseling program? Yes ☐ No ☐	
36.	How would you describe the practice of 'rien kua?' ☐ A good practice ☐ A bad practice ☐ A practice that is both good and bad	D
37.	What effect would stopping 'rien kua' at your school have on your school? ☐ It would make things worse ☐ It would make things better ☐ It would have no effect	D
38.	How many of your teachers have an intermediate level of English proficiency or higher? ☐ Most of them ☐ About half of them ☐ Some of them ☐ None of them	E
39.	How many administrators at your school have an intermediate level of English proficiency or higher? ☐ Most of us ☐ About half of us ☐ Some of us ☐ None of us	E
40.	How would you describe your understanding about concepts of 'educational inclusion?' ☐ High understanding ☐ Satisfactory Understanding ☐ Low Understanding	D
41.	How would you describe the inclusiveness of your school for each of the following kinds of student groupings? *(If you do not have this group, please leave blank)*	D
42.	Girls ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Minorities: ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Physically Challenged ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion Poor Students ☐ High Inclusion ☐ Medium Inclusion ☐ Low Inclusion	D
43.	Do you think the resource centre can be share with network school to use it? Yes ☐ No ☐	C,D
44.	Of all the different kinds of assistance that a project could provide to your school to improve educational quality, what single input do you think is the most important? _____	D, J
45.	**Section 3: Enabling Environments**	F, G, H, I
46.	How would you describe security in your school? ☐ Very Good ☐ Satisfactory ☐ Not so good	I

No.	Question	Variable Reference
47.	Does your school have access to electricity? ☐ Yes ☐ No	F
48.	Does your school have access to internet? ☐ Yes ☐ No	F
49.	To what extent do your students utilize the science labs at your school? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no science labs	F
50.	What are the challenges in effectively utilizing the science lab at your school? Pick the two most important issues at your school. *(For Resource Center School Only)* ☐ Teachers do not know how to use the labs. ☐ Teachers prefer to teach theory more than practice. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab. ☐ The classroom periods are too short to effectively use the labs. ☐ Students study the science subjects only one or two hours per week. ☐ The labs lack materials and equipment. ☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	F
51.	To what extent do your students utilize the library? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no library	F
52.	What are the challenges in effectively utilizing the library at your school? Pick the two most important issues at your school. ☐ Teachers do not know how to link their teaching with library services. ☐ Teachers have no time to link their teaching with library services. ☐ Students have little time to effectively utilize the library. ☐ There are no digital or internet facilities in the library. ☐ Librarians have no leadership skills. ☐ Library operating hours are too short. ☐ Library is frequently closed. ☐ Library lacks materials and research books. ☐ Other: _____	F
53.	To what extent do your students utilize the ICT labs at your school? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ School has no ICT labs	F, H
54.	What are the challenges in effectively utilizing the ICT labs at your school? Pick the two most important issues at your school. *(For Resource Center School Only)* ☐ Teachers do not know how to use the labs. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The utility costs of maintaining the ICT labs means that it is not possible to keep them running regularly. ☐ Utility Budget from MoEYS comes too late to keep the labs running regularly. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab.	F, H

No.	Question	Variable Reference
	☐ The classroom periods are too short to effectively use the labs. ☐ There are no available hours in the timetable to use ICT labs. ☐ The labs lack materials and equipment. ☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	
60.	How would you describe the teacher shortage at your school? ☐ There is no shortage ☐ There is a slight shortage ☐ There is a growing shortage ☐ There is a major shortage	G
61.	What kind of teacher shortage is there? ☐ Khmer ☐ Math ☐ Physic ☐ Chemistry ☐ Biology ☐ Earth Science ☐ Moral-civics ☐ History ☐ Geography ☐ ICT ☐ Other (specify_____)	
62.	In general, how would you describe the rate of utilization of the Resource Center? ☐ Very Frequent ☐ Frequent ☐ Once in a while ☐ Not so much	F
	Section 4: Stakeholder Outreach	K, L
63.	Is there a School Support Committee (or PTA) at the school? ☐ Yes ☐ No If yes, in what ways does the school support committee help the school? (Check all that applies) ☐ Furniture ☐ Teaching aids/materials ☐ Buildings ☐ Financial Support ☐ No support ☐ Others _____	K
64.	To what degree does the SSC support the school? ☐ A great deal ☐ Support a medium amount ☐ Only provides a little support ☐ Does not provide any support	K
65.	How often does the School Support Committee meet to discuss school issues? ☐ Once a month ☐ Once every two months ☐ Once a semester ☐ Once a year ☐ Never ☐ Other _____	K, I
66.	Complete the following statement based on your personal experience. Choose only ONE response. *When communities and parents are not involved in education, it is usually:* ☐ the fault of the community ☐ the fault of the school ☐ the fault of both the school and the community. ☐ None of these answers matches my view. My view is that _____	K, I
67.	How would you describe the relationship between the school and community? ☐ Very strong and active ☐ Somewhat strong and active ☐ Not very strong and active ☐ Hard to say What do you see as the single greatest obstacle to maintaining good relations with	K

No.	Question	Variable Reference
	the local community? _____	
68.	To what degree does your school use social media to communicate with stakeholders such as teachers, parents, students, community members, etc. ☐ A great deal ☐ Use it to some degree ☐ Very little ☐ Not at all	I
69.	Approximately what percentage of teachers have smartphones? _____%	I
70.	Approximately what percentage of students have smartphones? _____%	I

Please Circle:
Kind of School: *SRS Network School*

Upper Secondary Education – School Development Program
Focus Group Discussion – Community Members

Persons Interviewed:	**Total: 25 F: 6**
Circle all that apply:	**Mothers, Fathers, Members of SSC, Village Heads, CC**

No.	Question	Variable Reference
	Section 1: Management and Planning Issues	A, B
71.	How often do you have a meeting with schools in your community? What did you discuss with them about school issues? Can you give some concrete examples? • Generally, talk about the rules or regulations of school. Want to discuss with parent and provide the comments related to student behavior. Meeting every month but sometime two months – talk about the teacher teach the student regularly, hygiene and environment, student attendant, building repaired, and brought those issues to talk with parent. Asked the communities to advice to parent to follow up with their children study. Talking about the budget usage e.g. income and expense in the school and asked the community to sign on the expense to improve school. • Meeting with school to help providing the scholarship to the poverty student twice per year. We also joined with the organization to spread out the information related to safe migration to the dropped-out student and spread out the traffic law. However, we were not clear related to the school budget as we never joined. • The main thing was discussing about the relationship between parent and school in term of the student absent a lot twice per year. In addition, we also discussed related to the lack of study materials and equipment such table, chair and repaired the school building. • Not so often – one per semester based on the school invitation. Sometime discussing about how to use the school budget and student discipline and environment management.	B
72.	[Participants should be broken up into groups of 3 to 4 persons to do the following exercise] To answer the following question, each group will have to use 8 stars to indicate how they prioritize various issues in the school (★**)**. Each group should discuss the issues indicated on a piece of poster paper and allocate the stars according to how they prioritize each one. Some issues may receive no stars and others may receive 1, 2, 3 or more stars if it is a very high priority. Remember to remind participants that they may not use more than 8 stars for the exercise. When they have finished, take a picture of each prioritization poster that has been done and record it for analysis. *Use Poster 1 for this Exercise.* 17. ★★ **(2)** Infrastructure upgrading 18. **0** School has a flagpole	B

No.	Question	Variable Reference
	19. ★★ **(2.3)** Students are learning well 20. ★ **(1.3)** Teachers have adequate salaries 21. ★★ **(2.3)** Teachers demonstrate high levels of professionalism 22. 0 Students dress properly 23. ★ **(1.5)** Parents are satisfied with the instruction at the school 24. 0 School has a proper gate Why did you choose it as priority? • The reason to priority upgraded infrastructure because it's important to have a good environments and good building attract the students to study. • When the student outstanding make other parent want to send their kids to school. • If the teacher has enough salary, they will pay more attention to the student. And the teacher didn't involve the community or school activities that make the parent and community lazy to involved as well. • If teachers are professional and have more knowledge, they will teach the student well. • Make the teacher to punctuation with school, come to teach regularly. the parent satisfied with the quality of teachers, and report to the parent through SSC related to the student absenteeism. • When the teacher has high level of professionalism, they will treat all the student equally without discrimination even they didn't 'rien kua'. • When the teacher not discriminate the student and teach them equally, the parent will happy as their children have knowledge from school. • As we think that students are learning well is a priority because it also encourages the other students to study hard. • The community in Ta Kmao high school mentioned that teachers demonstrate high levels of professionalism as it's important to improve the education quality – as we can see that the teacher in private school which have similar salary but they show the high professionalism. So, that would be good to make the teacher change their behavior and willing to improve the quality of education by themselves rather than increase their salary. However, make the parents are satisfied with the instruction at the school. In addition, if the school have no gate, the proper gate is the most priority to think about - As the school need to have proper gate, if no gate the student can go out every time which not respect to the school regulation.	
	Section 2: School Perceptions and Concepts of Educational Quality/Services	C, D, E, H, J
73.	In your opinion, what is the biggest problem(s) at this school? • If the school weak on the management or not clear to the student will have an issue. To solve this problem, we meeting with director and teachers to make this school better. Another concern related to bully student; we report to the local authority.	C

No.	Question	Variable Reference
	• The school shortage with teacher e.g. no chemistry teacher, but after the school request to ministry and they sent Khmer or Sport teacher that was not fit the requirement. • Absenteeism students but they always absent event we advise them. • The biggest issue in this school is 'rein kua', that would be better to reduce or stop the practice of 'rein kua' as not all student can afford to pay for 'rein kua' that can cause the dropout. In addition, stop taking the money from student during the semester exam as it will affect to the student feeling. • As we also knew that the teacher in Preak Sihaknuk is surplus but would shortage of subject teachers. In addition, the environment was not preparing and management well as the school is big with a huge number of students. • Teachers respect the school regulation or discipline and come to teach regularly and on time. However, surplus teachers and they teach different subject from their skills.	
74.	What is the greatest improvement at this school that you've seen and why you are most proud about it? Alternatively, tell me if you think that there has been little improvement. • Infrastructure such as garden, building etc. • The quality of education seems better than before as more students passed the exam. • The community more involve in the school activities – the school request to SSC to spread out information about the needed of the school to the parents for supporting. The parent more involved and provide support to build infrastructures. • The school have like skills related to art, create something for sell, farming vegetable and cooking. • We think that would be good if we have new building as the student were increased, however we would request to have modern materials for teaching and learning the same as Phnom Penh and upgrading computers as the old labs more computers not work well. • We noticed that the study result seems to be better and the environment also be better than before. However, related to teacher we suggest to reduce the practice of 'rien kua'. • Mostly we can see the improvement of infrastructure such as building, school gate, garden, pole of flags, football yard and environment was better. However, the toilet should be improved and have enough water usage. Overall, the greatest improvement of the school were infrastructure or school facilities, however in term of the quality of education might need to be improved.	D
75.	If you were a very rich person and wanted to improve the education system, what you would like to change?	C

No.	Question	Variable Reference
	• Firstly, build new building and tables and modern study materials • Secondly, find the good teachers and strengthen quality of teachers and students. However, we also involved in the maintaining the school or materials and follow with teaching and mobilized the community to involve the school activities. • Will support the teacher to teach follow the education curriculum and policy, and stop 'rein kau' at the school. That could be increase the teacher salary, so that they will pay more attention to teach student. • We will increase the teacher salary, if they have enough salary the practice of 'rein kau' will be reduced. In addition, will improve the classroom to have modern teaching and learning materials.	
76.	Based on your knowledge of the school, what are some of the key challenges you see in improving educational quality? • The problems are teachers not really changed their habit and think about their benefit as priority. • Teacher has no discipline and they complain about their salary is low. The school complain about the shortage of teacher; however, some teachers get the study our to teach 'rien kau'. We will happy if the school can teach the student full-time (morning and afternoon). • Few community members said that the student used a lot of phone that not pay attention to the study, so that would be good if school has the role not allow the student to bring their phone to the classes. • What we can see nowadays when the student finished the school couldn't find the job as the curriculum is not help them, so if the school can provide the life-skills. School should provide English language and ICT skills to students which can help them to get the job when they finished the school.	D
77.	Tell me how you feel about the quality of education at your local school? Do you think schools will help your children earn a living as they get older? *Use Poster 2.* • The quality of education in our area seems better than before 80% - as we can see that the more students passed the exam. • Not good enough yet – as some students were dropout of school because they thought that it's not important and can't find the job for their future. • The student hasn't learned computer from grade 7, so they need to go out to study if they can afford. It would be good if the student can have computer knowledge. This school have 2 computer labs but not enough for all student to study and very little study. Another thing, the science and computer labs were sometime used by the network schools even it was not enough for the resource center. • If the student can complete the school, they could find the job to do such as being a teacher etc. • To be able to have a good quality of education, the student should learn more on the science connect the theory with real practice e.g. they can use laboratory lab and visit other school or workplace. Nowadays, only	C, D

No.	Question	Variable Reference
	theories were taught at school but didn't have any practice. when the student study life-skills E.g. agriculture – allow the student to practice.	
78.	How would you describe the attitudes of children at your local school towards education? • some students want to study but some don't want to study – the student live far away from school and maybe because of they are lazy to study. • Some of them said that they are poor – and there are a lot of factories around that attract them to go to work. • However, most of the student really want to study and know the important of education. • Not sure related to teacher attendant because of the school director never report to us. • As we can see that most of the students want to study, but around 20% of students were used or engage their labour by family. • Most of the student really want to study, but only small amount of student doesn't want to study as they were engaged from friend. Moreover, some student doesn't have money to pay for 'rein kua' that why they don't want to come to school.	C
79.	How do you feel about the practice of 'rien kua?' *Use Poster 3.* • Rien kua is good to support students for better study performance. The student can have ability to research. If no Rien kua, the student will be bad performance. • The importance of Rien kua because the student learn less in the class – what we can see that most of the student Rien kua are outstanding students and not fail the exam. • The government school need to follow the curriculum and don't have enough time to teach in the details less – Rien kua will teach the details and important lesson • If the school increase more study time would be good and might not need Rien kua practice. And have enough teachers to study on the subject. • We think that 'rien kau' is not bad if it is a complementary and not impact on the study time, but we heard from the students saying that if we not 'rien kua' with teacher, we could not pass the exam or even we passed but not get the good grade. In addition, most of the good lesson from curriculum was taught in 'rien kua' class. • The practice of 'rien kua' have more advantage and disadvantage – the student can learn more and have enough knowledge to pass exam, however it also has disadvantage such they pay more attention to the student who 'rien kua' and also they might take the study time for 'rien kua'.	D
80.	Of all the different kinds of assistance that a project could provide to your school to im-	D, J

No.	Question	Variable Reference
	prove educational quality, what single input do you think is the most important? • Strengthen teachers – provide them enough salary, if they have enough salary, they will pay more attention to the students. Also improve the teacher capacity and should not have another job to support their life. • Student materials or scholarship – e.g. support the poor students. • Train teacher and provide teaching materials support to make teacher be able to teach student with quality. • Provide scholarship for the poverty student as most of them dropout as can't afford with study. • The main priority is providing more training to the teachers and provide more teaching and learning materials to school as every parent want their children be able to find the job when they finished from school.	
	Section 3: Enabling Environments	F, G, H, I
81.	How would you describe security in your local school? • The security is better than before, if the student doesn't have uniform not allow to enter school. • It can be seen that nowadays, the security in our local school seems to be better and no any problems. • The was any security problem as the school have the guard.	I
82.	How would you describe the teacher shortage at your local school? • In the other local schools' shortage of teachers – because sometime they borrow teachers from this school. And this school also shortage of subject teachers. • As the teachers told us that the school has enough teachers, however there some shortage subject teachers such computer, chemistry teachers etc. • Overall, shortage of subject teachers but surplus Khmer teacher or normal teachers.	G
	Section 4: Stakeholder Outreach	K, L
83.	How did the school engage parents/community people/local authorities in school events? Can you give some concrete examples? • School informed to SSC and student to inform the people in the community to involved in the school activities. • When the meeting the local authority came to join the school activities and the community members mobilized the funds to support the school development. • More parents involved in the school activities if any invitation from school. • School invited the parent through local authorities and community people. • Mostly, the parent joins the meeting with school during the beginning of	K, I

No.	Question	Variable Reference
	academic school year.	
84.	How do you feel about the relationship between the community and the school? Is it a close relationship? Can you give some concrete examples? *Use Poster 4.* • Good communication between community and school, and community continue inform to parent if any issue related to their children at school. • When the student absent from school – school asked the community members to support to spread information to their parent. • The relationship between the school and community is good, when the school have any event or need any support always ask community members to join the meeting.	K

Second Upper Secondary Education – School Development Program
Survey Form – Students

School Name:	_____	**Sex:**	**M F**
Province:	_____	**Grade:**	_____
District:	_____	**Date:**	_____
Academic Stream:	**Science Social** *(Please Circle One)*	**How old are you?**	_____

No.	Question	Variable Reference
	Section 2: School Perceptions and Concepts of Educational Quality/Services	C, D, E, H, J
1.	Complete the following statement: *The biggest problem in my school is:* _____	C
2.	Complete the following statement: *The one thing that I am most proud of this school as a student is:* _____	D
3.	Complete the following statement in any way that you would like: *If I were a very rich person and wanted to improve the education system, I would:* _____	C
4.	What are some of the key challenges you face in utilizing the Resource Center? *(Pick the top 2 issues for you only)* ☐ The facilities are not well maintained. ☐ The facilities are too small. ☐ The facilities have too few materials to be effective. ☐ The facilities are often locked. ☐ My teacher doesn't know how to use them. ☐ My teacher knows how to use them but is busy with private class. ☐ There is not enough time in the study time to use the facilities ☐ Not applicable ☐ Don't know ☐Other: Please specify: _____	D
5.	How big of a difference has the Resource Center made at your school in terms of the quality of education? ☐ A big difference ☐ A medium difference ☐ Only a small difference ☐ No difference ☐ Difficult to say	D
6.	How would you describe the attendance of your teachers? ☐ Always come to work on a regular basis	D, E

No.	Question	Variable Reference
	☐ Sometimes tardy ☐ Often tardy ☐ Sometimes absent ☐ Often absent If teachers don't come on a regular basis, do you know what is usually the reason? What is usually the reason? (Choose one response only) ☐ Busy with 'rien kua' ☐ Busy with personal things or business ☐ Busy with their study ☐ Busy with meeting ☐ Don't know ☐ Other (specify_____)	
7.	How would you describe your teachers in class? ☐ Strongly motivated and interested in helping students ☐ Sometimes motivated and interested in helping students ☐ Less motivated and interested in helping students ☐ Difficult to say	D, E
8.	Which of the following statements best describes how you feel about your teachers? (*Choose only ONE response)* ☐ I really like all of my teachers a lot ☐ I like most of my teachers ☐ I only like some of my teachers ☐ I don't like any of my teachers ☐ Difficult to say.	D, E
9.	How frequently do your teachers use teaching aids during their teaching? ☐ Very frequently ☐ Frequently ☐ From time to time ☐ Not very often ☐ Never ☐ Difficult to say	D, E
10.	How would you describe the quality of education at your school? ☐ Better than most ☐ About the same as most ☐ Worse than most ☐ Difficult to say	C, D
11.	How would you describe the attitudes of students at your school towards education? Please pick the statement that best describes the situation at your school. ☐ Most students really want to attend school ☐ Many students really want to attend school but a few feel that it is not so important ☐ About half the students here really want to attend school but the other half feel that it is not so important ☐ Few of the children here feel that attending school is very important ☐ Don't know	C

No.	Question	Variable Reference
12.	How many of the teachers in this school are proficient in using computers? ☐ All of them ☐ Most of them ☐ Some of them ☐ None of them ☐ Don't know	E, H
13.	Do your teachers actually use ICT in their classroom teaching? ☐ Yes ☐ No	E, H
14.	Which statement below best describes how the majority of your teachers teaches? (Choose only ONE statement) ☐ Lecturing is the predominant methodology. ☐ A combination of lecturing and some practical group exercises. ☐ A good balance of lecturing and practical group exercises. ☐ A strong focus on practical group work and student projects. ☐ Hard to say	E
15.	Does your school teach any life skills program? Yes ☐ No ☐	D, J
16.	If yes, what are they? ☐ Rice cultivation ☐ Frog/fish raising ☐ Sewing ☐ Vegetable growing ☐ HIV/AIDS ☐ Safe migration ☐ Auto mobile repairing ☐ Electronics ☐ Other	D, J
17.	How big a role does life skills instruction play in your school? ☐ A very big role ☐ A medium sized role ☐ A small role ☐ No role	D, J
18.	How many hours per week do you study life-skills? ☐ One hour per week ☐ Two hour per week ☐ Three hour per week ☐ More than three hour per week	D, J
19.	Does your school have a career counselling program? Yes ☐ No ☐	D, J
20.	Did you ever receive any career counseling while at school? Yes ☐ No ☐	D, J
21.	Do you think career counseling is important for your future? Yes ☐ No ☐	D, J

No.	Question	Variable Reference
22.	How would you describe the practice of 'rien kua?' ☐ A good practice ☐ A bad practice ☐ A practice that is both good and bad	D
23.	What effect would stopping 'rien kua' at your school have on your school? ☐ It would make things worse ☐ It would make things better ☐ It would have no effect	D
24.	Do you know, how many of the teachers at your school have an intermediate level of English proficiency or higher? ☐ Most of them ☐ About half of them ☐ Some of them ☐ None of them ☐ Don't know	E
25.	Of all the different kinds of assistance that a project could provide to your school to improve your study, what single input do you think is the most important? _____	D, J
26.	**Section 3: Enabling Environments**	F, G, H, I
27.	How would you describe security in your school? ☐ Very Good ☐ Satisfactory ☐ Not so good	I
28.	To what extent do you utilize the science labs at your school? *(For Science Stream Students Only)* ☐ A great deal ☐ Some of the time ☐ Not so much ☐ Not at all ☐ School has no science labs	F
29.	What are the challenges in effectively utilizing the science lab at your school? Pick the two most important issues at your school. *(For Science Stream Students Only)* ☐ Teachers do not know how to use the labs. ☐ Teachers prefer to teach theory more than practice. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab. ☐ The classroom periods are too short to effectively use the labs. ☐ Students study the science subjects only one or two hours per week. ☐ The labs lack materials and equipment. ☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	F
30.	Does the science labs room at your school looks clean, bright light, and well-managed? ☐ Yes ☐ No	F
31.	How could the science lab or its services be improved? ☐ Add more materials or science lab's equipment ☐ Increase the room space	F

No.	Question	Variable Reference
	☐ Maintenance the martials or equipment ☐ Open regularly for students to do experiment. ☐ Increase more times in the day to use the lab ☐ Don't know/nothing to improve ☐ Other _____	
32.	To what extent do you utilize the library? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ Not at all ☐ School has no library	F
33.	What are the challenges in effectively utilizing the library at your school? Pick the two most important issues at your school. ☐ Teachers do not know how to link their teaching with library services. ☐ Teachers have no time to link their teaching with library services. ☐ Students have little time to effectively utilize the library. ☐ There are no digital or internet facilities in the library. ☐ Librarians have no leadership skills. ☐ Library operating hours are too short. ☐ Library is frequently closed. ☐ Library lacks materials and research books. ☐ Other: _____	F
34.	Does the library room at your school looks clean, bright light, and well-managed? ☐ Yes ☐ No	F
35.	What do you value most about the library? *(check all that apply)* ☐ Many great books ☐ Well organized and easy to find book ☐ Has computers, tablets or other digital devices and internet access ☐ Very clean and comfortable ☐ The Librarian is always there to support students when needed ☐ Other _____	F
36.	How could the library or its services be improved? *(check all that apply)* ☐ Should have more books available ☐ should well organize and easy to find book ☐ should have computer, tablet or other digital devices and internet access ☐ should be clean and comfortable ☐ should have a librarian to support when needed ☐ Don't know/nothing to improve ☐ Other _____	F
37.	To what extent do you utilize the ICT labs at your school? ☐ A great deal ☐ Some of the time ☐ Not so much ☐ Not at all ☐ School has	F, H

No.	Question	Variable Reference
	no ICT labs	
38.	What are the challenges in effectively utilizing the ICT labs at your school? Pick the two most important issues at your school. ☐ Teachers do not know how to use the labs. ☐ Teachers have no time to use the labs because they are too busy with their private classes. ☐ The utility costs of maintaining the ICT labs means that it is not possible to keep them running regularly. ☐ Utility Budget from MoEYS comes too late to keep the labs running regularly. ☐ The labs are too few in number to be accessible to all students. ☐ There is not enough time in the day to use the lab. ☐ The classroom periods are too short to effectively use the labs. ☐ There are no available hours in the timetable to use ICT labs. ☐ The labs lack materials and equipment. ☐ The labs are too small to accommodate a full class of students. ☐ The labs are rarely open. ☐ There is no one to regularly maintain the labs and so they fall into disrepair. ☐ Other: _____	F, H
39.	What do you value most about the ICT labs? ☐ Can study the computer class ☐ Online access (Internet) ☐ Well organized and comfortable ☐ Teachers have knowledge to use the labs ☐ Other _____	
40.	How could the ICT labs or its services be improved? *(check all that apply)* ☐ Increase study hours ☐ Improve online access (internet) ☐ Increase computer stations to fit all students ☐ Make it more organized and comfortable ☐ Building teacher capacity ☐ Don't know/nothing to improve ☐ Other _____	F
41.	How would you describe the teacher shortage at your school? ☐ There is no shortage ☐ There is a slight shortage ☐ There is a growing shortage ☐ There is a major shortage ☐ Don't know	G
42.	What kind of teacher shortage is there? ☐ Khmer ☐ Math ☐ Physic ☐ Chemistry ☐ Biology ☐ Earth Science ☐ Moral-civics ☐ History ☐ Geography ☐ ICT ☐ Other (specify_____) ☐ Don't know	G

No.	Question	Variable Reference
43.	In general, how often do you utilize the Resource Center? ☐ Very Frequently ☐ Frequently ☐ Once in a while ☐ Not so much ☐ Never used	F
	Section 4: Stakeholder Outreach	K, L
44.	To what degree does your school use social media to communicate with stakeholders such as teachers, parents, students, community members, etc. ☐ A great deal ☐ Use it to some degree ☐ Very little ☐ Not at all ☐ Don't know	I
45.	Approximately what percentage of teachers at your school have smartphones? _____%	I
46.	Approximately what percentage of students at your school have a smartphone ? _____%	I

ANNEX 4:
Survey Schedule

Date	Province	School Name
23-Nov-20	Kampong Chhnang	Preahbath Soramarith
23-Nov-20	Kampong Chhnang	Hun Sen Boribo
23-Nov-20	Kratie	Kratie Krong
23-Nov-20	Kratie	Hun Sen Sophakborak
25-Nov-20	Pursat	Pursat
25-Nov-20	Pursat	Hun Sen Krako
25-Nov-20	Steung Treng	Preah Reachbochanikech
26-Nov-20	Ratanak Kiri	Samdach Ov Samdach Mae
27-Nov-20	Battambang	Net Yang
27-Nov-20	Battambang	Bovel
27-Nov-20	Mondul Kiri	Hun Sen Mondulkiri
28-Nov-20	Battambang	Phnom Sampov
28-Nov-20	Pailin	Hun Sen Krong Tep Nimit
30-Nov-20	Banteay Meanchey	Krong Poipet
30-Nov-20	Svay Reang	Svay Rieng
30-Nov-20	Svay Reang	Hun Sen Prasot
1-Dec-20	Banteay Meanchey	Chub Vary
1-Dec-20	Banteay Meanchey	Hun Sen Klakon
2-Dec-20	Prey Veng	Preah Angdoung
2-Dec-20	Prey Veng	Peam Ro
3-Dec-20	Prey Veng	Hunsen Kampong Popil
3-Dec-20	Siem Reap	Angkor
3-Dec-20	Siem Reap	Kralanh
5-Dec-20	Odar Meanchey	Hun Sen Odar Mean Chey
5-Dec-20	Odar Meanchey	Anlong Veng
5-Dec-20	Tboung Khmum	Samdach Decho Hun Sen Soung

Date	Province	School Name
5-Dec-20	Tboung Khmum	Hun Sen O'Oraing Ov
7-Dec-20	Kampong Cham	Preah Sihanouk
7-Dec-20 (Cancelled)	Kampong Cham	Hun Sen Skun
7-Dec-20	Preah Vihea	Chea Sim Tbeng Meanchey
7-Dec-20	Preah Vihea	Roveang
9-Dec-20	Kep	Hun Sen Chamkadoung
9-Feb-21	Kampong Thom	Hun Sen Balang
10-Feb-21	Kampong Thom	Kampong Thom USS
10-Feb-21	Kampong Thom	Kampong Thmor
12-Feb-21	Phnom Penh	Hun Sen Chumpouvoan
12-Feb-21	Phnom Penh	Chbar Ampov
13-Feb-21	Kandal	Hun Sen Sereipheap
13-Feb-21	Kandal	Hun Sen Koh Thom
15-Feb-21	Kandal	Tep Pranam
17-Feb-21	Koh Kong	Koh Kong
18-Feb-21	Koh Kong	Sre Ambil
19-Feb-21	Kompot	Preah Reach Samphea
19-Feb-21	Kompot	Hun Sen Chhouk
19-Feb-21	Takeo	Chea Sim Takeo
20-Feb-21	Takeo	Samdach Ov
22-Feb-21	Kampong Spue	Kampong Speu
23-Feb-21	Kampong Spue	Oudong
25-Feb-21 (Cancelled)	Sihanuk Vill	Krong Preah Sihanouk
26-Feb-21 (Cancelled)	Sihanuk Vill	Hun Sen Vealrinh