



# NEW GENERATION SCHOOL Annual Report

(January-December 2021)

## YEAR 6 IMPLEMENTATION



January 2022  
Phnom Penh CAMBODIA

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## **LIST OF ABBREVIATIONS**

ADB	Asian Development Bank
AFD	Agence Francaise de Development
CAM	Cambodia Association of Mentors
CDDE	Center for Digital and Distance Education
CFS	Child Friendly School
CICME	Cambodia’s International Conference on Mentoring Educators
CIES	Comparative International Education Society
CNI	Consonant Name Identification
CPD	Continuous Professional Development
CWPM	Correct Words Per Minute
DCD	Department of Curriculum Development
E2STEM	English   E-Learning   Science   Technology   Engineering   Mathematics
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
FFF	Franks Family Foundation
FWR	Familiar Word Reading
GSED	General Secondary Education Department
HS	High School
ICT	Information and Communication Technology
IPM	Integrated Pest Management
KAPE	Kampuchea Action to Promote Education
LNI	Letter Name Identification
M.Ed	Master of Education
MoEF	Ministry of Economy and Finance
MoEYS	Ministry of Education, Youth, and Sport
NGPRC	New Generation Pedagogical Research Center
NGPS	New Generation Preschool
NGS	New Generation School
NIE	National Institute of Education
ORF	Oral Reading Fluency
PCR	Pupil Classroom Ratio
PED	Primary Education Department
PS	Primary School
PTR	Pupil Teacher Ratio
SBM	School-based Management
SRS	Secondary Resource School
STEM	Science Technology Engineering and Mathematics
TTD	Teacher Training Department
TTO	Thontean Obrom
USE-SDP	Upper Secondary Education – Sector Development Program
VNI	Vowel Name Identification
WPM	Words Per Minute

### Quick Program Facts

Timeframe, Location, & Budget (All Sources)	
Start Date	January 2016
End Date	Open ended
Target Provinces	5 (Phnom Penh, Kampong Cham, Kandal, Kampong Speu, Svay Rieng)
Budget for Year 1 (2016)	\$ 1,218,000 (Secondary)
Budget for Year 2 (2017)	\$ 1,520,000 (Secondary) + \$40,000 (Primary) = \$1,560,000
Budget for Year 3 (2018)	\$ 1,576,000 (Secondary) + \$296,000 (Primary) = \$1,872,000
Budget for Year 4 (2019)	\$ 1,494,000 (Secondary) + \$250,000 (Primary) + \$163,000 (Tertiary) = \$1,907,000
Budget for Year 5 (2020)	\$ 1,494,000 (Secondary) + \$250,000 (Primary) + \$163,000 (Tertiary) = \$1,907,000
Budget for Year 6 (2021)	\$ 1,494,000 (Secondary) + \$250,000 (Primary) + \$163,000 (Tertiary) = \$1,907,000
Unit Costs (Primary) (2021)	\$149 (MoEYS Supported Schools Only)
Unit Costs (Secondary) (2021)	\$271
Beneficiaries	
<b>Students Supported</b>	<b>6,915 (3,643 Girls)</b>
Primary Level	2,251 (1,143 Girls)
Secondary Level	4,664 (2,500 Girls)
Tertiary Level	32 (Master Degree Candidates)
<b>Teachers Supported</b>	<b>449 (219 Female) Note: Exclusive of Tertiary</b>
Primary Level	102 (59 Female)
Secondary Level	347 (160 Female)
Tertiary Level	4 Lecturers, 1 Training Coordinator, 1 Master Mentor
<b>Other Staff Supported</b>	
School Administrators Supported	26
Librarians Supported	18
Counselors Supported	6
School Nurses Supported	4
Mentors Supported	15
<b>Schools Supported</b>	<b>10</b>
Primary Schools Assisted	4
Secondary Schools Assisted	6
<b>Classes Supported</b>	<b>201</b>
Primary Level	64
Secondary Level	137
Efficiency Indicators	
<b>PTR Level</b>	
Primary Level	1:22
Secondary Level	1:13
<b>PCR Level</b>	
Primary Level	35:1
Secondary Level	34:1
<b>Gender Parity Index (Enrollment)</b>	
Primary Level	1.03
Secondary Level	1.16





## 1. EXECUTIVE SUMMARY

### Update on Current Operations

**General Operations:** The New Generation School Program completed its sixth year of operation with funding support from MoEYS. In spite of the economic damage wrought by the Covid19 Pandemic, MoEYS has committed to a seventh year of funding for NGS programming in FY2022 at the same levels of funding as 2021. Happily, NGS programming has managed to avoid budget cuts unlike many other departments. Nevertheless, the pandemic has been highly disruptive of NGS programming and schools were closed for about 50% of the year. In spite of this, the NGS system was able to quickly adapt and moved much of its learning to a virtual format, producing 6,733 lesson videos to enable students to study from home. Many of these videos were of a high standard and were used by MoEYS for national programming to promote distance education in other schools.

**Summary of Milestones:** Key milestones achieved during the year were many and include some of the following events:

- **Increase in NGS Accredited Schools:** The number of fully accredited New Generation Schools increased from 5 to 7 in 2021 with new accreditations for Prey Leap and Prek Anchanh HS. Currently, 70% of New Generation Schools are now accredited.
- **Inauguration of New Courses on Robotics:** With advocacy from KAPE, a new partnership was created with a group called *Arduino Robotics*. Through this new partnership, the program has been able to introduce special programming on robotics for students enrolled in New Generation Schools.
- **Planning for Sustainability and Parental Financing:** As NGS Programming prepares to enter its 7<sup>th</sup> year of implementation in 2022, it has put in place provisions to sustain as much of local programming as possible in order to reduce budgetary dependence on the government. At the present time, 60% of schools have now achieved local funding that exceeds 50% or more of operating costs. Indeed, New Generation Schools are poised to raise over \$800,000 in FY2022 to cover recurrent costs. NGS administrators believe that local financing will continue to increase to a point where all schools should soon be self-sustaining.
- **Final Roll-out of School-based Mentors:** As a result of MoEYS investments in the establishment of the New Generation Pedagogical Research Center at NIE, the program was able to assign 36 Mentors who had completed their Master's Degree to all primary and secondary schools in the NGS System. This on-site support will greatly contribute to sustained performance and reduce technical reliance on KAPE.
- **Integration of School-based Management Principles into NGS Programming:** The NGS Team collaborated closely with KAPE Advisers working in the *Upper Secondary Education – Sector Development Program (USE-SDP2)* funded by the Asian Development Bank to create a School-based Management Training Manual. The Manual will be used in both NGS as well as USE-SDP2 sites. While NGS has been practicing SBM for many years, this is the first time that the program has been able to formally codify its SBM practices in the form of a manual.

**Key Activities and Updates:** Key updates on programming scope and activities include the following:

- **Update on the Scope of NGS Programming:** Enrollment in the NGS System continued to expand this year and reached almost 7,000 students across both the primary and secondary school sectors. This expansion in enrollment occurred in spite of the erratic trajectory of school opening and closing due to periodic outbreaks of the Covid19 Pandemic. For secondary schools in the NGS system, enrollment has grown by 18% since 2020 while for primary schools, it has grown by 10%. Unit costs have also continued to decline, dropping from \$320/student last year to \$271 this year for secondary level; primary school unit costs have similarly dropped from \$172/student to \$149 in 2021.
- **Networking and Capacity-building for School Personnel:** In spite of school closures, New Generation Schools have accelerated their efforts to form partnerships electronically through which they can participate in competitions, discussion forums, and information exchanges. Similarly, most capacity-building activities have shifted to an electronic format, since schools closed so that such activities can continue during the shut-down period. Altogether, the NGS Central Office reported that there were 17 workshops and capacity-building events during 2021 comprising 1,278 participants. These workshops covered such topics as STEM teaching, club formation, life skills education, ICT in Education, School-based Management, and many other topics.
- **Accelerating Digitalization:** The NGS System has accelerated its transition towards increased digitalization during the period of the Pandemic. In this respect, thousands of online lesson videos have been created for school archives in this respect. Some schools have even set up their own recording studios to expedite the production of online materials. In addition, these efforts are helping to drive innovation within the broader education system whereby many of the NGS videos are finding their way into the archives of the *Center for Digital and Distance Education (CDDE)* and the Department of IT (DIT) for broader use beyond the NGS System. The close collaboration with CDDE has been facilitated by the emplacement of the Center on the Preah Sisovath HS campus so that the two institutions can work very closely in tandem.
- **Program Documentation:** The NGS Central Office has been extremely busy completing additional documentation on various technical themes including School-based Management, Project Work, and Subject Club Establishment Manuals. Recently produced manuals have been done in close cooperation with the *Upper Secondary Education – Sector Development Program 2 (USE-SDP2)*, which is funded by the Asian Development Bank. In all, 11 manuals were completed during the reporting period, which will join 8 manuals that were completed earlier. Thus, the NGS System has developed about 19 manuals and formalized resource materials, since it began. The manuals produced this year will be sent to the MoEYS Khmer Language Review Office for review and final approval/adoption before going out for wider publication.
- **School-based Mentoring Emplacement:** The introduction of school-based mentors to all NGS sites continues to be an important strategy to ensure technical sustainability of program inputs. The New Generation Pedagogical Research Center continued to post Mentors to NGS sites. In 2021, an additional 19 Mentors were posted to New Generation Schools bringing the total number of posted Mentors to

34 or 3 to 4 Mentors per school. The posting of Mentors in this way will help reduce the technical dependency of schools on KAPE and will greatly contribute to technical sustainability.

- ***Evaluation of School-based Mentoring:*** During the reporting period, the New Generation Pedagogical Research Center completed intensive research on the efficacy of school-based mentoring as a strategy to increase the quality of teaching. In this regard, the Center received a grant of \$15,000 from *The Asia Foundation* to conduct a small research project that looked at how effectively mentors placed in New Generation School sites could work to support teachers. The results were generally positive but researchers also reported several findings that will lead to changes in the mentoring program. Recommended changes stemming from the research relate to the need to revise the syllabus to focus more on teaching methods, improving understanding of the mentor's Job Description by school managers, and a review of the method for mentor selection, among others. Research results are currently being disseminated through the NGPRC website and in the form of an official NIE publication.
- ***National and International Conferences:*** After the success of the 1<sup>st</sup> Cambodia International Conference on Mentoring Educators (CICME) last year, the NGPRC organized a second conference that took place in November 2021. Due to the Covid19 Pandemic, the conference was once again organized in a virtual format. Because of the high interest in the conference last year, it was also decided to organize both a National and International Conference this year. The former was delivered in Khmer Language while the latter was organized in English and included many speakers from universities throughout the world. The national conference took place during the last week of July 2021 and included over 30 speakers and 900 slides. The response from the educational community in Cambodia to the national conference was great with an average of 21,566 daily views and 461 viewers in real-time during the actual delivery of the conference. The Department of IT estimates that almost 70,000 individuals were reached through the conference.

### **Important Achievements during 2021**

The New Generation School Program continued to register key achievements during the year in spite of the obstacles imposed by the pandemic. For example, the New Generation School Central Office reported that the program has achieved 90% of official indicators. Another key achievement refers to the impressive job that all schools have done in building up an online learning system that is the envy of the country. Over 85% of students enrolled in the NGS System (at least at the secondary school level) have been able to continue their studies online without interruption, even though there may be drawbacks to reduced face-to-face contact with teachers. While primary schools have reported a lower rate of participation in online education, it is nevertheless much higher than the national rate and well exceeds 50%. In addition to the significant progress made in the area of online education, the NGS System also continues to show significant impact in terms of various metrics that range from test performance on national examinations (82% pass rate and 56% of students receiving A, B, or C), transition to university (90%), retention (98%), accreditation (70% of schools accredited), standards of teacher professionalism (98% of teachers completing career path plans), high reading proficiency (at primary level), and student awards (750 awards received). These performance metrics indicate that the investment in New Generation Schools is greatly enriching the process of human

resource development in the public schools, as per the goal of Government investment. This helps to justify continuing investment and on-going plans for expansion.



↑ *Critical Thinking Baseline Testing for new Grade 7 students at Preah Sisovath HS. The test is now done electronically to increase reliability and accuracy.*

### **Challenges Going Forward**

**1. The Extended Closure of Schools:** The extended closure of schools due to the pandemic has disrupted many activities including life skills classes, club meetings, project work, and many other activities that are more easily implemented through face-to-face means. On the other hand, the need to move all learning to online modalities has hastened the process of learning and training about blended learning and e-learning. Thus, there has been a silver-lining to the closure of schools but it is hoped that schools will re-open before the end of the calendar year to help schools return to a more normal footing.

**2. The Precarious Situation of New Generation Schools in Svay Rieng Province:** Child Fund Australia made a commitment to helping MoEYS to roll-out New Generation School Reforms to rural areas in Svay Rieng Province starting in 2015. Child Fund was quite clear that its funding support to two rural schools in the province would end in August 2021 and that Government should fill any funding shortfalls, pending the accreditation of both schools. Since they are now accredited, both schools are now authorized to try to raise funds from the local community to cover operating costs. However, these efforts resulted in a funding shortfall of almost \$30,000. In order to prevent the collapse of NGS programming in Svay Rieng, KAPE has been able to meet this shortfall by raising funds internally as well as enlisting the support of the Family Franks Foundation, which has been a strong

advocate for the New Generation School idea. Thus, the funding shortfall for 2022 has been resolved, at least in the short-term. Nevertheless, it will be important for MoEYS to review its budget request to MoEF for future years in order to ensure that both schools can maintain operations through a combination of local and government resources.

**3. Accredited Schools Not Receiving Funding from Government as per NGS Policy:** According to NGS Policy, Government will help schools to cover the operational costs of New Generation Schools in cases where local contributions from parents fall short of actual costs. In many cases, such shortfalls arise because poor families cannot provide fees to the school and indeed, the NGS Policy exempts poor families from making financial contributions to New Generation Schools. Funding shortfalls that are created by such exemptions are supposed to be covered by a Social Equity Fund from Government. The problem of the funding shortfall for 2022 in Svay Rieng has already been recounted above. There are also additional cases where MoEYS has not been able to comply with its policy to support accredited New Generation Schools. As New Generation Schools enter into a new era where all schools are accredited, it will be important for MoEYS to review the NGS Policy and ensure that it has enough resources to top up income of these institutions so that they can remain operational and accredited.

**4. The Need to Accelerate Parental Support to Achieve Sustained Operation:** As a general rule of thumb, NGS programmers are aiming for 70% ( $\pm 10\%$ ) parental support of recurrent costs, while at the same time ensuring that the poorest members of society are ensured 'free' access to the NGS System (if their children can demonstrate the motivation and pre-requisite skills to work in a New Generation School). However, minimum recurrent costs also include costs for board operation, construction, and other costs, which should perhaps not be included in a statement of minimum recurrent costs. Thus, an essential task for 2022 will be to review and recalculate minimum recurrent costs to arrive at a more accurate figure while also advocating with local communities to modify and likely increase annual fees to reach the 70% target of sustained operation.

**5. Need for Accreditation Office as the Program Matures:** As the New Generation School System matures and more and more schools apply for accreditation, it is becoming increasingly important that the NGS System create a free-standing and independent Accreditation Office that can ensure that the accreditation process happens regularly and at a desirable level of depth. The scope of accreditation tasks is now reaching a point where a full-time office is required to carry out the accreditations, follow up on issues that prevented accreditation, and also assist Provincial Boards to carry out formative assessment visits as per the NGS Guidelines. In addition, plans to expand the NGS System to 15 or more schools could potentially overwhelm current provisions to keep the accreditation system operating properly. Thus, the creation of a new office dedicated to accreditation should help to round out the structure of the NGS System with a clear division of labor to ensure adequate specialization, independence, and efficiency.

**6. Stabilizing Personnel Appointments to New Generation Schools:** Staffing transfers and resignations have been a persistent problem that has resulted in a continuous need to recruit new teacher replacements. This year, these transfers have abated somewhat to a level of only 4% at secondary school level and 3% at primary school level. However, in years past, the rate of transfer or resignation sometimes reached as high as 17%. Although it is to be expected that a dynamic system such as NGS would have a high need for competent and ambitious teachers, the NGS Central Office hopes that all schools should work more rigorously towards keeping teachers happy and reducing the continuing

demands on the education system to continually replace teachers, as such demands are not sustainable in the long-run.

**7. Private Online Classes at Sisovath HS: Risks & Benefits:** Preah Sisovath HS has developed an online learning program that would be accessible non-NGS students. This new program, known as *Online Plus*, would allow teachers at Preah Sisovath HS to greatly increase the number of students outside of the NGS System who can access high quality online learning on a par with what regular NGS students are receiving. KAPE has provided an analysis for the NGS National Board to consider in approving this program. Responses to this analysis by Preah Sisovath HS have satisfactorily addressed the risks identified by KAPE leading to a tentative endorsement by the NGS Central Office for approval by the National Board.

**8. Planning for the Transition to 'Blended Learning' in a Post-Covid19 Environment:** In preparation for a post-Covid environment, the NGS System is trying to organize itself in a way so that blended learning will be a major feature of the educational environment in all New Generation Schools. This involves creating advisory frameworks that will help guide schools in effectively implementing blended learning as well as training programs that will give both teachers and administrators the capacity to do so. The NGS System is cooperating closely with CDDE in creating the needed frameworks going forward.

**9. Absorbing Teachers into the NGS System Who Have Resisted Collaboration:** Several secondary schools in the NGS System are rapidly reaching the point where they will achieve full grade coverage. However, the final expansion to Grade 12 brings into a sharp focus an on-going problem relating to a large number of teachers who either surplus teachers with no classes to teach or who are teachers who are clinging to their private classes and refuse to comply with NGS requirements that does not allow teachers to extort money from their own students. If these schools decide to move ahead with their final expansions, the NGS National and Provincial Boards will need to make a difficult decision about what to do with all these surplus and/or non-compliant teachers. Based on the latest reports from these three schools, there are about 185 teachers in the surplus/non-compliant category of whom barely 7% have agreed to join the NGS System.

**10. Issues of Management Reliability at Peam Chikong HS:** Based on an assessment of school management in all NGS sites, the Central NGS Office has found that 9 out of 10 schools achieved scores in the 'Good' to 'Excellent' range; however, Peam Chikong HS has in contrast exhibited very weak scores on all three measures. This situation will likely require the intervention of both the Provincial and National Oversight Boards, as most school managers at Peam Chikong HS have been unresponsive to efforts to increase their engagement.

**11. Brain Drain at New Generation Schools:** The high standing of New Generation Schools has created a situation in which teachers working at these schools have many options for transfer or are scooped up by departments and tertiary institutions within the public system to upgrade the quality of their staffing. While such trends benefit the MoEYS in many ways, it results in a brain drain in many New Generation Schools that diminishes their prospects of maintaining high standards.

## 2. BACKGROUND

### 2.1 Historical Evolution of NGS Reforms

The New Generation School System represents the culmination in educational reforms that accommodate a two-track development approach for the education system. Two-track development refers to high and low investment strategies to develop the education system. Such an approach reflects a conscious decision on the part of the Ministry of Education, Youth, and Sport (MoEYS) to make a long-term commitment to high investment schools that will produce the high-quality human resources needed to turn the education system around in the long run. Such an approach minimizes the risks associated with investments in a ‘minimum standard’ for the rest of the country’s schools, which often results in a ‘race to the bottom’ that inadvertently undermines human resource development. The two-track development strategy sometimes generates controversy within Cambodia’s education system in which New Generation Schools have become the best exemplar of a ‘high investment’ strategy while most conventional projects funded by multi- and bilateral donors opt for a focus on ‘low investment’ strategies where the main goal is a ‘minimum standard.’ Some of the key characteristics of each development approach are summarized in Box 1.

#### BOX 1: Two-Track Development Approach for Education Reform

##### High Investment Track

- Maximal Standards
- Bottom-up Implementation
- Long-term Commitment
- Highly sustainable due to strong ownership by stakeholders as well as intensive parental support

##### Low Investment Track

- Minimum Standards
- Top-down Implementation
- Implemented through short-term projects
- Questionable sustainability after disappearance of project frameworks

New Generation School Reforms started in 2016 and currently comprise six secondary schools, four primary schools, and a tertiary institution, known as the *New Generation Pedagogical Research Center*, that trains teacher mentors (mostly for NGS placement) at the National Institute of Education in Phnom Penh. New Generation Schools are akin to ‘charter schools’ and operate as highly autonomous educational institutions within the public education system. The establishment of such schools is intended to promote educational reform and innovation. These ten New Generation Schools within the NGS System receive support both directly or indirectly from MoEYS as well as Child Fund, the Franks Family Foundation, and the Oaktree Foundation. An 11<sup>th</sup> New Generation School is supported by E2STEM, a Singaporean NGO, at Yakunto HS and is also considered to be part of the NGS System, though its implementation framework differs. The roll-out of New Generation Schools is now in its sixth year. Although funding levels have been frozen since 2018, total financial support from MoEYS over this period reached \$9.24 million this year with an additional \$1.17 million from private foundations or approximately 11% of the total. Total funding from all sources for the New Generation School Initiative reached \$10,416,000 this year (see Table 2.1). Non-state sector development partners continue to play a major role in NGS programming, particularly as this concerns the temporary credits provided to the NGS system during the long period at the beginning of the fiscal year when government funds are being processed.

The New Generation School Initiative spent the period 2016-18 in an expansion mode, adding two or three schools to the system each year. A total of ten schools had joined the program by 2018 at which time the program entered into a consolidation phase, even though some schools continued to expand their enrollments. This is because NGS programming would often only start in two grades (e.g., Grades 7 and 8) at the start of

investment in a particular school in order to first establish a foothold through which to build up a constituency of NGS advocates, especially among parents and community members. After that, target schools would successively add one grade level each year to program coverage so that after four years of investment, all grades could be covered. Such an approach helps to promote incremental change and helps stakeholders to better understand the logic of the NGS System at a more gradual pace.

**Table 2.1: Investment in New Generation Schools at All Levels, 2015-21**

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	\$-- <sup>1</sup>	\$77,000	\$0	<b>\$1,494,000</b>	<b>6</b>
2020	\$1,417,000	\$-- <sup>2</sup>	\$77,000	\$0	<b>\$1,494,000</b>	<b>6</b>
2021	\$1,417,000	\$-- <sup>3</sup>	\$77,000	\$0	<b>\$1,494,000</b>	<b>6</b>
<b>Total</b>	<b>\$7,667,000</b>	<b>\$300,000</b>	<b>\$631,000</b>	<b>\$198,000</b>	<b>\$8,796,000</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>
2020	\$250,000	--	--	--	<b>\$250,000</b>	<b>2</b>
2021	\$250,000	--	--	--	<b>\$250,000</b>	<b>2</b>
<b>Total</b>	<b>\$1,086,000</b>	--	--	--	<b>\$1,086,000</b>	<b>4**</b>
<b>New Generation Pedagogical Research Center-NIE (Higher Education)</b>						
2019	\$163,000	\$15,000	\$30,000	--	\$208,000	1
2020	\$163,000	\$0	\$0	--	\$163,000	1
2021	\$163,000	\$0	\$0	--	\$163,000	1
<b>Total</b>	<b>\$489,000</b>	<b>\$15,000</b>	<b>\$30,000</b>	--	<b>\$534,000</b>	<b>1</b>
<b>GRAND TOTAL</b>	<b>\$9,242,000</b>	<b>\$315,000</b>	<b>\$661,000</b>	<b>\$198,000</b>	<b>\$10,416,000</b>	<b>11</b>

\*Includes one secondary school supported by Child Fund; \*\*Includes one self-supporting primary school and one supported by Child Fund.

In 2019, MoEYS also made a tactical decision to establish a training and research Center on the campus of the *National Institute of Education* that intensively trains teacher mentors working in New Generation School sites. The establishment of this Center, known as the *New Generation Pedagogical Research Center*, greatly facilitates the expansion of New Generation School reforms by enhancing the availability of human resources. The first

<sup>1</sup> Does not include \$272,000 interest-free loan to programming while government-funding was processed.

<sup>2</sup> Does not include \$330,000 interest-free loan to programming while government-funding was processed.

<sup>3</sup> Does not include \$365,000 interest-free loan to programming while government-funding was processed.



cohort of 25 mentors graduated in August 2020 and another cohort of 32 persons graduated in August 2021. This injection of highly trained personnel has enabled the NGS system to establish a school-based mentoring system for the first time in Cambodia's history in which the mentors have been intensively trained in a Master's Degree Program that focuses on mentoring as their primary duty.

## 2.2 General Overview of Operations during the Reporting Period

**General Operations:** The New Generation School Program completed its sixth year of operation with funding support from MoEYS. In spite of the economic damage wrought by the Covid19 Pandemic, MoEYS has committed to a seventh year of funding for NGS programming in FY2022 at the same levels of funding as 2021. Happily, NGS programming has managed to avoid budget cuts unlike many other departments. Nevertheless, the pandemic has been highly disruptive of NGS programming and schools were closed for about 50% of the year. In spite of this, the NGS system was able to quickly adapt and moved much of its learning to a virtual format, producing 6,733 lesson videos to enable students to study from home. Many of these videos were of a high standard and were used by MoEYS for national programming to promote distance education in other schools.



**Summary of Milestones:** Key milestones achieved during the year were many and include some of the following events:

- Increase in NGS Accredited Schools:** The number of fully accredited New Generation Schools increased from 5 to 7 in 2021 with new accreditations for Prey Leap and Prek Anchanh HS. Currently, 70% of New Generation Schools are now accredited.
- Inauguration of New Courses on Robotics:** With advocacy from KAPE, a new partnership was created with a group called *Arduino Robotics*. Through this new partnership, the program has been able to introduce special programming on robotics for students enrolled in New Generation Schools.
- Planning for Sustainability and Parental Financing:** As NGS Programming prepares to enter its 7<sup>th</sup> year of implementation in 2022, it has put in place provisions to sustain as much of local programming as possible in order to reduce budgetary dependence on the government. At the present time, 60% of schools have now achieved local funding that exceeds 50% or more of operating costs. Local financing will continue to increase to a point where all schools should be self-sustaining.
- Final Roll-out of School-based Mentors:** As a result of MoEYS investments in the establishment of the New Generation Pedagogical Research Center at NIE, the

**New Courses on Robotics:** With support from an organization called *Arduino*, the NGS program has introduced well-resourced courses on robotics in all secondary schools.

program was able to assign 36 Mentors who had completed their Master's Degree to all primary and secondary schools in the NGS System. This on-site support will greatly contribute to sustained performance and reduce technical reliance on KAPE.

- ***Integration of School-based Management Principles into NGS Programming:*** The NGS Team collaborated closely with KAPE Advisers working in the *Upper Secondary Education – Sector Development Program (USE-SDP2)* funded by the Asian Development Bank to create a School-based Management Training Manual. The Manual will be used in both NGS as well as USE-SDP2 sites. While NGS has been practicing SBM for many years, this is the first time that the program has been able to formally codify its SBM practices in the form of a manual.

***Covid19 Situation:*** This year, New Generation Schools opened with the rest of the public education system in the middle of January 2021 and closed in the middle of March 2021, as Covid19 transmissions accelerated. Although many schools in Cambodia continued to remain inactive during much of the school year since closures were enacted due to the Covid19 Pandemic, New Generation Schools have been able to move their entire academic program to an online or distance education footing. More than 90% of students enrolled in New Generation Schools continued to learn on a regular basis (especially at secondary school level) either through online channels or distance education arrangements in local villages (see **Sections 3.8 and 3.19**). Thus, funds have been wisely spent during this period even though many schools in the public education system have entered into a period of inactivity. Following an accelerated vaccination campaign in all schools throughout the country, it was finally possible to re-open schools in October 2021. With their strong level of internal governance, it was possible for schools to mobilize mentors, teachers, and librarians quickly so that schools could open their doors in a very short time once permission had been received. Nevertheless, the late re-opening of schools only left about two and a half months to make up for all of the lost time during the period of school closure that started in March and ended in September.

In terms of safeguarding school facilities during the period of school closure, New Generation Schools have animated very high standards of maintenance while they were closed as well as a high state of readiness to re-open quickly once MoEYS gave the order to do so. The high level of maintenance of school facilities within the NGS System demonstrates the elevated degree of accountability and governance that exists in New Generation Schools, as per their mandate under the NGS Policy.

***Networking and Capacity-building for School Personnel:*** Given the shutdown of the education system, New Generation Schools have accelerated their efforts to form partnerships electronically through which they can participate in competitions, discussion forums, and information exchanges. Similarly, most capacity-building activities have shifted to an electronic format since March 2021 so that such activities could continue during the shut-down period. Altogether, the NGS Central Office reported that there were 17 workshops and capacity-building events between January and December 2021 that covered such topics as STEM teaching, club formation, life skills education, ICT in Education, and many other topics (see **Section 3.3**).

***Accelerating Digitalization:*** As noted earlier, the NGS System has been highly active in terms of transforming educational service provision into a completely online footing so that students can continue to study regularly from home. Thousands of online lesson

videos have been created for school archives in this respect. Some schools have even set up their own recording studios to expedite the production of online materials. In addition, these efforts are helping to drive innovation within the broader education system whereby many of the NGS videos are finding their way into the archives of the *Center for Digital and Distance Education (CDDE)* for broader use beyond the NGS System. For the best produced videos, CDDE offers \$5 per video, which has further incentivized NGS teachers to produce online videos. Altogether, it has been reported that the NGS System has contributed 3,984 electronic files relating to the promotion of virtual instruction since last year (see Table 2.2). This close collaboration with CDDE has been facilitated by the emplacement of the Center on the Preah Sisovath HS campus so that the two institutions can work very closely in tandem.

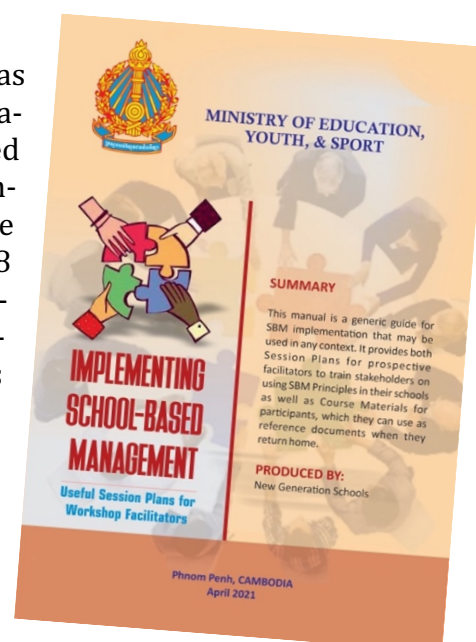


**Virtual Capacity-Building:** The advert shown above is an example of one of the many electronic capacity-building events organized by the NGS Team during the period of school closure.

**Table 2.2: Videos Contributed to CDDE for Nationwide Usage, 2021**

Video Type	Preah Sisovath HS	Prek Leap HS	H.S. Kg Cham HS	Peam Chikong HS	Prek Anchanh HS	Kok Pring HS	Total
Power Point Screen Record	1,152	370	198	106	50	80	1,956
Studio-produced	1,127	0	0	0	0	0	1,127
Everyday Teaching Videos	901	0	0	0	0	0	901
<b>Total</b>	<b>3,180</b>	<b>370</b>	<b>198</b>	<b>106</b>	<b>50</b>	<b>80</b>	<b>3,984</b>

**Program Documentation:** The NGS Central Office has been extremely busy completing additional documentation on various technical themes including School-based Management, Project Work, and Subject Club Establishment Manuals (see Section 3.4). In all, 11 manuals were completed during the reporting period, which will join 8 manuals that were completed earlier. Thus, the NGS System has developed about 19 manuals in all so far and formalized resource materials since it began. The manuals produced this year will be sent to the MoEYS Khmer Language Review Office for review and final approval/adoption before going out for wider publication.



### 2.3 Awards and Medals Earned by New Generation Schools

One of the key metrics that the NGS Central Office tracks closely relates to the number of achievement medals and awards received by New Generation Schools each year. This metric helps the program go beyond simplistic test results, which are quite limited in terms of what they can tell the public about learning in each New Generation School, since so much of the NGS curriculum is not even assessed in national examinations such as the Bac II Exam (e.g., ICT proficiency, robotics, coding, etc.). The ability of schools to participate in international competitions has, of course, been hampered by Covid19 travel restrictions. Nevertheless, students in the NGS system have generated a huge number of medals and awards during 2021 with a total of 723 students receiving 750 awards (see Table 2.3). These awards occurred in a wide range of subjects including Mathematics, STEM, Khmer Literature, English, ICT, and others.



**Awards Received by Students at Prek Leap HS:** Students at Prek Leap HS display awards in an international Math Contest.

**Table 2.3: Number of International and National Awards in New Generation Schools, 2021**

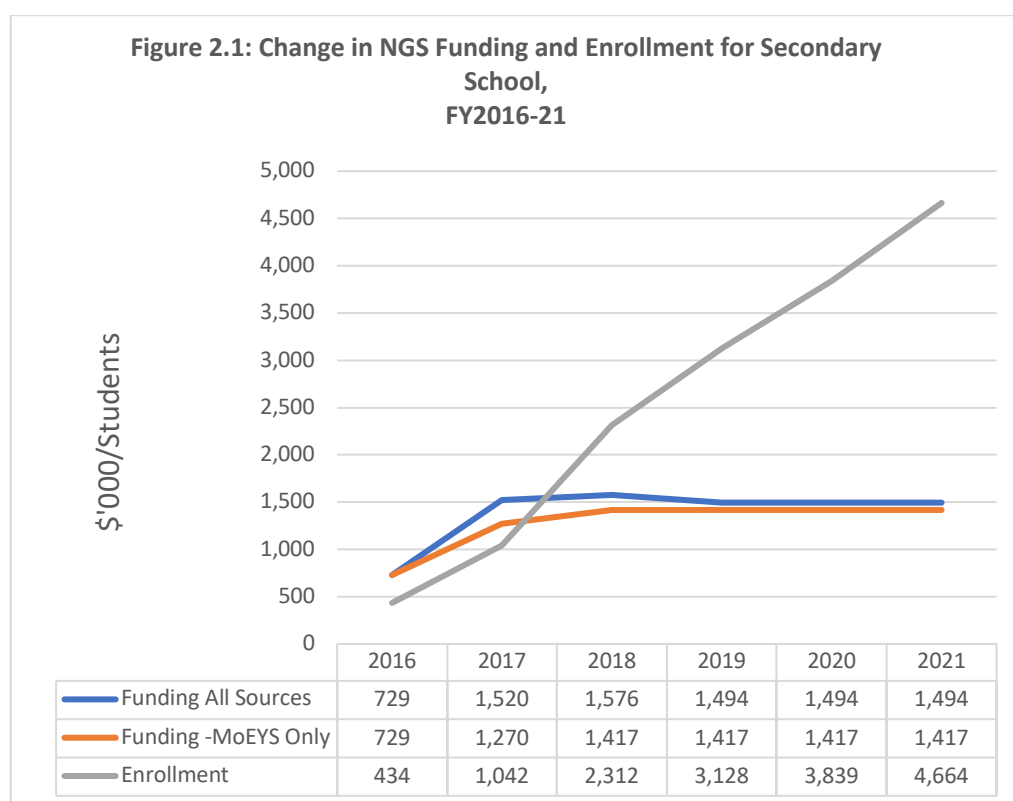
School Name	Students and Awards	General Awards	Certificates of Achievement	Gold Medal	Silver Medal	Bronze Medal	Total
Preah Sisovath HS	Number of Students	77	134	30	48	79	368
	Number of Awards	58	134	41	63	107	403
Hun Sen Kampong Cham HS	Number of Students	3	29	5	12	15	64
	Number of Awards	3	29	5	12	15	64
Prek Leap HS	Number of Students	8	76	13	6	21	124
	Number of Awards	4	76	13	6	21	120
Prek Anchanh HS	Number of Students	4	51	2	4	4	65
	Number of Awards	1	51	2	4	4	62
Peam Chikong HS	Number of Students	--	15	8	2	1	26
	Number of Awards	--	10	8	2	1	21
Kok Pring HS	Number of Students	--	--	--	2	1	3
	Number of Awards	--	--	--	2	1	3
Demonstration PS	Number of Students	--	49	2	4	14	69
	Number of Awards	--	53	2	4	14	73
Akkamohesei PS	Number of Students	--	3	--	--	1	4
	Number of Awards	--	3	--	--	1	4
<b>Total</b>	<b>Number of Students</b>	92	357	60	78	136	723
	<b>Number of Awards</b>	66	356	71	93	164	750

In the past, the majority of these awards used to be generated by students enrolled at Preah Sisovath HS. Although Sisovath continued to generate the most awards of any

school (403 or 54%), other schools now seem to be much more proactive about enrolling their students in both national and international competitions with an excellent result for all schools. In this respect, other schools earned 347 medals as well or about 46% of the total.

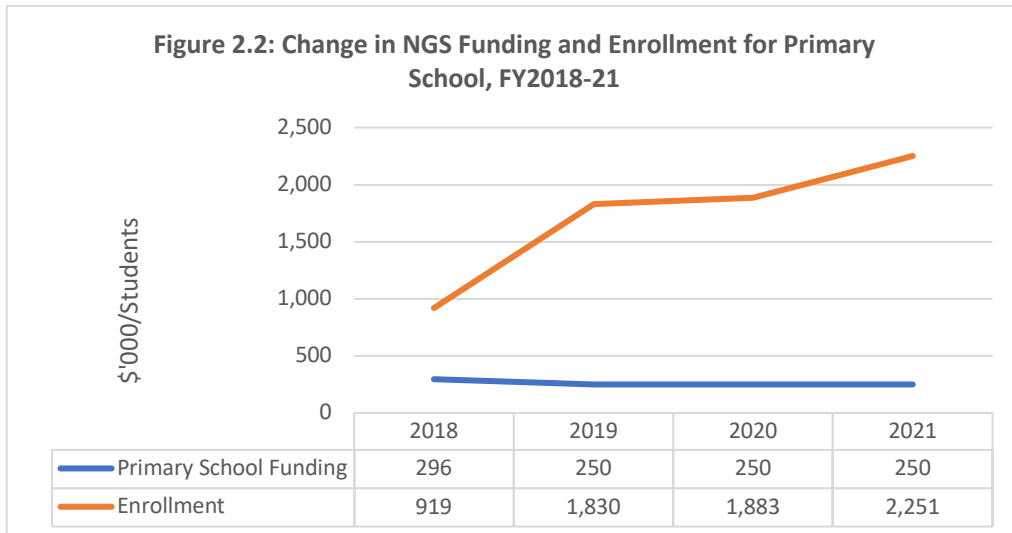
## 2.4 Budget Analysis for Enrollment

Each year, supported New Generation Schools continue to expand their grade coverage within their schools. For example, Prek Leap and Prek Anchanh HS started programming in 2018 with support for only Grades 7 and 8. Today, they are supporting Grades 7 to 11 with one final step remaining to achieve full grade coverage, which is tentatively planned for 2022. A similar situation exists for primary schools, which started to receive investment in 2018. This incremental expansion in enrollment means renovating additional classrooms and adding more and more teachers (who receive incentive payments) each year; however, funding levels have remained constant for both primary and secondary schools since 2018.



The program has been able to accommodate the increasing enrollment in New Generation Schools in an environment of frozen funding through two strategies. Strategy 1 involves shifting recurrent costs to parents in accredited New Generation Schools (e.g., Preah Sisovath HS and Hun Sen Kampong Cham HS). Parents have been willing to make significant ‘voluntary’ contributions for perceived high-quality education that is cheaper than most private schools. Indeed, most parents see getting their children into a New Generation School as a win-win situation, since they can attain high educational standards for relatively low annual cost. Strategy 2 involves shifting funds that were formerly used for renovation at Sisovath HS and Hun Sen Kampong Cham HS to other schools since renovations at these two schools have largely been completed. The situation described above has led to a situation of sharp divergence between enrollment and funding trends,

which can be seen very clearly in Figures 2.1 and 2.2.



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

#### System-wide Activities

##### 3.1 Update on Programming Scope

Enrollment in the NGS System continued to expand this year and reached almost 8,000 students by the end of the year across both the primary and secondary school sectors (see Table 3.1). This expansion in enrollment occurred in spite of the erratic trajectory of school opening and closing due to periodic outbreaks of the Covid19 Pandemic. For secondary schools in the NGS system, enrollment has grown by 18% since 2020 while for primary schools, it has grown by 10%. *Unit costs have also continued to decline, dropping from \$320/student last year to \$271 this year for secondary level; primary school unit costs have similarly dropped from \$172/student to \$149.* The decline in unit costs at both primary and secondary school level has been driven mainly by the completion of infrastructure upgrading, increasing enrollment, and the shift in financial support to parents in accredited schools. With the accreditation of more schools planned in 2022, the NGS System should see a continuing diminution in unit costs. Analyses of Pupil Class Ratios and Pupil Teacher Ratios also indicate that schools are maintaining accreditation standards to keep PCR and PTR levels below a level of 36:1 in order to ensure that large class sizes do not dilute educational quality. In this respect, the overall PCR and PTR level at secondary school level are 34:1 and 14:1, respectively; while for primary school level they are a respectable 34:1 and 22:1, respectively.

**Table 3.1: Enrollment, Investment Sources, & Historical Background across all New Generation Schools (2021-22)**

Province	School Name	Enrollment	No. of Classes	Teachers	Investment Source	Establishment Date	NGS Development Model
<b>Secondary School Level</b>							
Phnom Penh	Preah Sisovath HS	1,116	31	79	MoEYS-FFF	Oct 2015	School in a School
	Prek Leap HS	1,150	36	92	MoEYS-FFF	Oct 2017	Whole School
Kampong Cham	Hun Sen Kampong Cham HS	509	15	34	MoEYS-FFF	Oct 2015	New School/ Dying School
	Peam Chikorng HS	1,039	30	70	MoEYS-FFF	Oct 2018	Whole School
Kandal	Prek Anchanh HS	1,206	36	83	MoEYS-FFF	Oct 2017	Whole School
Svay Rieng	Kok Pring HS	485	15	40	Child Fund	June 2015	Whole School
<b>Total</b>	<b>6 schools</b>	<b>5,505</b>	<b>163</b>	<b>398</b>	<b>3 Sources</b>	--	<b>3 Models</b>
<b>UnitCosts/PCR/PTR</b>	--	<b>\$271</b>	<b>34:1</b>	<b>14:1</b>	--	--	--
<b>Primary School Level</b>							
Kampong Cham	Demonstration School	469	13	20	Self-supporting	Oct 2015	New School/ Dying School
	Angkor Ban PS	357	12	24	MoEYS	Oct 2017	Whole School
Kampong Speu	Akhea Mahasei PS	1,324	35	49	MoEYS	Oct 2017	Whole School
Svay Rieng	Svay Prahut PS	326	13	22	Child Fund	June 2015	Whole School
<b>Total</b>	<b>4 Schools</b>	<b>2,476</b>	<b>73</b>	<b>115</b>	<b>3 Sources</b>	--	<b>2 Models</b>
<b>UnitCosts/PCR/PTR</b>	--	<b>\$149*</b>	<b>34:1</b>	<b>22:1</b>	--	--	--
<b>GRAND TOTAL</b>	<b>10 Schools</b>	<b>7,981</b>	<b>236</b>	<b>513</b>	<b>4 Sources</b>	--	<b>3 Models</b>

\*Does not include Demonstration School and Svay Prahut PS, which are externally or self-funded.

### 3.2 Entrance Examination Results

New Generation School programming continues to be wildly popular with the Cambodian public and demand continues to outpace supply. In order to address this high demand, most New Generation Schools have had to turn to standardized Entrance Examinations and/or lotteries as the fairest way to ration available seats. Often these measures are not well 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, which stipulate a maximum PCR of 36 to 1 or less in 80% or more of classes. Unlimited access to New Generation Schools would quickly lead to very large class sizes, which would in turn make it impossible to use many of the modern teaching techniques used in New Generation Schools. In addition, New Generation Schools demand that students at secondary school level enter with basic proficiency skills in literacy and mathematics. Unfortunately, many students in Cambodia are completing Grade 6 with little or no ability to read or write or perform basic math.<sup>4</sup>

**Table 3.2: Test Results among Students Applying for Entry to New Generation Schools, 2021-22**

Name of School	Total Seats Available	Applicants Tested	Total Passing	Total Applications Accepted	Students Accepted as a % Applicants
<b>Secondary Level</b>					
Preah Sisovath HS	547	1,136	434	547	48%
Hun Sen Kg. Cham HS	--	--	--	--	--
Prek Anchanh HS	317	458	253	302	66%
Prek Leap HS	385	495	330	298	60%
H.S Peam Chikorng HS	339	378	312	312	82%
Kok Pring HS	120	161	120	120	74%
<b>Subtotal</b>	<b>1,708</b>	<b>2,628</b>	<b>1,449</b>	<b>1,579</b>	<b>60%</b>
<b>Primary Level</b>					
Demonstration School	94	135	115	94	70%
Akhean Mahasei PS	197	225	197	197	88%
Angkor Ban PS	--	--	--	--	--
<b>Subtotal</b>	<b>291</b>	<b>360</b>	<b>312</b>	<b>291</b>	<b>81%</b>
<b>Grand Total</b>	<b>1,999</b>	<b>2,988</b>	<b>1,761</b>	<b>1,870</b>	<b>62%</b>

The results of Entrance Examinations for the 2021-22 academic year are presented in Table 3.2 above. The acceptance rate of new applicants ranged from a low of only 48% at Preah Sisovath HS to a high of 88% at Akhea Mahasei PS. Nevertheless, most secondary schools have been trying to hold the line on standards and ensuring class sizes of 36 to 1 or less, as noted above. Overall, the admission rate was 60% among secondary schools, which is an improvement from last year's admission rate of only 51%. Problems of supply and demand appear to be most problematic at Preah Sisovath HS where space is in high demand. Hun Sen Kampong Cham HS has stopped Entrance Examinations for the general public since space there is also limited and there is now automatic intake from the NGS Primary School attached to the secondary school, known as the Demonstration School.

In contrast, primary schools demonstrated somewhat higher rates of admission, mainly because there are fewer restrictions on literacy for the children applying at Grade 1, since

<sup>4</sup> There is not yet a consensus on how the NGS Program should deal with illiterate students at Grade 6 who seek to transition to Grade 7 of a New Generation School. Some people feel that New Generation Schools should accept such students and provide remedial support. Others feel that New Generation Schools are not the best vehicle through which to deal with issues of basic literacy and numeracy. To deal with such students, MoEYS could provide basic literacy and numeracy support at much lower unit costs than are entailed by the high-tech labs and libraries of a New Generation School. Basic literacy and numeracy are not the goals of a New Generation School nor the high investment that they require.



they are at the beginning of the education cycle. In this respect, 81% of those children applying were accepted with Demonstration School showing the highest rates of restriction due to a shortage of building capacity combined with the strict PCR requirements of the NGS accreditation process (see Table 3.2).

### 3.3 Capacity Building Events during the Reporting Period

Program trainers reported that 17 workshops, meeting forums, and other capacity-building events were planned during the reporting period. In some cases, NGS trainers delivered the workshop content themselves but in other cases they coordinated with other resource institutions such as Arizona State University who provided an online workshop on blended learning (see Table 3.3 below). The primary recipients of these capacity-building events were diverse and included teachers, librarians, mentors, school administrators, and counselors at both primary and secondary school level. These workshops and other capacity-building events lasted about 51 days in all and recorded the participation of 1,278 participants.<sup>5</sup> Due to travel and meeting restrictions imposed by the Ministry of Health, many of these workshops had to occur in an online format though face-to-face meetings once again became possible as the pandemic started to abate at the end of the year.

**Table 3.3: Summary of Capacity Building Workshops and Events (Jan-December, 2021)**

Name of Workshop or Capacity-building Event	Primary Level	Secondary Level	Online	Face to Face	Number of Participants	Number of Days
<b>Jan to June 2021</b>						
1. 21 <sup>st</sup> Century Library Orientation	x	x		x	32	1
2. Life Skills & Club Orientation 1 (Prek Leap HS)		x		x	75	1
3. Life Skills & Club Orientation 2 (Prek Anchanh HS)		x		x	72	1
4. Life Skills & Club Orientation 3 (Peam Chikorng HS & Angkor Ban PS)	x	x		x	75	1
5. Life Skills & Club Orientation 4 (H.S Kampong Cham HS & Demonstration School)	x	x		x	56	1
6. Life Skills & Club Orientation 5 (Akkea Mohesei PS)	x			x	38	1
7. Life Skills & Club Orientation 6 (Preah Sisowath HS)		x		x	72	1
8. Science Workshop 1 (Prek Anchanh HS)		x		x	33	2
9. Science Workshop 2 (Prek Leap HS)		x		x	35	2
10. Science Workshop 3 (Hun Sen Peam Chikorng)		x		x	27	2
11. Arizona State University-Blended Learning & Flipped Classroom Forum	x	x	x		110	1
12. National Mentoring Conference	x	x	x		382	3
13. Building ICT Knowledge in Distance Learning for STEM		x	x		96	1
14. Counseling Refresher Training for School-Based Career Counselors		x	x		6	2
<b>July to December 2021</b>						
15. Foundation Workshop for New NGS Teachers (Primary & Secondary)	x	x		x	78	12.5
16. School-based Management Workshop	x	x		x	22	3
17. Robotics and Electronics Training		x		x	69	16
<b>Total</b>	<b>8</b>	<b>17</b>	<b>4</b>	<b>13</b>	<b>1,278</b>	<b>51.5</b>

<sup>5</sup> This is a cumulative figure and may include a single participant multiple times.

One of the key themes underlying capacity-building efforts during this time related to boosting life skills activities in all schools as well as strengthening STEM education. This strengthened the ability of schools to better utilize their science labs, set up life skills learning settings (e.g., biogardens, hydroponic greenhouses, multi-purpose life skills areas, etc.), and generally better foster hands-on learning. Workshop delivery during the year started as face-to-face events but then needed to shift to an online format when all schools were closed in March 2021.

### 3.4 New NGS Publications of Interest

Resource persons working in the NGS Program continued to expand the number of documents and manuals available to the Ministry in order to foster replication and sustainability of the process of establishing a New Generation School. Publication production during the current period focused on School-based Management, Teaching Methodology (Project-based Learning Method), and Subject Club Establishment (see Section 3.11 for the latter). Altogether, 11 publications were completed so far this year (see Box 2). Altogether, the NGS Program has now produced 19 manuals to date. Several of the new publications were done in collaboration with the *Upper Secondary Education – Sector Development Program 2* or *USE-SDP2* (funded by the Asian Development Bank) with which the NGS Program now has a very close relationship. This relationship has been facilitated by a contract between KAPE and USE-SDP2 to provide technical support and form linkages with New Generation School programming. There was a particularly close collaboration in the development of the SBM Manual and Club Manuals, which will be used jointly by both projects in target schools. Recently developed

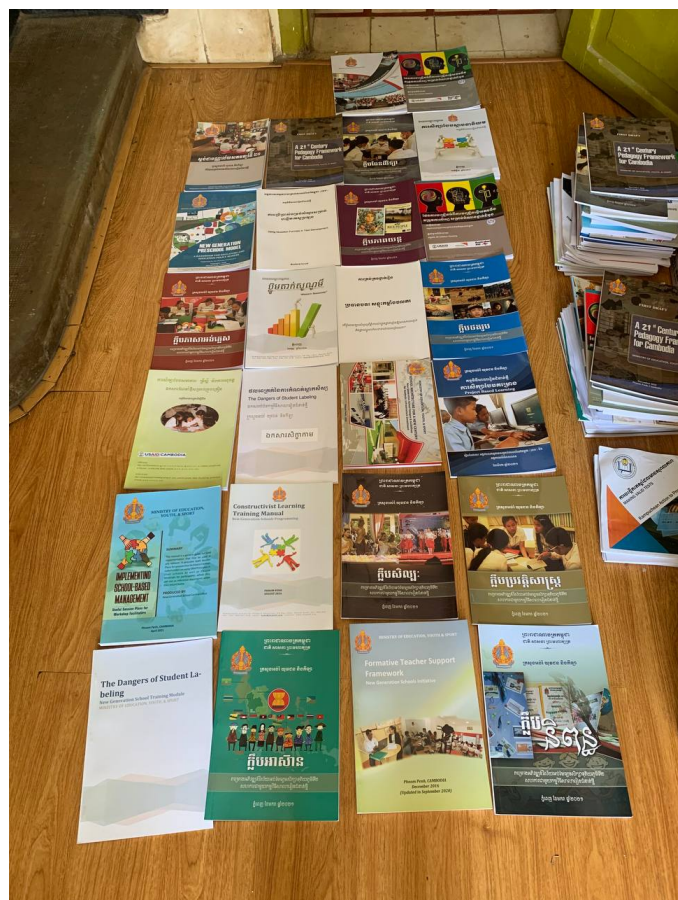
#### BOX 2: NGS Publications

##### Current Publications

- School Architecture for a New Century
- 21<sup>st</sup> Century Library Manual
- Constructivist Learning Manual
- A 21<sup>st</sup> Century Pedagogy Framework for Cambodia
- Formative Teacher Support Framework
- Student Assessment in the Classroom Manual
- NGS Operational Policy Guidelines
- New Generation Preschool Model Handbook

##### New Publications in 2021

- School-based Management Manual
- Project Work Manual
- Setting up Creative Writing Clubs
- Setting up History Clubs
- Setting up English Clubs
- Setting up ASEAN Clubs
- Setting up Drama Clubs
- Setting up Film Clubs
- Setting up Photography Clubs
- Setting up Earth Science Clubs
- Setting up STEM Clubs



**Display of NGS Publications:** Significant efforts have occurred during the year to systematize access to NGS technical publications.

publications will next go to MoEYS' Khmer Language Department for editing and review in 2022 before being presented to the Minister for approval.

### 3.5 Parental Financing Developments

As NGS Programming prepares to enter its 7<sup>th</sup> year of implementation in 2022, it is trying to put in place provisions to sustain as much of local programming as possible in order to reduce budgetary dependence on the government. Such provisions have been built into the NGS design so that after three years of investment followed by accreditation, a school can adequately demonstrate to parents that its educational standards are high enough to justify a standardized but voluntary fee. However, since many schools started their programming in different years, each school is on a different schedule to sustained operation.

**Table 3.4: School Operating Costs and Sustained Income, (to be used in 2022)**

School Name	Budgetary Support from MoEYS/Child Fund**	Local Support (Est.)	Total Operating Costs	% of Costs Locally Sustained
<b>Secondary Level</b>				
Preah Sisovath HS*	\$281,786	\$256,047	\$281,786	91%
Hun Sen Kg Cham HS*	\$162,093	\$79,696	\$121,322	66%
Prek Leap HS*	\$292,216	\$240,000	\$292,216	82%
Prek Anchanh HS*	\$236,202	\$200,000	\$236,202	85%
Peam Chikong HS	\$233,246	\$0	\$233,246	--
Kok Pring HS*	\$61,620	\$27,000	\$61,620	44%
<b>Subtotal</b>	<b>\$1,267,163</b>	<b>\$802,743</b>	<b>\$1,226,392</b>	<b>65%</b>
<b>Primary Level</b>				
Demonstration School*	--	\$30,000 <sup>‡</sup>	\$35,000	86%
Akhea Mahasei PS	\$123,553	\$---	\$123,553	TBD
Angkor Ban PS	\$46,594	\$---	\$46,594	TBD
Svay Brahuot PS	--	\$17,000	\$19,200	89%
<b>Subtotal</b>	<b>\$170,147</b>	<b>\$47,000</b>	<b>\$205,147</b>	<b>23%</b>

\*Schools accredited and charging voluntary fees; \*\*Does not include technical support or admin costs; <sup>‡</sup>Included in Hun Sen Kampong Cham HS as well.

In terms of self-financing, Preah Sisovath HS is farthest along with significant support now received from parents and a commensurate reduction in funding from the government (see Table 3.4). Indeed, parental contributions now cover about 91% of direct recurrent costs (exclusive of technical and administrative costs). This is largely because parents whose children attend Preah Sisovath HS tend to be more affluent and are willing to pay a very high annual fee (e.g., \$280/year) in comparison to other schools where the fees range from \$65 to \$130 per student per year. The primary schools in the NGS system supported by MoEYS have not yet introduced annual fees but both their accreditation and introduction of such fees is anticipated in the coming year. Two other primary schools (Demonstration School in Kampong Cham and Svay Brahuot PS in Svay Rieng) not supported by MoEYS have already nearly achieved sustained operation.

As the program heads into 2022, the Central NGS Office will make a more detailed analysis of absolutely necessary recurrent costs to maintain operations in comparison to current contributions from parents. This analysis will help programmers to better determine the need to increase fees in 2023 (e.g., at Hun Sen Kampong Cham HS and Kok Pring HS) in order to put all schools on a clear path towards sustained operation. However, it is important to ensure that students from poorer households who are unable to pay should still have a safety net from the Ministry so that they can access high quality educational services without the need to pay fees as do wealthier households. There are clear

provisions in the NGS Operational Guidelines that lay out the procedures to determine those households who should be exempt from annual fees requiring the government to provide subsidies to make up for any shortfalls.



**Budget Reporting to Parents:** A parent meeting occurs at Hun Sen Kampong Cham HS to discuss school finances and annual fees.

### 3.6 Progress on NGS Building Renovations for 2021 & Maintenance Efforts

Classroom renovation activities within NGS have slowed down considerably, as more and more schools come closer to fully renovated status. Mainly, renovation investments have focused on those schools that have not yet achieved full grade coverage, namely, Prek Leap HS, Prek Anchanh HS, Peam Chikong HS, and Akhea Mahasei PS. All other schools have achieved full grade coverage so that the need for additional classroom space (and renovation investments) has already been met. The remaining grades to be covered at these schools are summarized in Box 3. In addition, the Construction Department has been providing new buildings to New Generation Schools in designated areas (e.g., Peam Chikong HS, Angkor Ban PS, Akhea Mahasei PS, Demonstration School, etc.), which has also help to alleviate the need for intensive renovation from the NGS budget, though to be sure, these buildings are often built in a

**Table 3.5: Proposed & Completed Facilities in NGS Sites, FY2016 to FY2021**

Investment Area	Number Proposed 2016-21	Number Established 2016-21	%
<b>Secondary School Sector (5 schools)</b>			
NGS Classrooms	94	91	97%
Science Labs	41	49	120%
ICT Labs*	13	14	108%
21 <sup>st</sup> Century Libraries*	5	5	100%
Auditorium	5	4	80%
Office/Meeting/Faculty Rooms	13	18	138%
Canteen*	5	2	40%
Student Clinic*	5	4	80%
Youth Centers*	5	5	100%
<b>Total Facilities</b>	<b>186</b>	<b>192</b>	<b>103%</b>
<b>Primary School Sector (3 schools)</b>			
NGS Classrooms	45	52	116%
Science Labs	0	0	0%
ICT Labs	2	2	100%
21 <sup>st</sup> Century Libraries	2	2	100%
Office/Meeting/Faculty Rooms	2	2	100%
Auditorium	1	0	0%
Canteen	--	--	--
Student Clinic	--	--	--
Youth Centers	--	--	--
Toilet Facilities	13	10	77%
<b>Total Facilities</b>	<b>65</b>	<b>68</b>	<b>105%</b>
<b>Facilities at All Levels</b>	<b>251</b>	<b>260</b>	<b>104%</b>

\*Facilities sometimes shared with Primary Schools

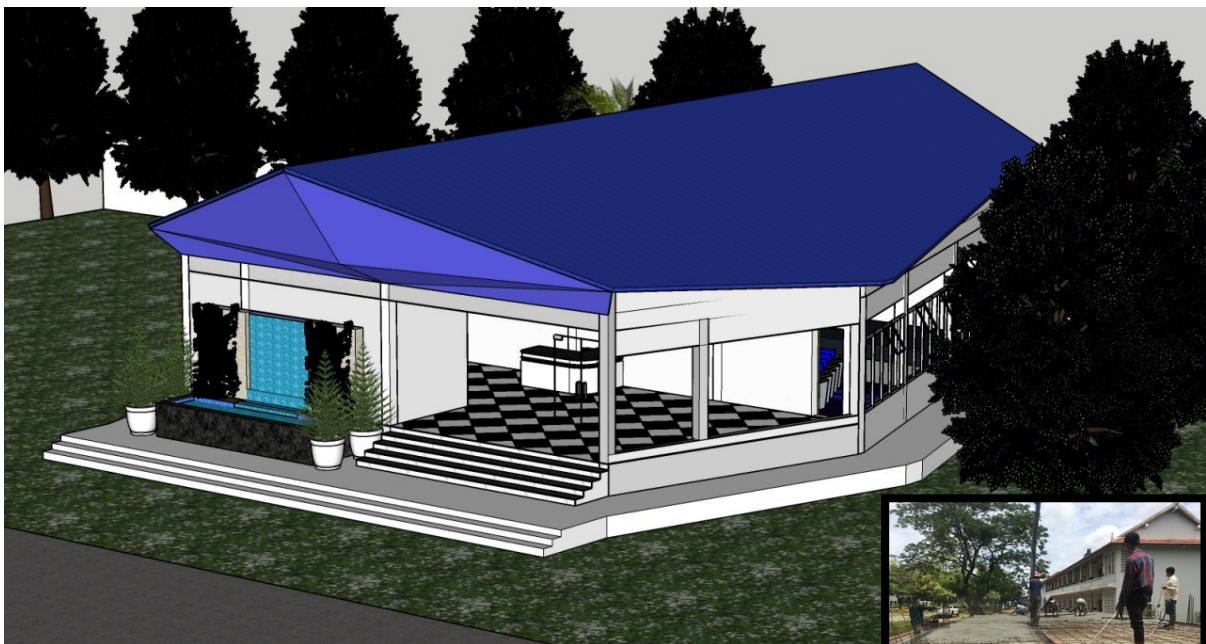
traditional style that makes it difficult to convert to 21<sup>st</sup> Century learning environments. Nevertheless, this investment by the Construction Department is welcome given that the budget for NGS programming has been frozen for several years, making it difficult to make the large outlays for construction that it used to make in the early years of NGS investment.

**BOX 3: Remaining Grades to be Covered in New Generation Schools**

School	Remaining Grades
Prek Leap HS	12
Prek Anchanh HS	12
Peam Chikong HS	11 & 12
Akhea Mahasei PS	5 & 6

In spite of the above situation, the investment made in educational facility renovations and new development by NGS over the years has been considerable with over 260 science labs, ICT labs, classrooms, libraries, offices, auditoriums, and student clinics completed as of 2021. This actually exceeds the total number of planned facilities by 104% (see Table 3.5). The only areas where additional investment is still needed is auditoriums (1), student clinics (1), and canteens (3); for the latter, however, schools have been partnering with the private sector and are emplacing canteen facilities that way.

In 2021, a modest number of new investments were completed including new classrooms, science labs, offices, library expansions, and on-going investments in a new auditorium at Prek Leap HS. In all, 14 new facilities (as well as some landscape improvements and bathrooms) were renovated in 2021 (see Table 3.6). By the end of the year, the program had renovated 260 new facilities in all, an impressive number (see Table 3.5).



↑ **Proposed New Auditorium at Prek Leap HS:** The NGS Program has started construction on a new, modern auditorium at Prek Leap HS. The facility will be fully wired and will have state-of-the art audio-visual features on a par with those installed at Preah Sisovath and Hun Sen Kampong Cham HS. The new facility will be able to seat over 100 students and will be used for a large number of planned educational forums and student events. Ground has been broken on the project (see inset picture) and final completion is anticipated in 2022.

The NGS Building & Design Section has also moved forward with other supplementary refinements in learning environments including the emplacement of wall murals with natural landscapes, question walls to promote student research, and landscaping to improve the ambience where students can do group work and/or play. These refinements

once again try to move the learning environment in schools from a minimum standard to a much higher standard than one normally sees in public schools (see display below).

**Table 3.6: Status of Infrastructure Renovations in 2021**

School	Facilities Renovated in 2021										Total	
	Non-science Classrooms	Science Labs	ICT Labs	Offices	Library	Bathroom	Wall painting (m2)	Clinic	Auditorium	Landscape (m2)		
	N										N	(m2)
1. Preah Sisovath HS												
2. Hun Sen Kampong Cham HS				3							3	
3. Prek Leap HS	3	3				1			1		8	
4. Prek Anchanh HS	3					1				330	4	330
5. Peam Chikong HS					1	1					3	
6. Angkor Ban PS												
7. Akhea Mahasei PS												
8. Demonstration School (Kg Cham)												
<b>Total</b>	<b>6</b>	<b>3</b>	<b>--</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>--</b>	<b>---</b>	<b>1</b>	<b>330</b>	<b>18</b>	<b>330</b>

### Refining NGS Learning Environments through New Design and Landscaping



↑ Wall mural at Angkor Ban PS enhances the attractiveness of the learning environment.

A library extension at Akhea Mahasei PS adds more space for reading using naturalistic tones. →

Well maintained gardens at Preah Sisovath HS ↓



↑ Newly paved parade grounds completed at Hun Sen Kampong Cham HS

A Question Wall at Hun Kampong Cham HS provides interesting questions for students to research and helps stimulate student imagination. ↓



## NGS Programming at Secondary School Level

### 3.7 Results on the Bac II Examination

Pass rates on the Bac II Examination among NGS institutions have historically shown steady improvement from 2018 with an average pass rate of 86% over the last several years. Rates peaked at 91% in 2019 but then stumbled in 2021 to 82% (see Box 4). This stumble in pass rate performance, though still significantly higher than the national pass rate of 65%, reflected the impact of the Covid19 pandemic on student performance, with a sharp bi-furcation in the cohort taking the test in 2021. In this respect, the proportion of NGS students scoring in the elite A-B-C range actually increased from 35% in 2019 to 56% in 2021 (see Table 3.7). At the same time, the national rate of students scoring in the A-B-C range increased from only 8% in 2019 to 16% in 2021 so that 3.5 times more NGS students were scoring in this elite range than nationally in 2021. This is a remarkable observation when one realizes that nearly 60% of NGS students are scoring in the top 16% of the country. These patterns were similar at both Preah Sisovath HS with 62% of students in the elite range and Hun Sen Kampong Cham HS with 35% of students.

#### Box 4: Historical Changes in the Bac II Pass Rate

**2018:** 84% Pass Rate  
**2019:** 91% Pass Rate  
**2020:** 100% Pass Rate\*  
**2021:** 82% Pass Rate

\*Due to the Covid19 Pandemic, all Grade 12 students were allowed to pass in 2020.

It needs to be noted, however, that the huge increase in the number of high performers among NGS students occurred at the same time that more students were also failing (18%) than in previous years, with the division between these two groups of students tracing the class divide among NGS students. That is, as New Generation Schools shifted to online education in the face of Covid19 school closures, wealthier students with ready access to smartphones and internet services were more likely to take advantage of these online services whereas poorer students were not. In spite of public misperceptions that most students attending New Generation Schools are from a wealthy elite, there is a large contingent of poor students enrolled in the NGS System who were put at a significant disadvantage due to changes from face-to-face education to an online format.

**Table 3.7: Bac II Examination Results at New Generation Schools (2021)**

Data Points	Grade 12 Students Taking Test	Tested Students Who Passed	Pass Rate	A	B	C	D	E	F	Students Scoring in the A-B-C Range
<b>Preah Sisovath HS</b>										
Number	206	182	88%	34	60	33	27	28	25	127
Percentage	--	--		17%	29%	16%	13%	14%	12	62%
<b>Hun Sen Kampong Cham HS</b>										
Number	62	39	63%	4	8	10	9	8	23	22
Percentage	--	--		6%	13%	16%	15%	13%	37%	35%
<b>All NGS Sites</b>										
Number	268	221	82%	38	68	43	36	36	48	149
Percentage	--	--		14%	26%	16%	13%	13%	18%	56%
<b>National</b>										
Number	114,187	72,016	65%	1,753	5,215	11,634	23,634	29,915	42,171	18,602
Percentage	--	--		2%	5%	10%	20%	26%	37%	16%

### 3.8 Efforts to Promote Online Learning

As noted earlier, most New Generation Schools have been able to shift most of their educational programming to online channels in response to Covid19 Pandemic school closures. Online learning activities were more quickly organized this year because school personnel were able to build on the work that had been done last year. In this respect, both teachers and administrators were more familiar with software programs to create educational videos and slide presentations and more skillful at effectively using them. Some schools have even set up their own make-shift studios to facilitate higher quality video recording and production. In addition, the establishment of the *Center for Digital and Distance Education (CDDE)* on the Preah Sisovath HS campus has provided significant technical support for organizing, archiving, and disseminating many of the online products that were developed by teachers in the NGS System. There is now close cooperation between NGS and CDDE, thereby leading to many synergies in performance as this relates to online education.



***Increasing Sophistication in Online Education:*** Several schools such as Prek Leap HS have created their own studios to facilitate the recording and production of online videos.

Based on information compiled by the NGS Central Office, a total of 6,773 videos and slide presentations were produced by schools in 2021 both for internal school use as well as for sharing with the CDDE. Videos shared with CDDE are placed in a national archive where teachers throughout the Kingdom can gain access to them. Khmer and Mathematics registered the largest amount of online material production with each subject registering near or over 1,000 online products (see Table 3.8). In addition, the majority of teachers in all schools demonstrated high rates of participation in online education with rates of engagement ranging between 83% and 100%. The average participation rate among teachers was reported to be 94%.

In terms of student utilization and participation in online education activities, secondary schools reported very high rates of engagement. In this respect, student engagement is monitored by reviewing the number of tests and quizzes completed and submitted by students following online lessons. The NGS Central Office reported that 409,704 tests and quizzes were completed between March and June or approximately 79 tests per student during the reporting period (see Table 3.9). This represents a huge amount of activity on online channels between students and teachers. Overall, teachers reported that 87% of the assigned tests and quizzes that were organized during the reporting period were completed by students. The readiness and agility of students to participate in online learning has also greatly boosted related efforts to accelerate the pace at which NGS can introduce blended learning modalities into supported schools.



**Table 3.8: Promoting Online Learning in New Generation Schools by Subject & School (2021) (Secondary)**

School	Number of Videos Produced by Teachers													No. of Teachers	Participating Teachers	Participating Teachers as a %	Videos per Teacher	
	Subject:	K	M	P	C	B	En	H	G	Mo	ES	IT	Other					Total
<b>Secondary School Level</b>																		
Preah Sisovath HS*	30	270	174	44	213	30	127	52	109	12	223	--	<b>1,284</b>	61	59	97%	31	
Preah Sisovath HS**	117	56	126	64	60	--	55	3	40	3	20	--	<b>544</b>					
Prek Leap HS*	80	106	83	80	83	75	80	82	75	45	50	--	<b>839</b>	68	65	96%	19	
Prek Leap HS**	157	122	--	49	--	--	--	--	--	42	--	--	<b>370</b>					
H.S. Kg Cham HS*	111	152	90	44	104	152	63	70	58	56	50	--	<b>950</b>	25	25	100%	41	
H.S. Kg Cham HS**	--	13	16	8	--	--	--	6	--	23	--	--	<b>66</b>					
Peam Chikong HS*	60	60	64	60	56	60	64	60	64	28	60	--	<b>636</b>	44	42	95%	18	
Peam Chikong HS**	50	--	27	--	--	--	29	--	--	--	--	--	<b>106</b>					
Prek Anchanh HS*	191	269	95	148	99	110	104	87	117	55	95	--	<b>1,370</b>	67	62	93%	25	
Prek Anchanh HS**	70	--	--	--	61	--	--	57	--	--	--	--	<b>188</b>					
Kok Pring HS*	56	21	53	40	23	19	36	--	36	25	--	--	<b>309</b>	29	24	83%	16	
Kok Pring HS**	8	--	--	--	--	--	18	11	23	11	--	--	<b>71</b>					
<b>Total</b>	<b>930</b>	<b>1,069</b>	<b>728</b>	<b>537</b>	<b>699</b>	<b>446</b>	<b>576</b>	<b>428</b>	<b>522</b>	<b>300</b>	<b>498</b>	<b>--</b>	<b>6,733</b>	<b>294</b>	<b>277</b>	<b>94%</b>	<b>24</b>	

\*Produced for internal school use; \*\*Produced for use by CDDE

**Table 3.9: Student Engagement in Online Testing by Grade (2021) (Secondary)**

Grade	Total Students	Total Tests Completed (March-June)*	Tests Completed per Student	Total Tests Assigned	% Of Tests Completed by All Students
7	1,034	87,661	80	108,300	81%
8	958	85,788	82	99,820	86%
9	767	67,214	79	79,260	85%
10	954	87,000	82	100,220	87%
11	680	61,503	75	66,860	92%
12	271	20,538	76	21,680	95%
<b>Total</b>	<b>4,664</b>	<b>409,704</b>	<b>79</b>	<b>476,140</b>	<b>87%</b>

\*Excludes Kok Pring HS

### 3.9 New Generation School Accreditation Process

The school accreditation process for the NGS system uses a framework of 24 conditional criteria that are broken down into two categories. In this respect, 12 of these criteria (Criteria 1-12) are 'absolutely' required (i.e., 100%) while another 12 (Criteria 13-24) are 'preferred.' Of the preferred criteria, a school must demonstrate at least 50% compliance or more. For the 7 schools applying for accreditation, all met accreditation requirements within a range of 92% (e.g., Prek Anchanh HS) to 100% (e.g., Prek Leap HS). The list of these criteria and the performance of each applying school is summarized in Table 3.10. The accreditation of 70% of New Generation Schools demonstrates another advance in the rate of accreditation from 2019 when only 50% of schools had been accredited.<sup>6</sup>

The accreditation process in the NGS System is often misunderstood to be a 'minimum performance standard,' which it very definitely is not. Rather, NGS sees its accreditation criteria framework, as creating the conditions necessary for a school to achieve innovation and high performance. That is, they enable a high degree of empowerment (i.e.,

<sup>6</sup> Accreditation visits in 2020 had to be cancelled due to the onset of the Covid19 Pandemic and restrictions on travel and school openings.

Table 3.10: Results of Accreditation Visits by Criteria (2021)

Accreditation Criteria	Preah Sisowath HS			Hun Sen Kg Cham HS			Demonstration School			Kork Pring HS			Prek Leap HS			Chea Sim Prek Anchanh HS			Svay Prohuot 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	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	x			x			x			x			x			x			x		
2. Practices of mandatory student purchases of teacher goods abolished	x			x			x			x			x			x			x		
3. Rationalized resource allocation system	x			x			x			x			x			x			x		
4. Increased hours of Instruction	x			x			x			x			x			x			x		
5. Teacher Career Path Planning & Teacher Support Framework	x				x			x		x				x			x		x		
6. 21 <sup>st</sup> Century Library Availability	x			x			x				x		x			x				x	
7. Professional Learning Community among Teachers	x			x			x			x			x			x			x		
8. High Rates of Student Access to ICT	x				x			x		x				x		x			x		
9. Availability of ICT Lab services	x				x			x		x				x		x			x		
10. Availability of science lab services	x				x			x			x			x			x			x	
11. PCR Level under 36:1	x				x			x		x				x			x		x		
12. Financial System in Place	x			x			x			x				x		x			x		
<b>Subtotal Score</b>	<b>12</b>	<b>--</b>	<b>--</b>	<b>7</b>	<b>5</b>	<b>--</b>	<b>7</b>	<b>5</b>	<b>--</b>	<b>10</b>	<b>2</b>	<b>--</b>	<b>9</b>	<b>3</b>	<b>--</b>	<b>11</b>	<b>1</b>	<b>--</b>	<b>10</b>	<b>2</b>	<b>--</b>
<b>Preferred Criteria (At least 50% Score Required)</b>										<b>10</b>	<b>2</b>										
13. Functional Student Council	x				x			x		x				x		x			x		
14. Functional SSC	x			x			x			x			x				x		x		
15. Teacher proficiency in ICT usage		x			x			x			x			x			x			x	
16. Evidence of career counseling services (secondary)	x			x							x			x			x				
17. Classroom sanitation & attractiveness	x				x			x			x			x			x			x	
18. Toilet hygiene and clean water access		x			x			x			x			x			x			x	
19. Sports/playground facilities	x				x			x			x			x			x			x	
20. Life skills Education		x		x			x			x			x			x			x		
21. Great Books Reading Programming		x				x			x	x			x			x			x		
22. Canteen services for students			x	x			x				x			x			x		x		
23. School Clinic in Place	x			x			x					x	x					x			x
24. 80% of Teachers have Bachelor Degree or Higher	x			x			x				x			x			x			x	
<b>Subtotal Score</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>8</b>		<b>8</b>	<b>4</b>		<b>8</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>1</b>
<b>Grand Total Score</b>	<b>19</b>	<b>4</b>	<b>1</b>	<b>13</b>	<b>10</b>	<b>1</b>	<b>12</b>	<b>10</b>	<b>1</b>	<b>14</b>	<b>9</b>	<b>1</b>	<b>17</b>	<b>7</b>		<b>19</b>	<b>3</b>	<b>2</b>	<b>15</b>	<b>7</b>	<b>1</b>
<b>Percentage Achieved</b>	<b>96%</b>		<b>-</b>	<b>96%</b>		<b>-</b>	<b>96%</b>		<b>-</b>	<b>96%</b>		<b>-</b>	<b>100%</b>		<b>-</b>	<b>92%</b>		<b>-</b>	<b>96%</b>		<b>-</b>

autonomy) in a school, which in turn promotes innovation and dynamic education. NGS accreditation criteria are by themselves not to be considered as minimum standards of performance, which NGS resolutely opposes. Thus, New Generation Schools follow the principle that achieving certain conditions of operation (e.g., no private classes) will in turn generate conditions of ‘empowerment,’ which is essential for a successful school. This principle has been the essential ingredient in successful New Generation School implementation, because when schools are truly empowered, it means that stakeholders are enabled to drive innovation from the ‘bottom-up,’ which ensures sustained change. Although minimum standards are commonly used in many projects to raise standards in theory, they tend to promote a ‘race to the bottom,’ since schools strive only for the lowest level of performance permitted in a project framework, rather than maximal levels of performance. These observations have given rise to what is known as the ‘Minimum Standard Trap’ (see Box 5).

Another problem with minimum standard configured projects is that they tend to lend themselves to top-down implementation approaches in which there is little internalization of project principles or visions among stakeholders. Rather, there is only mindless compliance with minimum standards of performance. Thus, while minimum standard-type projects may show some ephemeral successes in the short-run, they rarely lead to sustained change as schools revert back to their previous state when temporary project structures enforcing minimum standard compliance disappear.

#### Box 5: Risks Associated with the ‘Minimum Standard Trap’

- Undermines educational quality by promoting a **‘race to the bottom.’**
- Oversimplifies concepts of educational quality and leads to **mindless compliance** with minimum standards of performance.
- Promotes **top-down development approaches** that undermine stakeholder internalization of project principles and usually do not lead to sustained change when temporary project structures disappear.

### 3.10 Question Bank Evolution

The NGS Question Bank is now fully operational with all teachers oriented to its structure and points of access. In this regard, schools can access questions in the Bank through a security system that protects the confidentiality of test items so that the questions that they use to construct examinations have high levels of discrimination, reliability, as well as appropriate levels of difficulty. Questions have been developed for all subjects except IT and the NGS Central Office reports that over 5,130 questions have been developed, administered, analyzed, and revised accordingly (see Table 3.11). The Question Bank will only include questions with indices of item discrimination of 0.30 or higher and prefers questions of moderate difficulty (index range of 25% to 75%), since these questions are mostly intended for summative tests.

**Table 3.11: Questions Developed by Grade and Subject for the NGS Question Bank (2021)**

Grade Level/Subject:	Number of Questions Developed, Analyzed, and Revised												Total
	K	M	P	C	B	En	H	G	Mo	ES	IT	Other	
Grade 7	97	174	127	109	119	116	97	89	105	--	--	--	1,033
Grade 8	86	151	108	117	107	121	112	92	107	--	--	--	1,001
Grade 9	76	125	119	98	118	110	98	110	51	83	--	--	988
Grade 10	91	179	90	89	116	135	112	118	102	97	--	--	1,129
Grade 11	71	120	92	115	108	114	108	98	97	56	--	--	979
Grade 12	--	--	--	--	--	--	--	--	--	--	--	--	----
<b>Total</b>	<b>421</b>	<b>749</b>	<b>536</b>	<b>528</b>	<b>568</b>	<b>596</b>	<b>527</b>	<b>507</b>	<b>462</b>	<b>236</b>			<b>5,130</b>

Question development has mainly focused on Grades 7 to 11 due to the tendency of instructors in Grade 12 to focus on re-using old *Bac II Examinations* to help students prepare for the school leaving examination at the end of the secondary school cycle. To the Ministry's knowledge, this is the first time that an electronic Question Bank has ever been developed to help schools improve the validity of the tests that they administer. In this sense, it is a major milestone for the NGS System.

### 3.11 New Collaborations, Partnerships, & Networking

Public Private Partnership continues to play a key role in the implementation of New Generation School programming. In this respect, the NGS Program has over the years (2016-20) assembled a large array of public sector non-state actors and private companies to support the implementation of programming. The roles of the different partners vary tremendously in terms of what they provide. Some partners are NGOs that provide technical support for management and educational programming while others are international foundations that provide both tech support as well as strategic funding for things that MoEYS cannot use its own resources for. Many others are social enterprises and private companies that support NGS programming by tailoring their products to the specific needs of New Generation Schools, discount software licenses and other products, or provide free equipment, books, and other materials.

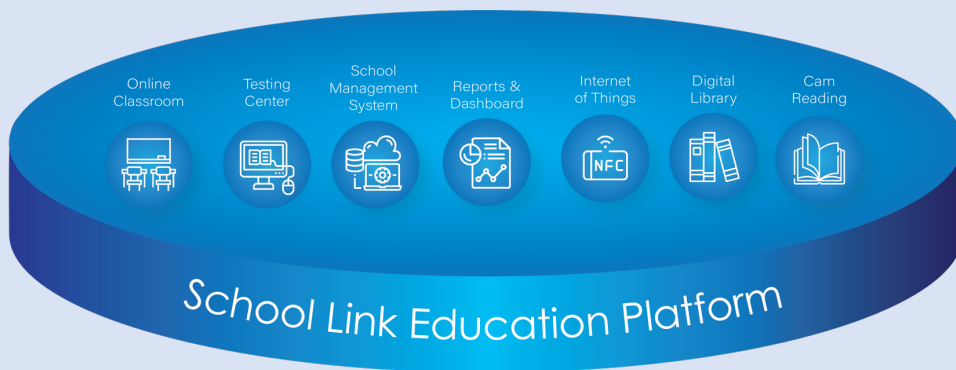
During 2021, the NGS Central Office has worked to invite additional partners to the growing list of 14 collaborators identified in Box 6. These new partners (see Box 7), many of whom are from the private sector, will assist New Generation Schools to further expand areas of learning in STEM, electronics, and blended learning. These collaborations will be marked by joint workshops, collaborative manual development, the design of new learning materials for STEM, and the emplacement of learning management systems in all schools.

#### BOX 6: Non-State Actors & Private Sector Companies Working to Implement NGS Programming (2016-2020)

1. **Kampuchea Action to Promote Education:** A national NGO that MoEYS contracts to implement NGS programming and manage the NGS Program
2. **Franks Family Foundation:** A British Foundation that provides technical support to the program and seeks to replicate NGS regionally (e.g., Laos, Myanmar).
3. **Apple Corporation:** Discounts both software and equipment for NGS implementation. Has contributed to an NGS Endowment Fund used to sustain NGS operations.
4. **Asia Foundation:** Through the Books for Asia Program operated by TAF, NGS libraries receive free donations of English books from top-line publishers in the United States.
5. **Cameo Education:** A British software development company that discounts the Observic Mentoring software licenses used by NGS Mentors. Cameo education has tailored its platform to fit the specifications required by NGS.
6. **Coding.org:** An American non-profit that provides NGS with free access to its learning platform to teach coding as well as robots that run off the code students create.
7. **Grow & Know:** A non-profit organization based in New York that has developed several useful materials on reproductive health designed for girls and boys who are entering puberty. These materials are contextualized to Cambodian settings and are provided for free for use in NGS Libraries and in counseling programs.
8. **KOOMPI:** A Cambodian-branded computer company that recently signed an MoU with MoEYS to host ThinkThink on its computers and which is powered by Linux.
9. **PACT:** An American organization that supports Youth Entrepreneurship Courses in NGS sites focusing especially on young girls.
10. **SALA:** A local software development company that has helped to design and maintain the NGPRC website
11. **ThinkThink:** A Japanese company that has developed an application with bite-sized mini-games to assist children in the development of their intellectual skills and problem-solving abilities. Signed an MoU with MoEYS in 2020.
12. **Thonthean Obrom (TTO):** A national social enterprise that develops Math Toolkits for students based on the specifications received from NGS educators.
13. **Wolfram Research, Inc:** A UK-based company that provides free licenses for its Computational Thinking software for use by teachers.
14. **X-Learning Systems:** A non-profit that provides discounted access to its English reading proficiency platform as well as access to thousands of English readers.

**BOX 7: New Network Collaborations Organized in 2021**

- **KLEMBOX Company:** This is a new company recently established by some outstanding university students whose goal is to provide affordable, hands-on materials to promote STEM learning. <https://www.linkedin.com/company/klembbox?fbclid=IwAR3s4IkF5r1HJUJ8PUw-WOUHww4iMi9JBkb292jVpFcdiF80GXGK5uQBcgao>
- **Automation Cambodia:** This company supports learning in the area of Robotics & Automation by providing training to teachers to create Electronics Clubs in all schools. The company will work with KAPE to develop a new manual to support the organization of this club by 2022. [https://www.facebook.com/AutomationnCambodia/?ref=page\\_internal](https://www.facebook.com/AutomationnCambodia/?ref=page_internal)
- **AUXSWOT Co.:** This company will work with KAPE to emplace an electronic Learning Management System in all New Generation Schools: <https://auxswot.com/>



- **Arizona State University:** This university is currently cooperating with NGS to support online training on Blended Learning (4 sessions), and planning for STEM piloting for some selected teachers and students in NGS schools.

**3.12 Completion of Club Manuals**

The establishment of student clubs to work more intensively on areas of interest to them personally is one of the key mechanisms that NGS uses to promote project work. Project work is one of the best exemplars of Constructivist Learning, which is the central pedagogical philosophy animating how teachers are supposed to teach in a New Generation School. Clubs can provide a good member-driven structure through which students can engage in intensive inquiries into specific subject areas that most interest them. Such inquiries may take the form of projects to create a product of some sort, field trips, guest speakers, and other activities determined by the club. As part of the budget planning process in each school, some amount of budget is provided to each club to support the activities that are planned by students. Depending on where students' interests lie, schools may

**Literary Products of a Club:** The picture at the right shows some of the books that the Creative Writing Club at Preah Sisovath HS has produced as part of the project work embedded within the club's work plan. ➔



support one or more different kinds of clubs. Topical areas include History, Drama, Creative Writing, Photography and many others (see Table 3.12). In order to help teachers to animate such clubs, the NGS program has sought to document how to set up and manage a subject club. This process of documentation was done collaboratively with Advisers working on the USE-SDP2 Project, which is funded by ADB. As a result of this collaboration, the club manuals developed will be used jointly by both projects. In all, both projects were able to document eight manuals relating to club establishment and management.

Although the closure of schools due to the Covid19 Pandemic has hindered the activity levels of clubs in many schools, many clubs do continue to operate under the guidance of a supervising teacher. According to data compiled by the NGS Central Office, there were 73 clubs operating across each of the secondary schools supported by the NGS System in 2021 (see Table 3.12 below).

**Documenting Subject Club Establishment:** An example of a Club Manual on Creative Writing. ↗



**Table 3.12: Proliferation of Student Clubs by School, 2021**

School Name	English Club	History Club	Earth Science Club	Physic Club	Biology Club	Chemistry Club	Math Club	Creative Writing Club	ASEAN Club	Drama Club	Photography Club	Film Club	Robotic Club	Total
Preah Sisovath HS	x	x	x	x	x	x	x	x	x	x	x	x	x	13
Hun Sen Kg Cham HS	x	x	x	x	x	x	x	x	x	x	x	x	--	12
Prek Leap HS	x	x	x	x	x	x	x	x	x	x	x	x	--	12
Prek Anchanh HS	x	x	x	x	x	x	x	x	x	x	x	x	--	12
Peam Chikong HS	x	x	x	x	x	x	x	x	x	x	x	x	--	12
Kok Pring HS	x	x	x	x	x	x	x	x	x	x	x	x	--	12
<b>Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>73</b>

### 3.13 Software License Procurements

The role of educational software and electronic platforms for learning and administration continued to grow in prominence in the NGS System as school closures increase the need for schools to shift learning and administration to electronic channels. With the arrival of government funds in June 2021, the program moved forward swiftly with a number of software procurements that will promote specialized learning in specific areas (e.g., STEM, English) as well as automated administrative practices and improved mentoring.

A list of procured software and other electronic platforms used in the program are summarized in Box 8, some of which provide free licenses.

The change to *Cambodia Mobile* for school administration represents a major, and it is hoped final, change in direction in this area. After an intensive review of different platforms and interviews with multiple service providers including SALA, Wiki-schools, Cambodia Mobile, and others, NGS programmers came to the conclusion that Cambodia Mobile offers the most comprehensive package of administrative software that also includes a learning management system, which the program desperately needs. Thus, all New Generation Schools will be shifting to Cambodia Mobile for all administrative functions starting in 2021. In this respect, all schools will get the basic package of Cambodia Mobile (\$6/student) while two schools will procure the package that also includes a Learning Management System (\$12/student). A listing of all the features of this software is provided in **Annex 2**.

#### BOX 8: Software Procurement in 2021

- **Observic:** This is a mentoring software that helps teachers to archive their teaching practice and present to School-based Mentors for review and confidential feedback. (Cost: \$15/Teacher)
- **Cambodia Mobile:** This is a sophisticated platform that offers different packages for different levels of service. The basic service enables automated attendance, grading, and promotional status tracking (Cost: \$6/student) while more advanced packages include an LMS (Cost: \$12/student).
- **X-reading:** This is an electronic platform that allows students to gain access to hundreds of books in English and read them with automated tests that help teachers monitor their progress. (Cost: \$12/Student)
- **Zoom/Google Meet:** All schools have license-free access to essential meeting software and platforms such as Zoom and Google Meet. (Cost: Free)
- **PhET:** These are online simulations that provide fun, interactive research-based simulations for use in K-12 and college STEM education. Access to the platform is free. The simulations help students visually comprehend concepts that are invisible to the by using graphics and intuitive controls such click-and-drag manipulations. (Cost: Free)
- **Camtasia:** This is a software that many NGS teachers are now using to help them produce professional videos as part of the online learning program. (Cost: Free)

### 3.14 Great Books Programming

The *Great Books Reading Program* looks to cultivate an avid passion for reading in every student. By providing a list of “must read” classic books related to school topics and life lessons, the program seeks to engage students in reflective activities such as book reports, book fairs, oral presentations and displays. The New Generation School System has been supporting Great Books programming for several years with the goal of promoting a culture of reading among many students, particularly with regards to important works of literature. Under the Great Books Program, students have been reading and analyzing at least 10 books from a list of preferred books each year. These books are in both Khmer and English language, depending on a student’s preference. This program seeks to have a huge impact on students’ personal growth as well as fortifying a culture of reading during leisure time. The different types of assessments used in the Great Books Program facilitate reflection, help incorporate critical thinking skills on everyday activities, enhance leadership and team work abilities and most of all will open a window to the world when students choose books from a wide range of National and international classic and essential reading material. Currently, the NGS Central Office reports that five schools are currently supporting the Great Books Program with about 108 participating students and an average of 9 books read per student (see Table 3.13). Different Great Books club chapters also create presentations by students of the books that they have read using public speaking skills that they learn in other classes. Examples of such presentations are presented in the links attached below:

<https://t.me/c/1403542563/1532>

<https://t.me/c/1403542563/149>

<https://www.facebook.com/1612512592309887/videos/4112236532229759>

**Table 3.13: Student Participation in Great Books Programming**

School Name	Participating Grade Levels	Participating Students	Number of Books Read	Books Read per Student
Preah Sisovath HS	7,8,9,10	32	448	14
Hun Sen Kg Cham HS	--	--	--	--
Prek Leap HS	7,8,9,10,11	17	105	6
Prek Anchanh HS	7,8,10,11	25	100	4
Peam Chikong HS	7,8,10	9	122	13
Kok Pring HS	7,8,9,10	25	175	7
<b>Total</b>	7,8,9,10,11	108	950	9

### 3.15 Networking Outside of the New Generation School System

The NGS System has also been trying to leverage its experience and best practices to schools outside of the system. As programming in New Generation Schools becomes better known and more accessible through online means (a development greatly accelerated by the Covid19 Pandemic), networking outside of the NGS System is becoming much easier. For example, NGS advisers have been working with the *Westline Education Group Co., Ltd.*, one of the largest private school networks in Cambodia, on promoting best practices such as project work and blended learning. Through this networking, NGS has been able to leverage its influence to hundreds of educators in the Westline System (see Box 8). Similarly, Preah Sisovath HS is working on a pilot called *Online Plus* in which it will make its online learning program accessible to hundreds of non-Sisovath students. This will enable non-NGS students to start benefiting from the considerable investment that has taken place in developing NGS' e-learning program. These and similar efforts are helping to leverage MoEYS investments far beyond the NGS System.

#### **BOX 9: Educators Reached in the Westline Education System by NGS Networking**

- 68 senior officers comprising the Company CEO, Vice President, Director of Internal Quality Assurance, Academic Director, Academic Managers, Research & Development Manager, School Principals, & Vice School Principals
- 130 Primary School Teachers
- 225 secondary school teachers

### 3.16 Transition of Students to University

Preah Sisovath and Hun Sen Kampong Cham High Schools are the only institutions in the NGS System that currently have students enrolled in Grade 12. This will change significantly next year when the first cohort of NGS students in Prek Leap and Prek Anchanh High Schools reach Grade 12, nearly doubling the number of NGS students who take the Bac II Examination and apply for admittance to university. The NGS System tracks the number of students who transition to university very carefully as another key metric of performance. For the current year, schools report that 90% of students are transitioning to university while 1% moved to post-secondary TVET and Polytechnic institutions. Another 1% of students decided to join the work force while the remainder (8%) decided to repeat Grade 12 (see Table 3.14). When one considers that the gross enrollment ratio for youth attending university is only about 10%, a 90% transition rate to tertiary level institutions is a very high number. It should also be noted that a large number of those going to university also received scholarships. In this respect, over two-thirds of students



accepted to university received some sort of scholarship, a very large proportion of the total. These metrics overall present a picture of a very well-prepared student cohorts transitioning to higher education and satisfies an expectation that NGS will contribute to the public education system's ability to generate high quality human resources for national development.

*Table 3.14: Post-Secondary Tracking of Grade 12 Students, 2021*

School	Total Grade 12 Students	Students Admitted to University	%	Receiving Scholarships	%	Admitted to TVET & 2-year Institutions	%	Entered Work Force	%
Preah Sisovath HS	206	192	93%	141	73%	0	--	0	--
Hun Sen Kampong Cham HS	62	48	77%	14	29%	3	5%	2	3%
<b>Total</b>	<b>268</b>	<b>240</b>	<b>90%</b>	<b>155</b>	<b>65%</b>	<b>3</b>	<b>1%</b>	<b>2</b>	<b>1%</b>

### 3.17 Career Counseling Activities

Career counseling services in New Generation Schools continue to be a major element in the redesigned Cambodian public school. Each school has set up counseling offices with at least one counselor assigned to each school. Career planning starts intensively with outreach to each new cohort of youth that enters as school at Grade 7. Students are introduced to *Trey Visay*, the e-counseling app developed by KAPE and now used in all New Generation School, and participate in a survey to assess risk factors that they may be encountering. Risk assessments have shifted heavily to a review of responses made by students to questionnaires as part of their registration in *Trey Visay*. Based on assessments, students may receive intensive



*Career Counseling Services: Students at Prek Anchanh HS meet with a counselor in the library to learn about using *Trey Visay* and complete an exploratory survey on their interests and concerns*

one-on-one counseling and/or participate in workshops designed to help them better plan their careers as they go through the secondary school cycle. Counseling services in New Generation Schools are well-resourced by the provision of counseling offices, full-time counselors, tablets that host counseling software (e.g., *Trey Visay*), and meeting facilities in the form of both auditoriums and libraries.

Counselors across the NGS system report and compile statistics on students utilizing counseling services in all schools each year. In 2021, counselors reported that they had surveyed 910 students entering at Grade 7 and designated 49% as being 'at risk,' meaning

that they need intensive counseling services to sort out their career plans (see Table 3.15). In addition, it was reported that almost one thousand students had received individualized counseling during the year while another 889 had participated in special workshops on career planning. Such workshops deal with a variety of topics including how to use career resources, exposure meetings with individuals in various professions (e.g., policeman, nurses, entrepreneurs, etc.), and other topics that help youth deal with challenges in the World of Work. Counselors also play a key role when Grade 12 students fail their Bac II Examinations to help them recover from the disappointment and navigate what their best options are going forward. In comparison to other public schools, New Generation Schools continue to be the best exemplars of institutions providing tailor-made services to help Cambodian youth plan their futures.



Grade 7 students learn how to use Trey Visay

Table 3.15: Overview of Counseling Activities across NGS Secondary Schools, 2021

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	108	60	74	39	69%	65%	410	193	41%	19%	18
Hun Sen Kg Cham HS	1	97	44	77	36	79%	82%	166	86	36%	19%	416
Prek Anchanh HS	1	209	122	141	75	67%	61%	162	78	16%	8%	219
Prek Leap HS	1	279	144	63	31	23%	22%	69	34	7%	3%	236
Peam Chikong HS	1	217	124	66	28	30%	23%	110	42	14%	5%	0
<b>Total</b>	<b>5</b>	<b>910</b>	<b>494</b>	<b>444</b>	<b>254</b>	<b>49%</b>	<b>51%</b>	<b>917</b>	<b>433</b>	<b>22%</b>	<b>10%</b>	<b>889</b>

\*Note: Student surveys focus on students entering New Generation Schools at Grade 7 for the 2020-21 academic year.

### 3.18 Ongoing Investments in the Canteen at Preah Sisovath HS

Because the Preah Sisovath HS Campus is littered with a large number of *ad hoc* eateries, which gives the campus a messy look, there has long been a desire to build a central canteen with a thoughtful design (see below). This desire faces many challenges due to the limited amount of free space on the campus in addition to the many restrictions on the architectural styles of new buildings, which must harmonize with the Second Empire style of the original buildings. Nevertheless, the NGS program has advocated vigorously to push forward an initiative to build a new, modern canteen facility. The New Generation School at Sisovath HS has now enlisted the support of parents to support construction of a specially designed facility that will have two floors. The bottom floor will house an eatery with private sector stalls while an upper floor will house meeting and library facilities. Through strong advocacy, the school has raised approximately \$80,000 from parents with a proposed contribution from NGS of \$20,000, which is planned for 2022. It is hoped that the new canteen will open sometime in mid-2022.



➤ **Proposed Design for New Canteen at Preah Sisovath HS:** The NGS Architect has provided technical support to Preah Sisovath HS in the design of a new canteen that will help to centralize the location and organization of lunch-time breaks as well as snack periods for students (see idealized drawings shown). Currently, there are a number of small ad hoc eateries spread throughout the campus, which detract from the overall ambience of the school. The proposed new canteen will not only provide more formalized eating spaces but will also include meeting facilities where it will be easy to have catering services for workshops and public forums.

## NGS Primary School Level

### 3.19 Efforts to Promote Online Learning (Primary School Level)

As is the case of shifting educational services to an online format at secondary school level, New Generation Primary Schools also tried during the year to provide educational services online. However, these efforts have been slightly less comprehensive than the efforts at secondary school level. In this respect, primary school teachers at two schools developed their own videos while other schools decided to use educational materials from the MoEYS archives to organize online learning services (see Table 3.16). The Demonstration School seemed to evince the highest level of in-house video production with a reported average of 76 videos produced per teacher. The differences in approach between schools often reflected variations in access of student populations to the internet and mobile devices. For example, Angkor Ban PS and Akhea Mahasei PS reported that only about 55% of students in their schools were accessing online services due to constraints relating to access to mobile devices and internet while the remainder accessed more traditional distance education services such as paper-based worksheets used in village and home-based learning (see below).

Table 3.16: Promoting Online Learning in New Generation Schools by Subject & School (2021) (Primary)

School	Number of Videos Produced by Teachers												No. of Teachers	Participating Teachers	Participating Teachers as a %	Videos per Teacher		
	G1	G2	G3	G4	G5	G6												
<b>Primary School Level</b>																		
Demonstration School	143	264	115	109	153	208								992	13	13	100%	76
Akhea Mahasei PS*	--	--	--	--	--	--								--	--	--	--	--
Angkor Ban PS*	--	--	--	--	--	--								--	--	--	--	--
Svay Prahut PS	37	36	33	22	27	26								181	16	16	100%	11
<b>Total</b>	<b>180</b>	<b>300</b>	<b>148</b>	<b>131</b>	<b>180</b>	<b>234</b>								<b>1,173</b>	<b>29</b>	<b>29</b>	<b>100%</b>	<b>40</b>

\*Schools that engaged in online learning but used videos from MoEYS archives instead of producing their own.

Most primary schools have also been highly active in organizing electronic testing with a total of 31,007 electronic tests completed during the year or 15 tests per student (see Table 3.17). Although the participation rate in electronic testing by primary school students is lower than that seen at secondary school level (87% versus 77%), the number of primary school students apparently participating in the online education program is still significant considering the very young age of children and their more limited exposure to technology than older children.

Table 3.17: Student Engagement in Online Testing by Grade at Primary School Level (2021)

Grade	Total Students	Total Tests Completed (Mar-June)	Tests Completed per Student	Total Tests Assigned	% Of Tests Completed by All Students
1	412	6,144	15	8,320	74%
2	383	6,010	17	7,728	78%
3	444	6,725	15	9,152	73%
4	428	7,072	17	8,878	80%
5	176	2,269	13	2,816	81%
6	227	2,797	12	3,632	77%
<b>Total</b>	<b>2,070</b>	<b>31,007</b>	<b>15</b>	<b>40,536</b>	<b>77%</b>

### 3.20 The Scope of Distance Education Activities at Primary Level

Because the scope of the online education program at primary level is smaller than is true at secondary school level, the village-based distance education program that uses paper-based materials still plays quite a significant role at all schools. This speaks to the limited access to mobile learning devices and internet services among children as noted above and this is particularly true in more rural areas such as Angkor Ban PS and Svay Prahuet PS. The paper-based distance education program (which is primarily animated at village level) has been incredibly vibrant with schools reporting the completion of over 281,000 student worksheets (see Table 3.18). This represents about 110 worksheets per student during the reporting period. In addition, teacher participation rates in these activities have been extremely high with the NGS Central Office reporting a 95% participation rate.

**Table 3.18: Scope of Distance Education Activities at Primary School Level, 2021**

School	Number of Worksheets Completed by Students							Total Students	Worksheets per Student	No. of Teachers	Participating Teachers	Participating Teachers as a %
	G1	G2	G3	G4	G5	G6	Total					
<b>Primary School Level</b>												
Demonstration School	1,104	1,136	1,216	1,184	1,152	1,680	7,472	467	16	13	13	100%
Akhea Mahasei PS	41,160	38,010	52,710	51,660	30,030	30,870	244,440	1,309	187	38	38	100%
Angkor Ban PS	2,544	3,960	2,016	5,244	3,672	3,600	21,036	442	61	12	12	100%
Svay Prahuet PS	861	1040	1,564	1,156	1,604	2,265	8,490	334	25	16	13	81%
<b>Total</b>	<b>45,669</b>	<b>44,146</b>	<b>57,506</b>	<b>59,244</b>	<b>36,458</b>	<b>38,415</b>	<b>281,438</b>	<b>2,552</b>	<b>110</b>	<b>79</b>	<b>76</b>	<b>95%</b>



➤ **Distance Education Activities in Full Motion:** For those New Generation Schools that cannot reach all of their students through online means, there is a very active campaign to provide educational services through paper-based worksheets and tests as well as the use of self-study games and materials. As the pictures above demonstrate, these activities are largely village-based and comprise children of all age groups.

### **3.21 Completion of New Building Emplacement in Several Sites**

Several New Generation Primary Schools have received large investments from other funding sources such as the Department of Construction, the Chinese Government, local parent associations, and other sources to emplace large new buildings on NGS campuses. These investments have alleviated severe classroom shortages that have hindered grade expansions at these schools. For example, Akhea Mahasei PS was desperately in need of a new large facility to enable the school to allow all six grade levels to move from a double shift system to a single shift system where children study for six hours per day. The construction of a three-story building with 18 classrooms has addressed the severe classroom shortage there. Other schools have similarly received new investments such as the Demonstration School (8-room building) and Angkor Ban PS (10-room building) both of which are in Kampong Cham Province.



***Large Investments in Primary School Infrastructure:*** A three-story building with 18 classrooms was recently completed at Akhea Mahasei PS in Kampong Speu Province.

## New Generation Pedagogical Research Center

### 3.22 Posting of New Mentors by NGPRC

The mentor intake in late 2020 (Cohort 2) was much larger than the original intake in 2019, coming in at 32 persons. Cohort 2 completed their studies in 2021 and have been posted to both NGS and non-NGS institutions. About one-fifth of the candidates in Cohort 2 were internal to the NGS System (i.e., they came from among teachers currently teaching at a New Generation School) while 78% came from non-NGS sites. Cohort 2 had mostly completed their course work by March when the MoEYS ordered the closure of all educational institutions at the end of March 2021. This meant that candidates had to undertake a 'virtual' practicum, as was the case for Cohort 1 in 2020. This required working with mentees through electronic meetings rather than face to face encounters, which was less than ideal. All degree candidates completed their practicums and mini-theses in July 2021 and were posted to receiving institutions in August or September 2021.

Table 3.19: Assignment of Mentors within the NGS System and Other Institutions, 2020 & 2021

Recipient Institution	2021			2020	Total	Mentors Who Have Left the System
	Total Mentors Assigned	Mentors Internal to the NGS System	Mentors External to the NGS System	Total Mentors Posted in 2020		
<b>NGS Institutions</b>						
Preah Sisovath HS	2	1	1	4	6	
H.S. Kampong Cham HS	4	2	2	3	7	1
Prek Leap HS	1	1	0	3	4	
Prek Anchanh HS	1	0	1	3	4	
Peam Chikong HS	3	1	2	2	5	
Kok Pring HS	2	1	1	2	4	
Demonstration School (PS)	1	0	1	0	1	
Angkor Ban PS	1	1	0	0	1	
Svay Prahut PS	1	0	1	0	1	
Preach Akamahesey PS	3	0	3	0	3	
<b>Subtotal</b>	<b>19</b>	<b>7</b>	<b>12</b>	<b>17</b>	<b>36</b>	
<b>Non-NGS Institutions</b>						
Nat'l Institute of Education	5	0	5	2	7	
PTEC – (P Penh)	0	0	0	3	3	
BTEC – (Battambang)	0	0	0	3	3	
Samdach Ou HS*	2	0	2	0	2	
H. Sen Phnom Sampov HS*	2	0	2	0	2	
Prosoth HS*	2	0	2	0	2	
RTTC_Kampong Cham	2	0	2	0	2	
<b>Subtotal</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>8</b>	<b>21</b>	
<b>Total</b>	<b>32</b>	<b>7</b>	<b>25</b>	<b>25</b>	<b>57</b>	<b>1</b>
<b>As a Percentage (%)</b>	<b>100%</b>	<b>22%</b>	<b>78%</b>	<b>100%</b>	<b>100%</b>	<b>2%</b>

\*Posted to Schools in Upper Secondary Education-Sector Development Program (USE-SDP2) for Mentoring Pilot.

A request for posting mentors was sent to MoEYS and approved in the fourth quarter. A total of 19 new posts were created within the NGS system so that every school will have between 3 to 4 mentors (see Table 3.19). Accordingly, 19 newly graduated mentors or

59% were posted to New Generation Schools to join 16 mentors<sup>7</sup> who were posted there last year. Unlike last year, four primary level New Generation Schools also received mentors (6 in all or about a third of those being posted to NGS sites), as the intake last year was expanded to include both primary and secondary school teachers with a Bachelor Degree.

The remaining mentors in Cohort 2 (41%) were posted to non-NGS institutions including both tertiary and non-tertiary institutions. In this regard, 6 mentors were assigned to three schools in the USE-SDP2 Project as part of a mentoring pilot to determine whether mentors can improve the efficiency with which Secondary Resource Schools (SRS's) can operate. This pilot is part of a strategy to use school-based mentors to protect high investments made by MoEYS at secondary school level such as SRS's where the Ministry is investing millions of dollars in resource centers that appear to be underutilized according to recent assessments.<sup>8</sup> The remaining mentors were assigned to the National Institute of Education to upgrade the Primary Practice School there as well as other tertiary institutions (see Table 3.19).

### 3.23 New Intake at NGPRC

A new intake was undertaken at the Center in September 2021, comprising the third cohort trained by NGPRC. Applying candidates this year were fewer in number than in previous years because there are no candidates applying from within the New Generation School System. As implied above, all mentoring posts within the 10 New Generation Schools are now full. In addition, the Covid19 Pandemic has undermined the flow of information within the education system so that the applicant pool has now fallen from 157 in 2019 to only 70 in the current year. As a result, this year's intake has returned to the original level used in 2019 (i.e., 25-degree candidates). Of those applying, 58 were tested, interviewed, and observed in terms of their teaching practice and 25 individuals were offered a place at the Center for this year's degree program.

Future planning for NGPRC Intakes expects a marked increase in the number of applying candidates due to the proposed expansion of the NGS System to 15 new sites, which will require between 45 and 60 new mentors during the period 2022 to 2024. In addition, depending on the results of the Mentoring Pilot getting under way in USE-SDP 2, a huge number of mentors may be required for posting in these high investment schools. Currently, there are 50 SRS's spread throughout the country. If each SRS receives two mentors, a total of 100 mentors will also be required. However, this will depend on the result of the planned pilot within the SRS system. This is the current planning of the NGPRC in anticipation of new intakes.

### 3.24 Final Evaluation Report on School-based Mentoring System Completed

As part of its mandate, the New Generation Pedagogical Research Center has been engaging in intensive research on the efficacy of mentoring as a strategy to increase the quality of teaching. In this regard, the Center received a grant of

#### BOX 10: Key Findings from NGPRC Mentoring Research

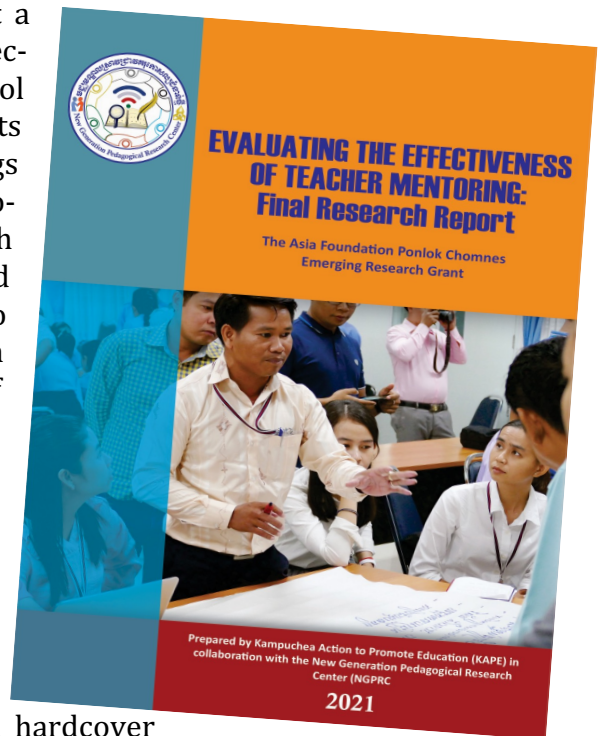
1. Bureaucratic Creep has been a problem in some schools as Administrators seek to use Mentors for paper work.
2. Mentor Workload and Ratio of Mentors to Mentees may need revision.
3. Poor understanding of the benefits of mentoring among teachers. Most think it is a new kind of inspection.
4. Teachers prefer pairing Mentors and Mentees by subject background.
5. Schools want Science Mentors.
6. School Principals prefer older Mentors.
7. Some mentors lack confidence, particularly with regards to teaching methods.

<sup>7</sup> Originally, 17 mentors were posted to New Generation Schools last year but one resigned.

<sup>8</sup> KAPE (2020) *Comprehensive Assessment of Secondary Resource School Network*, Phnom Penh: MoEYS-ADB.



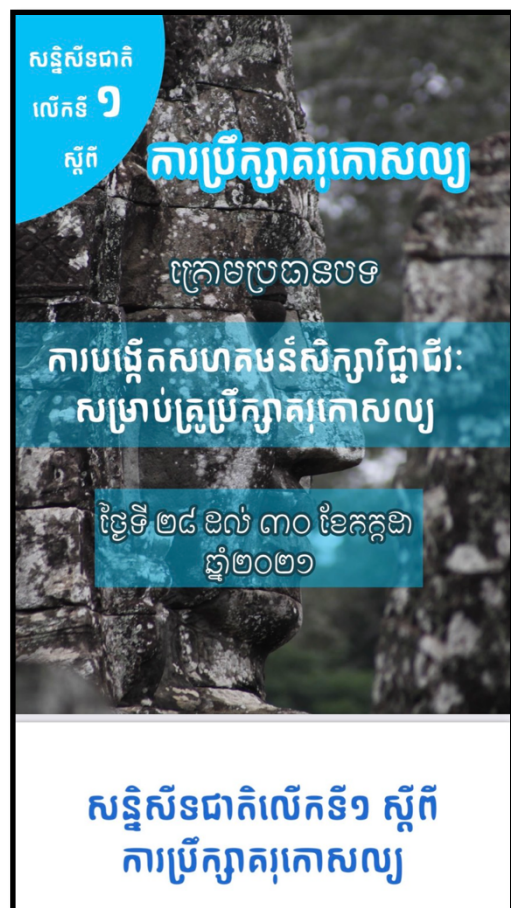
\$15,000 from *The Asia Foundation* to conduct a small research project that looked at how effectively mentors placed in New Generation School sites could work to support teachers. The results were generally positive but with several findings that will lead to changes in the mentoring program. Some of the key findings of this research are highlighted in Box 10. Recommended changes stemming from the research relate to the need to revise the syllabus to focus more on teaching methods, improving understanding of the mentor’s Job Description by school managers, and a review of the method for mentor selection, among others. Conducting research in this way helps the Center to fulfill its mandate to ensure that its programming is evidence-based. The finalized research was presented at a webinar<sup>9</sup> organized by *The Asia Foundation* on 18 August 2021 and published and disseminated through the NGPRC website<sup>10</sup> and as a hardcover publication (see inset).



### 3.25 Planning for National and International Conferences

After the success of the 1<sup>st</sup> Cambodia International Conference on Mentoring Educators (CICME) last year, the NGPRC began preparations for a second international conference that took place in November 2021 (15-17 November 2021). Due to the Covid19 Pandemic, the conference was once again organized in a virtual format. Because of the high interest in the conference last year, it was also decided to organize both a National and International Conference this year. The former was delivered in Khmer Language while the latter was organized in English and included many speakers from universities throughout the world. The national conference took place during the last week of July 2021 (28-30 July 2021) and included over 30 speakers and 900 slides. The key note presentation was delivered by H.E. Hang Chuon Naron, Minister of Education, Youth, and Sport. The response from

*Flyer for the National Conference on Pedagogy organized by NIE and NGPRC. ➔*



<sup>9</sup> <https://www.facebook.com/1492904754/posts/10225877387830012/?d=n>

<sup>10</sup> [https://www.ngprc.edu.kh/wp-content/uploads/2021/08/KAPE\\_Ponlok-Chamnaes\\_Teacher\\_Mentoring\\_2021-05-30\\_KDM.pdf](https://www.ngprc.edu.kh/wp-content/uploads/2021/08/KAPE_Ponlok-Chamnaes_Teacher_Mentoring_2021-05-30_KDM.pdf)

the educational community in Cambodia to the national conference was great with an average of 21,566 daily views and 461 viewers in real-time during the actual delivery of the conference (see Table 3.20). The Department of IT estimates that almost 70,000 individuals were reached through the conference. The strong success of the National Conference has helped to better establish the reputation of both the Center and the National Institute of Education as important actors in educational reform and innovation in Cambodia and it is hoped that the organization of these conferences will be a regular feature of NGPRC programming in the future.

In comparison to the national conference, the reach of the international conference was surprisingly less but nevertheless well attended by a diverse audience throughout the world. About 2,897 people joined the conference each day on average (see Table 3.20). The main benefit of the international conference was that it allowed NGPRC and NIE to learn about international trends in mentoring and enabled the both institutions to move closer to international partners such as Arizona State University and Texas A&M University.

**Table 3.20: Engagement in National Conference on Mentoring & New Pedagogies**

Parameter	28 July 2021	29 July 2021	30 July 2021	Average
Reactions	2,400	767	1,200	<b>1,455</b>
Comments	414	78	188	<b>226</b>
Shares	1,300	286	414	<b>666</b>
Peak Live Viewers	688	275	421	<b>461</b>
Views	31,300	11,400	22,000	<b>21,566</b>
Engagements	7,100	1,900	1,700	<b>3,566</b>
Reach	91,000	36,800	80,700	<b>69,500</b>

**Table 3.21: Engagement in International Conference on Mentoring & New Pedagogies**

Parameter	15 November 2021	16 November 2021	17 November 2021	Average
Reactions	113	37	31	<b>60</b>
Comments	10	0	0	<b>3</b>
Shares	45	20	14	<b>26</b>
Peak Live Viewers	20	5	7	<b>11</b>
Views	1,100	382	340	<b>607</b>
Engagements	564	169	138	<b>290</b>
Reach	5,530	2,264	898	<b>2,897</b>

**CICME 2021**

**2<sup>nd</sup> Virtual-Cambodia International Conference on Mentoring Educators**

From Phnom Penh, Cambodia

**November 15-17, 2021**

Organized and sponsored by:



First Announcement  
(Version: March 2021)

### 3.26 Establishment of the Cambodia Association of Mentors (CAM)

During 2021, the NGPRC also took on an important initiative to organize the growing number of mentors certified by the Center into a national association. The association, known as the *Cambodian Association of Mentors (CAM)*, has been officially recognized by the MoEYS and comprises all 57 mentors who have so far graduated from the NGPRC. The Association’s numbers are expected to grow with each successive cohort that enrolls in the Center’s degree program. The Association elects its own officers and will help the various mentors who are posted throughout the country to stay in touch with one another and the Center itself. As one of its first important duties, the CAM played a key role in organizing and moderating the National Conference on Pedagogy that took place in July 2021 and it is expected that the Association will play a similar role in organizing other national events relating to the mentoring of educators.

### 3.27 Enhancing National Research on Cambodian Education

As its name suggests, the New Generation Pedagogical Research Center seeks to increase the body of research literature on the Cambodian education system in Khmer Language. One way that the Center has sought to meet this mandate is to seek research grants externally such as from the The Asia Foundation, as described above. Another contribution to this mandate is made by degree candidates who have to write a Master’s Degree thesis as part of their degree requirements. This year, the Center has started to codify research theses completed by degree candidates to build a body of empirical research on Cambodian education that can be accessed online and in the Center’s library. Hard copies of the theses will also be kept in the Center’s archives. A list of the various research titles completed by degree candidates can be found in Table 3.22 below. So far, 57 research theses have been developed by the Center since its establishment.



**Building a Research Archive:** Hard copies of master’s degree theses completed by Cohort 2 have been printed and are ready for archiving at the NGPRC. ➔

**Table 3.22: List of Research Topics Completed for the Master’s Degree Thesis by NGPRC Degree Candidates**

Master Degree Thesis Topics Completed by Degree Candidates in 2021		
1. The Student’s Perception toward the Use of X-Reading to Study English on Internet: Case Study at Four New Generation Schools	12. Exploring Factors Cause At-Risk 9 <sup>th</sup> Grade Students to Get Low Performance and the Solutions to Achieve Their Academic Performance: A Case Study of 9 <sup>th</sup> Grade Teachers and At-Risk 9 <sup>th</sup> Grade Students at Krek High School	23. The Challenges of Teaching and Learning English Vocabulary: A Case Study at So Heu Secondary School in Battambang Province
2. The perception on the use of English cartoon movies with subtitles for EFL students on content comprehension: A case study at Kuok Pring High School	13. Challenges and needs of new teachers in New Generation School at High School	24. Exploring the Utilization on Audio-visual Aids and Challenges in EFL Classroom: A Case Study at Kouk Pring High School
3. The Challenges of Teachers in Producing Lesson Video and Teaching Students by Using Those Videos as the Priority Tool in Distance Learning during Covid 19: A Case Study in a New Generation School	14. Perspectives of Students Teachers and Parents on the Ability to Read Khmer Language of 7 <sup>th</sup> Grade Students at Svay Rolum Secondary School	25. Exploring Teachers’ and Students’ Perception on Reading Skills in EFL Classroom: A Case Study at Sok An Tonle Bati High School at Takeo Province, Cambodia

<b>Master Degree Thesis Topics Completed by Degree Candidates in 2021</b>		
4. Student Teachers' Perceptions on their Online Teaching Practicum: Case Study at Battambang Teacher Education College	15. Study on EFL Teachers' and School Principals' Experience about Online Teaching at High Schools in Mongkolborey District during COVID-19 Pandemic	26. Teachers' Perception of Inquiry-Based Learning Applied in Mathematic at primary school: A Case Study in Public School in Kampong Cham Province
5. Integrating Revised Bloom's Taxonomy of Cognitive Process Dimension in Developing Question Bank for Student Assessment of English Subject: A Case Study of New Generation School in Phnom Penh"	16. The Relationship of Reading Motivation with the Students Reading Comprehension at the Lower Secondary Level: Gender Differences	27. The challenges of using PhET in Teaching physic at Preah Sisowath High School (NGS), Phnom Penh
6. Classroom Management Strategies in Teaching EFL Large Classes at the Secondary Level at Bak Tok High School, Phnom Penh, Cambodia	17. Exploring Factors Influencing the Decision-Making to Choose Social Science Subjects among Upper Secondary School Students	28. Integrating STEM education method in Physics subject at Upper Secondary Schools.
7. Identifying Causes of Dropout in Rural Upper Secondary School in the Time of COVID-19	18. Investigating Mentors' and Mentees' Perceptions of Mentoring Practices: A Case of Prek Anchanh HS during School Closure In 2020-21 Academic Year	29. Challenges of Learning Algebra On First Degree Equation with One Variable in Secondary School Case Study: Grade 9th At Hun Sen Kandal Meanchey Secondary School.
8. Students and Teachers' Perceptions of Inquiry-Based Learning Applied in Physics at upper-Secondary Level: A Case Study in A High School in Phnom Penh	19. Exploring the Perceptions of Primary School Students Regarding Remote Learning During the COVID-19 Pandemic Through the Lens of 5 <sup>th</sup> Grade Students and Educators: A Case Study in Wat Chork Primary School	30. The Measures to Help Students in Grade Seven Who have Difficulty in Studying Mathematics "Solution and Practice". A Case Study: The Seven Grade Students of New Generation School Preak Leap High School.
9. Exploring Teachers and Students' Perception on Applying Inquiry-Based Learning (IBL) in Teaching and Learning in Social Science Subjects at Upper Secondary School	20. Challenges of Teaching and Learning of Geometry in Grade 9: A Case Study at Porthom High School in Svay Rieng Province, Cambodia	31. Learning Trigonometric function with Wolfram Alpha Technology for Grade 11.
10. The Challenges of Teaching and Learning English Writing Skills: A Case Study at Hun Sen Peamchikong High School, Cambodia	21. Examining Book Reading Habits and Preferences among Lower Secondary School Students	
11. Exploring Grade Seventh EFL Teachers' Challenges of Monthly Test during Distance Learning in the Area of COVID-19 Pandemic: A Case Study of Public Lower-Secondary School, Cambodia	22. Challenges of Teaching Experimental Lessons for Biology Teachers in Grade 12: Case Study at High School in Tbong Khmum Province	



**A Very Modern Degree Program:** Master Degree Candidates at NGPRC meet in the ICT in Education Seminar Room at the Center. Hands-on learning and seminar-style study techniques at the center make it a good exemplar for upgrading the rest of the National Institute of Education.



***A New Type of Facility to Promote Seminar-based Tertiary Education: The New Generation Pedagogical Research Center has been designed and organized to ensure very high-quality learning environments that feature seminar rooms, wired environments, and hands-on practicums.***

#### 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, and Sport each year. These indicators and the outputs with which they are associated can be found in **Annex 1** of this document. Of these 20 indicators, the program has so far been able to report that 90% have been fully achieved while two are still pending or in progress (see Table 4.1). Performance indicators that are still pending include delays in the administration of a post-test for Critical Thinking (baselines have been completed) as well as the accreditation of six secondary schools (five have already been accredited). Delays in the achievement of these last performance standards have largely been due to restrictions stemming from the Covid19 pandemic. One important achievement milestone that was achieved this year was an expectation that student dropout would drop below 5% in all accredited schools. This year, all schools reported achieving this performance indicator. The overall dropout rate across all schools was only 2% compared to the national average of 18% for lower secondary school and 8% for upper secondary. It is expected that the program will have achieved all performance indicators for reporting to MoEYS-MoEF by the end of 2022.

*Table 4.1: Summary of Results-based Indicators for MoEYS Reporting, 2021*

Output	Total Indicators	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	10	83%	0	0%	2	17%
<b>Output 2:</b> Completion of a successful NGS National Survey	1	1	100%	0	0%	0	0%
<b>Output 3:</b> Development of a National NGS Framework & Social Equity Fund with replication in at least 5 new sites	7	7	100%	0	0%	0	0%
<b>Total</b>	<b>20</b>	<b>18</b>	<b>90%</b>	<b>0</b>	<b>0%</b>	<b>2</b>	<b>10%</b>

## 5. CHALLENGES GOING FORWARD

### 5.1 The Extended Closure of Schools

New Generation Schools opened for about two and a half months at the start of 2021 before being closed once again due to rapid spread of the Covid19 Pandemic. As of the writing this report, schools have remained closed since the end of March. Thus, students have not been able to attend school for over three months and counting. Happily, over 85% of enrolled students have been able to continue their education through online means or through village-based distance education modalities, the latter especially being the case in rural areas where internet access is more difficult. Nevertheless, the closure of schools has disrupted many activities including life skills classes, club meetings, project work, and many other activities that are more easily implemented through face-to-face means. On the other hand, the urgent need to move all learning to online modalities has hastened the process of learning and training about blended learning and e-learning. Most NGS teachers are now adept at making educational videos, using the internet to do question-and-answer sessions with students, testing, and homework assignments. Thus, there has been a silver-lining to the closure of schools, but it is hoped that schools in the NGS System will enter a period of ‘normalization’ in 2022 when the school system re-opens.

### 5.2 The Precarious Situation of New Generation Schools in Svay Rieng Province

Child Fund Australia made a commitment to helping MoEYS to roll-out New Generation School Reforms to rural areas in Svay Rieng Province starting in 2015. Child Fund made an investment of over \$1 million to Kok Pring HS and Svay Brahuot PS over an investment cycle of six years. Investments included technical support, building renovations, some new construction, furniture, and equipment. Child Fund was quite clear that its funding support would end in August 2021 and that Government should fill any funding shortfalls, pending the accreditation of both schools. In this respect, Kok Pring achieved its accreditation in 2019, while Svay Brahuot PS achieved accreditation in 2020. Both schools share the same compound and use facilities in common such as ICT Labs, Library, and Playgrounds.

**Table 5.1: Expenditures and Income at New Generation Schools in Svay Rieng Province**

Expenditures and Income	Total Expenditures
Svay Prahout PS Estimated Expenditures	\$19,200.00
Kok Pring HS Estimated Expenditures	\$44,780.00
<b>GRAND TOTAL EXPENDITURES</b>	<b>\$ 63,980.00</b>
	<b>Income Sources (est.)</b>
Parental Contributions (Kok Pring)	\$18,000
Parental Contributions (Svay Prahout)	\$17,000
<b>Subtotal for Local Income</b>	<b>\$35,000</b>
<b>Shortfall</b>	<b>\$28,980</b>
KAPE/Internal Funds*	\$15,000
Franks Family Foundation Contribution*	\$14,000
<b>TOTAL ESTIMATED INCOME</b>	<b>\$64,000.00</b>

\*Emergency Contributions to cover shortfall

Since they are accredited, both schools are now authorized to try to raise funds from the local community to cover operating costs. Although these schools are located in a rural area, parents were able to contribute \$35,000 towards the running costs of the school for

2022. Based on estimated annual expenditures of about \$64,000, this created a shortfall of \$29,000 for the 2022 academic year (see Table 5.1). Because the NGS Budget has been frozen for several years in view of plummeting government revenues, it was not possible for MoEYS to meet the funding shortfall reported by Kok Pring HS and Svay Brahuot PS for FY2022. In order to prevent the collapse of NGS programming in Svay Rieng, KAPE has been able to meet this shortfall by raising funds internally as well as enlisting the support of its long-time partner, the Family Franks Foundation, which has been a strong advocate for the New Generation School idea. Thus, the funding shortfall for 2022 has been solved, at least in the short-term. Nevertheless, it will be important for MoEYS to review its budget request to MoEF for future years in order to ensure that both schools can maintain operations through a combination of local and government resources.

### **5.3 Accredited Schools Not Receiving Funding from Government as per NGS Policy**

According to NGS Policy, Government will help schools to cover the operational costs of New Generation Schools in cases where local contributions from parents fall short of actual costs. In many cases, such shortfalls arise because poor families cannot provide fees to the school and indeed, the NGS Policy exempts poor families from making financial contributions to New Generation Schools. Funding shortfalls that are created by such exemptions are supposed to be covered by a Social Equity Fund from Government. The problem of the \$29,000 shortfall for 2022 in Svay Rieng has already been recounted above. There is also the case of a primary-level New Generation School in Kampong Cham Province known as the Demonstration School that is also facing shortfalls in funding of about \$5,000 or more. Luckily, this school has been able to defray costs by sharing facilities with Hun Sen Kampong Cham HS, since both schools are in the same compound. Nevertheless, this is another case where MoEYS has not been able to comply with its own policy of providing a funding cushion to help cover the actual costs of operation in cases where parents cannot carry the entire burden. As New Generation Schools enter into a new era where all schools are accredited, it will be important for MoEYS to review the NGS Policy and ensure that it has enough resources to top up income of New Generation Schools so that they can remain operational and accredited.

### **5.4 The Need to Accelerate Parental Support to Achieve Sustained Operation**

As the NGS Program moves into 2022, an essential task will be to map out the most essential recurrent operating costs for each New Generation School in order to set targets for parental support. Important funding challenges at several schools in Svay Rieng and Kampong Cham Provinces have already been recounted above. As a general rule of thumb, NGS programmers are aiming for 70% ( $\pm 10\%$ ) parental support of recurrent costs, while at the same time ensuring that the poorest members of society are ensured 'free' access to the NGS System (if their children can demonstrate the motivation and prerequisite skills to study in a New Generation School). A Social Equity Fund supported by MoEYS would cover 30% of recurrent costs, which are currently based on the requested school budget developed by KAPE and submitted to the MoEYS each year for review. Thus far, a growing number of schools have reached or are nearing the 70% sustainability target (see Table 5.2). However, minimum recurrent costs also include costs for board operation, construction, and other expenditures, which should perhaps not be included in a statement of minimum recurrent costs. Thus, an essential task for 2022 should be to review and recalculate minimum recurrent costs to arrive at a more accurate figure (which should be lower than current costs) while also advocating with local communities to modify and likely increase annual fees to reach the 70% target of sustained operation



(see Table 5.3). In addition, KAPE will need to reach out to both MoEYS and MoEF in order to be sure that everyone is in agreement with the *30-70 Formula* described above, as programming goes forward.

**Table 5.2: Estimated School Operating Costs and Sustained Income, 2022**

School Name	Budgetary Support from MoEYS/Child Fund**	Local Support (Est.)	Total Operating Costs	% of Costs Locally Sustained
<b>Secondary Level</b>				
Preah Sisovath HS*	\$281,786	\$256,047	\$281,786	91%
Hun Sen Kg Cham HS*	\$162,093	\$79,696	\$121,322	66%
Prek Leap HS*	\$292,216	\$240,000	\$292,216	82%
Prek Anchanh HS*	\$236,202	\$200,000	\$236,202	85%
Peam Chikong HS	\$233,246	\$0	\$233,246	--
Kok Pring HS*	\$61,620	\$27,000	\$61,620	44%
<b>Subtotal</b>	<b>\$1,267,163</b>	<b>\$802,743</b>	<b>\$1,226,392</b>	<b>65%</b>
<b>Primary Level</b>				
Demonstration School*	--	\$30,000 <sup>‡</sup>	\$35,000	86%
Akhea Mahasei PS	\$123,553	\$---	\$123,553	TBD
Angkor Ban PS	\$46,594	\$---	\$46,594	TBD
Svay Brahuot PS	--	\$17,000	\$19,200	89%
<b>Subtotal</b>	<b>\$170,147</b>	<b>\$47,000</b>	<b>\$205,147</b>	<b>23%</b>

\*Schools accredited and charging voluntary fees; \*\*Does not include technical support or admin costs; <sup>‡</sup>Included in Hun Sen Kampong Cham HS as well.

**Table 5.3: Annual Student Fees Charged/Proposed at New Generation Schools**

School	Province	Current Student Fees
1. Preah Sisovath HS	Phnom	\$280
2. Prek Leap HS	Penh	\$260
3. Kampong Cham HS	Kampong Cham	\$100
4. Peam Chikong		\$204*
5. Angkor Ban:		\$70 to \$150*
6. Demonstration School	Svay Rieng	\$100
7. Svay Brahuot PS		\$50
8. Kok Pring HS		\$65
9. Prek Anchanh HS	Kandal	\$250
10. Akhea Mahasei PS	Kampong Speu	TBD*

\*Proposed

## 5.5 Need for an Accreditation Office as the Program Matures

As the New Generation School System matures and more and more schools apply for accreditation, it is becoming increasingly important that the NGS System create a free-standing and independent Accreditation Office that can ensure that the accreditation process happens regularly and at a desirable level of depth. Such an office would gradually replace the subcommittee originally entrusted with this task when there were only one or two schools to accredit each year. The scope of accreditation tasks is now reaching a point where a full-time office is required to carry out the accreditations, follow up on issues that prevented accreditation, and also assist Provincial Boards to carry out formative assessment visits as per the NGS Guidelines. In addition, plans to expand the NGS System to 15 or more schools could potentially overwhelm current provisions to keep the accreditation system operating properly. There is also an interest in MoEYS to allow Secondary Resource Schools to start applying for NGS accreditation as well. Thus, the

creation of a new office dedicated to accreditation should help to round out the structure of the NGS System with a clear division of labor to ensure adequate specialization, independence, and efficiency (see Figure 5.1).

**BOX 11: Functions of Specific Bodies & Offices in the NGS System**

**National Oversight Board:**

- Reviews/Approves budget requests of the NGS Central Office.
- Approves procurements.
- Approves accreditation recommendations.
- Provides consultative support and direction to all NGS-related offices.

**Provincial Oversight Board:**

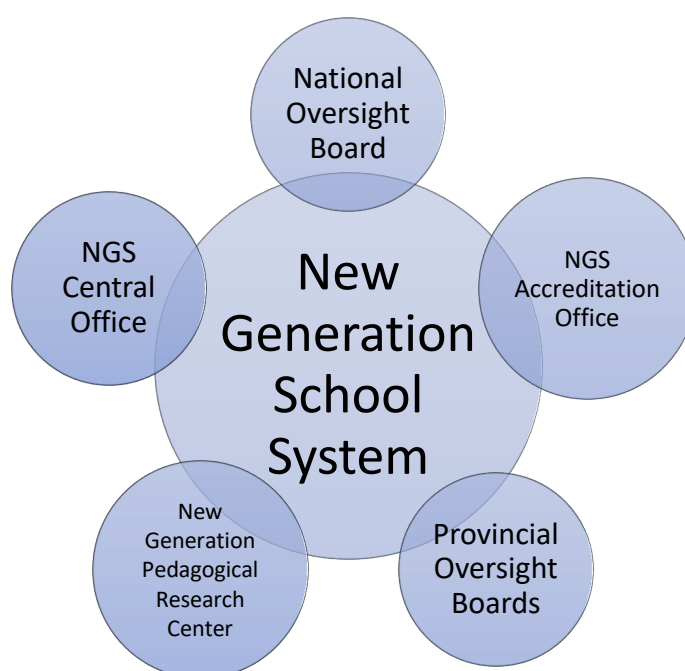
- Approves teacher recruitment decisions.
- Approves monthly/quarterly budgets.
- Formative assessment of NGS implementation.

**NGS Central Office:**

- Develops and implements work plans and annual budgets.
- Develops all technical manuals and policy documents.
- Compiles progress reports.
- Compiles, allocates, and liquidates budgets for NGS.
- Monitors NGS implementation.
- Provides consultative support to all NGS-related offices.

**NGS Accreditation Office:**

- Independently undertakes accreditation assessments.
- Makes recommendations regarding accreditation.



**Figure 5.1: Specific Bodies and Offices Responsible for Administering the New Generation School System**

**5.6 Stabilizing Personnel Appointments to New Generation Schools**

Each year, the NGS Central Office submits requests to the NGS National Board for staffing replacements. Often times, these requests are submitted to accommodate the continuing expansion in enrollment at schools that are increasing their grade coverage (e.g., Prek Leap HS, Prek Anchanh HS, etc.). On the other hand, some of these requests are intended to facilitate replacements for teachers transferring out of the NGS System, particularly for those teachers working in Phnom Penh. This year, these transfers have abated somewhat to a level of only 4% at secondary school level and 3% at primary school level (see Table 5.4). However, in years past, the rate of transfer or resignation sometimes reached as high as 17% (see **Annex 3**). Some of the reasons for transfer include using schools with strong reputations such as Preah Sisovath HS, as a stepping stone to a better position in the private sector or at a tertiary institution, the desire for further study, unhappiness with restrictions on private classes, and the high workload, among others.

**Table 5.4: Staff Resignations & Transfers in the New Generation School System, 2021**

School Name	Total Teachers	Teachers Resigning or Transferring	%
<b>Secondary Level</b>			
Preah Sisovath HS	72	10	14%
Hun Sen Kg Cham HS	33	1	3%
Prek Leap HS	72	0	0%
Prek Anchanh HS	70	0	0%

Peam Chikong HS	49	0	0%
Kok Pring HS	38	2	5%
<b>Total</b>	<b>334</b>	<b>13</b>	<b>4%</b>
<b>Primary Level</b>			
Demonstration School	21	0	0%
Akhea Mahasei PS	38	0	0%
Angkor Ban PS	26	0	0%
Svay Prahut PS	19	3	16%
<b>Total</b>	<b>100</b>	<b>3</b>	<b>3%</b>

Although it is to be expected that a dynamic system such as NGS would have a high need for competent and ambitious teachers, the NGS Central Office hopes that all schools should work more vigorously towards keeping teachers happy and reducing the continuing demands on the education system to replace teachers, as such demands are not sustainable in the long-run.

### 5.7 Private Online Classes at Sisovath HS: Risks & Benefits

In view of the high demand for educational access to New Generation Schools, particularly in Phnom Penh, Preah Sisovath HS has developed an online learning program that would be accessible non-NGS students. This new program, known as *Online Plus*, would allow teachers at Preah Sisovath HS to greatly increase the number of students outside of the NGS System who can access high quality online learning on a par with what regular NGS students are receiving. The *Online Plus Initiative* has many merits to recommend it, especially in this time of school closures caused by the Covid19 Pandemic. These merits demonstrate the strong initiative and independent thinking of the Preah Sisovath HS and the desire of New Generation Schools to reach out to students outside of the NGS System. However, there are also a number of significant risks that need to be considered carefully by Ministry in approving this initiative including the danger of teachers neglecting their regular duties at Preah Sisovath HS to animate the online program and the negative public perceptions of the high fees associated with enrollment in the *Online Plus* Program. KAPE has provided an analysis for the NGS National Board to consider in approving this program (see **Annex 4**). Responses to this analysis by Preah Sisovath HS have satisfactorily addressed the risks identified by KAPE leading to a tentative endorsement by the NGS Central Office for approval by the National Board.

### 5.8 Planning for the Transition to ‘Blended Learning’ in a Post-Covid19 Environment

One of the positive side effects of the Covid19 Pandemic on the education system is that it has accelerated the need to shift educational services to an increasingly online format. Most NGS Teachers are now very adept at producing online learning products including electronic lessons, tests, and videos. Even though the Covid19 Pandemic will eventually come to an end, it is clear that things will never return to the way that they were. Indeed, it is increasingly likely that in a post-Covid world, things will permanently morph into a ‘blended learning’ mode (see Box 12) in which students continue to learn much of the content of their lessons online while face-to-face meetings at school will focus only on the things that are more difficult to be done online, such as lab work, working on group projects, and live interactions, among others. In preparation for this new reality after the end of the Covid19 crisis, the NGS System is trying to organize itself in a way so that blended learning will be a major

#### **BOX 12: What is Blended Learning?**

A style of education in which students learn via electronic and online media as well as traditional face-to-face teaching. Blended learning has been introduced in small charter schools where it has proven particularly popular and effective.

feature of the educational environment in all New Generation Schools. This involves creating advisory frameworks that will help guide schools in effectively implementing blended learning as well as training programs that will give both teachers and administrators the capacity to do so. The NGS System is cooperating closely with CDDE in creating the needed frameworks going forward.

### 5.9 Absorbing Teachers into the NGS System Who Have Resisted Collaboration

Several secondary schools in the NGS System are rapidly reaching the point where they will achieve full grade coverage. In this respect, both Prek Leap and Prek Anchanh HS are poised to reach Grade 12 in 2022 while Peam Chikong HS is poised to reach Grade 11. However, the final expansion to Grade 12 brings into sharp focus an on-going problem relating to a large number of teachers who are either surplus teachers with no classes to teach or who are teachers who are clinging to their private classes and refuse to comply with NGS requirements that forbid teachers from extorting money from their own students. In terms of surplus teachers, one school reported having 10 sports teachers while others reported having an excessive number of life skills teachers. Absorbing these teachers into the NGS System will be very costly, since there are so many of them and since many would likely have no work to do. If these schools decide to move ahead with their final expansions, the NGS National and Provincial Boards will need to make a difficult decision about what to do with all these surplus and/or non-compliant teachers. Based on the latest reports from these three schools, there are about 185 teachers in the surplus/non-compliant category of whom barely 7% have agreed to join the NGS System (see Table 5.5).

**Table 5.5: Residual Teachers at Selected Secondary Schools Who Have Not Yet Been absorbed into NGS, 2021**

School	Current Teachers in NGS	Residual Teachers Not in NGS	Residual Teachers Willing to Join NGS	Residual Teachers Willing to Join NGS as a %
Prek Leap HS	75	73	3	4.10%
Prek Anchanh HS	72	81	6	7.40%
Peam Chikong HS	54	31	3	9.67%
<b>Total</b>	<b>201</b>	<b>185</b>	<b>12</b>	<b>6.48%</b>

There are several options that the National and Provincial Boards will have to consider to resolve this problem as follows:

**Option 1:** Delay the expansion to Grades 11/12 until a later day, thereby maintaining the *status quo* and postponing the need to make the hard decisions needed. This option is likely to be very unpopular with parents.

**Option 2:** Create a normal Grade 12 that is not subject to NGS rules and regulations and another Grade 12 that is part of the NGS System. Under this arrangement, the school would allow students to choose which kind of service they want. This would create a ‘school in a school’ approach at the Grade 12 level, which MoEYS traditionally dislikes doing, but which has worked at Preah Sisovath HS in Phnom Penh. However, it may also happen that no students choose the ‘rien kua’ pathway in which case non-compliant Grade 12 teachers would be completely sidelined.

**Option 3:** Continue the expansion to Grade 12 as planned under the NGS system and require teachers to either comply or transfer to another school. The Personnel Offices of Provincial Offices of Education would need to facilitate this option, which

would enable a very large number of transferring teachers. This option is likely to be the most difficult and least popular with teachers.

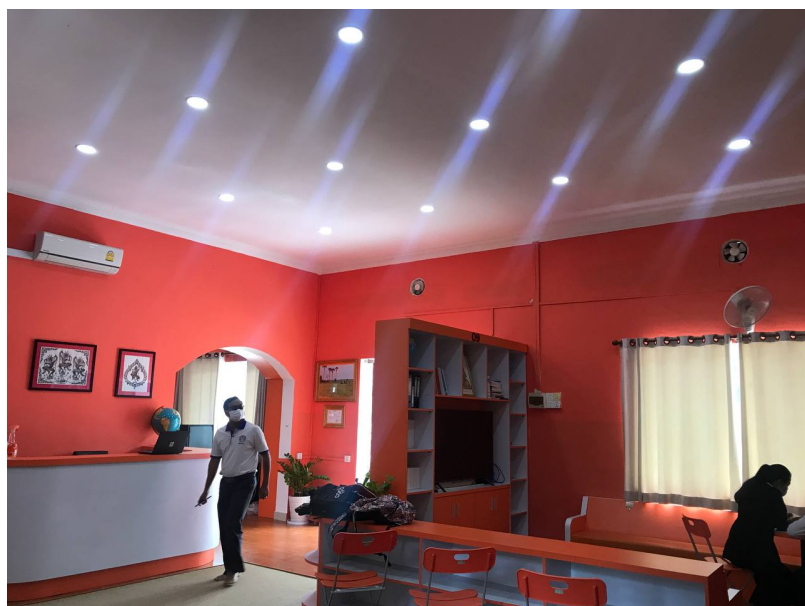
KAPE will raise this challenge at a future board meeting and present the options outlined above at which time, the National and Provincial Board will need to make a difficult decision about the way forward.

### 5.10 Issues of Management Reliability at Peam Chikong HS

The NGS Central Office has carried out an assessment of school managers in all 10 New Generation Schools using a special assessment framework that evaluates the quality of Leadership, Motivation, and Innovation exhibited by each school management team (see **Annex 5**). Based on this assessment, 9 out of 10 schools achieved scores in the 'Good' to 'Excellent' range; however, Peam Chikong HS has in contrast exhibited very weak scores on all three measures. In this respect, evaluators noted that the school director is rarely at the school and several vice directors have not risen to the level of leadership and professionalism expected of them. In spite of this situation, the evaluation team also noted that teachers, mentors, librarians, and other school staff at Peam Chikong HS have nevertheless exhibited very high standards of performance due mainly to the technical support provided by one strong vice director and the school animator assigned by the NGS Central Office. The weakness of other managers at the school, however, will likely continue to be a problem and may lead to a failed attempt to get accreditation in 2022 or 2023 when the school applies for certification. This situation will likely require the intervention of both the Provincial and National Oversight Boards, as most school managers have been unresponsive to efforts to increase their engagement.

### 5.11 Brain Drain at New Generation Schools

The high standing of New Generation Schools has created a situation in which teachers working at these schools have many options for transfer or are scooped up by departments and tertiary institutions within the public system to upgrade the quality of their staffing. While such trends benefit the MoEYS in many ways, it results in a brain drain in many New Generation Schools that diminishes their prospects of maintaining high standards. For example, Hun Sen Kampong Cham HS lost three teachers with Master Degrees earned at foreign institutions in the space of one year. The number of teachers at the school with a foreign-earned Master's Degree has essentially fallen to zero. All moved to Ministry departments or tertiary institutions in the public system. Such teachers are hard to replace and even harder to train their replacements. While it is expected that NGS teachers would be in high demand at other institutions, this is becoming a



*Modern library facilities at Peam Chikong HS in Kampong Cham.*

particularly debilitating problem at some schools that greatly undermines stability of investments in human resource development. Indeed, it brings into question why schools should invest in subsidizing scholarships for teachers to study for advanced degrees when this will only facilitate their ability to leave the school.



*Cooperative Learning activities in a typical New Generation School classroom. Student groups work independently and under their own initiative.*

## 6. CONCLUSIONS

**General Operational Overview:** The year 2021 continues many of the difficulties for the New Generation School System that started in 2020 due to extended school closures caused by the Covid19 Pandemic. These difficulties are coming at a crucial (and inopportune) time for New Generation Schools because it was originally planned that all schools will not only be accredited by 2022 but also that investments should start to wind down as more and more costs are shifted to parents in an effort to promote increased sustainability (see Box 13). School closures have not been supportive of this planning.

Similarly, a major change in the organization of New Generation Schools involving the emplacement of school-based mentors has also been undermined by the inability of mentors to do classroom observations or meet face-to-face with teachers for individual conferencing and other continuous professional development activities. Even the 'mentor practicum' that is a part of the Master Degree requirements for mentor certification had to be moved to a virtual format for the second year in a row. The use of mentors in New Generation Schools is part of a key strategic plan to reduce technical assistance from KAPE and improve the prospects for technical sustainability.

Progress towards all of the planning goals described above has been greatly slowed by disruptive school closures. In addition, the contraction of the economy caused by the closure of many businesses, the loss of employment, and plummeting tax revenues have all brought into question whether parents can meet increased financial obligations to sustain New Generation Schools as well as the government's ability to continue funding the NGS System at current levels. Thus, the current year has ushered in a period of great uncertainty for New Generation School educational reforms.

**Important Achievements:** There have, however, been bright spots in this difficult operating environment that have improved the status of the New Generation School System. One of these is the impressive job that all schools have done in building up an online learning system that is the envy of the country. Over 90% of students enrolled in the NGS System (at least at the secondary school level) have been able to continue their studies online without interruption, even though there may be drawbacks to reduced face-to-face contact with teachers. While primary schools have reported a lower rate of participation in online education, it is nevertheless much higher than the national rate and well exceeds 50%. In addition, New Generation Schools have been able to prove their value to supporting a national framework for online learning by creating hundreds of electronic tests, slide shows, and videos that are being archived by the *Center for Digital and Distance Education* for national use. Indeed, the CDDE, which is located on the campus of Preah Sisovath HS has developed an increasingly close alliance with the NGS System and KAPE to promote online education. This collaboration is promoting much experience in adapting blended learning, project work, and other modern education initiatives to the Cambodian context. In this sense, the Covid19 Pandemic has increased the prominence of the New Generation School System in promoting educational reforms and modernization.

### BOX 13: Key Strategic Planning for 2021-22

- 70% Sustained Recurrent Costs achieved by shifting costs to parents
- Successful Accreditation of all New Generation Schools.
- Successful emplacement of a school-based mentoring system to achieve technical sustainability.
- Accelerated progress towards digital education (e.g., blended learning, online learning, etc.).

In addition to the significant progress made in the area of online education, the NGS System also continues to show significant impact in terms of various metrics that range from test performance on national examinations, transition to university, retention, accreditation, standards of teacher professionalism, reading proficiency (at primary level), and student awards. These performance metrics (see Table 6.1) indicate that the investment in New Generation Schools is greatly enriching the process of human resource development in the public schools, as per the goal of Government investment. This helps to justify continuing investment and on-going plans for expansion.

**Reaching a Cross-Roads:** As New Generation Schools reach the end of the sixth year of investment, the program appears to be reaching a major cross-roads in terms of its future evolution. In this regard, it is expected that when the 2022 academic year begins, all schools will be ready to apply for accreditation. It is the program’s hope that all schools can achieve accredited status, which will empower all of them to negotiate parental support from local communities. As pointed out earlier, New Generation Schools are poised to raise over \$800,000 from local communities and this amount may reach \$1 million when all schools are receiving local support. Nevertheless, there will continue to be a need for Government to cover the costs of a Social Equity Fund so that poor families are guaranteed free access to the New Generation School System.

Of equal importance, MoEYS will need to review how it plans to maintain the technical and administrative support provided to the New Generation School System through the NGS Central Office, the New Generation Pedagogical Research Center at NIE, and the proposed NGS Accreditation Office. Currently, MoEYS has outsourced the management of these offices to *Kampuchea Action to Promote Education* to streamline programming, relieve pressure on MoEYS management capacity, and ensure that the NGS System has access to short-term credits by tapping KAPE’s financial reserves (during the time that the government budget is being processed). As the NGS System reaches a more heightened state of maturity, MoEYS will need to decide whether it continues these arrangements or tries to move these operations into the MoEYS system. To a large extent, the decision of

**Table 6.1: Key Metrics for New Generation School Performance (2021)**

Metric	NGS	National
<b>Secondary Level:</b>		
1. Bac II Examination Pass Rate: (2019)	82% <sup>11</sup>	65%
2. Students with A, B, or C Bac II Pass: (2019)	56%	16%
3. Transition to University:	90%	13.69%*
4. Students Receiving Medals/Awards:	723	n/a
5. Students studying ICT 3 hrs/week or more:	100%	0%
6. Dropout Rate:	2%	LSS: 18% USS: 8%
7. Secondary Schools Accredited:	83%	n/a
8. Secondary School Teachers with 4-Year Degrees or Higher:	86%	43%
9. Teachers Completing Career Path Plans:	98%	n/a
10. Secondary Students Engaged in Online Education:	87%	
11. Sustained Financing from Parents at Secondary Level:	\$802,000	n/a
<b>Primary Level:</b>		
12. Oral Reading Fluency (Grade 3)	71 Words per Minute	45 WPM
13. Familiar Word Reading (Grade 1)	15 Words per Minute	3 WPM

\*Gross Enrolment (Tertiary); \*\*National Mandated Standard

Sources: MoEYS, 2020; EMIS, 2019; World Bank, 2018

<sup>11</sup> It is important to note that all NGS students are enrolled in the Science Stream where the Bac II Exam pass rate is only about 50% compared to the social science stream where the pass rate is about 80%.



MoEYS to expand the NGS System to 15 more schools may play an important role in the calculus whether to continue outsourcing the support of the NGS System or perhaps creating additional project structures that can take responsibility for current expansion plans. As more donors take an interest in replicating NGS programming (e.g., Asian Development Bank, Agence Francais de Development, etc.), it is indeed possible that multiple project structures could emerge, but which all work within the NGS regulatory framework. MoEYS will have to take all of these factors into consideration, as the current cohort of 10 New Generation Schools complete their investment cycles and receive their accreditation while new investment cycles for other proposed NGS sites begin.



**Promoting ICT in Education at All Levels:** Time for M-learning activities in a primary level New Generation School classroom.

### ANNEX 1: Indicator Reporting Table for MoEYS/MoEF (Updated 2021)

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>1. Sisovath HS (in operation)</li> <li>2. Hun Sen Kampong Cham HS (in operation)</li> <li>3. Prek Leap HS (in operation)</li> <li>4. Prek Anchanh HS (in operation)</li> <li>5. Peam Chikong HS (in operation)</li> <li>6. Kok Pring Jr. HS (in operation)<sup>12</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> (7 out of 10 schools currently accredited; 5 out of 6 secondary schools currently accredited)</li> <li>1. Sisovath HS (Accredited in 2017, 2018, 2019, 2020, &amp; 2021)</li> <li>2. Hun Sen Kampong Cham HS (Accredited in 2017, 2018, 2019, 2020, &amp; 2021)</li> <li>3. Demonstration School of Kampong Cham (Accredited in 2019, 2020, and 2021) (Primary Level)</li> <li>4. Prek Leap HS (Accredited in 2020 and 2021)</li> <li>5. Prek Anchanh HS (Accredited in 2020 and 2021)</li> <li>6. Kok Pring Jr. HS (Accredited in 2019 and 2020, and 2021)<sup>13</sup></li> <li>7. Svay Prahut PS (Accredited in 2020 and 2021) (Primary Level)</li> <li>8. Peam Chikong HS (Planned for 2022)</li> <li>9. Akhea Mahasei PS (Planned for 2022) (Primary Level)</li> <li>10. Angkor Ban PS (Planned for 2022) (Primary Level)</li> </ul>											
<b>Indicator 1.4:</b> At least 95% of teachers each year are compliant with Teacher Development Framework	<ul style="list-style-type: none"> <li>Classroom observation results</li> <li>Teacher conference records</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 2017, 2018, 2019, 2020, and 2021</b></li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">School (2021)</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></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	School (2021)	Secondary School Level			Total Teachers	Teachers Completing Career Path Plans	%				
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<sup>12</sup> Funded by Child Fund.

<sup>13</sup> Ibid

Target	Means of Verification	Risks & Assumptions	Achievement to Date																																																																							
expectations including the completion of Career Path Plans each year.	<ul style="list-style-type: none"> <li>Quarterly Reports</li> </ul>		Preah Sisovath HS	70	70	100%																																																																				
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<b>Indicator 1.5:</b> Bac II Exam Performance exceeds National Average 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 2018</b></p> <ul style="list-style-type: none"> <li>Total Pass Rate for NGS: 84%</li> </ul> <p><b>Achieved for 2019</b></p> <ul style="list-style-type: none"> <li>Total Pass Rate for NGS: 91%</li> </ul> <p><b>Cancelled for 2020</b></p> <ul style="list-style-type: none"> <li>Bac II Examination cancelled in 2020 due to Covid19 Pandemic</li> </ul> <p><b>Achieved for 2021:</b></p> <ul style="list-style-type: none"> <li>Total Pass Rate for NGS: 82%</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>	<ul style="list-style-type: none"> <li><b>Achieved:</b> 104% of planned facilities completed by 2021.</li> </ul> <p style="text-align: center;"><b>Proposed &amp; Completed Facilities in NGS Sites, FY2016 to FY2021</b></p> <table border="1"> <thead> <tr> <th>Investment Area</th> <th>Number Proposed 2016-21</th> <th>Number Established 2016-21</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>91</td> <td>97%</td> </tr> <tr> <td>Science Labs</td> <td>41</td> <td>49</td> <td>120%</td> </tr> <tr> <td>ICT Labs*</td> <td>13</td> <td>14</td> <td>108%</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>4</td> <td>80%</td> </tr> <tr> <td>Office/Meeting/Faculty Rooms</td> <td>13</td> <td>18</td> <td>138%</td> </tr> <tr> <td>Canteen*</td> <td>5</td> <td>2</td> <td>40%</td> </tr> <tr> <td>Student Clinic*</td> <td>5</td> <td>4</td> <td>80%</td> </tr> <tr> <td>Youth Centers*</td> <td>5</td> <td>5</td> <td>100%</td> </tr> <tr> <td><b>Total Facilities</b></td> <td><b>186</b></td> <td><b>192</b></td> <td><b>103%</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>52</td> <td>116%</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>2</td> <td>100%</td> </tr> <tr> <td>21<sup>st</sup> Century Libraries</td> <td>2</td> <td>2</td> <td>100%</td> </tr> </tbody> </table>				Investment Area	Number Proposed 2016-21	Number Established 2016-21	%	<b>Secondary School Sector (5 schools)</b>				NGS Classrooms	94	91	97%	Science Labs	41	49	120%	ICT Labs*	13	14	108%	21 <sup>st</sup> Century Libraries*	5	5	100%	Auditorium	5	4	80%	Office/Meeting/Faculty Rooms	13	18	138%	Canteen*	5	2	40%	Student Clinic*	5	4	80%	Youth Centers*	5	5	100%	<b>Total Facilities</b>	<b>186</b>	<b>192</b>	<b>103%</b>	<b>Primary School Sector (3 schools)</b>				NGS Classrooms	45	52	116%	Science Labs	0	0	0%	ICT Labs	2	2	100%	21 <sup>st</sup> Century Libraries	2	2	100%
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Office/Meeting/Faculty Rooms	2	2	100%																																														
Auditorium	1	0	0%																																														
Canteen	--	--	--																																														
Student Clinic	--	--	--																																														
Youth Centers	--	--	--																																														
Toilet Facilities	13	10	77%																																														
<b>Total Facilities</b>	<b>65</b>	<b>68</b>	<b>105%</b>																																														
<b>Facilities at All Levels</b>	<b>251</b>	<b>260</b>	<b>104%</b>																																														
<p><b>Indicator 1.7:</b> Documentation of New School Architecture Designs is completed by 2019 to facilitate replication by other agencies.</p>	<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>Achieved/Completed:</b> Document approved and published by MoEYS</li> </ul>																																														
<p><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.</p>	<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>Pending midline test administrations planned for 2022 (Testing in 2021 was postponed due to the Covid19 Pandemic.)</li> </ul>																																														
<p><b>Indicator 1.9:</b> ICT labs at all schools meet standardized criteria for satisfactory operation or better each year.</p>	<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 2021 (83% Performance Score)</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>96%</td> <td>80%</td> <td>100%</td> <td>94%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>86%</td> <td>91%</td> <td>83%</td> <td>89%</td> <td>87%</td> </tr> <tr> <td>Prek Anchanh HS</td> <td>76%</td> <td>83%</td> <td>75%</td> <td>78%</td> <td>78%</td> </tr> <tr> <td>Prek Leap HS</td> <td>81%</td> <td>78%</td> <td>75%</td> <td>78%</td> <td>78%</td> </tr> <tr> <td>Hun Sen Peamchikrong HS</td> <td>76%</td> <td>83%</td> <td>67%</td> <td>78%</td> <td>76%</td> </tr> <tr> <td><b>Average</b></td> <td><b>82%</b></td> <td><b>86%</b></td> <td><b>78%</b></td> <td><b>84%</b></td> <td><b>83%</b></td> </tr> </tbody> </table> <p><b>Note: Minimum Performance = 65%</b></p>					School	General Admin	Curriculum & Teaching	Student Learning	Lab Maintenance	Total	Preah Sisovath HS	90%	96%	80%	100%	94%	Hun Sen Kg Cham HS	86%	91%	83%	89%	87%	Prek Anchanh HS	76%	83%	75%	78%	78%	Prek Leap HS	81%	78%	75%	78%	78%	Hun Sen Peamchikrong HS	76%	83%	67%	78%	76%	<b>Average</b>	<b>82%</b>	<b>86%</b>	<b>78%</b>	<b>84%</b>	<b>83%</b>
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<p><b>Indicator 1.10:</b> ICT in Education proficiency among teachers at each school improves from baseline scores.</p>	<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</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved for 2021</b></li> <li>All schools improved their scores from baseline by <b>about 11%</b>.</li> <li><b>76%</b> of teachers describe the frequency of their use of ICT in instruction as medium to high</li> </ul>																																														

Target	Means of Verification	Risks & Assumptions	Achievement to Date																												
		accommodate the use of ICT in teaching																													
<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>Achieved:</b> Dropout reported to be 2% at secondary level compared to national rate of 18% at LSS and 8% at USS.</li> </ul> <table border="1"> <thead> <tr> <th>School</th> <th>Total Students/ Female</th> <th>Total Dropouts</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>998/571</td> <td>20</td> <td>2%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>458/235</td> <td>14</td> <td>3%</td> </tr> <tr> <td>Prek Leap HS</td> <td>978/518</td> <td>9</td> <td>1%</td> </tr> <tr> <td>Prek Anchanh HS</td> <td>1015/571</td> <td>6</td> <td>1%</td> </tr> <tr> <td>Peam Chikong HS</td> <td>791/459</td> <td>24</td> <td>3%</td> </tr> <tr> <td><b>Total</b></td> <td><b>4,240/2,354</b></td> <td><b>73</b></td> <td><b>2%</b></td> </tr> </tbody> </table>	School	Total Students/ Female	Total Dropouts	%	Preah Sisovath HS	998/571	20	2%	Hun Sen Kg Cham HS	458/235	14	3%	Prek Leap HS	978/518	9	1%	Prek Anchanh HS	1015/571	6	1%	Peam Chikong HS	791/459	24	3%	<b>Total</b>	<b>4,240/2,354</b>	<b>73</b>	<b>2%</b>
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<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:</b> 91% of Grade 12 students transition to post-secondary level institutions</li> </ul> <table border="1"> <thead> <tr> <th>School</th> <th>Total Students</th> <th>Total Students Entering Post-Secondary Studies</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preah Sisovath HS</td> <td>206</td> <td>192</td> <td>88%</td> </tr> <tr> <td>Hun Sen Kg Cham HS</td> <td>62</td> <td>51</td> <td>82%</td> </tr> <tr> <td><b>Total</b></td> <td><b>268</b></td> <td><b>243</b></td> <td><b>91%</b></td> </tr> </tbody> </table>	School	Total Students	Total Students Entering Post-Secondary Studies	%	Preah Sisovath HS	206	192	88%	Hun Sen Kg Cham HS	62	51	82%	<b>Total</b>	<b>268</b>	<b>243</b>	<b>91%</b>												
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<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 are associated with success.	<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> <li>POEs are cooperative and supportive in identifying suitable locations for NGS replication.</li> </ul>	<ul style="list-style-type: none"> <li><b>Achieved since 2016</b></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> Social Equity Framework has been incorporated into NGS Operational Guidelines and are pending approval.</li> </ul>																												

Target	Means of Verification	Risks & Assumptions	Achievement to Date
<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> Manual completed in and waiting for Minister's approval.</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 since 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 National Level as well as at Provincial Level in Kampong Cham, Kandal, Phnom Penh, Kampong Speu, and Svay Rieng.	<ul style="list-style-type: none"> <li>• Oversight Board Performance Checklist</li> </ul>	<ul style="list-style-type: none"> <li>• The Boards are able to meet on a regular basis to discuss issues of relevance to the school</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Achieved</b></li> <li>• <b>National Board:</b> Newly appointed in 2017</li> <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>

## ANNEX 2:

### Features of the Cambodia Mobile Electronic School Management Program

#### School Link Platform Pricing

Edition	Description	Amount
<p><b>Essential Package</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Manage Timetable</li> <li><input type="checkbox"/> Mange Students, Teachers, and Parents</li> <li><input type="checkbox"/> Batch schedule &amp; promotion</li> <li><input type="checkbox"/> Manage curricular</li> <li><input type="checkbox"/> Manage Grade Sheet and Criteria</li> <li><input type="checkbox"/> Grading Scale with multiplier</li> <li><input type="checkbox"/> Import grades from excel</li> <li><input type="checkbox"/> Import students' attendance</li> <li><input type="checkbox"/> Export reports to Excel</li> <li><input type="checkbox"/> Print Reports &amp; Analytics</li> <li><input type="checkbox"/> Print student ID cards with QR</li> <li><input type="checkbox"/> NGS Mobile app                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Public announcements</li> <li><input type="checkbox"/> Student access to view attendance and Grade</li> <li><input type="checkbox"/> Parent access to view attendance and Grade</li> <li><input type="checkbox"/> Send notification to users</li> </ul> </li> <li><input type="checkbox"/> App and website branding</li> <li><input type="checkbox"/> Security updates</li> <li><input type="checkbox"/> System maintenance</li> <li><input type="checkbox"/> Feature updates</li> </ul>	<p>\$ 6 / student per year</p>

<p><b>Online classroom Package</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cashier &amp; Billing system</li> <li><input type="checkbox"/> Inventory System</li> <li><input type="checkbox"/> Scholarship system</li> <li><input type="checkbox"/> Financial report (website and mobile)</li> <li><input type="checkbox"/> Prepare &amp; Organize Lessons, Material</li> <li><input type="checkbox"/> Grade Books for teachers</li> <li><input type="checkbox"/> Prepare and Organize Online Exams</li> <li><input type="checkbox"/> Entrance exam and registration form</li> <li><input type="checkbox"/> Online classroom on web</li> <li><input type="checkbox"/> Integrated Zoom</li> <li><input type="checkbox"/> Online classroom analytics</li> <li><input type="checkbox"/> NGS Mobile app                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Online Classroom for students</li> <li><input type="checkbox"/> Online Classroom for teachers</li> <li><input type="checkbox"/> View activities in online classroom by parents</li> </ul> </li> </ul>	<p>\$ 3 / student per year</p>
<p><b>Integration Package</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Internet of Things (NFC Scanner)</li> <li><input type="checkbox"/> Attendance approval process</li> <li><input type="checkbox"/> Digital Library on NGS mobile                             <ul style="list-style-type: none"> <li><input type="checkbox"/> Ebooks</li> <li><input type="checkbox"/> Videos</li> </ul> </li> <li><input type="checkbox"/> API Integration with other systems</li> <li><input type="checkbox"/> Custom feature development</li> </ul>	<p>\$ 3 / student per year</p>



<p><b>Cam Reading</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> More than 1700 books</li> <li><input type="checkbox"/> More than 1000 audio books</li> <li><input type="checkbox"/> Reading comprehension</li> <li><input type="checkbox"/> Progress Tracking</li> <li><input type="checkbox"/> Offline mode</li> <li><input type="checkbox"/> Assignment from teachers</li> <li><input type="checkbox"/> Reports and Grade</li> </ul>	<p>\$9 / student per year</p>
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**NOTE:**

1. Custom feature development does not include usage fee. For example, a notification by message feature can be developed upon request but the cost of sending messages will not be covered.
2. For custom development, depending on the size of the project scope, Auxswot reserves the right to negotiate the timeline and additional fee.
3. All prices do not include VAT.

**DISCOUNT OFFER:**

1. For applying the School Management System to any number of NGS high schools, a **5% discount** will be offered for the **first year**.
2. If the system is applied to all NGS high schools, an **additional 5% discount** will be offered for the **first year** with 6 months free of Cam Reading licenses.
3. This offer is valid until **June 30th, 2021**.

### ANNEX 3: Changes in Staffing at New Generation Schools, 2018-21

School Name	2017-18				2018-19				2019-20		
	Total Teachers	Teachers Re-signing or Transferring	%	New Teachers Recruited	Total Teachers	Teachers Re-signing or Transferring	%	New Teachers Recruited	Total Teachers	Teachers Re-signing or Transferring	%
<b>Secondary Level</b>											
Preah Sisovath HS	68	11	16%	12	69	18	26%	21	72	13	18%
Hun Sen Kg Cham HS	27	1	4%	4	31	2	6%	5	35	1	3%
Prek Leap HS	26	1	3%	13	38	10	24%	27	55	4	7%
Prek Anchanh HS	25	1	4%	0	37	4	11%	14	53	5	9%
Peam Chikong HS	0	0	0%	0	20	3	12%	24	34	1	3%
Kok Pring HS	23	2	9%	4	25	1	4%	5	26	1	3%
<b>Total</b>	<b>169</b>	<b>16</b>	<b>9%</b>	<b>33</b>	<b>220</b>	<b>38</b>	<b>17%</b>	<b>96</b>	<b>275</b>	<b>25</b>	<b>9%</b>
<b>Primary Level</b>											
Demonstration School	19	0	0%	0	19	0	0%	0	19	1	5%
Akhea Mahasei PS	18	0	0%	0	18	0	0%	9	27	0	0%
Angkor Ban PS	17	0	0%	4	21	1	5%	7	21	1	5%
Svay Prahut PS	20	4	20%	3	17	4	24%	5	17	3	16%
<b>Total</b>	<b>74</b>	<b>4</b>	<b>5%</b>	<b>7</b>	<b>62</b>	<b>5</b>	<b>8%</b>	<b>21</b>	<b>84</b>	<b>5</b>	<b>6%</b>

## ANNEX 4:

### Recommendations on Online Plus Initiative at Preah Sisovath HS

9 August 2021

The following analysis on the *Online Plus Initiative* has been compiled by Kampuchea Action to Promote Education (KAPE) as part of the agency's mandate to advise the Ministry of Education, Youth, and Sport in the management of the New Generation School Initiative.

The *Online Plus Initiative* has many merits to recommend it, especially in this time of school closures caused by the Covid19 Pandemic. However, there are also a number of significant risks that need to be considered carefully by Ministry. First, KAPE would like to point out some of the merits of this initiative:

#### Merits of the Initiative

1. ***Demonstrates Strong Initiative and Independent Thinking:*** One of the expectations of MoEYS in supporting New Generation Schools is the hope is that schools will use their autonomy to show independent thinking, unsolicited initiatives, and innovation. The development of the *Online Plus Initiative* demonstrates that there is a strong pattern of initiative at Preah Sisovath HS.
2. ***The Initiative Leverages the High Ability Level of Preah Sisovath HS to Help Students Outside of the NGS System:*** Over the last year, Preah Sisovath HS has developed an extremely high capacity to adjust its education program to an online and blended learning footing, as a response to the Covid19 Pandemic. The *Online Plus Initiative* demonstrates the ability and willingness of Preah Sisovath HS to provide online learning opportunities of a very high quality to students outside of the NGS System. In this sense, the initiative will help to enhance the social equity aspects of New Generation Schools, as other students not enrolled at Preah Sisovath HS will receive benefits from the educational program there, particularly since many students have few other options for online learning during the Covid19 Pandemic.
3. ***Heightens the Reputation of Preah Sisovath HS:*** The *Online Plus Initiative* is an activity that will further strengthen the growing reputation of Preah Sisovath HS as a Center of Educational Excellence within Cambodia's educational system. This has always been an important goal of MoEYS' decision to make the high investment in NGS programming. In this sense, *Online Plus* will add to the school's formidable reputation.

In spite of the merits discussed above, there are also some risks to consider that are associated with the implementation of the *Online Plus Initiative*. These risks may not necessarily be realized but they are nevertheless important issues to consider as part of the approval process for this initiative.

#### Risks Associated with the Initiative:

1. ***Potential Incompatibility with NGS Accreditation Standards:*** Preah Sisovath HS has an unfortunate history when it comes to the endemic nature of private classes (*rien kua*) at the school and the conflict that erupted when NGS accreditation standards required that such classes be stopped as a condition of teacher employment in the

NGS System. The New Generation School System has largely eliminated private classes within Preah Sisovath and this has been a major accomplishment for MoEYS' efforts to establish good governance principles across all New Generation Schools. Because the Online Plus Initiative introduces private classes into the NGS System, there is the potential for incompatibility with NGS Accreditation Standards, which forbid 'rien kua' classes UNLESS the following conditions can be validated:

- a. Teachers engaged in *Online Plus* do not do any work on this activity during working hours, since they receive incentives from MoEYS NOT to engage in private classes.
  - b. Teachers engaged in *Online Plus* do not neglect their regular duties as NGS teachers.
  - c. The students of teachers teaching *Online Plus* are not enrolled in these classes or paying any fees to their regular teachers.
  - d. Student fees are paid directly to the school and there is no direct exchange of money between teachers and students.
2. ***Taking a New Generation School in the Direction of Acting like a Private Business:*** The \$600 extra fee for participating in Online Plus seems very high and suggests that some teachers may be cashing in on skills that they learned as NGS teachers. Parental Fees in the past were intended to cover 'real' operating costs and in that sense never implied that Preah Sisovath HS was making a profit. But the very high fees associated with *Online Plus* may indeed lead to a public perception that NGS institutions are turning into profit-making entities, which would be very bad press for the NGS System.
3. ***Teachers Neglect Their Regular Duties:*** High fees in the *Online Plus Initiative* could incentivize teachers to neglect their regular duties as New Generation School teachers in favor of their duties as online instructors. Not only would this undermine educational quality at Preah Sisovath HS, but it may cause MoEF to question why such teachers are receiving incentives not to teach private classes when in fact there may be a perception that they are actually teaching private classes online.
4. ***The Potential for Division within the School:*** Another possible risk of this initiative is that some teachers working at Preah Sisovath HS who are less skilled in online education will feel left out. This could create division and conflict in the school that could be disruptive and challenging to the leadership at Preah Sisovath HS.

#### **KAPE's Recommendation to MoEYS:**

As noted earlier, the risks described above are not necessarily assured but do raise some concern that administrators at Preah Sisovath HS should take note of. These risks appear to have been satisfactorily addressed in the responses from the management team at Preah Sisovath New Generation School. In view of these assurances, clarifications, and responsive measures, it is KAPE's opinion that MoEYS should approve the proposed initiative by Preah Sisovath New Generation School.

**ANNEX 5:**  
**School Management Assessment Framework**  
**New Generation Schools**

**Assessment Scale:**

**0-2:** Very Weak; **3-4:** Weak; **5-7:** Moderate; **8-9:** Strong; **10:** Excellent

(Please see rubrics used below for the assessment)

<b>School Name:</b>		<b>Location:</b>	
<b>Joined Program:</b>		<b>Supported Grades:</b>	
<b>Managers:</b>		<b>Role:</b>	
		<b>Role:</b>	
		<b>Role:</b>	
<b>Overall School Management Score:</b>		<b>Leadership &amp; Management</b>	
		<b>Innovation:</b>	
		<b>Motivation:</b>	

**DESCRIPTION:**

**General Assessment:**

**Leadership & Management:**

**Innovation:**

**Motivation:**

### Assessment Rubrics

Scale	Leadership & Management	Innovation	Motivation
<b>0-2:</b> Very Weak	The majority of managers have little visibility at the school and leave the management of the school to others. The school is largely on auto-pilot and most managers including the director are rarely seen.	There are no new practices at the school and school managers actively seek to maintain the status quo and discourage others who may have new ideas or want to make positive changes at the school.	The majority of managers show little interest in the NGS program. Most managers (including the director) miss meetings, leave meetings early, and/or leave the management of the school to others.
<b>3-4:</b> Weak	The completion of basic management tasks (organizing meetings, financial reporting, statistics, etc.) are done at a level that is barely satisfactory. There is little transparency in management, poor communication, no decisive decision-making, and a style of leadership that does not inspire confidence in others.	There are some new changes and ideas relating to educational practices at the school but these are largely unplanned, come from below, and are generally ignored by the managers at the school.	The majority of managers demonstrate some nominal interest in the program but only enough to satisfy superiors. Managers do some things to support the program but only the bare minimum, and in many cases less than the minimum.
<b>5-7:</b> Moderate	Basic management tasks are completed at a level that is satisfactory and exceeds the minimum standard. Although the leadership at the school may be liked or even well-liked by subordinates, there is no sense of dynamism (e.g., risk-taking) in how the school is led.	There are some new changes and ideas relating to educational practices occurring at the school, which come both from managers as well as subordinates. However, these are generally organic changes that are not yet well-planned or coordinated.	The motivation levels of a majority of managers are satisfactory. They show a reasonable degree of interest and support of the program but may still be constrained in this support either because they perhaps lack capacity or do not fully understand the program.
<b>8-9:</b> Strong	Management tasks are completed in a manner that is very efficient. Managers are well-liked, transparent, decisive in their decision-making, and inspire confidence in others. Managers demonstrate good communication & negotiation skills and can be humble when required.	There is systematic innovation at the school that comes from all levels. The innovations are well-planned and coordinated and consciously address problems that have been identified by the school during planning meetings and other structured discussions.	The motivation levels of a majority of managers are quite strong. Managers spend more than the required amount of time working at their schools, strive hard to motivate others at the school, and demonstrate a strong sense of ownership of their schools.
<b>10:</b> Excellent	Management tasks are completed in a manner that is extremely efficient. Managers demonstrate all the characteristics of a strong leader described above but go one step further by generating a high level of creativity in the way that they manage the school.	There is systematic innovation at the school of a very high quality. Not only are the innovations well-planned and coordinated in terms of the local school environment but these innovations have high relevance for province-wide and even nationwide replication.	The motivation levels of a majority of managers are extremely strong as described above and the managers strive to make their school not only well-known and outstanding models of education in their own areas but also on the national and even international stage.