



# NEW GENERATION SCHOOL ANNUAL ACHIEVEMENT REPORT

Year 4 Implementation (January-December 2019)



January 2020  
PHNOM PENH

## TABLE OF CONTENTS

### *List of Tables*

### *List of Acronyms*

<b>1. EXECUTIVE SUMMARY .....</b>	<b>1</b>
1.1 General Overview	1
1.2 Summary of Key Achievements in 2019	1
1.3 Performance on Key Metrics	2
1.4 Key Challenges	2
<b>2. BACKGROUND .....</b>	<b>5</b>
2.1 Historical Evolution of the Program	5
2.2 General Overview of Operations during 2018	5
2.2.1 Important Milestones and Events	
2.2.2 Update on Programming Scope	
2.3 Developing an Exit Strategy for KAPE Financial & Technical Support	10
<b>3. KEY ACCOMPLISHMENTS &amp; ACTIVITIES DURING THE YEAR .....</b>	<b>13</b>
3.1 Enrollment, Unit Costs, and the Number of NGS Models Piloted	13
3.2 Bac II Examination Results	13
3.3 Accreditation Results during the Period	16
3.4 Critical Thinking Test Results	18
3.5 Results of Entrance Examinations	20
3.6 Facility Emplacement Results	22
3.7 Results of Student Counseling Outreach	25
3.8 Results of Extended Reading Initiative	26
3.9 Awards and Medals Received during 2019	28
3.10 Post-Secondary Student Tracking Results	29
3.11 Completion of NGS Operational Guidelines	29
3.12 Development of 21 <sup>st</sup> Century Library Training Manual	30
3.13 Development of a Digital Education Road Map	30
3.14 Efforts to Systematize NGS Implementation at Primary Level	31
3.15 Study Trip to Thailand	32
3.16 Parent Night Shows	34
3.17 Completion of New Generation Pedagogical Research Center	36
<b>4. PROGRESS ON OFFICIAL INDICATORS .....</b>	<b>39</b>
<b>5. CHALLENGES &amp; ISSUES IN IMPLEMENTATION .....</b>	<b>40</b>
5.1 The Status of Sisovath HS	40
5.2 Absorbing Teachers at Prek Leap & Prek Anchanh HS into NGS Programming	40
5.3 Limiting Admission to Students with Basic Numeracy & Literacy Skills	41
5.4 Introducing Voluntary Parental Contributions	43
5.5 Teaching to Think or Teaching to the Test	44
5.6 Status of Accredited But Unsupported New Generation Schools	45

5.7 Protecting the NGS Brand	45
5.8 Activity Levels among Provincial Boards	46
<b>6. CONCLUSIONS AND THE WAY FORWARD .....</b>	<b>47</b>
<b>ANNEXES</b>	<b>49</b>
<b>Annex 1:</b> Indicator Reporting Table for MoEYS/MoEF	
<b>Annex 2:</b> Master Metrics Framework	
<b>Annex 3:</b> Cohort Map of Students Being Tested for Critical Thinking Skills	

## List of Tables

- Table 2.1:** Investment in New Generation Schools at All Levels, 2015-19
- Table 2.2:** Projected Grade Coverage in New Generation Schools (2018-22)
- Table 2.3:** Enrollment, Teachers, Classes, and PCR/PTR Levels (2019-20)
- 
- Table 3.1:** Enrollment and Investment Sources across all New Generation School Sites (2019-20)
- Table 3.2:** Test Results for Bac II Examination at New Generation School and Non-NGS Sites (2018 & 2019)
- Table 3.3a:** Results of Accreditation Visits by Criteria (2019)
- Table 3.3b:** Planned NGS Accreditation Visits, 2017-22
- Table 3.4:** Critical Thinking Baseline and Post-Test Results by Cohort, 2019
- Table 3.5:** Test Results among Students Applying for Entry to New Generation Schools
- Table 3.6:** Proposed & Previous Scope of Infrastructure Investment at All NGS Secondary School Facilities (2020)
- Table 3.7:** Proposed & Previous Scope of Infrastructure Investment at All NGS Primary School Facilities (2020)
- Table 3.8:** Proposed and Completed Facilities in NGS Sites, FY2016 to FY2020 (MoEYS Funded Facilities Only)
- Table 3.9:** Overview of Counseling Activities across NGS Secondary Schools, 2019
- Table 3.10:** Students Participating in the Extensive Reading Pilot, 2019-20
- Table 3.11:** Number of International & National Awards in New Generation Schools, 2019
- Table 3.12:** Post-Secondary Tracking of Grade 12 Students, 2019
- Table 3.13:** Developmental Status of Primary Level New Generation Schools, 2019
- Table 3.14:** Participants in Study Trip to Thailand, 2019
- 
- Table 4.1:** Summary of Progress on Official Performance Indicators, 2019
- 
- Table 5.1:** Residual Teachers at Prek Leap & Prek Anchanh HS as NGS Programming Expands
- Table 5.2:** Test Results among Students Applying for Entry to New Generation Schools (2019-20)
- Table 5.3:** Negotiation of Voluntary Parental Support Fees at New Generation Schools, 2019

## List of Acronyms

BA	Bachelor of Arts
BS	Bachelor of Science
CF	Child Fund
CFS	Child Friendly School
EGRA	Early Grade Reading Assessment
ER	Extended Reading
FFF	Franks Family Foundation
HRH	Her Royal Highness
HS	High School
ICT	Information and Communication Technology
KAPE	Kampuchean Action to Promote Education
MA	Master of Arts
MEd	Master of Education
MoEF	Ministry of Economy and Finance
MoEYS	Ministry of Education, Youth, and Sport
MS	Master of Science
NGPRC	New Generation Pedagogical Research Center
NGS	New Generation Schools
NGSI	New Generation School Initiative
NIE	National Institute of Education
PCR	Pupil Class Ratio
PDR	People’s Democratic Republic
PED	Primary Education Department
PLC	Professional Learning Community
PS	Primary School
PTR	Pupil Teacher Ratio
RGC	Royal Government of Cambodia
SED	Secondary Education Department
SSC	School Support Committee
STEM	Science, Technology, Engineering, and Mathematics
TAF	The Asia Foundation
TVET	Technical and Vocational Education Training

## 1. EXECUTIVE SUMMARY

### 1.1 General Overview

The New Generation School Program completed its fourth year of funding support by MoEYS with KAPE continuing to play the role of implementer with oversight provided by the National Oversight Board, which is chaired by H.E. Lao Chao Vanna. A funding proposal for the fifth year of support in 2020 has now been approved by MoEYS and is currently being processed by the Ministry of Economy and Finance. The number of supported New Generation Schools has now stabilized at 10 this year (with 8 supported by MoEYS/FFF and 2 supported by Child Fund). Some supported schools continued to expand the number of grade levels covered by NGS investment as they incrementally move towards ‘whole’ school coverage. This includes investments at Prek Leap, Prek Anchanh, Peam Chikong HS, as well as Akheamahasei Primary School. Demand for entry into New Generation Schools continued to explode and far exceeds the places available, demonstrating the high quality standards of these schools and acceptance by the general public. The accreditation of New Generation Schools continued to accelerate with 40% of schools currently receiving investment now accredited. NGS Planners believe that all schools can be accredited by 2022, leading to significant opportunities for parental support to relieve pressure on MoEYS financing for these schools.

Sustainability prospects for NGS Reforms continued to strengthen, as the program prepares to enter its fifth year of implementation (in 2020). NGS programming is now entering a new period of stability and growing maturity as several schools become increasingly self-sufficient due to increasing parental support. The design of NGS Reforms that condition parental support on high performance is beginning to demonstrate in actual terms the merit of the program’s sustainability strategy. In this respect, the formal accreditation process orchestrated by the National Oversight Board validates performance each year and gives a concrete assurance to parents that schools are meeting high standards set by MoEYS.

At the same time, the establishment of a *New Generation Pedagogical Research Center* at the National Institute of Education will be closely linked to NGS Reforms (see below). This center will provide school-based mentors who are certified with a Master’s Degree in Education for all New Generation Schools. This on-site mentoring support will help KAPE to reduce its own technical assistance, thereby further buttressing efforts to sustain NGS Reforms in the future.

### 1.2 Summary of Key Achievements in 2019

NGS Reforms continued to achieve notable milestones during 2019 including the following developments:

- **National Recognition:** The Royal Government of Cambodia has included New Generation Schools as an official development approach in its latest version of the national *Rectangular Strategic Plan*, providing national recognition of NGS Reforms at the highest level. In addition, Prime Minister Hun Sen mentioned NGS reforms at a graduation ceremony in Phnom Penh while program schools have been

visited by the representatives from the National Parliament, including H.E. Hun Mony who chairs the Committee in Parliament responsible for educational matters.

- ***Increase in the Number of NGS Accredited Schools:*** The number of fully accredited New Generation Schools increased from two to four schools with Preah Sisovath HS and Hun Sen Kampong Cham HS now being joined by Kok Pring HS and the Demonstration School of Kampong Cham. This means that 40% of New Generation Schools are now accredited with the accreditation of all schools anticipated by 2022.
- ***Spectacular National Exam Results:*** Student cohorts from Preah Sisovath HS and Hun Sen Kampong Cham HS achieved results that far exceeded the national average (68%) with a 94% pass rate at Sisovath HS and an 84% pass rate at Hun Sen Kampong Cham HS.
- ***International Awards:*** NGS schools received 424 Gold, Silver, & Bronze Medals during the year, further meeting MoEYS expectations for ‘maximal,’ rather than minimal, standards of education in the public school system.
- ***Extension of NGS Programming to the National Institute of Education:*** At the beginning of 2019, MoEYS asked KAPE to establish a Master’s Degree Program to train NGS Mentors at NIE. In spite of significant constraints along the way and a very limited timeframe, a new center was opened at NIE on schedule in September 2019. The center provides a new approach to higher education focusing on small seminar style classes that foster small group discussions as well as significant emphasis on the use of technology to learn.

### 1.3 Performance on Key Metrics

The NGS Program continued to make good progress in achieving key performance metrics during the year. With respect to the 20 indicators required for reporting to MoEF, NGS programmers have reported that 80% of official indicators have now been achieved with the remainder on track for achievement over the next two years. One indicator relating to the achievement of a standard of 5% dropout rate or less was not achieved by several schools during the current year, although the overall rate of reported dropout across all schools was below 4%. To be sure, it should still be noted that the national dropout rate at secondary school level is 17%, which is quite high in comparison to the situation at most New Generation Schools.

### 1.4 Key Challenges

The NGS Central Office identified eight key challenges going forward for future programming. These challenges include the following:

**1. *The Status of Sisovath HS:*** Although Sisovath New Generation School continues to demonstrate outstanding performance, the school has been unable to unite back into one institution due to the refusal of teachers at the normal school to stop extorting money from students for private classes. Strict enforcement of prohibitions against the practice of student extortion is a major requirement to be a New Generation School and this point continues to be a non-negotiable issue among teachers at the normal school.

**2. Absorbing Teachers at Prek Leap & Prek Anchanh HS into NGS Programming:**

Prek Leap and Prek Anchanh HS are schools where the eventual goal is comprehensive conversion of all grade levels to NGS programming. Currently, both schools are expanding their NGS programming from Grade 9 to Grade 10 in the 2019-20 academic year. However, with each successive expansion, there is a growing number of teachers who are increasingly sidelined because their area of expertise does not match the need (e.g., Prek Leap HS has almost 10 sports teachers) or they do not want to join the program due to their interest in maintaining their private classes (which are prohibited under NGS guidelines). As the program expands in future years, these issues will need resolution.

**3. Limiting Admission to Students with Basic Numeracy & Literacy Skills:** One of the things that has been very difficult to communicate to parents and local authorities is that *New Generation Schools are not for everyone*. As high investment schools, the government seeks to achieve a higher academic standard at New Generation Schools that focus on 21<sup>st</sup> Century skills and high transition rates to tertiary institutions. NGS is not for students who have not yet acquired basic literacy and numeracy skills, at least at the secondary school level. It is an assumption that students already have these skills when they enter Grade 7. Nevertheless, many New Generation Secondary Schools are reporting that there is a large number of students from local primary schools who seek to move into a New Generation School but who are functionally illiterate, presenting a serious challenge for NGS reforms in terms of their national mission.

**4. Introducing Voluntary Parental Contributions:** One of the key strategies to sustain NGS programming is to request parents to make fixed contributions of a voluntary nature after the school's high standard has been validated through an accreditation process. Usually, all services are completely free during the first three years of investment to first demonstrate to parents that the educational standards at the school are high and that this represents true value in return for financial support. As NGS reforms completed their 4<sup>th</sup> year of implementation, four schools achieved NGS accreditation, which entitles them to negotiate voluntary parental contributions of a standardized nature. However, there are some areas where the demographic make-up of the population is not well-suited to heavy parental support for the operating costs of a New Generation School, particularly in very rural areas. Such schools may require extended government support until the local economy in such communities can catch up the required needs of the local school.

**5. 'Teaching to Think' or 'Teaching to the Test':** As student cohorts within operating New Generation Schools approach Grade 12, there is heightened interest among educators and the public to see how well NGS students perform on the *Bac II* Exit Examination. These expectations have put New Generation Schools in a difficult situation because much of what is taught in such schools (ICT, Coding, lab work, etc.) is not covered on the examination. Nevertheless, the pressure on New Generation Schools to perform well on the examination incentivizes activities to 'teach to the test' rather than necessarily teaching students to think critically.

**6. The Status of 'Unsupported' But 'Accredited' New Generation Schools:** Another challenge facing NGS planners relates to the status of schools that have been accredited but receive no direct support from MoEYS. During 2019, two non-government-supported schools were accredited by the National Board because both had achieved compliance with NGS academic standards. According to the official policy, schools that receive accreditation are eligible for government funding support for those parents who cannot afford to make any financial contributions to the school. Due to the very tight funding situation for 2020, it has not yet been possible to include even a nominal contribution from MoEYS for the purpose of supporting these schools, even though they should be receiving some support according to approved policy guidelines.

**7. Protecting the NGS Brand:** One of the most important achievements of NGS programming has been the creation of a meaningful NGS brand name. When a school calls itself a *New Generation School*, one can be confident that the school has certain very high standards including longer hours of learning, no teacher corruption, modern library and laboratory facilities, regular access to ICT facilities, and other important features. Unfortunately, there are now several normal schools in different provinces that are calling themselves New Generation Schools. This represents a threat to preserving the meaningfulness of the NGS brand.

**8. Activity Levels among Provincial Boards:** According to the National Policy Guidelines governing New Generation Schools, all schools receiving NGS investment will be overseen by both a National Oversight Board and Provincial Oversight Board. While 5 Provincial Boards have now been created in each province/municipality with a New Generation School, their level of activity and leadership still has many limitations, requiring more intensive capacity-building support and direction from MoEYS.

## 2. BACKGROUND

### 2.1 Historical Evolution of the Program

The completion of the fourth year of operations saw continuing expansion of NGS programming, particularly in Whole School Models where not all grade levels are yet part of the program. This refers specifically to Prek Leap HS, Prek Anchanh HS, and Peam Chikong HS, as well as Akhea Mahasei PS. These schools are now providing educational services up to Grade 10 at secondary level and Grade 3 at primary level. Investments during the year reached \$1,496,019 at secondary school level, \$250,000 at primary level, and \$227,000 in higher education where KAPE has assisted the Ministry in setting up a new Master’s Degree Program in Teacher Mentoring (see Table 2.1). In total, MoEYS and private donors invested \$1,973,019 of which \$1,832,019 was comprised of government funding or 93%. This funding support was spread across 10 schools and one higher education institution. Key elements of funding support include infrastructure and equipment, teacher incentives, and technical support activities. Total investment over the last four years reached \$6.62 million from all sources. Unit costs per student continue to decline and are now at \$292 per student.

**Table 2.1: Investment in New Generation Schools at All Levels, 2015-19**

Year	MoEYS	Franks Family Foundation	Child Fund Australia	Oaktree Foundation	Total	Schools & Institutions Receiving Investment
<b>Secondary Schools</b>						
2015	\$374,000	--	--	\$124,000	<b>\$498,000</b>	<b>2</b>
2016	\$355,000	\$141,000	\$150,000	\$74,000	<b>\$720,000</b>	<b>3</b>
2017	\$1,270,000	\$100,000	\$150,000	\$0	<b>\$1,520,000</b>	<b>5*</b>
2018	\$1,417,000	\$59,000	\$100,000	\$0	<b>\$1,576,000</b>	<b>6</b>
2019	\$1,417,000	\$0	\$77,000	\$0	<b>\$1,496,019</b>	<b>6</b>
<b>Total</b>	<b>\$4,833,000</b>	<b>\$300,000</b>	<b>\$477,000</b>	<b>\$198,000</b>	<b>\$5,808,000</b>	<b>6</b>
<b>Primary Schools</b>						
2017	\$40,000	--	--	--	<b>\$40,000</b>	<b>2</b>
2018	\$296,000	--	--	--	<b>\$296,000</b>	<b>2</b>
2019	\$250,000	--	--	--	<b>\$250,000</b>	<b>2</b>
<b>Total</b>	<b>\$586,000</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>\$586,000</b>	<b>4**</b>
<b>New Generation Pedagogical Research Center-NIE (Higher Education)</b>						
2019	\$163,000	\$34,000	\$30,000		\$227,000	1
<b>Total</b>	<b>\$163,000</b>	<b>\$34,000</b>	<b>\$30,000</b>		<b>\$227,000</b>	<b>1</b>
<b>GRAND TOTAL</b>	<b>\$5,582,000</b>	<b>\$334,000</b>	<b>\$507,000</b>	<b>\$198,000</b>	<b>\$6,621,000</b>	<b>11</b>

\*Includes one school supported by Child Fund; \*\*Includes two self-supporting primary schools

### 2.2 General Overview of Operations during 2019

#### 2.2.1 Important Milestones and Events

**Prime Minister Hun Sen Gives Endorsement of New Generation Schools:** At a graduation ceremony at Beltei International Academy in Phnom Penh, Samdech Hun Sen gave a strong recommendation to the private school sector to consider the successes and innovative programming that has been achieved by the New Generation School system. This was a dramatic endorsement of everything that has been achieved by New Generation Schools and a vindication for the far-sighted vision of the Minister of Education,



**Key Endorsement:** Prime Minister gives public endorsement of New Generation Schools at a Graduation Ceremony in Phnom Penh.

Youth, and Sport, H.E. Hang Chuon Naron. It is hoped that this endorsement will send a strong message to opponents of NGS programming both in and outside the education system that NGS Reforms are here to stay.<sup>1</sup>

**NGS Accreditation:** The fourth year of programming saw two more schools joining Preah Sisovath HS and Hun Sen Kampong Cham HS as accredited New Generation Schools. This refers to the recent accreditation of Kok Pring HS and the Demonstration School, a primary school in Kampong Cham. This milestone indicates that 40% of New Generation Schools are now fully accredited and can seek parental support through which they can achieve less dependence on the Ministry.

### ***Pedagogical Research***

**Center:** Another important event relates to the completion and opening of the *New Generation Pedagogical Research Center* at the National Institute of Education. This center will be training school-based mentors through an intensive Master's Degree in Mentoring. Graduating mentors will then be posted to New Generation Schools where they will be able to provide ongoing technical support to all teachers. This will help to reduce the dependence of schools on KAPE staff for technical support. In addition to the enhancement of educational services at the National Institute of Education that the Center will provide, NGPRC will also play a major role in KAPE's Exit Strategy (see below), thereby enhancing the overall sustainability of the program.



***A New Chapter in NGS Programming:*** H.E. Dr. Hang Chuon Naron, Minister of Education, Youth, & Sport meets with 25 Master Degree Candidates at the newly inaugurated New Generation Pedagogical Research Center at NIE in November 2019. The Center will make a huge difference in providing MoEYS with the human resources needed to both sustain and expand NGS programming.

**Document Development:** A number of key documents were also developed during the fiscal year including the final revisions in the NGS Operational Guidelines Manual as well as a programming manual on 21<sup>st</sup> Century Libraries and a Student Assessment Manual. Program advisers also developed a detailed Curricular Syllabus for the NGPRC as well as a Digital Education Roadmap that will help guide future investments in ICT for NGS Programming.

**Visit from National Parliament to a New Generation School:** Members of Committee 7 (Education, Youth, Sport, Religious Affairs, Culture and Tourism) from the National Parliament visited Kok Pring Jr. HS and Svay Prahut PS in Svay Rieng Province on 8 August. Both schools are New Generation Schools that are part of the educational reforms initiated by MoEYS. The Parliamentary Delegation was led by H.E. Hun Many who is also the Chairman of the Committee. Parliamentarians expressed

<sup>1</sup> <https://www.facebook.com/watch/?v=381681069429873>

its strong support for these reforms and were very much impressed by what they saw including project work activities, ICT in education techniques, and 21st Century facilities. The visiting Parliamentarians were realists in recognizing the need for reforms like NGS but also gave sound advice that the reforms should proceed cautiously because many Cambodian educators and members of the public do not yet fully understand the reforms because they are so new to Cambodia. Nevertheless, the visit was a great promotion for NGS reforms and a reminder that these reforms are here to stay.

***New Generation School Receives Visit from the House of Lords:*** Preah Sisovath HS received a visit from Lord Johnathon Mendelthsson of the House of Lords on 26 August 2019. Lord Mendelthsson was accompanied by his wife Lady Nicola and was received by representatives of KAPE, which has been designated by the Ministry of Education, Youth, and Sport to manage New Generation School Reforms. Lord Mendelthsson's wife is also Vice President of Facebook Europe and was quite interested in the efforts of New Generation Schools to incorporate technology into the instructional process. It should be noted that Lord Mendelthsson is also a member of the Board of the Franks Family Foundation (FFF), which also collaborates with MoEYS to fund NGS reforms. His Lordship was quite impressed with the significant outcomes achieved by New Generation Schools in such a short time and will help to spread information to potential donors in the United Kingdom about these remarkable reforms in Cambodian education.



***Important Recognition at Nation Level:*** H.E. Hun Many, Chairperson of Committee 7 of the National Parliament, visits Kok Pring HS in Svay Rieng Province. Parliamentarians were very impressed with what they saw and expressed strong support for continued funding of NGS reforms.



***Rapidly Increasing Profile:*** Mr. Ul Run, NGS Operations Manager, makes a presentation at the APIC Conference on behalf of the NGPRC. The presentation described the recently inaugurated M.Ed Mentoring program and new mentoring software that will soon be piloted in Cambodia.

***New Generation Pedagogical Research Center Faculty Present at Asia-Pacific Conference on Interdisciplinary Research:*** On 5 September 2019, Mr. Ul Run and Dr. Chan Roath of the New Generation Pedagogical Research Center (NGPRC) at NIE made a presentation on new strategies to address instructional quality in public

schools using a Mentoring Approach at the APCIR in Siem Reap. The NGPRC is a new initiative of MoEYS to set up a Master of Education Degree in Mentoring at the National Institute of Education. The Center's creation is part of a shift in Ministry strategy away from in-service workshops and towards creating a framework for school-based mentoring. The M.Ed Program in Mentoring is the only one of its kind in S.E. Asia and demonstrates a major reform to shift the allocation of more resources to mentoring. The presentation was well received by researchers from around the Asia-Pacific region and has been an excellent start for the NGPRC as it starts its first year of operation.

### 2.2.2 Update on Programming Scope and Grades Covered

Current investment in New Generation Schools continues to assist schools to increase the number of grades covered in each school. At the present time, only Preah Sisovath HS and Hun Sen Kampong Cham HS have covered all grades in their respective secondary schools. Among primary schools, only the Demonstration School and Angkor Ban PS in Kampong Cham and Svay Prahut PS in Svay Rieng have reached a stage where all grades are covered in their respective schools (see Table 2.2). At least 2 to 3 more years of investment is required in other schools before full coverage is achieved, pending the availability of funding from MoEYS. The reason that NGS emplacement does not seek to make the whole school a New Generation School at one time relates to the size of the schools, the amount of budget and human resources required to do so, and the need to get local teachers and communities accustomed to the idea of NGS programming gradually.

It should also be noted that MoEYS had also proposed to add an 11<sup>th</sup> school to the NGS system in Kampong Chhnang Province called, Kiri Sovanavong PS. Investments at this school have been costed for MoEYS, but due to the decision to freeze all NGS funding at 2018 levels, these plans are currently still on hold.

**Table 2.2: Projected Grade Coverage in New Generation Schools (2018-22)**

Province	School Name	Grade Coverage				
		2018-19 (Actual)	2019-20 (Projected)	2020-21 (Projected)	2021-22 (Projected)	2022-23 (Projected)
<b>Secondary School Level</b>						
Phnom Penh	1. Sisovath HS	Grades 7-12	Grades 7-12	Grades 7-12	Grades 7-12	Grades 7-12
	2. Prek Leap HS	Grades 7-9	Grades 7-10	Grades 7-11	Grades 7-12	Grades 7-12
Kampong Cham	3. Hun Sen Kampong Cham HS	Grades 7-12	Grades 7-12	Grades 7-12	Grades 7-12	Grades 7-12
	4. Peam Chikong HS	Grades 7-8	Grades 7-9	Grades 7-10	Grades 7-11	Grades 7-12
Kandal	5. Prek Anchanh	Grades 7-9	Grades 7-10	Grades 7-11	Grades 7-12	Grades 7-12
Svay Rieng	6. Kok Pring HS*	Grades 7-9	Grades 7-10	Grades 7-11	Grades 7-12	Grades 7-12
<b>Primary School Level</b>						
Kampong Cham	7. Demonstration School**	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6
	8. Angkor Ban PS	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6
Kg Speu	9. Akhea Mahasei PS	Grades 1-2	Grades 1-3	Grades 1-4	Grades 1-5	Grades 1-6
Svay Rieng	10. Svay Prahut PS*	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6	Grades 1-6
Kampong Chhnang	11. Kiri Sovanavong PS (Proposed)	--	--	Grades 1-6	Grades 1-6	Grades 1-6

\*Supported by Child Fund.

Enrollment levels and the number of classes continued to increase in schools that are adding grade levels such as Prek Leap and Prek Anchanh. Total enrollment across all New Generation School reached 5,722 (see Table 2.3). The number of teachers at secondary school level reached 257 while at primary level it reached 78. In all, there are now a total of 335 teachers working in the NGS system. The number of classes in

these schools has increased by 30 to 50%, while at others where there has been no expansion in enrollment (e.g., Hun Sen Kampong Cham HS), it has stabilized. Schools have demonstrated Pupil Class Ratio (PCR) levels that vary from 30 to 36 to 1 at secondary school level while at primary school PCR ranges from 29 to 36 to 1. On average, PCR levels were reported to be 33:1, which very much supports better educational quality. All schools, therefore, appear to be within required limitations on class size so that schools can be accredited. In this regard, accreditation requirements do not allow schools to have class sizes that exceed 36 to 1.

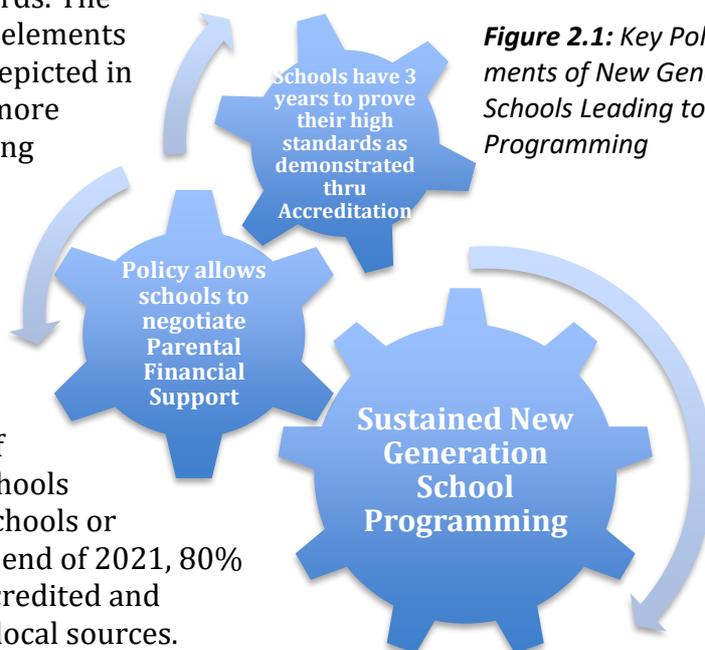
**Table 2.3: Enrollment, Teachers, Classes, and PCR/PTR Levels (2019-20)**

Province	School Name	Students, Teachers, and Classes				
		Students	Teachers	Classes	PCR	PTR
<b>Secondary School Level</b>						
Phnom Penh	1. Sisovath HS	1,004	68	28	36:1	15:1
	2. Prek Leap HS	741	52	24	31:1	14:1
Kampong Cham	3. Hun Sen Kampong Cham HS	381	27	12	32:1	15:1
	4. Peam Chikong HS	541	32	18	30:1	17:1
Kandal	5. Prek Anchanh	803	52	24	33:1	15:1
Svay Rieng	6. Kok Pring HS*	369	26	11	34:1	14:1
	<b>Subtotal</b>	<b>3,839</b>	<b>257</b>	<b>117</b>	<b>33:1</b>	<b>15:1</b>
<b>Primary School Level</b>						
Kampong Cham	7. Demonstration School**	473	17	13	36:1	28:1
	8. Angkor Ban PS	307	19	10	31:1	16:1
Kg Speu	9. Akhea Mahasei PS	756	25	21	36:1	30:1
Svay Rieng	10. Svay Prahut PS*	347	17	12	29:1	20:1
	<b>Subtotal</b>	<b>1,883</b>	<b>78</b>	<b>56</b>	<b>34:1</b>	<b>24:1</b>
<b>Total</b>		<b>5,722</b>	<b>335</b>	<b>173</b>	<b>33:1</b>	<b>17:1</b>

\*Supported by Child Fund.

## 2.3 Developing an Exit Strategy for KAPE Financial and Technical Support

**Policy Elements Ensuring Sustainable Programming:** As KAPE starts its fifth year of its technical assistance to emplace New Generation Schools, the need for better documenting KAPE’s exit strategy becomes increasingly more pressing. An eventual exit from support has already been built into NGS programming from the very beginning by building on accountable performance linked to accreditation, a 3-year investment cycle to achieve accreditation, and a policy framework, which gives the autonomy to schools to negotiate Parental Financial Support in exchange for sustained (and accredited) standards. The linkages between these elements of the NGS system are depicted in Figure 2.1. However, a more rigorous schedule limiting KAPE’s role is needed. Currently, there are now four schools that have been accredited and are now soliciting funds from parents to maintain standards. By the end of 2020, this number of schools should increase to six schools or 60% of the total. By the end of 2021, 80% of schools should be accredited and receiving funding from local sources.



**Figure 2.1:** Key Policy Elements of New Generation Schools Leading to Sustained Programming

### Sources of Funding to Sustain School

**Running Costs:** Internal discussions within the program and with schools have suggested that schools should be 70% self-sufficient financially (or more) by the time that they de-link from KAPE-mediated support. The remaining 30% support for a New Generation School should be provided by MoEYS, as per the approved policy framework. Although it takes many months for

MoEF to process funding requests, it is hoped that if schools can self-fund for the first 70% of the school year (i.e., mid-September), the remaining funds can hopefully arrive in time to get schools to the end of the fiscal year. KAPE is currently assessing to what degree accredited schools are able to cover their operating costs (especially teacher incentives) through parental fees. This involves exact estimations of operating costs as well as anticipated income from parental donations (see Box 1).

At current rates of parental support, KAPE estimates that Preah Sisovath HS has exceeded an expectation of 70% self-sufficiency while Hun Sen Kampong Cham HS and the Demonstration School are only about 16% short of the goal. Kok Pring HS, however, is only at about half of the expected level, requiring additional efforts to increase local support, which is a challenge given that the school is located in a very

#### BOX 1: Current Status of Running Costs and Income at Accredited Schools (est.)

School	Income	Costs Covered
1. Sisovath HS	\$250,000	80%
2. Kg Cham HS	\$46,000	54%
3. Demonstration School	Same as Hun Sen Kg Cham HS	
4. Kok Pring HS	\$19,500	39%

rural area. On the other hand, Prek Leap HS, Prek Anchanh HS, and Akhea Mahasei PS (which will achieve accreditation in the next two years) are all very well positioned to achieve very high rates of parental income, due to the wise decision to place them in semi-urban areas, where there is a good demographic mix of different income groups. Angkor Ban PS and Peam Chikong HS are more doubtful at this stage, something that KAPE will further explore as it documents its Exit Strategy in more detail.

**Sustaining Technical Support Inputs:** KAPE also believes that its efforts to use the *New Generation Pedagogical Research Center* will help to shift the need for teacher technical support to school-based mentors, thereby reducing the reliance on KAPE technical personnel. Mentors will start graduating from the Center in August 2020 and will be immediately posted to their New Generation Schools of Origin. Additional intakes of prospective mentors should ensure that each school has between three and four school-based mentors who are all certified with a Master’s Degree in Mentoring. The establishment of the NGPRC is the final piece of KAPE planning to ensure sustained programming after its exit from the program (see Box 2).

**Schedule for Sustained Programming:** Based on the planning described above, KAPE believes that 80% of schools can be accredited by the end of 2021 leading to their financial self-sufficiency. Depending on the ability of parents in the rural surroundings of Angkor Ban PS to provide local support and needed changes in management at Peam Chikong HS, all New Generation Schools should achieve a sustained footing by the middle of 2022, eventuating the final phase-out of KAPE support (see Box 3). This of course assumes that the MoEYS has no plans for any further expansion of NGS sites, which KAPE may pursue through the identification of private funding that will be facilitated by the establishment of an *International New Generation School Foundation*, supported by the Franks Family Foundation and other private donors.

**Key Assumptions:** The Exit Strategy articulated above is based on some major assumptions. One of these assumptions is that government funds can be released to schools by the ninth month of the fiscal year. Currently, MoEF requires six months to process financial requests submitted by KAPE and the corresponding departments. Thus, this seems to be a reasonable assumption. Another assumption is that MoEYS can maintain annual accreditation visits to 10 New Generation Schools each year. The

**BOX 2: Summary of Sustainability Elements of KAPE’s Exit Strategy**

1. Three-year investment cycle to convince parents of high standards
2. Validating standards for parents through Annual Accreditation.
3. Incentivizing schools to strive for Accreditation because it is linked to their right to negotiate parental support
4. Policy guidelines empower schools to negotiate Parental Financial support once they have demonstrated accreditation. This provides the legal framework for sustained local support.
5. Training School-based Mentors through a Master’s Degree Program that has been established at NIE. Such mentors will eliminate the need for reliance on KAPE technical personnel.

**BOX 3: Anticipated Schedule for Phase-out of KAPE Support**

- **2020:** 60% of New Generation Schools accredited/Placement of School-based Mentor begins
- **2021:** 80% of New Generation Schools accredited
- **2022:** 100% of New Generation Schools accredited/KAPE Phase-out Complete.

National Board has so far struggled with finding time for accreditation visits, even when only two schools are involved. Increasing this expectation to ten schools may not be possible under the current configuration of the Board. Thus, this could be a vulnerable assumption, requiring additional discussion with MoEYS. These and other assumptions are summarized in Box 4.

**BOX 4: Key Assumptions Underlying KAPE's Exit Strategy Planning**

1. MoEF can release funds to schools by the 9<sup>th</sup> month of the fiscal year.
2. Parents in rural areas can cover 70% of a New Generation School's running costs.
3. MoEYS can ensure the timely execution of Annual Accreditation Visits to 10 schools each fiscal year.
4. The New Generation Pedagogical Research Center can sustain its own operations and provide continuing technical support to school-based

### 3. KEY ACCOMPLISHMENTS & ACTIVITIES DURING THE YEAR

#### 3.1 Enrollment, Unit Costs, and the Number of NGS Models Piloted

While the enrollment in some schools stabilized in the 2019-20 academic year, other schools continued to expand the number of students enrolled. Particularly in schools using a Whole School Model, the number of grade levels continued to incrementally increase. In this respect, Prek Leap, Kok Pring HS, and Prek Anchanh HS added Grade 10 to their supported grades, while Peam Chikong HS added Grade 9. At primary level, Akhea Mahasei PS expanded to Grade 3. Meanwhile, demand for admission to Preah Sisovath New Generation School doubled this year to over 1,200 applicants, placing much pressure on the school to increase the number of available places. As noted earlier, enrollment at secondary school level increased to 3,839 students (from 3,128 last year) while primary school enrollment remained relatively stable at 1,883 students (in comparison to 1,830 last year). Total enrollment reached almost 6,000 and came in at 5,722 students in 173 classes (see Table 3.1). The increase in enrollment at most schools put downward pressure on unit costs with student unit costs at secondary school level dropping to \$370 per student and at primary school level to \$133 per student.

**Table 3.1: Enrollment and Investment Sources across all New Generation School Sites (2019-20)**

Province	School Name	Enrollment (2019-20)	Number of Classes	Investment Source	Date of Establishment	NGS Development Model
<b>Secondary School Level</b>						
Phnom Penh	Preah Sisovath HS	1,004	28	MoEYS-FFF	Oct 2015	School in a School
	Prek Leap HS	741	24	MoEYS-FFF	Oct 2017	Whole School
Kampong Cham	Hun Sen Kampong Cham HS	381	12	MoEYS-FFF	Oct 2015	New School/ Dying School
	Peam Chikorn HS	541	18	MoEYS-FFF	Oct 2018	Whole School
Kandal	Prek Anchanh	803	24	MoEYS-FFF	Oct 2017	Whole School
Svay Rieng	Kok Pring HS	369	11	Child Fund	June 2015	Whole School
<b>Total</b>	<b>6 schools</b>	<b>3,839</b>	<b>117</b>	<b>3 Sources</b>	<b>--</b>	<b>3 Models</b>
<b>Unit Costs</b>	<b>--</b>	<b>\$370/Student</b>	<b>\$12,786/class</b>			
<b>Primary School Level</b>						
Kampong Cham	Demonstration School	473	13	Self-supporting	Oct 2015	New School/ Dying School
	Angkor Ban PS	307	10	MoEYS	Oct 2017	Whole School
Kg Speu	Akhea Mahasei PS	756	21	MoEYS	Oct 2017	Whole School
Svay Rieng	Svay Prahut PS	347	12	Child Fund	June 2015	Whole School
<b>Total</b>	<b>4 Schools</b>	<b>1,883</b>	<b>56</b>	<b>3 Sources</b>	<b>--</b>	<b>2 Models</b>
<b>Unit Costs</b>	<b>--</b>	<b>\$133/Student</b>	<b>\$4,464/class</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>GRAND TOTAL</b>	<b>10 Schools</b>	<b>5,722</b>	<b>173</b>	<b>4 Sources</b>	<b>--</b>	<b>3 Models</b>
<b>Unit Costs</b>	<b>--</b>	<b>\$305/student</b>	<b>\$10,092/class</b>	<b>--</b>	<b>--</b>	<b>--</b>

#### 3.2 Bac II Examination Results

The New Generation School Office has compiled an analysis of the results of the *Bac II Examination* in New Generation Schools that have Grade 12 cohorts for the 2018-19 Academic Year. There are currently only two such schools with students at the Grade 12 level, namely *Preah Sisovath HS* in Phnom Penh and *Hun Sen Kampong Cham HS* in

Kampong Cham Province. Because the New Generation School at Sisovath HS is a 'School in a School,' the reported test results have been separated from the test results of the normal school. In all, 126 students sat for the *Bac II Examination* at Sisovath NGS while 49 students sat for the test at Hun Sen Kampong Cham HS (see Table 3.2 below).

The overall results at both schools were excellent (in comparison to the national average) and showed some improvement from the results reported last year. The schools also continued to outperform other control schools in the same vicinity. For example, Sisovath NGS achieved a 94% pass rate compared with a national pass rate of 68%. This outcome is even more remarkable because all of the students enrolled at Sisovath NGS are in the science stream where the national pass rate average is usually even lower. Similarly, the pass rate at Hun Sen Kampong Cham HS was also significantly higher than the national pass rate with a reported outcome of 84% of students passing the examination. As in the case of Sisovath NGS, all students enrolled in Grade 12 at Hun Sen Kampong Cham HS were in the science stream. It should also be noted that both schools improved their performance from last year with Sisovath NGS jumping to 94% from a previous pass rate of 89% last year while Hun Sen Kampong HS showed an even more dramatic improvement, moving from 74% last year to 84% this year.

In terms of the number of students scoring at the highest level, Sisovath NGS reported that 48 students or 38% scored at the A, B, or C level. This compares with only 13% of students scoring at the A, B, or C level in the Sisovath normal school. Nationally, only 7.4% of students scored at this level, indicating that 38% of NGS students at Sisovath scored at the 92 percentile or higher, a remarkable achievement. In addition, the pass rate at the normal school at Sisovath HS was only 55% or 39% less than the rate achieved by Sisovath NGS (94% versus 55%). It should also be noted that although Sisovath NGS only comprises 13% of the students taking the exam at Sisovath, the school generated 56% of the A scores (10 A scores out of 18 for the entire school). It is, therefore, important to remember that although Sisovath HS as a whole will get the top award for generating the most A scores of any school in the Kingdom (18), the main credit for this achievement goes mainly to the New Generation School.

Many students at Hun Sen Kampong Cham HS were also reported to score at the top percentile of the national examination. In this respect, 13 students scored at the A, B or C level, which comprises 27% of the total number of students who sat for the examination. Thus, almost a third of the school's students scored in the top 8% of the entire country or at the 92 percentile or higher. In addition, Hun Sen Kampong HS was the top scoring school in Kampong Cham Town, significantly exceeding the pass rate scores of other high schools in the provincial capital, especially the largest high school (Preah Sihanouk HS), which only reported a pass rate of 62% along with Sambor Meas HS which reported a 75% pass rate and Deydos HS with a 36% pass rate. Thus, the test results of Hun Sen Kampong Cham HS towered over the results of other secondary schools in the town. In addition, 4% of the students at the school achieved an A score in comparison to only 0.4% of students nationally.

When one considers that less than 8% of the students who took the *Bac II Examination* at national level scored at the A, B, or C level, the examination outcomes at New Generation Schools are truly remarkable. In this respect, Hun Sen Kampong HS reported that 27% of its students scored within the A to C performance range as noted above, which is greater than the national level by a margin of 3.64 times. Similarly, Sisovath NGS reported that 38% of its students scored in this range, which is 5.14 times greater than the national average. Thus, a significantly larger proportion of NGS students are scoring in the top national percentiles, which is a remarkable achievement.

**Table 3.2: Bac II Examination Results at New Generation Schools & Non-NGS Control Sites (2018 & 2019)**

		Grade 12 Students Taking Test	Tested Students Who Passed	Pass Rate	Letter Grades					
					A	B	C	D	E	F
Sisovath HS (NGS)										
2018	No.	102	91	89%	9	13	21	18	30	11
	%	--	--		9%	13%	20%	17%	29%	11%
2019	No.	126	118	94%	10	20	18	39	31	8
	%	--	--		8%	16%	14%	31%	25%	6%
Sisovath HS (Non-NGS)*										
2018	No.	880	434	52%	10	46	47	84	247	446
	%	--	--		1%	5%	5%	10%	30%	48%
2019	No.	834	460	55%	8	46	54	84	268	374
	%	--	--		1%	6%	6%	10%	32%	45%
Hun Sen Kg Cham HS										
2018	No.	55	41	74%	0	3	7	10	21	14
	%	--	--		0%	6%	13%	18%	38%	26%
2019	No.	49	41	84%	2	4	7	6	22	8
	%	--	--		4%	8%	14%	12%	45%	16%
Preah Sihanouk HS/Kg Cham (non-NGS)*										
2018	No.	803	385	48%	10	30	58	94	193	418
	%	--	--		1%	4%	7%	12%	24%	52%
2019	No.	651	402	62%	7	32	33	72	258	249
	%	--	--		1%	5%	5%	11%	40%	38%
National Pass Result										
2018	No.	113,365	76,038	67%	408	2,222	6,041	15,180	52,183	39,230
	%	-	-		0.4%	2%	5%	13%	46%	33%
2019	No.	117,043	79,052	68%	443	2,430	5,847	14,100	56,232	37,991
	%	--	--		0.4%	2%	5%	12%	48%	32%

\*Comparison Schools:

Many critics of New Generation Schools like to point out that these schools achieve at a higher standard because of the rigorous selection procedures that are employed there, leading to a situation where they only admit the best students. While it is true that New Generation Schools such as Sisovath HS now do have to employ rigorous selection procedures as an equitable means to ration the limited number of seats available, it should be pointed out that selection procedures only became active during Year 3 of the reform, meaning that Cohort 1 (last year's Bac II Results) and Cohort 2 (this year's results) were admitted under a non-selection regime. Thus, these arguments by critics lack validity and should not be used to explain away the high performance results achieved at New Generation Schools.

The test results at New Generation Schools reported above undermine the belief of many teachers and parents that students must take (lucrative) private classes in order to pass the *Bac II Examination*. It is important to remember in this regard that private classes at all New Generation Schools are strictly forbidden so that students were able to achieve these very high outcomes through a combination of extra hours of regular study (New Generation Schools provide 40 hours of instruction per week), practical lab work in 21<sup>st</sup> Century science labs, and special classes that the school organizes for ALL students that are free of charge. Unit costs of education are also significantly lower. For example, MoEYS is currently spending approximately \$370 per student *per annum* to provide the high standard of education at the New Generation School. In comparison, students at the normal school reportedly pay between \$60 and \$80 per month for their private classes, which over a course of 10 months means that students are paying about \$600 to \$800 per year for their education. Given that the pass rate at the normal school was 39% less than the New Generation School, one can only conclude that the 'rien kua' regime is not only expensive, but also inefficient as well.

### 3.3 Accreditation Results during the Period

The National Oversight Board completed another round of annual accreditation in four schools that have completed a 3-year investment cycle, namely Preah Sisovath HS (Phnom Penh), Hun Sen Kampong Cham HS (Kampong Cham), Hun Sen Demonstration School (Kampong Cham), and Kok Pring HS (Svay Rieng). All four schools achieved 100% of the required criteria either fully or to an acceptable degree while compliance with Preferred Criteria ranged from 75% (at Hun Sen Demonstration School) to 100% (Hun Sen Kampong Cham HS). Overall achievement of accreditation criteria ranged from 100% to 88% (see Table 3.3a), which demonstrates high compliance with MoEYS expectations. Two of this year's accredited schools are newly accredited and join Preah Sisovath HS and Hun Sen Kampong Cham HS, which have been accredited in previous years.

When schools become accredited, they accrue two important privileges. One of these is assured high investment from MoEYS for at least 30% of a school's operating costs to maintain accreditation standards (e.g., teacher incentives, special student activities, etc.). Another important privilege relates to the right of schools to negotiate standardized fees (of a voluntary nature) from parents whose children are now attending the school. As 2019 ended, parents at Preah Sisovath HS, Hun Sen Kampong Cham HS, and Hun Sen Demonstration School demonstrated high levels of willingness to



**Rigorous Accreditation Standards:** Mr Ung Chinna of the Oversight Board interviews a teacher at Kok Pring HS in Svay Rieng as part of a 3-day accreditation process.

fund their schools. Indeed, all three schools reported receiving in total almost \$300,000 in annual funding to support operational costs, while Kok Pring HS is currently negotiating parental contributions that will start in the 2020-21 academic year. These provisions of the NGS Policy help to build sustainability into the New Generation School development process and relieve a large part of the financial burden from the government to maintain high standards.

**Table 3.3a: Results of Accreditation Visits by Criteria (2019)**

Accreditation Criteria	Preah Sisovath HS			Hun Sen Kam-pong Cham HS			Demonstration School			Kok Pring HS		
	Fully Achieved	Achieved to Acceptable Standard	Not Achieved	Fully Achieved	Achieved to Acceptable Standard	Not Achieved	Fully Achieved	Achieved to Acceptable Standard	Not Achieved	Fully Achieved	Achieved to Acceptable Standard	Not Achieved
<b>Required Criteria (100% Score Required)</b>												
1. Private Tutoring abolished	✓			✓			✓			✓		
2. Practices of mandatory student purchases of teacher goods abolished	✓			✓			✓			✓		
3. Rationalized resource allocation system	✓			✓			✓			✓		
4. Increased hours of Instruction	✓			✓			✓			✓		
5. Teacher Career Path Planning & Teacher Support Framework	✓				✓		✓			✓		
6. 21 <sup>st</sup> Century Library Availability	✓				✓		✓				✓	
7. Professional Learning Community among Teachers	✓				✓		✓			✓		
8. High Rates of Student Access to ICT	✓				✓		✓			✓		
9. Availability of ICT Lab services	✓				✓			✓		✓		
10. Availability of science lab services	✓				✓		✓			✓		
11. PCR Level under 36:1	✓				✓		✓			✓		
12. Financial System in Place	✓				✓			✓		✓		
<b>Subtotal Score</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>
<b>Preferred Criteria (At least 50% Score Required)</b>												
13. Functional Student Council	✓			✓			✓			✓		
14. Functional SSC	✓				✓		✓			✓		
15. Teacher proficiency in ICT usage		✓			✓				✓	✓		
16. Evidence of career counseling services (for secondary schools only)	✓				✓			✓		✓		
17. Classroom sanitation & attractiveness	✓			✓				✓		✓		
18. Toilet hygiene and clean water access		✓		✓				✓		✓		
19. Sports/playground facilities	✓				✓			✓		✓		
20. Life skills Education		✓			✓			✓			✓	
21. Great Books Reading Programming	✓				✓				✓			✓
22. Canteen services for students			✓		✓		✓				✓	
23. School Clinic in Place	✓				✓		✓					✓
24. 80% of Teachers have Bachelor Degree or Higher	✓				✓				✓	✓		
<b>Subtotal Score</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>2</b>	<b>2</b>
<b>Grand Total Score</b>	<b>20</b>	<b>3</b>	<b>1</b>	<b>7</b>	<b>17</b>	<b>0</b>	<b>14</b>	<b>7</b>	<b>3</b>	<b>19</b>	<b>3</b>	<b>2</b>
<b>Percentage Achieved</b>	<b>96%</b>			<b>100%</b>			<b>88%</b>			<b>92%</b>		

New Generation School programming has now achieved accreditation of 40% of schools currently receiving MoEYS investment (two schools are also funded by Child Fund through KAPE). At the end of 2020, the NGS Central Office believes that Prek Leap HS and Prek Anchanh will also be ready to apply for accreditation, which if successful, will bring the rate of accreditation to 60%. In 2021, two more schools should be ready for accreditation (Angkor Ban PS and Akhea Mahasei PS) bringing the rate to 80%. By 2022, MoEYS should have achieved a 100% rate of accreditation (see Ta-

ble 3.3b). This rate of achievement assumes that the National Oversight Board has the capacity to field enough staff to cover all ten New Generation Schools currently receiving investment. This would require between 40 and 50 days of planning and actual site visits each year by Board members.

**Table 3.3b: Planned NGS Accreditation Visits, 2017-22**

School Name	Province	Planned Accreditation Rate					
		2017	2018	2019	2020	2021	2022
1. Preah Sisovath HS	Phnom Penh	✓	✓	✓	✓	✓	✓
2. Prek Leap HS	Phnom Penh				✓	✓	✓
3. Hun Sen Kg Cham HS	Kg Cham	✓	✓	✓	✓	✓	✓
4. Peam Chikong HS	Kg Cham						✓
5. Prek Anchanh HS	Kandal				✓	✓	✓
6. Kok Pring HS*	Svay Rieng			✓	✓	✓	✓
7. Demonstration School	Kg Cham		✓	✓	✓	✓	✓
8. Angkor Ban PS	Kg Cham					✓	✓
9. Akhea Mahasei PS	Kg Speu					✓	✓
10. Svay Prahut PS*	Svay Rieng						✓
<b>Total</b>		<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>10</b>
<b>Expected Level of Accredited Schools</b>		20%	30%	40%	60%	80%	100%

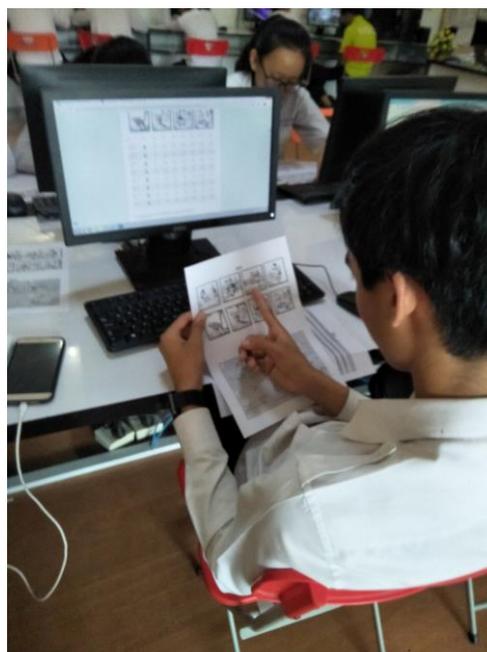
\*Currently funded by Child Fund through KAPE.

### 3.4 Critical Thinking Test Results

The program re-organized its Critical Thinking Test activities by developing a Post-test to follow-up testing that was done in the earlier stages of NGS programming. The new test Post-Test maintains the essential elements of the Baseline test, which has six sections:

1. Figural Series (Prediction)
2. Logical Sequences (Logical thinking)
3. Classification Exercises (Classifying skills)
4. Analogies (Analyzing relationships)
5. Concept Analysis (Applying abstract concepts)
6. Textual Analysis (Identifying relevant facts)

With the large increase in schools admitted to the program, program planners also organized a clear road map of cohort testing that will facilitate follow-up of Baseline Tests (see **Annex 2**). Each cohort is tested at the end of a three-year cycle; this means that cohorts tested at Grade 7 will be re-tested when they complete Grade 9, while cohorts tested at Grade 10 will be retested at the end of Grade 12. The project can now report on Post-Test Results for cohorts tested earlier in the program at Preah Sisovath HS and Hun Sen Kampong Cham HS while Baseline Tests have been administered to all new schools including Prek Leap, Prek Anchan, and Peam Chikong HS. A new innovation in Critical Thinking Assess-



**Evaluation in the 21<sup>st</sup> Century:** A student in a New Generation School takes a Critical Thinking Test ‘electronically’.

ment that occurred in 2019 was the conversion of such tests to an electronic template so that all questions could be administered electronically. The results of all testing activities are presented in Table 3.4.

**Table 3.4: Critical Thinking Baseline and Post-Test Results by Cohort, 2019**

School	Figural Series (Prediction)		Logical Sequences		Classification		Analogies		Concept Analysis		Textual Analysis		Total Mean Score For all sections	
	Cohort		Cohort		Cohort		Cohort		Cohort		Cohort		Cohort	
Grades 7/10	1	B	1	B	1	B	1	B	1	B	1	B	1	B
Sisovath Baseline	64%	79%	57%	47%	60%	63%	59%	65%	44%	51%	71%	65%	59%	62%
Sisovath Post Test	73%	--	54%	--	72%	--	66%	--	66%	--	64%	--	66%	
Change	9%	--	-3%	--	12%	--	7%	--	22%	--	-7%	--	7%	
Grades 7/10	3	--	3	--	3	--	3	--	3	--	3	--	3	--
Prek Leap Baseline	57%	--	41%	--	54%	--	50%	--	52%	--	26%	--	47%	--
Prek Leap Post-test	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Change	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grades 7/10	3	--	3	--	3	--	3	--	3	--	3	--	3	--
Prek Anchanh Baseline	52%	--	43%	--	56%	--	52%	--	52%	--	30%	--	48%	--
Prek Anchanh Post-test	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Change	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grades 7/10	2	--	2	--	2	--	2	--	2	--	2	--	2	--
Peam Chikong Baseline	52%	--	40%	--	49%	--	54%	--	45%	--	27%	--	45%	--
Peam Chikong Post-test	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Change	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Grades 7/10	1	B	1	B	1	B	1	B	1	B	1	B	1	B
Hun Sen Kg Cham Baseline	50%	63%	56%	41%	46%	56%	14%	55%	30%	49%	13%	36%	35%	--
Hun Sen Kg Cham Post-test	74%	--	49%	--	73%	--	69%	--	66%	--	33%	--	61%	--
Change	24%	--	-7%	--	27%	--	55%	--	36%	--	20%	--	26%	--
<b>Average Mean Scores (Baseline)</b>	45%	71%	47%	44%	53%	60%	46%	60%	45%	50%	33%	51%	47%	62%

Note: Orange font indicates lowest baseline value; Aqua font indicates highest value.

Baseline values are now in place for all schools. The lowest baseline values tended to be in *Textual Analysis* where the mean score across all schools was only 33% (for Grade 7 cohorts). The highest mean score occurred among Grade 10 cohorts and was in *Figural Series* (which assesses powers of prediction). Grade 7 cohorts that were

tested at Preah Sisovath HS and Hun Sen Kampong Cham HS three years ago and who are now in Grade 10 (i.e., Cohort 1) showed a change from baseline of 7% and 26%, respectively. Students at Hun Sen Kampong Cham HS showed a more dramatic improvement than Sisovath students because they started from a much lower baseline value of only 35% (versus 59% at Preah Sisovath). This contrast in baseline values likely speaks to the difference in students' academic preparation between the capital city and a provincial town.

Inquiry-based Learning Survey

**SECTION 5: Concept Analysis – Fact and Opinion ( 12 points)**

**Directions:** The questions below require you to be able to distinguish between a *fact* and an *opinion*. The text below is a discussion about how men and women differ. For each underlined sentence in the text, there is an empty box immediately afterwards. Write the letter "F" if you think the statement is a fact or "O" if you think the statement is an opinion. To help you make your analysis, a definition of a fact and opinion is given below. An example is done for you in the text below.

**Definition of Terms:**  
**Fact:** the characteristic of being true or actual; something that exists or actually occurred.  
**Opinion:** a belief that may vary from person to person.

**How do Men and Women Differ**

Many social scientists have struggled with the question about how men and women differ. 1.  F For example, it is clear that men are more aggressive than women who are mostly passive. 2.  In addition, men are always stronger than women in both a physical and mental sense. 3.  Of course, many disagree strongly with this view. Biologists only agree that the main way that men and women differ is that women can have children but men cannot.

4.  Most everyone agrees with this observation. There is also wide agreement that women should have the right to vote. In many countries, women only recently received the right to vote in the last 100 years or so. 5.  Of course, men have stronger views about politics than women do. 6.  And it is certainly more important that more men should vote than women. 7.

But it is certain that people will continue to have different views about how men and women differ for many years to come.



13

← **An Example of an Exercise from the Critical Thinking Test:** One of the sections on the administered test was in 'Concept Analysis' in which students were asked to determine whether a statement that they read was a 'fact' or an 'opinion' based on a simple definition of each concept. While such tasks may seem simple, the resulting mean score of only 45% among Grade 7 students across all tested schools suggests that many students starting their secondary education studies still lack such basic critical thinking skills. These analysis exercises required students to put aside their own views about gender differences and apply standardized definitions of fact and opinion to classify each statement that they read in a text accordingly. An example of the text is provided in the excerpt provided at the right.

### 3.5 Results of Entrance Examinations

As New Generation School programming achieves a higher and higher profile in Cambodian society, the demand for such schools has started to increase dramatically. The most striking example of this increased demand occurred at Preah Sisovath HS this year when 1,264 students applied for entry for only 234 available seats. In order to address this high demand, most New Generation Schools have had to turn to standardized Entrance Examinations as the fairest way to ration available seats. Often these measures are not understood by local communities who are not happy when public schools limit access based on measures of academic preparedness. However, these measures are required by NGS Accreditation standards,



**When Demand Outpaces Supply:** The School Auditorium at Sisovath HS is filled to overflowing as parents in Phnom Penh sought to better understand the entry requirements for study at the New Generation School.

which stipulate a PCR of 36 to 1 or less in 80% or more of classes. Unlimited access to New Generation Schools would, therefore, result in lowering standards through large class sizes, which would in turn make it impossible to use many of the modern teaching techniques used in New Generation Schools that do not work in large, over-crowded classrooms.

The results of Entrance Examinations are presented in Table 3.5 below. The acceptance rate of new applicants ranged from a low of only 19% at Preah Sisovath HS to a high of 85% at Peam Chikong HS, where demand is lower (because it is a brand new New Generation School) and testing standards have been dumbed down in response to political pressure from local officials. Nevertheless, most secondary schools have been trying to hold the line on standards and ensuring class sizes of 36 to 1 or less. Similarly, primary schools have also demonstrated rates of admittance that match up with pass rates on examinations, except in the case of Angkor Ban where most children entering from Grade 1 simply transfer in from the local pre-school located in the school compound.

**Table 3.5: Test Results among Students Applying for Entry to New Generation Schools**

Name of School	Total Seats	Total Applicants Tested	Total Passing (50% or more)	%	Total Applicants Accepted	%
<b>Secondary Level</b>						
Sisovath HS	234	1,264	148	12%	243	19%
Hun Sen Kg Cham HS	65	96	48	50%	48	50%
Prek Leap HS	287	395	209	53%	208	53%
Prek Anchanh HS	293	378	248	66%	281	74%
Peam Chikong HS	220	273	233	85%	233	85%
Kok Pring Jr HS	138	163	114	70%	114	70%
<b>Subtotal</b>	<b>1,237</b>	<b>2,569</b>	<b>1,000</b>	<b>39%</b>	<b>1,127</b>	<b>44%</b>
<b>Primary Level</b>						
Demonstration School	72	105	72	69%	72	69%
Akhean Mahasei PS	180	243	163	67%	163	67%
Angkor Ban PS	40	12	12	100%	12	100%
<b>Subtotal</b>	<b>292</b>	<b>360</b>	<b>247</b>	<b>69%</b>	<b>247</b>	<b>69%</b>
<b>Total</b>	<b>1,529</b>	<b>2,929</b>	<b>1,247</b>	<b>44%</b>	<b>1,374</b>	<b>47%</b>

## INTRODUCING ELECTRONIC ENTRANCE EXAMINATIONS TO MEET HIGH DEMAND



↑ **Promoting Innovation in Testing:** One of 1,264 candidates wishing to study at Preah Sisovath HS takes the Entrance Examination on his mobile phone, which increased both efficiency in tabulation and transparency in reporting.

To everyone's surprise, the demand for entry to Preah Sisovath New Generation School doubled from last year's levels to over 1,200 candidates. In order to meet the high demand, NGS managers at Sisovath HS decided to convert the Entrance Examination into an on-line test that students could access on their phones and mobile devices.

The decision to move to electronic testing not only improved the speed and efficiency with which tests could be corrected but also had a remarkable impact on transparency. Results were automatically posted and classified on the school website, making it difficult for powerful individuals to exert pressure to circumvent the admissions process, which often happens in Cambodia. This helped to further boost the reputation of New Generation Schools as well managed institutions with high standards of governance.

### 3.6 Facility Emplacement Results

NGS programming continued to make significant investments in infrastructure upgrading, mainly at schools that are all still adding grade levels as part of their incremental expansion (e.g., Prek Leap, Prek Anchanh HS, and Peam Chikong HS). Infrastructure investments at Sisovath HS have now been completed and with the completion of a new Meeting Hall at Hun Sen Kampong Cham HS, infrastructure investments there will also be ending. By the end of 2019, NGS programming had realized the emplacement of 160 new facilities at secondary school level (see Table 3.6) and 52 facilities at primary level (see Table 3.7) or a total of 212 facilities including modern classrooms, libraries, labs, student clinics, auditoriums, etc. A total of 19 new facilities are proposed at secondary school level in 2020 and 13 more at primary level or 32 new facilities in all.

Some of the investments proposed for next year will be major including a new meeting hall for Prek Leap HS and Akhea Mahasei PS and new student clinics as well as additional classrooms and labs.

During 2019, some major investments were also completed including two new auditoriums (Hun Sen Kampong Cham HS and Prek Anchanh HS) and a new 21<sup>st</sup> Century Library (Peam Chikong HS). Some unusual refinements were also completed at existing facilities including a Library Garden at Prek Leap HS (see case study) and major renovations to an old computer lab at Hun Sen Kampong Cham HS, which was oldest computer lab in the NGS system.



↑ **New Library Completed:** Peam Chikong HS received major investments in library development. The new library uses a new color theme (orange) and 3D murals to create a more naturalized setting for youth to study in (top).

**21<sup>st</sup> Century Auditorium Facilities:** Additional investments in Prek Anchanh have provided the school with a new and modern auditorium that can seat over 75 people (middle).

**Renovations to an Old Computer Lab:** Hun Sen Kampong Cham HS was the very first New Generation School in the NGS system. Its computer lab was established in 2013 and after 6 years of continuous use was in need of additional refurbishment, which was completed during the year (bottom).

**Table 3.6: Proposed & Previous Scope of Infrastructure Investment at All NGS Secondary School Facilities (2020)**

School	NGS Class rooms	Science Lab	ICT Lab	Library	Auditorium	Offices/	Canteen	Clinic	Youth Center	TOTAL
						Meeting Rooms				
Sisovath HS										
Previous	14	9	2	1*	1	5	0	1	1	34
Proposed (2020)	1	0	0	0	0	0	0	0	0	1
H Sen Kg Cham HS										
Previous	21	3	2	1*	1	2	1	1	1	33
Proposed (2020)	0	0	0	0	0	0	0	0	0	0
Prek Leap HS										
Previous	18	9	2	1	0	2	0	0	1	33
Proposed (2020)	0	1	1	0	1	0	0	1	0	4
Prek Anchan HS										
Previous	15	12	3	1	1	2	0	0	0	34
Proposed (2020)	5	1	1	0	0	0	0	1	1	9
Peam Chikong HS										
Previous	15	6	2	1	0	2	0	0	0	26
Proposed (2020)	5	0	0	0	0	0	0	0	0	5
<b>Total Facilities</b>										
<b>Previous</b>	<b>83</b>	<b>39</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>160</b>
<b>Proposed (2020)</b>	<b>11</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>19</b>
<b>All Facilities</b>	<b>94</b>	<b>41</b>	<b>13</b>	<b>5</b>	<b>4</b>	<b>13</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>179</b>

\*Includes library loft as part of expansion; \*\*Renovations to existing facilities

**Table 3.7: Proposed & Previous Scope of Infrastructure Investment at All NGS Primary School Facilities (2020)**

Facilities to be Renovated	Akhea Mahesei PS				Angkor Ban PS				Total Phases 1-3
	Phase 1	Phase 2	Phase 3 (2019)	Phase 3 (2020)	Phase 1	Phase 2	Phase 3 (2019)	Phase 3 (2020)	
Classrooms	--	18	6	5	--	12	2	2	45
Library	1	1*	--	--	1	1*	--	--	2
Science Lab	--	--	--	--	--	--	--	--	0
School Office & Faculty Room	1	1*	--	--	1	1*	--	--	2
Computer Lab (2020)**	--	--	--	1	--	--	--	1	2
Auditorium				1				--	1
Toilet Blocks	--	2	6	2	--	2	--	1	13
<b>Total</b>	<b>2</b>	<b>20</b>	<b>12</b>	<b>9</b>	<b>2</b>	<b>14</b>	<b>2</b>	<b>4</b>	<b>65</b>
	<b>34</b>				<b>18</b>				

\*Expansion of partly renovated facilities started in Phase 1; \*\*Pending special funding from MoEYS.

With direct MoEYS investments in large new buildings planned at Prek Anchan HS, Peam Chikong HS, Angkor Ban PS, and Akhea Mahesei PS, the need for physical alterations for which KAPE will be responsible will decrease in currently supported New Generation Schools. In future years, therefore, most investment in infrastructure will be limited to furniture and equipment, except in cases where the newly emplaced infrastructure is too traditional. KAPE has been working with the National Oversight Board to ensure that upcoming investments in building infrastructure that are mediated by the MoEYS Construction Department follow NGS specifications, such as the use of glass doors and windows and modern color schemes. As a result, KAPE only envisions investments in 32 more facilities in 2020, bringing the total number of new

**Table 3.8: Proposed and Completed Facilities in NGS Sites, FY2016 to FY2020 (MoEYS Funded Facilities Only)**

Investment Area	Number Proposed	Number Established	%
<b>Secondary School Sector (5 schools)</b>			
NGS Classrooms	94	83	88%
Science Labs	41	39	95%
ICT Labs*	13	11	85%
21 <sup>st</sup> Century Libraries*	5	5	100%
Auditorium	5	3	60%
Office/Meeting/Faculty Rooms	13	13	100%
Canteen*	5	1	20%
Student Clinic*	5	2	40%
Youth Centers*	4	3	75%
<b>Total Facilities</b>	<b>185</b>	<b>160</b>	<b>86%</b>
<b>Primary School Sector (3 schools)**</b>			
NGS Classrooms	45	38	84%
Science Labs	0	0	0%
ICT Labs	2	0	0%
21 <sup>st</sup> Century Libraries	2	2	100%
Office/Meeting/Faculty Rooms	2	2	100%
Auditorium	1	0	
Canteen	--	--	--
Student Clinic	--	--	--
Youth Centers	--	--	--
Toilet Facilities	13	10	77%
<b>Total Facilities</b>	<b>65</b>	<b>52</b>	<b>80%</b>
<b>Facilities at All Levels</b>	<b>250</b>	<b>212</b>	<b>85%</b>
*Facilities sometimes shared with Primary Schools; **Does not include Child Fund and Oaktree Foundation supported schools.			

facilities emplaced by KAPE to 250. With 212 facilities already completed at the end of 2019, 85% of planned investment has now been completed (see Table 3.8). In this respect, 86% of planning at secondary school level has been completed while 80% at primary level has been done. It should be noted too that these investments do not include previously completed facilities at the Demonstration School and Svay Prahut PS that were funded by the *Oaktree Foundation* and *Child Fund Cambodia*, respectively.

### NEW INNOVATIONS IN INFRASTRUCTURE INVESTMENT: Library Gardens at Prek Leap



The 21<sup>st</sup> Century Library recently established at Prek Leap HS in Phnom Penh has been extremely popular with students and teachers. Unfortunately, student demand has quickly outpaced the ability of the library to accommodate all students. A narrow space behind the library between the building that houses it and the school perimeter wall provided some possibility for expansion but not for a building. This space was unkempt and unsightly and too narrow. In keeping with a desire to create innovative school designs in New Generation School settings, MoEYS has created the first Library Garden of the NGS system by building a back door to the library to connect the Main Library to this space. Designers closed off the alley with a wall/fountain on both ends to ensure security for the use of library books. Within this space, MoEYS has created a delightful reading space characterized by natural gardens, sitting benches, fountains, and flowers. This space has created a very appealing extension to the school library without building a building that uses a piece of land that previously was useless and unsightly. Such innovations demonstrate the creativity that NGS programming has brought into the public school system.

## NEW AUDITORIUM COMPLETED AT HUN SEN KAMPONG CHAM HS



Hun Sen Kampong Cham HS was the first New Generation School in Cambodia. However, as it has grown, its student numbers have far exceeded the capacity of existing meeting facilities to accommodate them. The school has been hampered by the lack of proper meeting facilities to enable suitable forums for discussion and information dissemination.

Given this background, NGS programmers sought to provide a free-standing facility of modern design that could accommodate the school's needs for a modern meeting hall. This 21<sup>st</sup> Century Auditorium came on line in 2019 and provides an ante-room to register guests and provide coffee breaks. The main meeting hall of the building can comfortably seat 80 persons and the total capacity of the hall is about 110 persons. Since opening, the school has made extensive use of the hall for workshops, parent meetings, board meetings, and other important functions. The hall has modern audio-visual facilities, a projection screen, built-in speakers, and air-conditioning. The addition of this facility has truly helped the school to achieve its desire to be a 21<sup>st</sup> Century school.



*An external view of the new Meeting Hall at Hun Sen Kampong Cham HS (above);*

*Workshop on X-reading and English language (middle);*

*Students enjoy their new meeting facilities (bottom)*

### 3.7 Results of Student Counseling Outreach

In spite of some personnel changes among School Counselors at the beginning of the school year, all secondary schools were able to provide a career counseling program that provided both individualized counseling for students 'at risk' as well as numerous large group activities that featured opportunities for future study, presentations by role models representing different professions (e.g. engineers, doctors, policemen and women, etc.). School Counselors in New Generation Schools do not have to teach and can, therefore, devote all of their time to working with youth on career issues. During the 2018-19 academic year, counselors reported surveying 883 incoming

Grade 7 students across all schools to induct them into the school’s counseling program (see Table 3.9). These students join other students from earlier cohorts in Grades 8 to 12 who were similarly surveyed. A total of 65 students or 7% of the incoming cohort were determined to be at risk, meaning that they had not done any thinking at all about what they would like to do after graduation nor did they demonstrate strong commitment to completing school. These students and others from different grades, who were also determined to be at risk, received multiple counseling sessions of an individualized nature to help them think about their future career options. In all, 862 students across five New Generation Schools received individualized counseling during the year. In addition, counselors also organized short counseling workshops for larger groups of students that featured guest speakers, opportunities for future study, and other career related discussion. In all, 1,972 students participated in these counseling activities.



↑ **Counseling Workshop:** The Career Counselor at Peam Chikong HS (sitting at the front) invited a speaker who is an English Teacher to talk with students in the library about the advantages of this profession.

**Table 3.9: Overview of Counseling Activities across NGS Secondary Schools, 2019**

School Name	Counselors	Students Surveyed		Students Identified as at Risk		% at Risk		Students Counseled (across all grades)		%		Students Attending Counseling Workshops
		T	F	T	F	T	F	T	F	T	F	
Preah Sisovath HS	1	144	82	10	3	7%	2%	69	39	7%	4%	343
Hun Sen Kg Cham HS	1	76	44	7	3	9%	4%	236	98	45%	19%	611
Prek An-chanh HS	1	218	135	18	5	8%	2%	126	69	31%	17%	320
Prek Leap HS	1	243	102	20	11	8%	4%	184	123	54%	36%	335
Peam Chikong HS	1	202	110	10	6	5%	3%	247	137	44%	24%	363
<b>Total</b>	<b>5</b>	<b>883</b>	<b>473</b>	<b>65</b>	<b>28</b>	<b>7%</b>	<b>3%</b>	<b>862</b>	<b>466</b>	<b>31%</b>	<b>17%</b>	<b>1,972</b>

\*Note: Student surveys focus on students entering New Generation Schools at Grade 7 for the 2018-19 academic year.

### 3.8 Results of Extended Reading Initiative in English

New Generation Schools continued to support activities enabling students to improve their reading ability in English. In this respect, the program has adopted the strategy of what is known as “Extended Reading” as opposed to “Intensive Reading,” which is the most commonly used strategy to teach reading. One of the best electronic platforms to promote Extended Reading in English is called *X-reading*. Access to this platform costs \$15 per student for a one-year subscription with access to over 1,000 electronic books from a wide number of different publishers such as MacMil-

lan, McGraw Hill, etc. For the 2019-20 academic year, KAPE has been able to negotiate a reduction in cost to only \$12 per student per year or a 20% discount. After students are registered on the platform, they can choose the books that they want to read electronically and take comprehension tests when completing each book. Students are evaluated automatically on the platform in terms of the number of books that they read, their level of comprehension, and the number of words that they have read. This



↑ **Innovations in English Reading:** Students at Peam Chikong HS register for participation in the X-Reading Program to improve their English language capacity.

enables teachers to assess a large amount of outside of reading very quickly and with minimal effort. During the pilot program in 2019, 17% of students achieved a goal of 100,000 words or more read while 7% have achieved a goal of over 200,000 words.

Advocates of Extended Reading have demonstrated empirically that intensive exposure to English text at a level that is below the maximal level of proficiency of the student is much more effective in promoting reading proficiency and comprehension. Students that can read over half a million words in a year do much better on ToEFL tests and other measures of English proficiency. NGS has now subscribed to the X-reading platform to help students improve their English language ability. With the success of the program last year, the New Generation School Office has expanded participation in this program to all five New Generation Secondary Schools, encompassing 725 students and nine teachers. This represents a major expansion in programming of 222% when compared to the 2018-19 academic year (see Table 3.10). Students joining the program must demonstrate an interest in English, good marks in English, and access to a smartphone or tablet at home. Those joining the program receive full support from the school for access to the X-reading platform (\$12/student). In some schools like Siosvath HS, all students joined the program, demonstrating the interest that it generates. On average, NGS is investing \$1,740 in each school for participation in this program.

**Table 3.10: Students Participating in the Extensive Reading Pilot, 2019-20**

School	Students Enrolled	Participating Grades	Number of Classes	Participating Teachers
1. Preah Sisovath HS	596	7, 8, 9, 10	14	4
2. Hun Sen Kampong Cham HS	24	10-11	4	1
3. Prek Leap HS	52	7-10	5	2
4. Prek Anchanh HS	24	7-10	2	1
5. Kok Pring HS	0	0	0	0
6. Peam Chikong HS	29	9	1	1
<b>Total (2019-20)</b>	<b>725</b>	<b>5 Grades (7, 8, 9, 10, 11)</b>	<b>26 Classes</b>	<b>9 Teachers</b>
<b>Total (2018-19)</b>	<b>326</b>	<b>4 Grades (7, 8, 10, &amp; 11)</b>	<b>10 Classes</b>	<b>4 Teachers</b>
<b>Change (%)</b>	<b>222%</b>	<b>--</b>	<b>260%</b>	<b>225%</b>

### 3.9 Awards and Medals Received during 2019

Another important metric for assessing the impact of NGS reforms on educational quality relates to the number of medals and awards received by students enrolled in NGS institutions. Such awards are a good measure for much of the creativity, research, and 21<sup>st</sup> Century skills that are often not captured in the national examinations. This year, New Generation Schools at both the secondary and primary school level reported receiving 819 awards that were earned by 612 students (see Table 3.11). A total of 46% of these awards were gold, silver, and bronze medals. As in past years, Preah Sisovath HS has accounted for the vast majority of the medals. But this year, other schools have stepped up their advocacy to help their students to register for various national and international competitions. Still, much more advocacy is needed to step up the number of students from other schools that are participating in such competitions. Nevertheless, it is a remarkable achievement that over 800 awards were achieved by students in the NGS system.



↑ **Making Cambodia Proud:** Students from Preah Sisovath HS show some of the medals that they won at international competitions during the school year.

**Table 3.11: Number of International and National Awards in New Generation Schools, 2019**

School Name	Students and Awards	General Awards	Certificates of Achievement	Gold Medal	Silver Medal	Bronze Medal	Total
Preah Sisovath HS	Number of Students	11	414	68	77	25	595
	Number of Awards	11	420	149	185	37	802
Hun Sen Kampong Cham HS	Number of Students	-	-	-	-	1	1
	Number of Awards	-	-	-	-	1	1
Prek Leap HS	Number of Students	1	5	-	1	2	9
	Number of Awards	1	5	-	1	2	9
Prek Anchanh HS	Number of Students	-	-	-	-	-	0
	Number of Awards	-	-	-	-	-	0
Peam Chikong HS	Number of Students	-	-	-	-	-	0
	Number of Awards	-	-	-	-	-	0
Kok Pring HS	Number of Students	-	2	-	-	2	4
	Number of Awards	-	2	-	-	2	4
Akkea Mahesei PS	Number of Students	-	1	-	-	1	2
	Number of Awards	-	1	-	-	1	2
Demonstration Primary School	Number of Students	-	1	-	-	-	1
	Number of Awards	-	1	-	-	-	1
<b>Total</b>	<b>Number of Students</b>	12	423	68	78	31	612
	<b>Number of Awards</b>	12	429	149	186	43	819

### 3.10 Post-Secondary Student Tracking Results

Along with accreditation expectations, dropout standards, and other indicators, one of the key measures of successful impact of NGS programming relates to the number of Grade 12 students who transition to tertiary studies. In this respect, the performance standard identified by NGS planners is 80% transition or more to tertiary education institutions at the end of Grade 12. Currently, there are only two schools with Grades 7 to 12, namely Preah Sisovath HS and Hun Sen Kampong Cham HS. Based on the most recent reporting following the release of performance results on the *Bac II Examination*, both schools



↑ **Ready for the Future:** Students completing Grade 12 at Hun Sen Kampong Cham HS attend their graduation ceremony where they will receive their High School Diplomas. 80% of the graduating class will attend university in 2020.

achieved a tertiary transition rate of 80% or more. In this regard, Preah Sisovath HS reported a 91% transition rate while Hun Sen Kampong Cham reported an 80% transition rate (see Table 3.12). Overall, 88% of NGS students enrolled in Grade 12 went on to study at a tertiary institution. Of this number, 47% or nearly half received some sort of scholarship to facilitate their studies. These results very firmly establish these two supported New Generation Schools as prestigious institutions of learning where students have an excellent chance to transition to tertiary education.

**Table 3.12: Post-Secondary Tracking of Grade 12 Students, 2019**

School	Total Grade 12 Students	Students Admitted to University	%	Receiving Scholarships	%	Admitted to TVET & 2-year Institutions	%	Entered Work Force	%
Preah Sisovath HS	126	115	91%	55	48%	0	0%	11	9%
Hun Sen Kampong Cham HS	49	39	80%	18	46%	0	0%	10	20%
<b>Total</b>	<b>175</b>	<b>154</b>	<b>88%</b>	<b>73</b>	<b>47%</b>	<b>0</b>	<b>0%</b>	<b>21</b>	<b>12%</b>

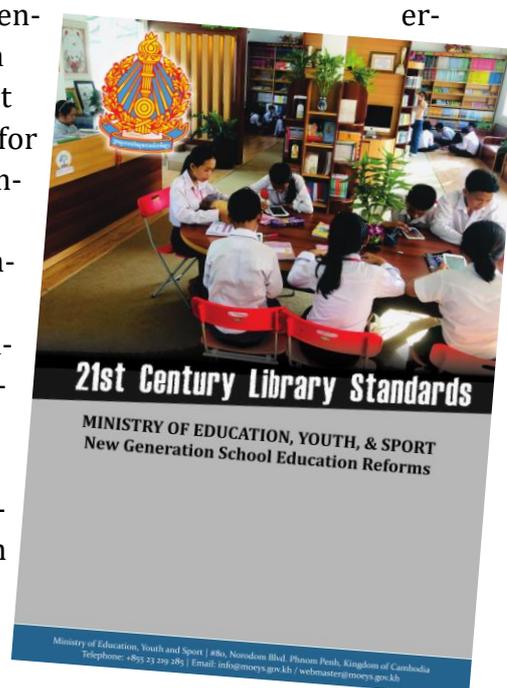
### 3.11 Completion of NGS Operational Guidelines

The NGS Operational Guidelines have been completed for quite some time (since the beginning of 2019). The document provides 120 guidelines across 13 operational areas to help guide New Generation School implementation. The lengthy document in Khmer has already been aligned with its English counterpart and has been submitted to the Ministry for final approval and adoption since the middle of 2019. It is hoped that the document can finally be formally approved by MoEYS early in 2020. In the meantime, all New Generation Schools are using the document to guide implementation, even though it has not yet been officially approved.

### 3.12 Development of 21<sup>st</sup> Century Library Training Manual

As part of the effort to facilitate replication of New Generation School programming in other schools, program staff members and advisers have sought to document the standards and implementation procedures used for NGS emplacement. A recently completed manual completed by the NGS Central Office relates to the development of 21<sup>st</sup> Century Libraries, which are a key feature of New Generation School Programming. The manual provides 63 guidelines that should be considered by schools receiving high investment for the development and operation of modern libraries in Cambodia. Various topics covered by the manual include the Organization of Space in the Library, Physical & Digital Access, Staffing Requirements, Librarian Qualifications, Book and Digital Services, Evaluation, and other matters. The manual has been submitted to the National Oversight Board for review and revision and will hopefully be officially adopted by MoEYS in 2020.

er-



### 3.13 Development of a Digital Education Road Map

Since August 2019, KAPE has been working on developing a *Digital Education Road Map* in collaboration with the Dept. of Information Technology (DIT). One of the goals of these efforts is to create a documentary on MoEYS planning in Digital Education that can be presented at the National Congress in March 2020. The Digital Education Roadmap focuses on four areas of investment that are summarized in Box 5. Although digital education already plays a very prominent role in NGS programming including the introduction of multiple kinds of educational software, wiring of all schools, and setting up 21<sup>st</sup> Century Libraries with mobile learning devices and research stations, the roadmap will enable NGS programmers to better plan the introduction of new digital elements in the NGS system in a more systematic way.

#### BOX 5: Digital Education Road Map Structure

##### 1. Curriculum Content Rationalization

###### Grades 4 to 6:

- Basic Computer Skills
- Basic Media
- Basic Coding
- Basic Design

###### Grades 7 to 9

- Basic ICT in Education
- Media Literacy
- Coding and Problem Solving/Computational Thinking
- ICT for STEM and Innovation
- Research & Digital Education Resource

###### Grades 10 to 12

- Advanced ICT
- ICT Life Skills
- Internet & Email
- STEM and Digital Education

##### 2. Technology Infrastructure and Investments in:

- Micro-computers
- Tablets
- ICT Labs
- Chrome Books
- Wired Schools

##### 3. Human Capacity Enhancement

- Mentoring Software
- E-Learning

##### 4. School Administration & State Support System

- Sala Software Development
- Wiki-school Software Procurement

### 3.14 Status of Efforts to Systematize NGS Implementation at Primary Level

Efforts to expand NGS programming to the primary school sector continued to accelerate during 2019, even though funding levels have remained frozen since 2018. The number of supported grade levels at Akhea Mahsei PS in particular increased so now more than half of the school's children are studying in New Generation Classrooms. In addition, Hun Sen Demonstration School became the first NGS primary school to achieve accreditation, even though it is not receiving any direct support from the Ministry. Most support is currently being provided by parents who recently agreed to raise voluntary support fees from \$65 per year to \$100. Teachers at both Angkor Ban and Akhea Mahasei PS, the newest primary schools in the NGS system, continued to make rapid progress in modernizing their educational practices. A summary of the developments at each of the four New Generation Primary Schools receiving support from parents and government is provided in Table 3.13 below.

**Table 3.13: Developmental Status of Primary Level New Generation Schools, 2018**

Province	School Name	Developmental Status
Kampong Cham	Demonstration School	<ul style="list-style-type: none"> <li>• First New Generation Primary School established in Cambodia.</li> <li>• The school recently received Accreditation in 2019 and is now qualified for official MoEYS support.</li> <li>• The school is highly operational and supports all Grades and Classes with NGS services including 21<sup>st</sup> Century Library, Student Clinic, ICT lab, and life skills classes.</li> <li>• Students have access to wonderful library facilities, study ICT for 2 hours per week and also receive intensive English.</li> <li>• The school is currently funded primarily through parental contributions, which are not enough to cover all operational costs.</li> <li>• Future prospects are highly positive and the school is well-regarded by parents.</li> </ul>
	Angkor Ban PS	<ul style="list-style-type: none"> <li>• This is a new site where investments just began at the end of 2017</li> <li>• Intensive Infrastructure investments were completed in 2019.</li> <li>• A new building is under construction to facilitate future expansion as parental demand starts to grow.</li> <li>• Grade coverage is complete (Grades 1 to 6).</li> <li>• Teacher recruitment has proven to be challenging due to the location of the school in a rural area.</li> <li>• There are plans to develop a New Generation Pre-school at the school, which will be the first of its kinds in the Kingdom.</li> <li>• The school does not yet have any provisions for ICT instruction and a special request for funds to MoEYS is currently pending.</li> <li>• Future prospects are highly positive and the school is increasingly well-regarded.</li> </ul>
Kampong Speu	Akhea Mahasei PS	<ul style="list-style-type: none"> <li>• New site where investments just began at the end of 2017</li> <li>• Intensive Infrastructure investments are on-going leading to grade coverage of half of the school (Grades 1 to 3). Grade 4 will join the New Generation School orbit in 2020.</li> <li>• A new building will be built at the school by MoEYS to ensure that New Generation School programming can be extended to all grades.</li> <li>• Demand for admission to the school is growing, requiring measures to limit open admission due to the lack of seats and the need to limit PCR levels to 36:1 or less.</li> <li>• The school does not yet have any provisions for ICT instruction and a special request for funds to MoEYS is currently pending.</li> <li>• Future prospects are highly positive and the school is well-regarded</li> </ul>
Svay Rieng	Svay Prahut PS	<ul style="list-style-type: none"> <li>• This school has been receiving investment from Child Fund for 3 years.</li> <li>• A recent external evaluation gave the school low marks due to poor leadership, undisciplined teachers, and very high PCR levels that appear to be out of control.</li> <li>• Investments by Child Fund were suspended in 2018 but may recommence when MoEYS starts direct funding of the nearby secondary school that was recently accredited.</li> <li>• Prospects for this school are still pending. The poor external evaluation was a wake-up call for the school that highlighted the need for changes in leadership.</li> </ul>

One important problem for the development of primary level New Generation Schools is underfunding. Currently, two schools (Angkor Ban and Akhea Mahasei PS) cannot qualify for accreditation because they do not have ICT facilities, as required under the NGS Operational Guidelines for accreditation. MoEYS is currently trying to identify alternative funding for ICT labs at both schools so that they can apply for accreditation on schedule in 2021.

### Sampling of Innovative Activities in New Generation Primary Schools



*Clockwise from Top: Administrators now routinely use technology as part of their regular work; teachers now also commonly use laptops & LCD projectors in their teaching; students line up to borrow library books from a 21<sup>st</sup> Century Library; Cooperative Learning is a key way of teaching at all grade levels.*

### 3.15 Study Trip to Thailand

For the fourth year, the NGS Central Office organized a study trip to Thailand to provide exposure for teachers to educational practices in a rapidly modernizing education system like Thailand. This year, the program brought 137 Cambodian educators in two separate trips to Buriram Province where there are some remarkable examples of cutting edge educational practice, particularly at *Lamplimat Pattana School*, which is one of the most famous schools in Thailand. This school has a revolutionary, non-competitive type of education with no formalized testing but yet scores in the

top 10% of all schools in Thailand. Cambodian educators also visited *Chulaphorn Science HS*, which is a public school supported by the Thai Royal Family. This school provides a completely different model of education, which is highly competitive and boasts very high levels of investment. Only 5% of the students that apply admitted.

Cambodian educators were able to ponder the merits and demerits of each model of education as they map out the direction of development in their own schools back in Cambodia. Because New Generation Schools are autonomous, Cambodian educators at these schools technically have the authority to steer their schools in different directions, as long as they can maintain their accreditation. This is intended to be the beauty of the NGS system where students receive autonomy to innovate but are also held accountable for their performance.

The majority of the 106 teachers who joined the study tour were from Angkor Ban PS, Akhea Mahasei PS, and Peam Chikong HS (see Table 3.14). This is the first time that these schools have ever participated in a study trip overseas and fulfills a promise to NGS teachers that there are special opportunities for their professional development. New teachers from older NGS schools such as Preah Sisovath, Hun Sen Kampong Cham HS, Prek Anchanh HS, and Prek Leap HS also joined as well as Board Members and two POE Directors (Kampong Cham and Kandal Province).



**Learning about Education in Neighboring Countries:** Cambodian educators listen to a presentation by Ajarn Wichian Chaiyabang, one of the most well-known education theorists in Thailand who also established Lamplaimat School (above); Teachers participate in a tour of Lamplaimat Pathana facilities to observe how teachers teach and the special relationship between teachers and students (below).

### About Lamplaimat Pattana School



Lamplaimat Pattana School has become well-known in Thailand as one of the country's leading progressive schools, and has been featured in numerous TV programmes and newspaper articles. Despite its policy of not selecting children based on ability, it achieved the best results of all of Buriram Province's 860 schools in the primary level nationwide standardized tests in 2010 and was in the top 15% of schools nationwide.

**Table 3.14: Participants in Study Trip to Thailand, 2019**

School/Province	Teachers	School Managers	Librarians	Officials	Total	Remarks
<b>Secondary Schools</b>						
Preah Sisovath HS	12	1	--	--	13	
Hun Sen Kampong Cham HS	8	1	--	--	9	
Prek Leap HS	12	3	--	--	15	
Prek Anchanh HS	14	3	--	--	17	
Peam Chikong HS	18	4	--	--	22	
Kok Pring Jr. HS	--	--	--	--	0	
<b>Subtotal</b>	<b>64</b>	<b>12</b>	<b>--</b>	<b>--</b>	<b>76</b>	
<b>Primary Schools</b>						
Demonstration School	7	--	--	--	7	
Akhea Mahasei PS	18	3	2	--	23	
Angkor Ban PS	17	2	2	--	21	
Svay Prahut PS	--	--	--	--	--	
<b>Subtotal</b>	<b>42</b>	<b>5</b>	<b>4</b>	<b>--</b>	<b>51</b>	
<b>Board Members</b>						
National Board	--	--	--	1	1	
Phnom Penh Board	--	--	--	3	3	
Kg Cham Board	--	--	--	2	2	
Kandal Board	--	--	--	2	2	
Kampong Speu Board	--	--	--	2	2	
Svay Rieng Board	--	--	--	--	--	
<b>Subtotal</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>10</b>	<b>10</b>	
<b>GRAND TOTAL</b>	<b>106</b>	<b>17</b>	<b>4</b>	<b>10</b>	<b>137</b>	

### 3.16 Parents' Night Shows

Parent Night Shows occurred across all schools in 2019, as in previous years. This year, students at Peam Chikong HS also joined in these festivities, as this was their second year in the program. Each year, New Generation Schools organize an exhibition by students to demonstrate to their parents what they are learning and how. It is for this reason that the exhibitions are known as a *Parents' Night Show*. The exhibitions occur in the late afternoon and evening so that working parents can visit the school without having to take time off from work. MoEYS provides a grant to each school to pay for

<b>BOX 6: Description of Parent Night Shows at All Schools, 2019</b>		
School	Projects	Highlights
Preah Sisovath HS	113	Incredibly well-organized with a contribution from parents of \$10,500 to put on the event. Schools from other parts of the city also joined the exhibition this year, which will hopefully influence teaching there when teachers/students return.
Hun Sen Kampong Cham HS*	65	The primary school joined the Parents' Night Event this year and made a major impression on parents. The POE Director of Kampong Cham made a rousing speech and there were emotional farewells by Grade 12 students who will be finishing this year.
Prek Leap HS	150	Prek Leap organized the most exhibitions of any school. This was the second time that the event had been organized and reached new heights with the number of stakeholders involved.
Prek Anchanh	52	Students and teachers at Prek Anchanh once again did a fantastic job of organizing a large number of exhibitions. The exhibit extended all the way into the evening with many students unwilling to go home. This year, student created a number of models of DNA, body organs, and other educational materials that will also be useful for classroom teaching in the future.
Kok Pring HS	52	Students made several amazing projects including a generator to produce electricity.
Peam Chikong HS	58	First-time event that attracted many parents and students from other schools. There was a heavy focus on STEM Projects at the school, which is surprising because this is the first year of programming at the school.
<b>Total</b>	<b>490</b>	--

materials and projects that students create.

The exhibitions created by students are directly linked to the constructivist and project method approaches used as part of the pedagogical upgrading at each New Generation School. Students must research their projects at the research stations provided in the 21<sup>st</sup> Century Libraries emplaced in each school. The exhibition atmosphere also helps to incentivize the creation of projects by students so that they can show and explain them to others. Students receive great praise and encouragement from their teachers, parents, and visitors. As universities increasingly place more and more focus on student portfolios to complement the information provided by examination scores, student projects such as these will likely grow in importance.

In 2019, students across six New Generation Secondary Schools in four provinces created 490 project exhibitions that were displayed during the months of June and July 2019 (see **Box 6**). Starting next year, primary schools will also be encouraged to organize similar exhibitions at their schools.

More information on the Parents' Night Show Exhibitions is provided at the following link: [https://www.facebook.com/kapeaction/posts/2818833118145226?\\_tn\\_=\\_K-R](https://www.facebook.com/kapeaction/posts/2818833118145226?_tn_=_K-R).

### Highlights from the Parents' Night Shows in 2019



### 3.17 Completion of New Generation Pedagogical Research Center

One of the key achievements of the fiscal year has been the program's ability to create a new Master's Degree Program (in Mentoring) at the National Institute of Education that will support New Generation School programming. MoEYS, with KAPE assistance was able to set up the entire program, including the construction of a new building, within a 9-month period, which is truly remarkable given the many bureaucratic obstacles to achieving this objective, as requested by the Minister of Education, Youth, & Sport. MoEYS originally proposed expanding NGS programming to the Teacher Education Sector as an important means to facilitate the expansion and sustainability of NGS programming. The Ministry of Economy and Finance (MoEF) gave a green light to MoEYS in November 2018 to move forward with creating a specialized teacher education center that could support efforts to train teachers in NGS principles of ethics and mentoring effectively. This funding support has also been greatly supplemented with funding from both *Child Fund Australia* and the *Franks Family Foundation*.

The proposed center, now called the *New Generation Pedagogical Research Center*, has been emplaced at the National Institute of Education and officially opened on schedule in mid-September 2019 with 25 Master of Education degree candidates in place as well as seven faculty members, and one visiting professor. The training program at the center has been designed to be intensive and can be completed in one year because candidates study full-time, 5 days per week. The Ministry has allowed candidates to receive a one-year leave of absence from their schools while keeping their state salaries during the study program, thereby enabling them to study full time. The Center's graduate program has several unique features including a modular study program, seminar style settings with a candidate to instructor ratio of 12 to 1, and a 3-month practicum that has intensive support from instructors. ICT learning has a prominent role in the program including a new mentoring software called *Observic* that will be an important feature of the education brand of the Center.

The following activities describe what has been done to establish the *New Generation Pedagogical Research Center* during the 2019 Fiscal Year. This includes the following:

1. **Processing and Release of Funds:** Funds from MoEYS arrived in May 2019 and



↑ **Modern Style Education:** Master Degree candidates at the New Generation Pedagogical Research Center enjoy seminar style classrooms that enable small group discussions and frequent interaction with instructors.

funds from other development partners (Child Fund and Franks Family Foundation) have been available since October 2018. KAPE has created an account for the center and account codes to assist in its financial administration.

2. **Approval of the Prakas that Establishes the Center.** The Minister has now signed the legal document establishing the center and its *Master's Degree Program in Mentoring*.

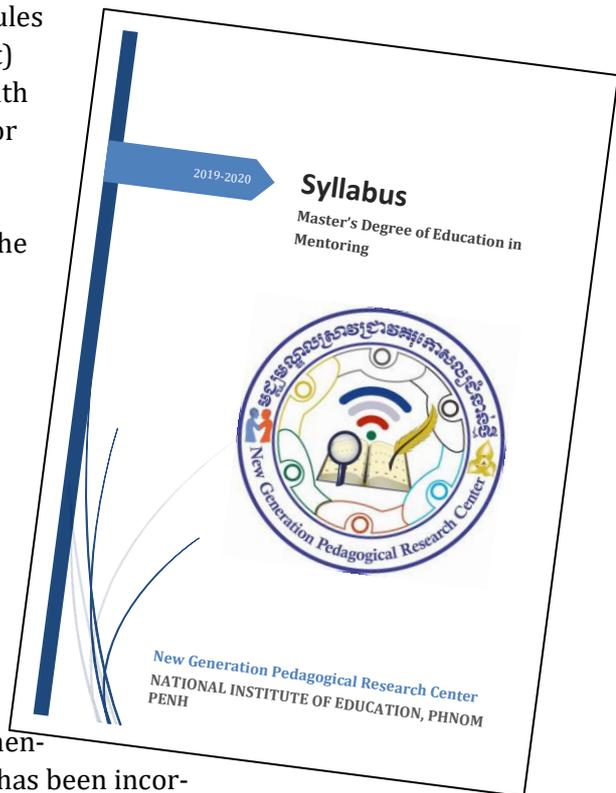
3. **Development of a Curriculum Framework:** NGS Advisers have been intensively working on the development of a curriculum framework and Syllabus that defines the content of the Master's Degree Program. The framework includes 4 streams of content including (i) Professional Ethics & Mentoring; (ii) English for Educational Research; (iii) ICT in Education; and (iv) General Methodological Systems & Principles. The framework includes 30 Modules of one credit each (15 hours per credit) inclusive of a Mini-Thesis and a 3-month Practicum (15 credits). Total credits for the award of the Master's Degree is 45 credits as per the requirements of the Cambodia Accreditation Committee. The Curriculum Framework and definition of content, educational objectives, assigned readings, and project work/assignments is now fully completed.

4. **Development of a Practicum Framework:** A practicum framework involving 3-month placements at Preah Sisovath HS and Prek Leap HS has been completed. The framework lays out an Overview and Description of the practicum, Practicum Objectives; Guidelines for Implementation and Evaluation. This document has been incorporated into the overall Curriculum Framework of the Center's degree program.

5. **Completion of Building Designs:** An architect was engaged to design a new modern facility that will facilitate 21<sup>st</sup> Century Learning. This includes a design that provides for two seminar rooms, a lobby cum library, a study room, outside gardens that will facilitate group work, staff offices, and a large meeting room that can accommodate up to 30 persons.

6. **Building Emplacement:** In collaboration with NIE, a physical site for the new center was identified on the NIE campus. Unfortunately, the proposed building was so dilapidated that it had to be removed and replaced by a new structure. Construction started in May 2019 and was completed in October 2019 (5 months). While the Center building was being completed, degree candidates borrowed two classrooms from the National Institute of Education for a 6-week period at the start of the program.

7. **Staff Recruitment:** KAPE set up a selection committee employing its own systems to ensure transparent and consensual staff recruitment. The NGS Board agreed to allow KAPE to staff the Center in this way in order to expedite the opening of the Cen-



ter by September 2019, as per the Minister's request. All 7 staff members were recruited including two individuals with PhD degrees and five with Master Degrees.

8. **Staffing Structure:** KAPE has completed the documentation of job descriptions for all positions.
9. **Trainee Announcements:** An electronic application form with all requirements has been developed and will be activated in mid-June to recruit 25 candidates who will study for the Master's Degree program.

## EXPANDING NEW GENERATION SCHOOL PROGRAMMING TO THE NATIONAL INSTITUTE OF EDUCATION IN PHNOM PENH



The *New Generation Pedagogical Research Centre* is an autonomous unit under the nominal supervision of the National Institute of Education. It represents a new hybrid development model whereby the Ministry of Education, Youth, and Sport has asked a non-state actor (KAPE) to set up and manage the Centre on behalf of the Ministry. This organizational arrangement is highly stimulative of educational innovation and free-thinking that is essential to drive educational reforms. It is a Public Private Partnership between the Ministry and a non-state actor *par excellence*.

The Ministry's desire to involve KAPE in managing the Centre means that it can seek outside funds in the form of research grants, educational pilot funding, and other kinds of contract work that will provide some degree of independence and financial self-sufficiency to the Centre. This will help to reduce its degree of dependence on funding from the government. Indeed, the Centre has already received a competitive research grant from *The Asia Foundation* of \$15,000 to assess the effectiveness of teacher mentoring in schools under the New Generation School System.



The Centre will also be organizing Cambodia's first International Conference on teacher mentoring that will engage educators throughout the ASEAN Region and beyond. The *Cambodia International Mentoring Educators Conference* will be hosted by NIE and will be an annual event to bring attention to the latest research and experiences in teacher mentoring. The conference will be a great honor for Cambodia to host and will help to finally upgrade the role of the National Institute in the education sector. These are the kinds of innovations that MoEYS had intended for the Centre to drive and it is quickly fulfilling this role.



← A view of the Centre at NIE from the front provides a modern contrast to surrounding buildings (above); Bright modern environments in the Centre lobby encourage small discussions and group work throughout the building (middle); A seminar meeting of 12 Master's Degree candidates with their instructor in one of the specially designed seminar rooms in the Centre (below).

## 4. PROGRESS ON OFFICIAL INDICATORS

The NGS Program is required to report on 20 official performance indicators across three outputs to the Ministry of Education, Youth, & Sport each year. Of these 20 indicators, the program has so far been able to report that 80% have been fully achieved (see Table 4.1). One indicator relating to the achievement of a standard of 5% dropout or less was not achieved by several schools during the current year, although the overall rate of reported dropout across all schools was below 4%. Nevertheless, this indicator has still been rated as ‘not achieved’ at this time. To be sure, it should still be noted that the national dropout rate at secondary school level is 17%, which is quite high in comparison to the situation at most New Generation Schools. In the future, program planners will seek to ensure that all schools are registering dropout rates in line with the standard. The remaining indicators are either partially achieved, still in progress, or pending.

A complete accounting of progress on performance indicators is provided in **Annexes 1 and 2** of this document. In this respect, Annex 2 includes metrics not required for reporting to MoEF but which nevertheless provide additional measures of operational success such as tertiary transition rates, pass results on the Bac II Examination, and the number of international medals received, among others.

**Table 4.1: Summary of Progress on Official Performance Indicators, 2019**

Output	Total Indicators	Achieved	Partially Achieved	Not Achieved	Pending/In Progress
<b>Output 1:</b> Implementation of Expanded Investment Planning at 5 Existing NGS Sites (Secondary) and 3 Existing Primary School Sites)	12	8	1	1	2
<b>Output 2:</b> Completion of a successful NGS National Survey	1	1			
<b>Output 3:</b> Development of a National NGS Framework & Social Equity Fund with replication in at least 5 new sites	7	7			
<b>Total</b>	<b>20</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>%</b>	<b>100%</b>	<b>80%</b>	<b>5%</b>	<b>5%</b>	<b>10%</b>

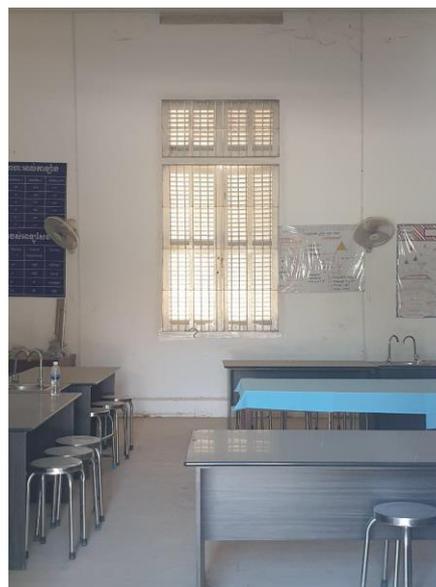
## 5. CHALLENGES GOING FORWARD

The NGS Program identified eight key challenges going forward. Some of these are challenges from earlier reports that continue to be true while others are new issues that need consideration by MoEYS Planners.

### 5.1 The Status of Sisovath HS

Although Sisovath New Generation School continues to demonstrate outstanding performance, the school has been unable to unite back into one institution due to the refusal of teachers at the normal school to stop extorting money from students for private classes. Prohibitions against the practice of student extortion are a major requirement to be a New Generation School and this point continues to be a non-negotiable issue among teachers at the normal school.

However, there have been other efforts to try to raise standards at the normal school by providing improved facilities similar to those used in the NGS part of the school in the hopes that teachers there would use them. A brand new science lab costing the Ministry \$10,000 to establish was, therefore, provided to the normal school in 2018. Until now, however, neither the teachers nor the management at the normal



school has shown any leadership in utilizing these facilities and they remain locked and used to this day. Science teachers at the normal school either do not know how to use the labs or are too busy with their private classes to take much interest. These issues demonstrate how intractable the problem of bringing the two schools back together is, barring major changes in leadership or personnel at the normal school. Perhaps the best long-term solution to this problem is to stop admitting students to Grade 7 in the normal school starting from 2020 so that in 6 years, there would be no students for teachers to teach private classes to, leading many teachers to move to other schools. This then would open the path to re-uniting the school into one school.



**Locked and Unused:** A science lab provided to the normal school at Sisovath has remained locked and covered in dust since it was provided to the normal school in 2018. In spite of complaints that they have no modern labs, teachers at the normal school seem to have little interest in actually using such facilities when provided.

### 5.2 Absorbing Teachers at Prek Leap & Prek Anchanh HS into NGS Programming

Prek Leap and Prek Anchanh HS are schools where the eventual goal is comprehensive conversion of all grade levels to NGS programming. Currently, both schools are expanding their NGS programming from Grade 9 to Grade 10 in the 2019-20 academic year.

Unlike Sisovath HS, which is a school in a school model, all teachers and classes must join the program with each successive grade level expansion. However, with each successive expansion, there is a growing number of teachers who are increasingly sidelined because their area of expertise does not match the need (e.g., Prek Leap HS has almost 10 sports teachers) or they do not want to join the program due to their interest in maintaining their private classes (which are prohibited under NGS guidelines). As more and more teachers are sidelined on the way to full coverage of all grades, there will arise a problem where there are many teachers who have no classes to teach but who are still collecting a salary from the government (see Table 4.1 below). Currently, there are 105 teachers at both schools or 48% of the total who are not part of NGS programming. Prek Leap is trying to address this problem by encouraging teachers who do not want to join the program or who have no relevant skills to transfer to other schools and indeed over 15 have done so. A similar situation is taking shape at Prek Anchan HS. Within three years time when the program will reach Grade 12 at both schools, MoEYS will need to make some hard decisions about what to do with residual teachers who are not qualified to teach in an New Generation School or who do not wish to teach in such schools.

**Table 5.1: Residual Teachers at Prek Leap & Prek Anchan HS as NGS Programming Expands**

School	A Current Number of Teachers (All Grades)	B Teachers in Grades 7-9 (2018-19)	C Current Teachers Applying to Join NGS (2019)	D Anticipated Teachers in Grades 7 to 10 (2019-20)	E Residual Teachers Anticipated in 2019-20 (A – D)
Prek Leap HS	105	35	1	58	46
Prek Anchan HS	113	37	3	51	59
<b>Total</b>	<b>218</b>	<b>72</b>	<b>4</b>	<b>109</b>	<b>105</b>

### 5.3 Limiting Admission to Students with Basic Numeracy & Literacy Skills

One of the things that has been very hard to communicate to parents and local authorities is that *New Generation Schools are not for everyone*. As high investment schools, the government seeks to achieve a higher academic standard focusing on 21<sup>st</sup> Century skills and is generally for students aiming to enter a university or tertiary education track. NGS is not for students who have not yet acquired basic literacy and numeracy skills, at least at the secondary school level. It is an assumption that students already have these skills when they enter Grade 7. Nevertheless, many New Generation Secondary Schools are reporting that there are a large number of students from the local primary schools who seek to move into a New Generation School but who are functionally illiterate. In fact, many of them failed an Entrance Examination at the start of the school year that assesses basic numeracy and literacy but who are usually admitted anyway to meet certain quotas (see Table 5.2). Such under-qualified students are not able to benefit from the available educational services that focus on science lab work, ICT, projects, etc. because they can barely read and write. Indeed, it may even be emotionally damaging to a student’s self-image to be placed in an educational environment for which they are so woefully unprepared. This is not to say that such students are not worthy of assistance and support, only that an NGS setting with its high investment is probably not the best place in which to do so.

In order to address very fundamental needs of basic literacy and numeracy, it is not necessary for MoEYS to make the very high investments that are required at a New Generation School. Indeed, addressing such needs in an NGS setting is highly inefficient from an investment perspective. Nevertheless, many members of the public have a very naïve understanding of educational standards, which tend to be unitary in nature. There is little understanding of the difference between a ‘minimum’ and a ‘maximum’ standard. As a result, there are often complaints and political pressure for New Generation Schools to look the other way with regards to underperforming students or those who are totally unprepared to do the work required. Such political pressures work to undermine the very high standards at a New Generation School and make it very difficult for teachers to respond to students’ needs when there are such vast ability differences between students. At the same time, when many such students fail to do the required work, the very same people who insist on the entry of under-qualified students, then question why so many of them failed academically after such high investment.

In order to respond to these problems, NGS programmers have made the following suggestions:

1. **Educate the Public:** New Generation Schools are now using the Infomercial recently produced by MoEYS to help local communities and primary schools better understand the expectations of a New Generation School, particularly the need for students who already have basic numeracy and literacy skills and who are highly motivated.
2. **Enforce Basic Literacy & Numeracy Requirements:** Admittance to a New Generation School should be limited to those who can pass the Entrance Examination. Quota systems that do not consider basic literacy and numeracy should be discarded.
3. **Identify Alternative Methods of Support for Functionally Illiterate Students:** Students who do not qualify for entry to a New Generation School should be referred to other schools in the catchment area, which can better focus on basic skills. In cases where such schools do not exist, MoEYS should consider helping local primary schools to add a Grade 7 class so that such students can continue their studies in a more appropriate setting.
4. **Strategic Support for Schools with a Grade 1 to 12 Configuration:** The best place to ensure that children acquire basic numeracy and literacy skills is at the beginning of the education cycle, not the middle of the cycle (i.e., Grade 7). Thus, MoEYS investment should seek to support schools that can provide high quality support to children from the very beginning of the education cycle (i.e., Grade 1). So far, only Hun Sen Kampong Cham HS and Kok Pring HS are situated in compounds with primary schools close by where children can be reached from the very beginning of the edu-



**Educating the Public about NGS Expectations:** The Director of Prek Leap HS meets with a local primary school’s students, parents, and teachers to inform them about the high expectations of studying in an NGS setting including high motivation, willingness to work hard, and basic numeracy & literacy.

education cycle. Future investments should also consider such configurations wherever possible.

5. **Hold Primary Schools Accountable:** MoEYS should make clear to primary schools that simply passing children along from grade to grade without acquisition of curricular standards will not be tolerated. When such accountability is enforced, schools will be less likely to send children who are functionally illiterate to Grade 7.

**Table 5.2: Test Results among Students Applying for Entry to New Generation Schools (2019-20)**

Name of School	Total Seats	Total Applicants Tested	Total Passing (50% or more)	%	Total Applicants Accepted	%
<b>Secondary Level</b>						
Preah Sisovath HS	234	1,264	148	12%	243	19%
Hun Sen Kg Cham HS	65	96	48	50%	48	50%
Prek Leap HS	287	395	209	53%	208	53%
Prek Anchanh HS	293	378	248	66%	281	74%
Peam Chikong HS	220	273	233	85%	233	85%
Kok Pring Jr HS	138	163	114	70%	114	70%
<b>Subtotal</b>	<b>1,237</b>	<b>2,569</b>	<b>1,000</b>	<b>39%</b>	<b>1,127</b>	<b>44%</b>
<b>Primary Level</b>						
Demonstration School	72	105	72	69%	72	69%
Akhean Mahasei PS	180	243	163	67%	163	67%
Angkor Ban PS	40	12	12	100%	12	100%
<b>Subtotal</b>	<b>292</b>	<b>360</b>	<b>247</b>	<b>69%</b>	<b>247</b>	<b>69%</b>
<b>Total</b>	<b>1,529</b>	<b>2,929</b>	<b>1,247</b>	<b>44%</b>	<b>1,374</b>	<b>47%</b>

#### 5.4 Introducing Voluntary Parental Contributions

One of the key strategies to sustain NGS programming is to request parents to make fixed contributions of a voluntary nature after the school's high standard has been validated through an accreditation process. Usually, all services are completely free during the first three years of investment to first demonstrate to parents that the educational standards at the school are high and that this represents true value in return for financial support. As NGS reforms completed their 4<sup>th</sup> year of implementation, four schools achieved NGS accreditation, which entitles them to negotiate voluntary parental contributions of a standardized nature.



**Parental Financial Support:** Parents at Hun Sen Kampong Cham HS meet in the school's new auditorium to approve a school request to increase voluntary support fees from \$65 to \$100 a year

For the first time, Preah Sisovath HS has successfully been allowed to negotiate parental fees with about 97% of parents willing to provide such support (see Table 5.3). Given the crush of demand for entry into the school, this was not a difficult 'sell' for most parents and in fact the agreed fees are much

cheaper than they would pay at the normal school (as a result of unregulated private classes) or a private school.

Hun Sen Kampong Cham HS and the Demonstration School were the first schools to negotiate financial support fees from parents in the NGS system and there has similarly been a great willingness to provide these very reasonable fees, albeit less than could be negotiated at Sisovath HS. In 2019, parents allowed the schools to increase the support payment from \$65 to \$100 per year. For poorer parents comprising about 22% of the enrollment, no fees are being charged.

Kok Pring HS was just accredited in July-August 2019 and it is currently still negotiating voluntary support fees with parents. These fees will be fixed at \$65 per year, which is the minimum amount specified in the NGS Operational Guidelines. Because of its rural setting, school management believes that only about half of the parents will be able to provide financial support to the school. In the meantime, the school continues to receive support from Child Fund until parental fees and support from MoEYS can be arranged, probably sometime in 2020.

**Table 5.3: Negotiation of Voluntary Parental Support Fees at New Generation Schools, 2019**

School	Negotiated Fees	Percentage of Parents Paying	Estimated Income in 2019-20
1. Preah Sisovath HS	\$280/student	97%	\$250,000
2. Hun Sen Kampong Cham HS	\$100/student	78%	\$66,000
3. Demonstration School	\$100/student		
4. Kok Pring HS	\$65/student	50% (est.)	N/A
5. Prek Leap HS	Planned for 2020	N/A	N/A
6. Prek Anchanh HS	Planned for 2020	N/A	N/A
7. Angkor Ban PS	Planned for 2021	N/A	N/A
8. Akhea Mahasei PS	Planned for 2021	N/A	N/A
9. Peam Chikong HS	Planned for 2022	N/A	N/A
10. Svay Prahut PS	Planned for 2022	N/A	N/A

## 5.5 ‘Teaching to Think’ or ‘Teaching to the Test’

As student cohorts within operating New Generation Schools approach Grade 12, there is heightened interest among educators and the public to see how well NGS students perform on the *Bac II* Exit Examination. These expectations have put New Generation Schools in a difficult situation because much of what is taught in such schools (ICT, Coding, lab work, etc.) is not covered on the examination. Nevertheless, the pressure on New Generation Schools to perform well on the examination incentivizes activities to ‘teach to the test’ rather than necessarily teaching students to think critically. ‘Teaching to the Test’ is a problem in many countries and is not unique to Cambodia. The effect that high stakes examinations have on how teachers teach is known as the ‘backwash effect’ and can often undermine efforts to refocus teaching on critical thinking, particularly if an examination is focusing on lower order thinking skills.

There is no denying that it is imperative for New Generation Schools to perform well on the national exit examination in order to justify their effectiveness as high quality educational institutions and justify continued investment. The NGS program has sought a middle path to address this dilemma by insulating the teaching practices in Grades 7 to

11 from 'teach to the test' pressures but budgeting intensive support for activities to prepare Grade 12 students to take the examination. This includes organizing mock examinations, improving study skills, and incentivizing teachers to help their students to get a good result.

### 5.6 The Status of 'Unsupported' But 'Accredited' New Generation Schools

Another challenge facing NGS planners relates to the status of schools that have been accredited but receive no direct support from MoEYS. During 2019, two non-supported schools were accredited by the National Board because both had achieved compliance with NGS academic standards. These two school schools include Kok Pring HS in Svay Rieng and the Hun Sen Demonstration Primary School in Kampong Cham. Kok Pring HS is currently supported entirely by funding from Child Fund Australia while the Demonstration School is supported mainly by parental contributions, which are generally used to support teacher incentives. To be sure, the Demonstration School also benefits from MoEYS funding support to the adjacent Hun Sen Kampong Cham HS in which many educational facilities are used in common including the 21<sup>st</sup> Century Library, the Student Clinic, the Auditorium, the Model Farm, and some classroom facilities. Nevertheless, according to the official policy, schools that receive accreditation are eligible for government funding support for those parents who cannot afford to make any financial contributions to the school. Due to the very tight funding situation for 2020, it was not possible to include even a nominal contribution from MoEYS for the purpose of supporting these schools, even though they should be receiving some support according to approved policy guidelines. MoEYS will need to consider how it can best resolve this situation. Each school has requested an annual MoEYS contribution of approximately \$15,000 to compensate for the inability of about 200+ parents to make any contribution to the school.

### 5.7 Protecting the NGS Brand

One of the most important achievements of NGS programming has been the creation of a meaningful NGS brand name. When a school calls itself a *New Generation School*, one can be confident that the school has certain very high standards including longer hours of learning, no teacher corruption, modern library and laboratory facilities, regular access to ICT facilities, and other important features that are outlined in the Accreditation Criteria of the NGS Operational Guidelines. It is critically important that MoEYS officials maintain the meaningfulness of this brand by ensuring that all schools must go through an accreditation process before they can call themselves a New Generation School; at the very least, a school must have qualified for 3 years of investment to become a New Generation School. Unfortunately, there are now several schools in different provinces that are calling themselves New



**What Is a New Generation School? :** A normal public school in Kampong Cham advertises itself to parents as a New Generation School.

Generation Schools. Because many provincial education officials still do not properly understand the NGS Operational Guidelines, there is not the concern that there should be when schools advertise themselves as New Generation Schools without authorization. While it is certainly a good thing that some schools aspire to be a New Generation School, provincial officials should point them in the right direction about how to apply to become a New Generation School and follow the procedures properly.

### 5.8 Activity Levels among Provincial Boards

According to the National Policy Guidelines governing New Generation Schools, all schools receiving NGS investment will be overseen by both a National Oversight Board and Provincial Oversight Board. The Provincial Oversight Boards have four major functions as summarized in Box 7. While 5 Provincial Boards have now been created in each province/municipality with a New Generation School, their level of activity and leadership still has many limitations and meetings often have to be initiated by KAPE rather than the Province. KAPE has developed a plan to provide more capacity building support to each Provincial Oversight Board in order to ensure that they can provide the needed monitoring support that will lead to continued accreditation, adequate staffing, and financial probity. The latter function is particularly important as New Generation Schools start to receive tens of thousands of dollars in financial support from parents that will require accountable management.

#### **BOX 7: Policy Guidelines Governing the Role of Provincial Oversight Boards**

**Guideline 3.2:** *MoEYS will also allow the creation of Provincial Oversight Boards that should complement the functions of the National Oversight Board. Provincial Oversight Boards will have four key functions:*

- (i) Review and Approval of monthly expenditure requests submitted by schools (see **Annex 14**);
- (ii) Local teacher recruitment and issue of appointment letters to staff a New Generation School;
- (iii) Monitoring of Process Indicators using the assessment form provided in **Annex 6**; and
- (iv) Nominating schools to be New Generation Schools, which will then be reviewed by the National Oversight Board and either accepted or rejected as an appropriate site for investment.

## 6. CONCLUSIONS AND THE WAY FORWARD

***Sustainability Prospects:*** The New Generation School Program completed its fourth year of funding support by MoEYS with KAPE continuing to play the role of implementer. As NGS Reforms enter their fifth year (in 2020), NGS programming is entering a new period of stability and growing maturity as several schools become increasingly self-sufficient due to increasing parental support. The design of NGS Reforms that condition parental support on high performance is beginning to demonstrate in actual terms the merit of the program's sustainability strategy. In this respect, the formal accreditation process orchestrated by the National Oversight Board validates performance each year and gives a concrete assurance to parents that schools are meeting high standards set by MoEYS. Currently, 40% of supported schools have now achieved a rigorous accreditation of expected standards and have either already negotiated parental support fees with local communities or are in the process of doing so. Sustainability of high standards at these schools is now assured while at the same time reducing the dependence on financial support from MoEYS by a significant margin. A further roll-out of this strategy is on schedule with 60% of schools on track for accreditation in 2020, 80% in 2021, and 100% in 2022.

***Technical Sustainability:*** The expansion of NGS programming into the tertiary sector with the successful establishment of the *New Generation Pedagogical Research Center* at the National Institute of Education promises another form of sustainability for future NGS programming. While the increasing rate of parental contributions promise more financial independence, the certification of school-based mentors by NGPRC with a Master's Degree in mentoring will help to ensure that each New Generation School will also be less dependent on technical support provided by KAPE. This new development is a major milestone in NGS programming and further buttresses efforts to ensure sustained operation in the future.

***Increasing Educational Demand as a Metric of Success:*** While sustainability measures become more robust, demand for entry into New Generation Schools continued to explode at currently supported sites and far exceeds the places available, demonstrating the high quality standards of these schools and acceptance by the general public. Indeed, a large part of the new demand for NGS enrollment is from students who are leaving the private sector and opting to re-enter the public school system. This high demand is another indicator of the success of NGS programming, which provides high educational standards at a reasonable cost (or no cost) to recipients. At the start of the 2019-20 school year, schools reported that they could only accept 47% of the students applying for entry while maintaining their pupil class ratios at 36 to 1 or less. It is unlikely that there would be this high level of demand if parents and students did not think that quality standards were high. Tellingly, the rejection rate was highest at the most established New Generation Schools, where reputations have been more firmly established.

***Other Metrics of Success:*** New Generation Schools also demonstrated success on other performance measures such as high pass rates on the national *Bac II Examination*, a high rate of entry into tertiary education institutions among graduates (88%),

low rates of dropout (3.7%) especially when compared to the national average, and numerous awards in international competitions. This data indicates that MoEYS investments in such schools, albeit high, are exceeding expectations on all metrics.

Finally, it should be noted that the New Generation Schools Reforms have also achieved a measure of legal staying power through the development of an approved policy framework as well as operational guidelines. The Royal Cambodian Government made the momentous step of incorporating NGS reforms into the Rectangular Development Strategy, which brings the recognition of NGS reforms to a whole new level. The Prime Minister himself has recently acknowledged these reforms and strongly endorsed their continuation. At the same time, representatives from the National Parliament have also endorsed these reforms, which bodes well for their continuation and possible expansion.

## ANNEX 1: Indicator Reporting Table for MoEYS/MoEF

Target	Means of Verification	Risks & Assumptions	Achievement to Date																															
<b>Output 1: Implementation of Expanded Investment Planning at 5 Existing NGS Sites (Secondary) and 3 Existing Primary School Sites)</b>																																		
<b>Indicator 1.1:</b> Establishment of 5 New Generation Schools at Secondary Level (MoEYS-supported only) by 2019.	<ul style="list-style-type: none"> <li>Project Reports</li> </ul>	<ul style="list-style-type: none"> <li>School managers, teachers, and local communities demonstrate commitment to supporting the principles of NGS implementation.</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved</b></li> <li>Sisovath HS (in operation)</li> <li>Hun Sen Kampong Cham HS (in operation)</li> <li>Prek Leap HS (in operation)</li> <li>Prek Anchanh HS (in operation)</li> <li>Peam Chikong HS (in operation)</li> <li>Kok Pring Jr. HS (in operation)<sup>2</sup></li> </ul>																															
<b>Indicator 1.2:</b> Three different NGS Models are developed and successfully piloted by 2018	<ul style="list-style-type: none"> <li>Project Reports</li> </ul>	<ul style="list-style-type: none"> <li>The prototype models developed by KAPE are feasible and relevant to the Cambodian context.</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b></li> <li>New School Prototype (Kampong Cham – 2 schools)</li> <li>School in a School Prototype (Phnom Penh – 1 school)</li> <li>Whole School Prototype (Phnom Penh – 1; Kandal – 1; Kampong Cham – 2; Svay Rieng – 2; and Kampong Speu – 1)</li> </ul>																															
<b>Indicator 1.3:</b> Accreditation of 6 New Generation Schools at Secondary Level within the period 2016-2021.	<ul style="list-style-type: none"> <li>Accreditation Report Scores</li> </ul>	<ul style="list-style-type: none"> <li>The Accreditation Subcommittee can administer accreditation protocol tools effectively and reliably.</li> </ul>	<ul style="list-style-type: none"> <li><b>In Progress</b></li> <li>Sisovath HS (Accredited in 2017, 2018, and 2019)</li> <li>Hun Sen Kampong Cham HS (Accredited in 2017, 2018, &amp; 2019)</li> <li>Prek Leap HS (Planned for 2020)</li> <li>Prek Anchanh HS (Planned for 2020)</li> <li>Peam Chikong HS (Planned for 2021)</li> <li>Kok Pring Jr. HS (Accredited in 2019)</li> </ul>																															
<b>Indicator 1.4:</b> At least 95% of teachers each year are compliant with Teacher Development Framework expectations including the completion of Career Path Plans each year.	<ul style="list-style-type: none"> <li>Classroom observation results</li> <li>Teacher conference records</li> <li>Quarterly Reports</li> </ul>	<ul style="list-style-type: none"> <li>Teachers are motivated to change their learning styles to accommodate the use of new pedagogies in their teaching</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved for 2018 &amp; 2019</b></li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">School</th> <th colspan="3">Secondary School Level</th> </tr> <tr> <th>Total Teachers</th> <th>Teachers Completing Career Path Plans</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>65/37f</td> <td>65</td> <td>100%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>28/19f</td> <td>28</td> <td>100%</td> </tr> <tr> <td>Prek Leap HS</td> <td>35/21f</td> <td>32</td> <td>91%</td> </tr> <tr> <td>Prek Anchanh HS</td> <td>37/17f</td> <td>36</td> <td>97%</td> </tr> <tr> <td>Peam Chikang HS</td> <td>22/14f</td> <td>22</td> <td>100%</td> </tr> <tr> <td><b>Total</b></td> <td><b>187/108</b></td> <td><b>183</b></td> <td><b>98%</b></td> </tr> </tbody> </table>	School	Secondary School Level			Total Teachers	Teachers Completing Career Path Plans	%	Preah Sisovath HS	65/37f	65	100%	Hun Sen Kg Cham HS	28/19f	28	100%	Prek Leap HS	35/21f	32	91%	Prek Anchanh HS	37/17f	36	97%	Peam Chikang HS	22/14f	22	100%	<b>Total</b>	<b>187/108</b>	<b>183</b>	<b>98%</b>
School	Secondary School Level																																	
	Total Teachers	Teachers Completing Career Path Plans	%																															
Preah Sisovath HS	65/37f	65	100%																															
Hun Sen Kg Cham HS	28/19f	28	100%																															
Prek Leap HS	35/21f	32	91%																															
Prek Anchanh HS	37/17f	36	97%																															
Peam Chikang HS	22/14f	22	100%																															
<b>Total</b>	<b>187/108</b>	<b>183</b>	<b>98%</b>																															

<sup>2</sup> Funded by Child Fund.

Target	Means of Verification	Risks & Assumptions	Achievement to Date																																																																																																				
<b>Indicator 1.5:</b> Bac II Exam Performance exceeds National Average at All Schools each year.	<ul style="list-style-type: none"> <li>Test Score Results</li> </ul>	<ul style="list-style-type: none"> <li>The design of questions on the Bac II Examination captures the higher order thinking skills that teachers in NGS sites are focused on teaching.</li> </ul>	<p><b>Achieved for 2019</b></p> <ul style="list-style-type: none"> <li>Hun Sen Kampong HS achieved an 84% Pass Rate (16% above National Average and Highest Scoring School in Kampong Cham Town)</li> <li>Preah Sisovath HS achieved a 94% Pass Rate (26% above National Average)</li> </ul>																																																																																																				
<b>Indicator 1.6:</b> A total of 227 renovated NGS facilities are completed by the end of 2019 including NGS Classrooms, Science Labs, ICT Labs, etc.	<ul style="list-style-type: none"> <li>Site Visit Reports</li> <li>Annual Reports</li> </ul>	<ul style="list-style-type: none"> <li>Funds are released on time in order to hire contractors according to procurement guidelines and complete the work in a timely manner.</li> <li>Contractors can follow the specifications for new facilities that are modern and of high quality.</li> </ul>	<p><b>Partially Achieved: 85% of Proposed Facilities Completed</b></p> <p><i>Proposed and Completed Facilities in NGS Sites, FY2016 to FY2018 (MoEYS Funded Only)</i></p> <table border="1"> <thead> <tr> <th>Investment Area</th> <th>Number Proposed</th> <th>Number Established</th> <th>%</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Secondary School Sector (5 schools)</b></td> </tr> <tr> <td>NGS Classrooms</td> <td>94</td> <td>83</td> <td>88%</td> </tr> <tr> <td>Science Labs</td> <td>41</td> <td>39</td> <td>95%</td> </tr> <tr> <td>ICT Labs*</td> <td>13</td> <td>11</td> <td>85%</td> </tr> <tr> <td>21<sup>st</sup> Century Libraries*</td> <td>5</td> <td>5</td> <td>100%</td> </tr> <tr> <td>Auditorium</td> <td>5</td> <td>3</td> <td>60%</td> </tr> <tr> <td>Office/Meeting/Faculty Rooms</td> <td>13</td> <td>13</td> <td>100%</td> </tr> <tr> <td>Canteen*</td> <td>5</td> <td>1</td> <td>20%</td> </tr> <tr> <td>Student Clinic*</td> <td>5</td> <td>2</td> <td>40%</td> </tr> <tr> <td>Youth Centers*</td> <td>4</td> <td>3</td> <td>75%</td> </tr> <tr> <td><b>Total Facilities</b></td> <td><b>185</b></td> <td><b>160</b></td> <td><b>86%</b></td> </tr> <tr> <td colspan="4"><b>Primary School Sector (3 schools)**</b></td> </tr> <tr> <td>NGS Classrooms</td> <td>45</td> <td>38</td> <td>84%</td> </tr> <tr> <td>Science Labs</td> <td>0</td> <td>0</td> <td>0%</td> </tr> <tr> <td>ICT Labs</td> <td>2</td> <td>0</td> <td>0%</td> </tr> <tr> <td>21<sup>st</sup> Century Libraries</td> <td>2</td> <td>2</td> <td>100%</td> </tr> <tr> <td>Office/Meeting/Faculty Rooms</td> <td>2</td> <td>2</td> <td>100%</td> </tr> <tr> <td>Auditorium</td> <td>1</td> <td>0</td> <td></td> </tr> <tr> <td>Canteen</td> <td>--</td> <td>--</td> <td>--</td> </tr> <tr> <td>Student Clinic</td> <td>--</td> <td>--</td> <td>--</td> </tr> <tr> <td>Youth Centers</td> <td>--</td> <td>--</td> <td>--</td> </tr> <tr> <td>Toilet Facilities</td> <td>13</td> <td>10</td> <td>77%</td> </tr> <tr> <td><b>Total Facilities</b></td> <td><b>65</b></td> <td><b>52</b></td> <td><b>80%</b></td> </tr> <tr> <td><b>Facilities at All Levels</b></td> <td><b>250</b></td> <td><b>212</b></td> <td><b>85%</b></td> </tr> </tbody> </table> <p>*Facilities sometimes shared with Primary Schools; **Does not include Child Fund supported schools.</p>	Investment Area	Number Proposed	Number Established	%	<b>Secondary School Sector (5 schools)</b>				NGS Classrooms	94	83	88%	Science Labs	41	39	95%	ICT Labs*	13	11	85%	21 <sup>st</sup> Century Libraries*	5	5	100%	Auditorium	5	3	60%	Office/Meeting/Faculty Rooms	13	13	100%	Canteen*	5	1	20%	Student Clinic*	5	2	40%	Youth Centers*	4	3	75%	<b>Total Facilities</b>	<b>185</b>	<b>160</b>	<b>86%</b>	<b>Primary School Sector (3 schools)**</b>				NGS Classrooms	45	38	84%	Science Labs	0	0	0%	ICT Labs	2	0	0%	21 <sup>st</sup> Century Libraries	2	2	100%	Office/Meeting/Faculty Rooms	2	2	100%	Auditorium	1	0		Canteen	--	--	--	Student Clinic	--	--	--	Youth Centers	--	--	--	Toilet Facilities	13	10	77%	<b>Total Facilities</b>	<b>65</b>	<b>52</b>	<b>80%</b>	<b>Facilities at All Levels</b>	<b>250</b>	<b>212</b>	<b>85%</b>
Investment Area	Number Proposed	Number Established	%																																																																																																				
<b>Secondary School Sector (5 schools)</b>																																																																																																							
NGS Classrooms	94	83	88%																																																																																																				
Science Labs	41	39	95%																																																																																																				
ICT Labs*	13	11	85%																																																																																																				
21 <sup>st</sup> Century Libraries*	5	5	100%																																																																																																				
Auditorium	5	3	60%																																																																																																				
Office/Meeting/Faculty Rooms	13	13	100%																																																																																																				
Canteen*	5	1	20%																																																																																																				
Student Clinic*	5	2	40%																																																																																																				
Youth Centers*	4	3	75%																																																																																																				
<b>Total Facilities</b>	<b>185</b>	<b>160</b>	<b>86%</b>																																																																																																				
<b>Primary School Sector (3 schools)**</b>																																																																																																							
NGS Classrooms	45	38	84%																																																																																																				
Science Labs	0	0	0%																																																																																																				
ICT Labs	2	0	0%																																																																																																				
21 <sup>st</sup> Century Libraries	2	2	100%																																																																																																				
Office/Meeting/Faculty Rooms	2	2	100%																																																																																																				
Auditorium	1	0																																																																																																					
Canteen	--	--	--																																																																																																				
Student Clinic	--	--	--																																																																																																				
Youth Centers	--	--	--																																																																																																				
Toilet Facilities	13	10	77%																																																																																																				
<b>Total Facilities</b>	<b>65</b>	<b>52</b>	<b>80%</b>																																																																																																				
<b>Facilities at All Levels</b>	<b>250</b>	<b>212</b>	<b>85%</b>																																																																																																				

Target	Means of Verification	Risks & Assumptions	Achievement to Date																																										
<b>Indicator 1.7:</b> Documentation of New School Architecture Designs is completed by 2019 to facilitate replication by other agencies.	<ul style="list-style-type: none"> <li>Manual is available for review</li> </ul>	<ul style="list-style-type: none"> <li>The physical design manual can capture the basic specifications for new school designs while allowing flexibility to adapt these to different locations.</li> </ul>	<ul style="list-style-type: none"> <li><b>In Progress:</b> Specifications for all facilities currently being documented</li> </ul>																																										
<b>Indicator 1.8:</b> Critical Thinking Test Scores among students at all schools show a statistically significant improvement from baseline scores by the end of Year 4.	<ul style="list-style-type: none"> <li>Test score results</li> </ul>	<ul style="list-style-type: none"> <li>Tests are administered in a way that ensures valid and reliable assessment</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved in 2019 for two schools:</b> Preah Sisovath HS exceeded baseline values by 7% while a tested cohort at Hun Sen Kampong Cham HS exceeded baseline levels by 26%.</li> </ul>																																										
<b>Indicator 1.9:</b> ICT labs at all schools meet standardized criteria for satisfactory operation or better each year.	<ul style="list-style-type: none"> <li>Survey results based on agreed governance principles</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholders are willing to change their attitudes and habits to enable improved governance</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved for 2018 and 2019</b></li> </ul> <table border="1"> <thead> <tr> <th>School</th> <th>General Admin</th> <th>Curriculum &amp; Teaching</th> <th>Student Learning</th> <th>Lab Maintenance</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>90%</td> <td>91%</td> <td>92%</td> <td>89%</td> <td>91%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>76%</td> <td>91%</td> <td>83%</td> <td>89%</td> <td>85%</td> </tr> <tr> <td>Prek Anchanh HS</td> <td>71%</td> <td>70%</td> <td>67%</td> <td>67%</td> <td>69%</td> </tr> <tr> <td>Prek Leap HS</td> <td>86%</td> <td>74%</td> <td>67%</td> <td>67%</td> <td>73%</td> </tr> <tr> <td>Peam Chikang HS</td> <td>71%</td> <td>70%</td> <td>83%</td> <td>67%</td> <td>69%</td> </tr> <tr> <td><b>Average</b></td> <td><b>79%</b></td> <td><b>79%</b></td> <td><b>75%</b></td> <td><b>76%</b></td> <td><b>77%</b></td> </tr> </tbody> </table> <p>Note: Minimum Performance = 65%</p>	School	General Admin	Curriculum & Teaching	Student Learning	Lab Maintenance	Total	Preah Sisovath HS	90%	91%	92%	89%	91%	Hun Sen Kg Cham HS	76%	91%	83%	89%	85%	Prek Anchanh HS	71%	70%	67%	67%	69%	Prek Leap HS	86%	74%	67%	67%	73%	Peam Chikang HS	71%	70%	83%	67%	69%	<b>Average</b>	<b>79%</b>	<b>79%</b>	<b>75%</b>	<b>76%</b>	<b>77%</b>
School	General Admin	Curriculum & Teaching	Student Learning	Lab Maintenance	Total																																								
Preah Sisovath HS	90%	91%	92%	89%	91%																																								
Hun Sen Kg Cham HS	76%	91%	83%	89%	85%																																								
Prek Anchanh HS	71%	70%	67%	67%	69%																																								
Prek Leap HS	86%	74%	67%	67%	73%																																								
Peam Chikang HS	71%	70%	83%	67%	69%																																								
<b>Average</b>	<b>79%</b>	<b>79%</b>	<b>75%</b>	<b>76%</b>	<b>77%</b>																																								
<b>Indicator 1.10:</b> ICT in Education proficiency among teachers at each school improves from baseline scores.	<ul style="list-style-type: none"> <li>Survey results</li> <li>Quarterly Reports</li> </ul>	<ul style="list-style-type: none"> <li>Teachers have the prerequisite skills to understand basic concepts of ICT literacy</li> <li>Teachers are motivated to change their learning styles to accommodate the use of ICT in teaching</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved for 2017, 2018, &amp; 2019</b></li> <li>All schools improved their scores from baseline</li> <li>73% of teachers describe the frequency of their use of ICT in instruction as medium to high</li> </ul>																																										
<b>Indicator 1.11:</b> Dropout rates at all schools do not exceed 5% each year.	<ul style="list-style-type: none"> <li>Educational Statistics Reports</li> </ul>	<ul style="list-style-type: none"> <li>Students and parents are motivated to stay enrolled to benefit from the high investment environment created by MoEYS.</li> </ul>	<ul style="list-style-type: none"> <li><b>Not Achieved in 2018</b></li> </ul> <table border="1"> <thead> <tr> <th>School</th> <th>Total Students/ Female</th> <th>Total Drop-outs</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>756/341</td> <td>0/0</td> <td>0%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>427/228</td> <td>20/9</td> <td>4.7%</td> </tr> <tr> <td><b>Prek Leap HS</b></td> <td><b>383/224</b></td> <td><b>23/16</b></td> <td><b>6.0%</b></td> </tr> </tbody> </table>	School	Total Students/ Female	Total Drop-outs	%	Preah Sisovath HS	756/341	0/0	0%	Hun Sen Kg Cham HS	427/228	20/9	4.7%	<b>Prek Leap HS</b>	<b>383/224</b>	<b>23/16</b>	<b>6.0%</b>																										
School	Total Students/ Female	Total Drop-outs	%																																										
Preah Sisovath HS	756/341	0/0	0%																																										
Hun Sen Kg Cham HS	427/228	20/9	4.7%																																										
<b>Prek Leap HS</b>	<b>383/224</b>	<b>23/16</b>	<b>6.0%</b>																																										

Target	Means of Verification	Risks & Assumptions	Achievement to Date																			
			Prek Anchanh HS	371/173	12/5	3.2%																
			Peam Chikong HS (Baseline)	1393/778	100/42f	7.17%																
			<b>Total</b>	<b>3,330/1,538</b>	<b>155/72</b>	<b>4.6%/4.7%</b>																
			<b>Not Achieved in 2019</b>																			
			<b>School Name</b>	<b>Total Enrollment (2019-2020)</b>	<b>Total Dropout (2018-2019)</b>	<b>%</b>																
			Preah Sisovath HS	1004	9	0.98%																
			Prek Leap HS	741	33	6.26%																
			Hun Sen Kg Cham HS	416	8	1.99%																
			Peam Chikong HS	540	23	6.71%																
			Demonstration School	473	5	1.04%																
			Angkor Ban PS	409	20	5.88%																
			Prek Anchanh HS	803	43	7.62%																
			Akhea Mahasei PS	729	19	3.30%																
			Kok Pring HS	369	42	14.18%																
			Svay Prahut PS	347	8	2.30%																
				<b>5831</b>	<b>210</b>	<b>3.6%</b>																
<b>Indicator 1.12:</b> At least 80% of all students graduating Grade 12 enroll in post-secondary school studies each year.	<ul style="list-style-type: none"> <li>School Tracking Reports</li> </ul>	<ul style="list-style-type: none"> <li>A majority of NGS students are more interested in pursuing further studies than immediately entering the workforce.</li> <li>A majority of NGS students have sufficient resources to pursue post-secondary school studies.</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved in 2018 and 2019</b></li> </ul> <table border="1"> <thead> <tr> <th>School</th> <th>Total Students (2019)</th> <th>Total Students Entering Post-Secondary Studies</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>126</td> <td>115</td> <td>94%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>49</td> <td>39</td> <td>80%</td> </tr> <tr> <td><b>Total</b></td> <td><b>175</b></td> <td><b>154</b></td> <td><b>88%</b></td> </tr> </tbody> </table>				School	Total Students (2019)	Total Students Entering Post-Secondary Studies	%	Preah Sisovath HS	126	115	94%	Hun Sen Kg Cham HS	49	39	80%	<b>Total</b>	<b>175</b>	<b>154</b>	<b>88%</b>
School	Total Students (2019)	Total Students Entering Post-Secondary Studies	%																			
Preah Sisovath HS	126	115	94%																			
Hun Sen Kg Cham HS	49	39	80%																			
<b>Total</b>	<b>175</b>	<b>154</b>	<b>88%</b>																			
<b>Output 2: Completion of a successful NGS National Survey</b>																						
<b>Indicator 2.1:</b> A national survey of schools in at least 10 provinces or more identifies a minimum of 10 potential sites for NGS expansion using preferred criteria that	<ul style="list-style-type: none"> <li>Completed Survey Report</li> </ul>	<ul style="list-style-type: none"> <li>There are a sufficient number of schools in other provinces whose contexts support replication of the NGS model</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved in 2016</b></li> </ul>																			

Target	Means of Verification	Risks & Assumptions	Achievement to Date
are associated with success.		<ul style="list-style-type: none"> <li>POEs are cooperative and supportive in identifying suitable locations for NGS replication.</li> </ul>	
<b>Output 3: Development of a National NGS Framework &amp; Social Equity Fund with replication in at least 5 new sites</b>			
<b>Indicator 3.1:</b> An implementation framework governing the operation of a Social Equity Fund designed to promote the proliferation of New Generation Schools is completed by 2018.	<ul style="list-style-type: none"> <li>Operational Guidelines Document</li> <li>Quarterly Report</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholders can agree on a common framework for NGS replication</li> <li>MoEYS has available funds to resource a Social Equity Fund</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b> Draft framework has been incorporated into NGS Operational Guidelines and are pending approval.</li> </ul>
<b>Indicator 3.2:</b> An accreditation process is in place including the establishment of an Accreditation Subcommittee and the official issue of NGS certifications.	<ul style="list-style-type: none"> <li>Accreditation Visit Reports with Recommendations</li> <li>Certifications</li> </ul>	<ul style="list-style-type: none"> <li>The Accreditation Subcommittee acts as an independent and neutral body capable of enforcing NGS Standards.</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b> Accreditation Protocols developed and implemented in 2016 for the first time.</li> </ul>
<b>Indicator 3.3:</b> A New Generation School Policy Document is developed and approved by MoEYS by 2016.	<ul style="list-style-type: none"> <li>Policy document review</li> </ul>	<ul style="list-style-type: none"> <li>All stakeholders can agree on the content outlined in the Policy Document</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b> Policy approved by Minister in 2016</li> </ul>
<b>Indicator 3.4:</b> A New Generation School Operational Guidelines Policy Manual is developed and approved by MoEYS by 2019	<ul style="list-style-type: none"> <li>Policy document review</li> </ul>	<ul style="list-style-type: none"> <li>All stakeholders can agree on the content outlined in the Policy Document</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b> Guidelines approved in 2020</li> </ul>
<b>Indicator 3.5:</b> Development of a Teacher Development Framework is completed by 2017	<ul style="list-style-type: none"> <li>Policy document review</li> </ul>	<ul style="list-style-type: none"> <li>All stakeholders can agree on the content outlined in the Policy Document</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved in 2017</b></li> </ul>
<b>Indicator 3.6:</b> An operational (i.e., meets four times per year) NGS Network is in place that comprises representatives of all certified NGS sites along with approved statutes.	<ul style="list-style-type: none"> <li>Standards of Performance as outlined in Statutes</li> <li>Meeting Minutes</li> </ul>	<ul style="list-style-type: none"> <li>Network meetings can be organized quarterly with high attendance of all actors</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved:</b> NGS Network in place since 2017 and meeting quarterly.</li> </ul>
<b>Indicator 3.7:</b> Operational Oversight Boards are established at	<ul style="list-style-type: none"> <li>Oversight Board Performance Check-</li> </ul>	<ul style="list-style-type: none"> <li>The Boards are able to meet on a regular basis to discuss issues</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved</b></li> <li><b>National Board:</b> Newly appointed in 2017</li> </ul>

Target	Means of Verification	Risks & Assumptions	Achievement to Date
National Level as well as at Provincial Level in Kampong Cham, Kandal, Phnom Penh, Kampong Speu, and Svay Rieng.	list	of relevance to the school	<ul style="list-style-type: none"> <li>• <b>5 Provincial Boards appointed and in operation</b> <ul style="list-style-type: none"> <li>○ Phnom Penh (established)</li> <li>○ Kampong Cham (established)</li> <li>○ Svay Rieng (established)</li> <li>○ Kandal (established)</li> <li>○ Kampong Speu (established)</li> </ul> </li> </ul>

- Performance Categories**
1. Governance & Finance
  2. Educational Programming
  3. Teachers & Staff
  4. Facilities & Resources
  5. School Culture & Environment

## ANNEX 2: Master Metrics Framework

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
<b>ACCREDITATION</b>	<b>Initial Accreditation</b> (Step 1) Establishing the Necessary Conditions for Success to Qualify for MoEYS Investment	Once a Year	<b>Governance, Finance:</b> Elimination of private tutoring & selling; Allocation of resources	<b>See Annex # 1</b>	2017: 2 Schools Accredited 2018: 3 Schools Accredited 2019: 4 Schools Accredited 2020: TBD 2021: TBD	X				
			<b>Educational Program:</b> Extended hours of instruction; STEM instruction;				X			
			<b>Teachers &amp; Staff:</b> Qualified teachers, all staff in career development path;					X		
			<b>Facilities &amp; Resources:</b> Science & ICT labs; 21 <sup>st</sup> Century library, classroom & learning spaces						X	
			<b>School Culture &amp; Environment:</b> Student support (career guidance, clinic, relationships with teachers, attitude instruction/modeling, clubs)							X
	<b>External Accreditation</b> (Step 2) (e.g., WASC: <i>Reporting to external accrediting body</i> )	Cyclical with Annual Progress Reports	<b>Governance:</b> (Vision, Mission, School-wide learning Outcomes)	<b>See Annex # 2</b>	In Progress	X	X	X	X	X
			<b>Educational Program:</b> (Curriculum, Instruction & Assessment)		In Progress		X	X		
			<b>Teachers &amp; Staff:</b> (PD & School-wide programs)		In Progress	X	X			
			<b>Facilities &amp; Resources:</b> (labs, libraries, learning spaces, equipment, materials, people)		#/use		X	X	X	
			<b>School Culture:</b> (environment, clubs, career counseling, tracking, health & safety)		#/use		X		X	X
<b>TERMINAL PERFORMANCE INDICATORS</b>	<ul style="list-style-type: none"> <li>• Reporting to MoEYS</li> <li>• Accountability to Donor</li> </ul>	Annual	<b>Annual Results Framework: (see Targets Below)</b>							
			<b>Output 1:</b> Implementation of Expanded Investment Planning at 5 Existing NGS Sites							
			<b>1.1</b> Establishment of 5 New Generation Schools at Secondary Level (MoEYS-supported only) by 2019.	<b>See Annex # 3</b>	Completed	X	X	X	X	X
			<b>1.2</b> Three different NGS Models are developed and successfully piloted by 2018		Completed	X	X	X	X	X
			<b>1.3</b> Accreditation of 6 New Generation Schools at Secondary Level within the period 2016-2021.		In progress: 4 schools so far accredited	X	X	X	X	X
			<b>1.4</b> At least 95% of teachers each year are compliant with Teacher Development Framework expectations including the completion of Career Path Plans each year.		Achieved with 98% of teachers in compliance		X	X		
			<b>1.5</b> Bac II Exam Performance exceeds National Average at All		Achieved at 2		X	X		

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
TERMINAL PERFORMANCE INDICATORS			Schools each year.		schools					
			1.6 A total of 160 renovated NGS facilities are completed by the end of 2019 including NGS Classrooms, Science Labs, ICT Labs, etc.		85% so far achieved				X	
			1.7 Documentation of New School Architecture Designs is completed by 2019 to facilitate replication by other agencies.		In progress				X	
			1.8 Critical Thinking Test Scores among students at all schools show a statistically significant improvement from baseline scores by the end of Year 4.		Achieved at 2 schools (2019) (Post-tests pending a 4 other schools)		X			
			1.9 ICT labs at all schools meet standardized criteria for satisfactory operation or better each year.		Achieved for 2019	X	X		X	X
			1.10 ICT in Education proficiency among teachers at each school improves from baseline		Pre-Test 62% Post-Test 73%			X		
			1.11 Dropout rates at all schools do not exceed 5% each year.		Partially Achieved <ul style="list-style-type: none"> <li>3.6% average dropout</li> <li>5 schools did not achieve the target</li> </ul>		X			
			1.12 At least 80% of all students graduating Grade 12 enroll in post-secondary school studies each year.		Achieved: 88% tertiary education transition rate		X			
			<b>Output 2: National Survey to Identify Additional NGS Sites</b>		Completed	X	X	X	X	X
			<b>Output 3: Development of a National NGS Framework &amp; Social Equity Fund with replication in at least 5 new sites</b>							
			3.1 An implementation framework governing the operation of a Social Equity Fund designed to promote the proliferation of New Generation Schools is completed by 2018.		Completed	X	X	X	X	X
			3.2: An accreditation process is in place including the establishment of an Accreditation Subcommittee and the official issue of NGS certifications.		Completed	X				
			3.3: A New Generation School Policy Document is developed and approved by MoEYS by 2016.		Completed	X				
			3.4: A New Generation School Operational Guidelines Policy Manual		Completed	X	X	X	X	X

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
			is developed and approved by MoEYS by 2019							
			3.5: Development of a Teacher Development Framework is completed by 2017		Completed			X		
			3.6: An operational (i.e., meets four times per year) NGS Network is in place that comprises representatives of all certified NGS sites along with approved statutes.		Completed	X	X			
			3.7: Operational Oversight Boards are established at National Level as well as at Provincial Level in Kampong Cham, Kandal, Phnom Penh, Kampong Speu, and Svay Rieng.		Completed	X				
<b>TERMINAL TPERFORMANCE INDICATORS</b>	<ul style="list-style-type: none"> <li>Reporting to MoEYS</li> <li>Accountability to Donor</li> </ul>	Annual	<b>Bac II Exam Results</b> <ul style="list-style-type: none"> <li><b>Target(s):</b> <ul style="list-style-type: none"> <li>Pass Rates must exceed national average at all schools</li> </ul> </li> <li><b>Data Points:</b> <ul style="list-style-type: none"> <li>Number and Percentage of Students Passing the Exam at All Schools</li> <li>Number and Percentage of Students with A, B, C, D, E, and F</li> <li>Comparisons with neighboring schools</li> </ul> </li> </ul>	See Annex #4	<b>2018:</b> <u>Pass Rates:</u> <ul style="list-style-type: none"> <li>Sisovath HS: 89%</li> <li>Kg Cham HS: 75%</li> <li>Prek Leap HS: --%</li> <li>Prek Anchanh HS: --%</li> <li>Peam Chikong HS: --%</li> </ul> All relevant sites achieved pass averages exceeding national average <b>2019:</b> TBD <u>Pass Rates:</u> <ul style="list-style-type: none"> <li>Sisovath HS: 94%</li> <li>H Sen Kg Cham HS: 84%</li> <li>Prek Leap HS: --%</li> <li>Prek Anchanh HS: --%</li> <li>Peam Chikong HS: --%</li> </ul>		X			

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Reporting to MoEYS</li> <li>• Accountability to Donor</li> </ul>	Annual	<p><b>Medals and Awards</b> (international &amp; National) as well as Internal awards</p> <ul style="list-style-type: none"> <li>• <b>Target(s):</b> <ul style="list-style-type: none"> <li>○ Each school should report at least some examples of outstanding student performance</li> </ul> </li> <li>• <b>Data Points</b> <p><i>Number of Awards Received</i></p> <ul style="list-style-type: none"> <li>○ General Awards</li> <li>○ Certificate of Achievement</li> <li>○ Gold Medal</li> <li>○ Silver Medal</li> <li>○ Bronze Medal</li> </ul> <p><i>Number and Percentage of Students Winning Awards</i></p> </li> </ul>	See Annex #5	<p><b>2018:</b> 125 Gold, Silver, and Bronze Medals awarded</p> <ul style="list-style-type: none"> <li>• Sisovath HS: 125 Medals</li> <li>• H Sen Kg Cham HS: --</li> <li>• Prek Leap HS: --</li> <li>• Prek Anchanh HS: --</li> <li>• Peam Chikong HS: --</li> </ul> <p><b>2019:</b> 375 Gold, Silver and Bronze Medals Awarded</p> <ul style="list-style-type: none"> <li>• Sisovath HS: 371</li> <li>• H Sen Kg Cham HS: 1</li> <li>• Prek Leap HS: 3</li> <li>• Prek Anchanh HS: --</li> <li>• Peam Chikong HS: --</li> </ul>		X			X

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Reporting to MoEYS</li> <li>• Accountability to Donor</li> </ul>	Annual	<p><b>Student tracking:</b> University; TVET; Scholarships; International Institutions; STEM discipline in university.</p> <ul style="list-style-type: none"> <li>• <b>Target(s):</b> <ul style="list-style-type: none"> <li>○ 80% of Grade 12 students enter post-secondary school studies</li> </ul> </li> <li>• <b>Data Points</b> <ul style="list-style-type: none"> <li>○ Number and Percentage of Students Graduating</li> <li>○ Number and Percentage of Students Entering Post-Secondary Studies</li> <li>○ Number and Percentage of Students Entering University</li> <li>○ Number and Percentage of Students Entering Polytechnic Institutions</li> <li>○ Number and Percentage of Graduates Receiving Scholarships</li> </ul> </li> </ul>	See Annex #6	<p><b>Students Doing Post-Secondary Studies:</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 100%</li> <li>• H Sen Kg Cham HS: 95%</li> <li>• Prek Leap HS: --%</li> <li>• Prek Anchanh HS: --%</li> <li>• Peam Chikong HS: --%</li> </ul> <p><b>Graduates Attending University:</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 100%</li> <li>• H Sen Kg Cham HS: 95%</li> <li>• Prek Leap HS: --%</li> <li>• Prek Anchanh HS: --%</li> <li>• Peam Chikong HS: --%</li> </ul> <p><b>Students Attending Polytechnic &amp; Vocational Institutions:</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 0%</li> <li>• H Sen Kg Cham HS: 0%</li> <li>• Prek Leap HS: --%</li> <li>• Prek Anchanh HS: --%</li> <li>• Peam Chikong HS: --%</li> </ul> <p><b>Graduates Receiving Scholarships</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 48%</li> <li>• H Sen Kg Cham HS: 46%</li> <li>• Prek Leap HS: %</li> <li>• Prek Anchanh HS: %</li> <li>• Peam Chikong HS: %</li> </ul>		X			

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories					
						1	2	3	4	5	
	<ul style="list-style-type: none"> <li>• Reporting to MoEYS</li> <li>• Accountability to Donor</li> </ul>	Annual	<p><b>Efficiency Statistics</b> (drop-out rate, promotion and repetition rate)</p> <ul style="list-style-type: none"> <li>• <b>Target(s):</b> <ul style="list-style-type: none"> <li>○ Dropout may not exceed 5% across all grades each year (excluding students who transfer)</li> </ul> </li> <li>• <b>Data Points</b> <ul style="list-style-type: none"> <li>○ Number and Percentage of Students Dropping out (All Grades)</li> <li>○ Number and Percentage of Students Promoted (All Grades)</li> <li>○ Number and Percentage of Students Repeating (All Grades)</li> </ul> </li> </ul>	See Annex #7	<p><b>Dropout Rate</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 1%</li> <li>• H. Sen Kg Cham HS: 2%</li> <li>• Prek Leap HS: 6%</li> <li>• Prek Anchanh HS: 7%</li> <li>• Peam Chikong HS: 7%</li> </ul> <p><b>Promotion Rate</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 93%</li> <li>• H Sen Kg Cham HS: 91%</li> <li>• Prek Leap HS: 78%</li> <li>• Prek Anchanh HS: 84%</li> <li>• Peam Chikong HS: 81%</li> </ul> <p><b>Repetition Rate</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 6%</li> <li>• H Sen Kg Cham HS: 7%</li> <li>• Prek Leap HS: 16%</li> <li>• Prek Anchanh HS: 9%</li> <li>• Peam Chikong HS: 12%</li> </ul>		X				X

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
<b>SOCIAL EQUITY PERFORMANCE</b>	<ul style="list-style-type: none"> <li>• Reporting to MoEYS</li> <li>• Accountability to Donor</li> </ul>	Annual	<p><b>Social Equity</b> (Free education for vulnerable and poor students)</p> <ul style="list-style-type: none"> <li>• <b>Target(s):</b> <ul style="list-style-type: none"> <li>○ Poor students (self-classified) pay no fees either formal or informal</li> </ul> </li> <li>• <b>Data Points</b> <ul style="list-style-type: none"> <li>○ Number and Percentage of Non-paying Students</li> <li>○ Number and Percentage of Paying Students</li> </ul> </li> </ul>	<b>See Annex #8</b>	<p><b>Paying Students:</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 97%</li> <li>• H Sen Kg Cham HS: <b>78%</b></li> <li>• Prek Leap HS: --</li> <li>• Prek Anchanh HS: --</li> <li>• Peam Chikong HS: --</li> </ul> <p><b>Free Students:</b></p> <ul style="list-style-type: none"> <li>• Sisovath HS: 3%</li> <li>• H Sen Kg Cham HS: <b>22%</b></li> <li>• Prek Leap HS: --</li> <li>• Prek Anchanh HS: --</li> <li>• Peam Chikong HS: --</li> </ul>		X			X

Type of Evaluation	Purpose	Timing	Focus Areas	Tools	Status updates	Performance Categories				
						1	2	3	4	5
NATIONAL & SUB-NATIONAL LEVEL ACCOUNTABILITY		Annual	<b>Board Performance</b> (National & Subnational): Participation, Attendance, Frequency <ul style="list-style-type: none"> <li>• <b>Target(s):</b> <ul style="list-style-type: none"> <li>○ Boards at all levels meet at least 4 times per year with at least a 51% attendance rate</li> </ul> </li> <li>• <b>Data Points</b> <ul style="list-style-type: none"> <li>○ Meetings per year at all levels (National and Provincial)</li> <li>○ Average Attendance Rate of all Meetings</li> <li>○ Number and Percentage of Members Who Have Never Attended a Meeting</li> </ul> </li> </ul>	%	<b>National Level</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul> <b>Sub-National Level Kampong Cham</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul> <b>Phnom Penh</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul> <b>Kandal</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul> <b>Kampong Speu</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul> <b>Svay Rieng</b> <ul style="list-style-type: none"> <li>• Meetings per Year:</li> <li>• Average Attendance:</li> <li>• Members Who Have Never Attended:</li> </ul>	X				

## ANNEX 3: Cohort Map of Students Being Tested for Critical Thinking Skills

### Critical Thinking Test Guidance New Generation Schools

#### SISOVATH HS

#### Testing Schedule for Sisovath HS

Academic Year	Baseline	Cohort	Status		Post-test	Cohort	Status
2015-16	Grade 7	1	Completed				
	Grade 10	A	Completed				
2016-17	Grade 7	--	--		--	--	--
	Grade 10	--	--		--	--	--
2017-18	Grade 7	--	--		--	--	--
	Grade 10	--	--		--	--	--
2018-19	Grade 7				Grade 10	1	July 2019
	Grade 10	--	--		Post Grade 12	A	Aborted
2019-20	Grade 7	5	Oct 2019		--	--	--
	Grade 10	--	--		--	--	--
2020-21	Grade 7	6	Oct 2020		--	--	--
	Grade 10				--	--	--
2021-22	Grade 7				Grade 9	5	July 2022
	Grade 10				--	--	--

#### Cohort Map for Sisovath

Year	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
<b>2015-16</b>	Cohort 1			Cohort A		
<b>2016-17</b>	Cohort 2	Cohort 1		Cohort B	Cohort A	
<b>2017-18</b>	Cohort 3	Cohort 2	Cohort 1	Cohort C	Cohort B	Cohort A
<b>2018-19</b>	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort C	Cohort B
<b>2019-20</b>	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort C
<b>2020-21</b>	Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1
<b>2021-22</b>		Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2
<b>2022-23</b>			Cohort 6	Cohort 5	Cohort 4	Cohort 3
<b>2023-24</b>				Cohort 6	Cohort 5	Cohort 4
<b>2024-25</b>					Cohort 6	Cohort 5
<b>2025-26</b>						Cohort 6

### PREK LEAP HS

#### Testing Schedule for Prek Leap HS

Academic Year	Baseline	Cohort	Status		Post-test	Cohort	Status
2017-18	Grade 7	--	--		--	--	--
2018-19	Grade 7	--	--		--	--	--
2019-20	Grade 7	3	Nov 2019 (Completed)		--	--	--
2020-21	Grade 7	4	Nov 2020		--	--	--
2021-22	Grade 7	5	Nov 2021		Grade 9	3	July 2022
2022-23	Grade 7	6	Nov 2022		Grade 9	4	July 2023

#### Cohort Map for Prek Leap HS

Year	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
2017-18	Cohort 1	Cohort A				
2018-19	Cohort 2	Cohort 1	Cohort A			
2019-20	Cohort 3	Cohort 2	Cohort 1	Cohort A		
2020-21	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A	
2021-22	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A
2022-23	Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1
2023-24		Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2
2024-25			Cohort 6	Cohort 5	Cohort 4	Cohort 3
2025-26				Cohort 6	Cohort 5	Cohort 4

### PREK ANCHANH HS

#### Testing Schedule for Prek Anchanh HS

Academic Year	Baseline	Cohort	Status		Post-test	Cohort	Status
2017-18	Grade 7	--	--		--	--	--
2018-19	Grade 7	--	--		--	--	--
2019-20	Grade 7	3	Nov 2019		--	--	--
2020-21	Grade 7	4	Nov 2020		--	--	--
2021-22	Grade 7	5	Nov 2021		Grade 9	3	July 2022
2022-23	Grade 7	6	Nov 2022		Grade 9	4	July 2023

#### Cohort Map for Prek Anchanh

Year	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
2017-18	Cohort 1	Cohort A				
2018-19	Cohort 2	Cohort 1	Cohort A			
2019-20	Cohort 3	Cohort 2	Cohort 1	Cohort A		
2020-21	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A	
2021-22	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A
2022-23	Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1
2023-24		Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2
2024-25			Cohort 6	Cohort 5	Cohort 4	Cohort 3

<b>2025-26</b>				Cohort 6	Cohort 5	Cohort 4
----------------	--	--	--	----------	----------	----------

**PEAM CHIKONG HS**

**Testing Schedule for Peam Chikong HS**

Academic Year	Baseline	Cohort	Status		Post-test	Cohort	Status
<b>2018-19</b>	Grade 7	--	--		--	--	--
<b>2019-20</b>	Grade 7	2	Nov 2019		--	--	--
<b>2020-21</b>	Grade 7	3	Nov 2020		--	--	--
<b>2021-22</b>	Grade 7	4	Nov 2021		Grade 9	2	July 2022
<b>2022-23</b>	Grade 7	5	Nov 2022		Grade 9	3	July 2023
	Grade 7	6	Nov 2023		Grade 9	4	July 2024

**Cohort Map for Peam Chikong HS**

Year	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
<b>2018-19</b>	Cohort 1	Cohort A				
<b>2019-20</b>	Cohort 2	Cohort 1	Cohort A			
<b>2020-21</b>	Cohort 3	Cohort 2	Cohort 1	Cohort A		
<b>2021-22</b>	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A	
<b>2022-23</b>	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1	Cohort A
<b>2023-24</b>	Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2	Cohort 1
<b>2024-25</b>		Cohort 6	Cohort 5	Cohort 4	Cohort 3	Cohort 2
<b>2025-26</b>			Cohort 6	Cohort 5	Cohort 4	Cohort 3
				Cohort 6	Cohort 5	Cohort 4