Creative Learning Class Project Final Report(CLC)
The period of report is from 2009 to 2014
Written by Ms. Loem Lida, Project Manager.

I. ABOUT CREATIVE LEARNING CLASS PROJECT

1. Project Background

Creative Learning Class (CLC) was created in November 2009. CLC is the development and expansion of an XO laptop class which was implemented in grades 4, 5, and 6 in Hun Sen Chanleas Dai Primary School. After working in the primary school for several years, PEPY found that students in other schools also wanted the opportunity to learn and experience XO computers. PEPY then decided to move XO classes from the Hun Sen Chanleas Dai Primary School to Chanleas Dai Junior High School in order to engage students from the whole commune. As a result, students throughout the commune were able to get the same educational opportunities. According to the results of a survey with the JHS students, 80% of the students did not feel confident; they felt shy, and afraid to speak out about what they were thinking. They also did not use the process of critical thinking to help with problem solving. The results of the survey helped us to make a more informed decision on how we would run the project. Instead of running XO class, we decided to run Creative Learning Class (CLC) to help students overcome some of the problems outline above.

2. Project Objective

The main objective of CLC was to enhance the knowledge and skills of students in creative thinking and problem solving through technology and the quality of education in Chanleas Dai Junior High School.

II. PROCESS OF RUNNING THE PROJECT

1. Curriculum Development

In order to achieve our objectives mentioned above, we decided to design three main teaching curriculums 1) Social Studies, where students learn about Cambodian history, village history, school, and other issues about ASEAN countries 2) Science, students learn about how chemicals work, the difference between solid and liquid, machineries etc. and 3) XO, students learn how to program, develop presentations, make blog posts, take pictures etc. Moreover, we also developed some additional teaching curriculum such as mathematics and puzzles. These two extra curriculums helped students improve their problems solving and decision skills. These were used during special occasions such as before and after Khmer New Year because all students hadn't returned to school yet. Each lesson in the curriculum was designed by using five main core capabilities as follows:

A. Formulation

Students thought of questions and problems that were relevant to them:
- Made and recorded observations about the world around them
- Raised questions about the world around them based on their observations
- Defined problems based on observable information

B. Research Formulation

Students gathered information effectively and efficiently:
- Gathered information from multiple sources (interviews, books, observation, and the internet)
- Kept records (notes, graphs, etc.) of information collected
- Combined observations from multiple groups/students using different resources

C. Experimentation

Students developed creative methods to answer questions:
- Inferred based on observation (made hypothesis)
- Used creativity in answering difficult or unusual questions
- Became comfortable with trial and error (especially in the face of initial and repeated failure/difficulty)
- Designed experiments that refined information and tested possible answers.

D. Evaluation

Students evaluated answers and determined if they were correct and useful:

• Students answered the question "how do you know?" and compared it to/against observable facts

• Explained why experiments should be repeatable and determine if they are

• Compared answers and experiments (especially methods) of classmates

• Students differentiated between empirical evidence and ideas, opinions, and inferences

E. Communication

Students communicated their methods and answers to others:

• Created presentable explanations that fit experimental results

• Presented collected information to peers

• Discussed and defended their methods when questioned.

2. Selecting Process

CLC was not a government class and was implemented directly by PEPY with students during their free time from school. Students who wanted to join this project had to sign up at the beginning of school year. The process of selecting students to join the class was:

a) Announced it to the students: At the end of September, every year, we collaborated with the government teachers and the principal to announce to students about 1) what CLC is 2) How it was to be run 3) When it was to start 4) Who can attend the class. Students' received an application form and sought approval from their parents or guardians. Moreover, they had to bring their parents or guardians to come and meet with PEPY team to talk about further collaboration.

b) Students filled out the PEPY application form Students have to submit their application forms to PEPY before the deadline

c) PEPY team announced to students who had qualified to attend the class. Students were generally always qualified to study in the class except those whose parents did not provide the approval by signing the application form.

3. Communication with school and relevant stakeholders

a) <u>Meeting with school Department of Education, Youth and Sport (DoEYS):</u> We sought permission first from DoEYS because they had the most power in the education sector

in that area. We presented to them information regarding how the project would be run in the junior high school, specifically the curriculum that we were planning to use with students. They were excited about our initiative and allowed us to implement to project in the school requested.

b) <u>Meeting with school principal:</u> We arranged a meeting with the junior high school management committee members to present to them about implementing the project with students in their school. They gave permission for us to implement the project and also helped us to arrange the schedule for students to attend our class during school day and time.

c) <u>Meeting with student's parents or guardians:</u> We usually organized the parents or guardians meeting during mid-October to inform them about CLC, and sought further collaboration and support. We also invited them to visit a CLC session to increase their understanding about the class.

d) <u>Home Visits:</u> We found that in rural communities some students' lackmotivation and some students are forced to stay at home and help with chores. As a result, this often affects school attendance. Going to their house and meeting members of their family is important to better understanding their circumstances and why they may not be attending class. It was a good opportunity to provide them with more information about what their children are doing at school; especially in CLC. This is because families often do not really understand what activities are taking place at school. During these visits our team documented all the information that we received for later trouble shooting. It is a good idea to also bring government teachers or the principal along with us because they are influential figures in the community and they understand the community culture more deeply.

e) <u>Weekly Team Meeting:</u> At PEPY we coordinated via a team meeting every week. In this meeting we shared what we have learned from the previous week, any issues faced, ideas to solve problems, and worked to develop the weekly plan. We found the weekly meeting to be very important for keeping everyone working as a team and informed. Our meetings lasted about 1 hour because members were strongly encouraged to be well prepared with their agendas and issues before the meeting.

f) <u>Evaluation:</u> Conduct the pre and post-test, we did a pre –test with students to see what their levels were before we provided the lessons to them and we also a post-test as well to see how they had progressed after receiving the lessons. In addition we also did

a Semester test once a year. We interviewed students to get feedback and met with the students individually also

4. Transition Period

In June 2013, the PEPY team considered halting the Creative Learning Class in Chanleas Dai Junior High School since PEPY's strategic priorities changed. We started to consider what we could do with CLC because students will lose their opportunity if we just stopped the project. We organized another meeting among our team to brainstorm possible solutions such as: a) Hand it over to school if they are willing to take over, b) Handover to Volunteer for Community Development (VCD), c) Talk to PEPY ex-staff who would be willing to run that project, or d) Donate all our resources to other NGOs who have similar vision, mission, core value and activities similar to ours. We also sought out the ideas from the community. First of all, we informed the teachers and principal that we would like to make changes to CLC. At the meeting, teachers and the principal expressed a strong interest that they would like to take over the project and run it with their teachers. Next, we organized a meeting in August 2013 with the community and invited the School Support Community, the Village Chief, the CommuneChief, and teachers to hear more what they thought about CLC in the future. They wanted PEPY to run it longer in their community, but understood that it was time for PEPY to transition out due to a shift in objectives. After discussion, they decided take over that project in order to retain the benefit for their children. They then divided some roles as the following:

A. Community
- They would encourage parents in their own village to send their children to CLC project
- They would announce to all parents that the school might raise some funds from the families to fix the XO computers.
- They would join the meeting whenever teachers invite them.

B. Teachers and Principal
- Piloted the CLC project with PEPY by arranging teachers to teach CLC lesson 2 hours per week
- Organized a meeting with school support committee to update them about the activities in the school
- Raised funds from students to fix the XO computers.

- Joined the training provided by PEPY.
- Developed a quarterly report and send to District of Education Youth and Sports (DoEYS), and Provincial of Education Youths and Sport (PoEYS).

5. Transition Process

A. Staff provided training to the government teachers about XO computers: In September 2013, PEPY team provided five days training to six government teachers. This training focused on how to use XO computers and how PEPY teaches students in Creative Learning Class (CLC) such as, Formulation, Research, Experiment, Evaluation and Communication. Teachers were really interested in XO programs such as scratch activities, painting, writing, turtle art, and also how to fix a computer.

B. Model Class from PEPY facilitator: Four government teachers were assigned to teach students in CLC. Before they started to teach students on their own, we provided them some model classes to help them develop their understanding. Since the class had started, we found that some teachers, came to class late and absent quite often and they did not give any feedback or idea after observing the class. At the end of each month our team leader, conducted many meetings with both individuals however their attendance did not improve.

C. Co-teaching between Government teacher and CLC facilitator: In January and February 2014, our team and government teachers started to teach together. This time we allowed the government teachers to do lesson plans on their own for their class. From our observation, we found that teachers didn't change the habits they had. Three of them still came to the class late, were absent quite often and they didn't always do the lesson plan for teaching. One teacher, came to class regularly, on time and did the lesson plan for teaching and followed the all the models of CLC.

D. After working together for four months, all the teachers found that: They didn't have time to implement project, they did not have time to do lesson plans and research, they had problems maintaining the XO computers and struggled to teach the use of XO's to students.

6. **Teacher attendance while they teaching at CLC class**

No	Name	Present in Class	Excuse	Absent
1	Individual A	36%	14%	50%
2	Individual B	36%	14%	50%
3	Individual C	69%	8%	23%
4	Individual D	90%	10%	0%

7. **Final Decision on transition the project**

Finally, after working with us for one year, the government teachers decided not to take over the project because they did not have enough time to run the CLC classes. There was discussion of another NGO with a similar mission and activities taking over, however there was no suitable NGO found. Therefore, due to this decision PEPY agreed to end this project.
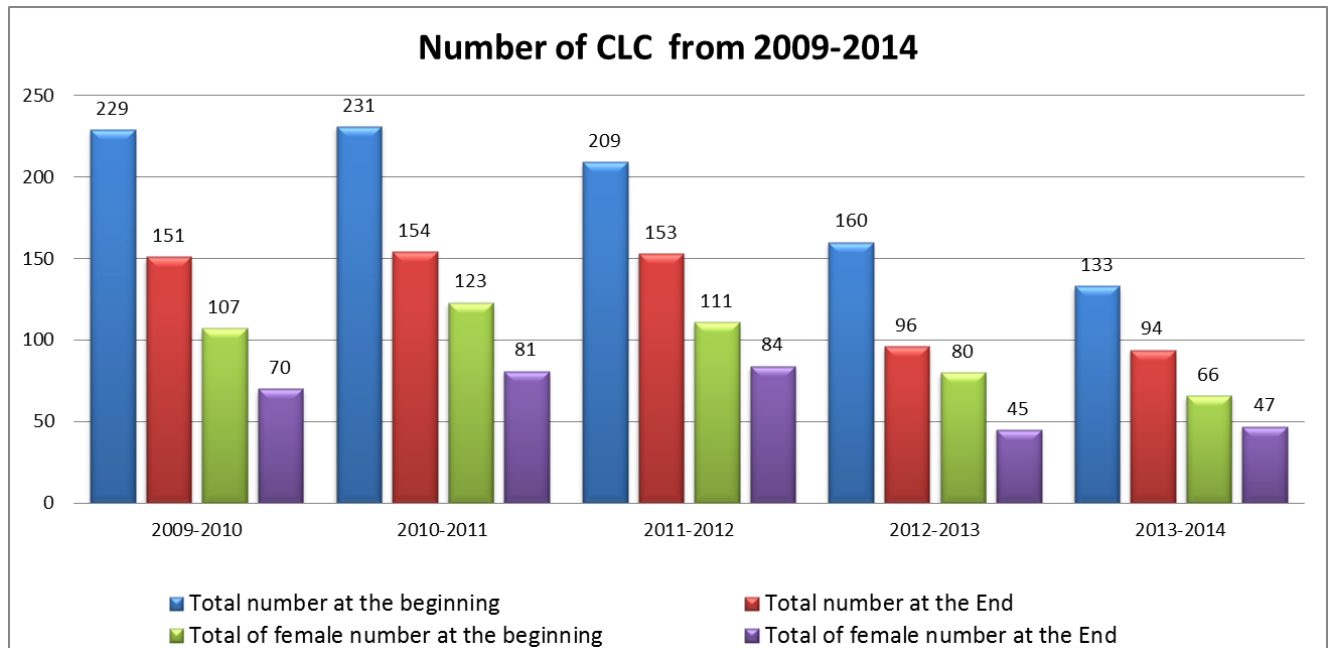
8. **Project material distribution**

Some of CLC materials were transferred to be used for PEPY's current programs this included laptops and solar electricity system . XO Computers and adaptors were donated to a NGO named Cambodia PRIDE who run similar program. Some books, shelves, and tables were donated to the Chanleas Dai Hun Sen Junior High School. The LEGO was donated to Phonheary Ly Foundation. All donors who contributed to the CLC project with material gifts in kind were informed of these transitions.

III. **Result of Project Implementation (Outputs):**

Creative Learning Class

1) **Number of students who we enrolled in CLC**

Number of CLC from 2009-2014

Chart: Number of CLC from 2009-2014

Year	Total number at the beginning	Total number at the End	Total of female number at the beginning	Total of female number at the End
2009-2010	229	151	107	70
2010-2011	231	154	123	81
2011-2012	209	153	111	84
2012-2013	160	96	80	45
2013-2014	133	94	66	47

. For the five years period CLC worked with 962 students, 51% of whom are females. The graph above shows that rate of students who dropped out varies from 24% to 40%. In addition we learned through consultation that without the presence of PEPY there, students drop out rate would have been higher. In general, students dropped out of school due to these three main factors:

a) Parents: Some parents convinced their children to drop out of school and migrate to Thailand in order to help them earn more income to build new houses, buy modern materials like motorbikes, or buy a Koyon (ploughing machine), as well. Some parents who had taken big loans from Micro Finance Institutions or local money lenders who were struggling to pay these loans back also encouraged the children to leave school and find work in order to help them cover these repayments.

b) Teachers in the government class: The main goal of students who come to school is to learn from teachers. However, as some of the teachers are of a poor standard and do not always come to teach regularly, this presents challenges for the student's education. As a result of poor and sporadic education some students didn't understand the lessons. As the result they didn't believe that they would be able to pass exams and get a job because they didn't have enough capacity to compete with students in the town. This in turn led to some students dropping out of school.

c) Students: Some students chose to prioritize immediate money and material items over longer term education. They wanted to have Smart phones, new motorbikes, and their own money. This led some to drop out in order to reach their short term goals. Some students put pressure on their parents to buy them a new motor bike for them otherwise they would stop coming to school.

2) Lessons provided to students

Grade	Lessons were provided/year	Social Lessons	Science Lesson	Information Technology Lessons	Smart Game topic/Math activities
Grade 7	49 lessons	7 lessons	6 lessons	23 lessons	13 topics
Grade 8	49 lessons	14 lessons	7 lessons	18 lessons	10 topics
Grade 9	36 lessons	4 lessons	3 lessons	19 lessons	10 topics

Every year, students in each grade received different lessons from our CLC course.

- Grade 7 students got 49 lessons in total and these lessons were divided into four parts 1) Social Studies contained 7 lessons: a) Sex and Gender, b) Gender and concept of people, c) Discrimination gender and methods to omit discrimination, d) Community and village, e) Family, f) School, and g) Map. 2) Science had 6 lessons: a) Liquid, solid, and gas, b) Mixture, c) Acidic and Acidic rain, d) Lemon electronic (science experiment), e) Solar system, and f) Gravity and air, 3) XO had 23 lessons: a) Introduction to XO, b) Introduction to Hardware, c) Introduction to Software d) Turtle Typing activity, e) Paint activity, f) Chat activity, g) Scratch Function (7 lessons), h) introduction to Gnome, i) Abiword (3 lessons), j) Spreadsheet (3 lessons), and k) internet and email (2 lessons), and 4) Smart Game contained around 10 topics and the topic depended on the class discussion, such as the history of Angkor Wat, ASEAN community etc.

- Grade 8 students got 49 lessons in total and those lessons were divided into four parts 1) Social Studies contained 14 lessons: a) General information about Cambodia, b) each period of Cambodia, c) Janla and Funon period, d) Angkor Empire, e) JekTumuk and LoungVek period, f) Odong and France colonies period, g) Niyum Khmer Republic ,

h)Democratic Kampuchea People's Republic of Cambodia, i) About Phnom Penh city, TaKoe, Kondal, and PreyVeng province, j) Ratanakiri, StengTreng, and Kompong Thom province, k) PrehVihea, Modolkiri, and Kompongcham, l) KompongChhnang, Pursat, Bailen, and Batdombong, m) Odor meanchey, BonteyMeanchey, Sveyreang provinces, and n) Kraches, kompot, kohkong, SihanukProvinceX 2) Sciencehad 7 lessons: a) Our solar system (3 lessons), b) Part of the Earth, c) Forest, d)Cloud, and e) Describing Soil, 3) XO were 18 lessons: a) Introduction to advance hardware, b) Scratch (7 lessons), c) Abiword (3 lessons), d) Spreadsheet (3 lessons), e) Gmail, and f) Block (3 lessons), and 4) Smart Game were 10 topics, the topics were depended on class discussions.

- Grade 9 students got 36 lessons in total and those lessons were divided into four parts 1) Social Studiescontained 4 lessons: a) Countries in ASEAN (3 lessons), and b) United Nation organization 2) Sciencehad 3 lessons: a) Water, b) Body odor, and c) Body system,, 3) XOhad 19 lessons: a) Scratch (8 lessons), b) Email (3 lessons), c) MS word (2 lessons), d) MS excel (2 lessons) , and e) Blog (3 lessons), f) power point (2 lessons), and 4) Smart Game had 10 topics, which depended on class discussions.
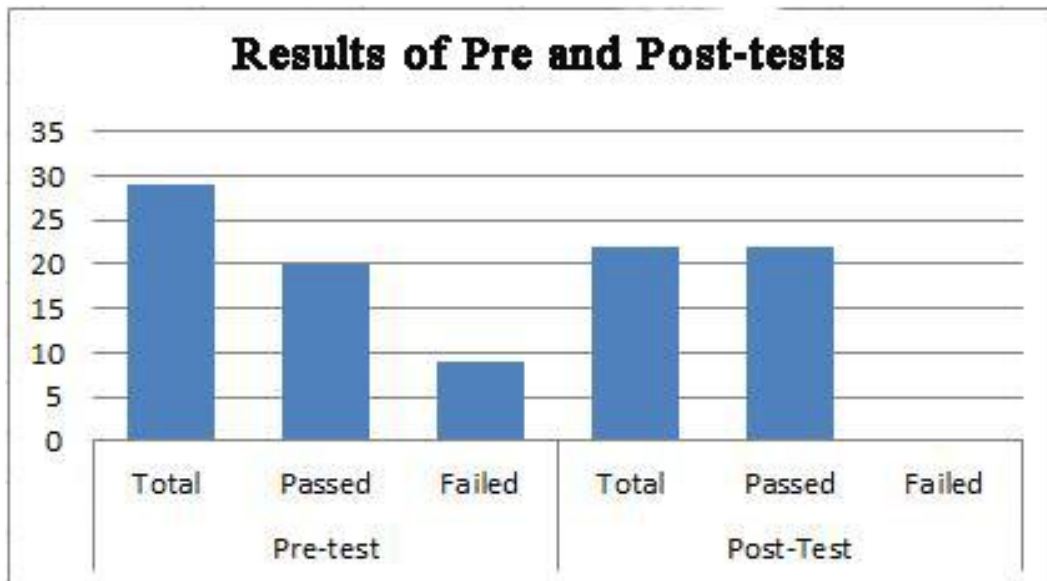
3) Pre and Post test

A). Result of Pre and Posttest of Grade 7A in 2013-2014
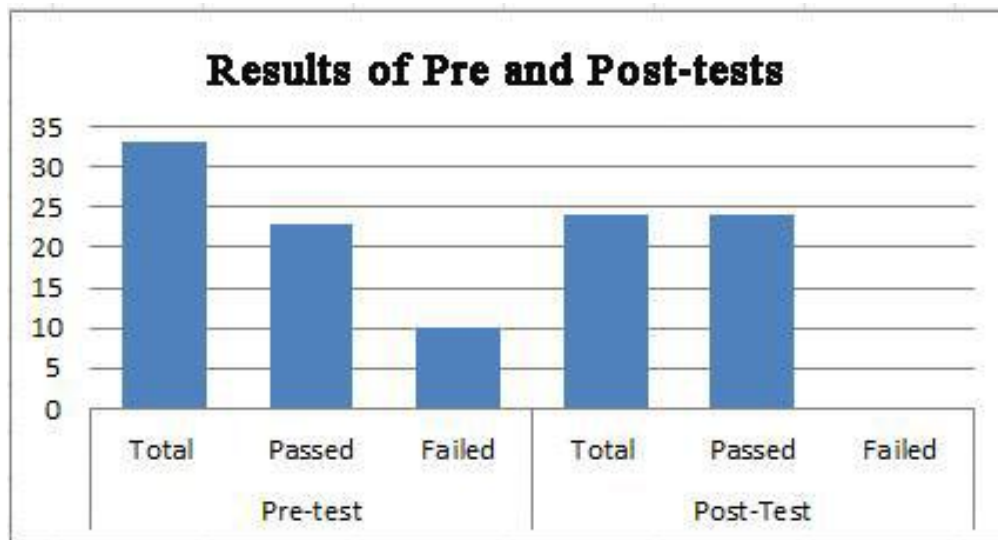
According to results of this examination, at the beginning there were 33 took the pre-test. Among all the students, there were 23 who passed and 10 who failed. At the end of the year, there were only 24 students took the post-test and all of them passed. These statistics therefore show that the lessons were effective as all the students taking the
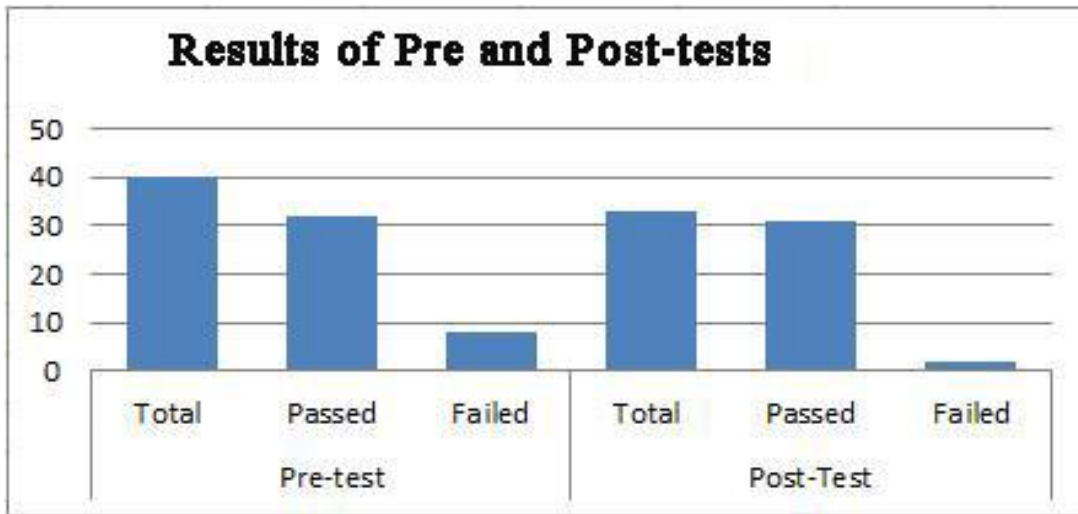
test at the end of the year have passed. It also implies that 9 students(27%) dropped out. The major causes of dropping out of school were migration or being kept at school to help with housework.

B). Result of Pre and Posttest of Grade 7B in 2013-2014


Results of Pre and Post-tests

 According to results of this examination, at the beginning of the year 29 took the pre-test, 20 passed and 9 failed. At the end of the year, 22 students took the post-test and all passed. This proves the syllabuswas effective as all the students taking the test at the end of the year passed. This graph also shows a 24% drop out rate. Major causes of drop out are mainly migration to Thailand or being kept at home to assist with housework.

C). Result of Pre and Posttest of Grade 8

Results of Pre and Post-tests

According to results of this examination, at thebeginning 40 took pre-test, 32 passed and 8 failed. At the end of the year, 33 students took the post-test and 31 passed. This shows the lessons wereeffective as the number of students who have passed the test at the end of the year has increased. The graph also illustrates a dropout rate of 17%.Migration and being kept home to help with housework are again the major causes of dropout..

D). Result of Pre and Posttest of Grade 9

Results of Pre and Post-tests
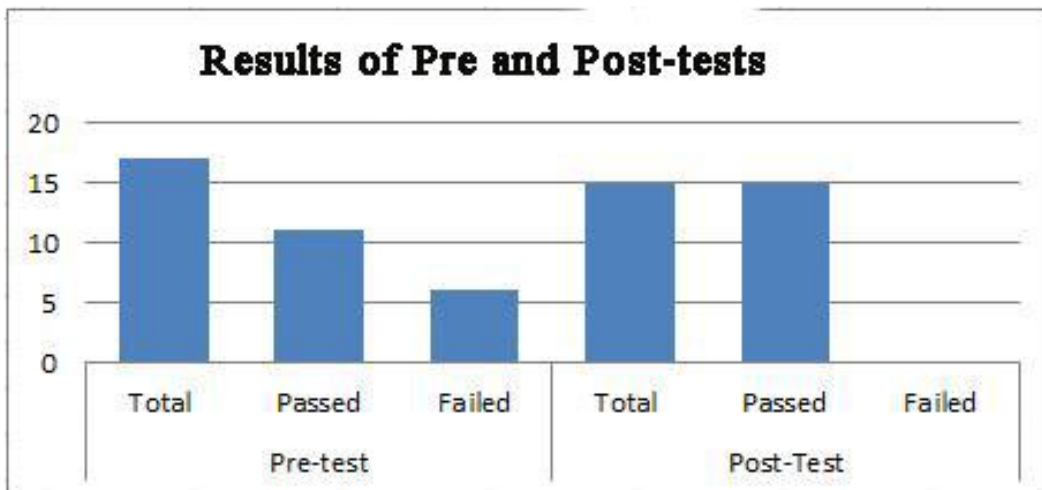
According to results of this examination, 17 took pre-test,11 passed and 6 failed. At the end of the year, 15 students took the post-test and all passed, showing that the education received was effective. The graph also illustrates an 11% drop out rate, again due to migration and family responsibilities.

Engineering Club

Engineering club was a part of CLC started in 2012. The idea of starting this club was to help students understand what an engineer is and the tasks of an engineer. Students get involved in constructing their own robots using pieces of Lego mind storm and NTX donated by a company called National Instruments. The activities involved with this club were:

a) Students were formed in different groups depending on their available time.
b) Students, first, followed the instructions given along with the piece of Lego and then constructed robot based on that guidelines.
c) Once they completed their construction, they started to program in computers to run their robot
d) They could develop their own robots such as lorries, trucks, cars, excavators and also racing motor bike.

1) Number of students who joined engineering club
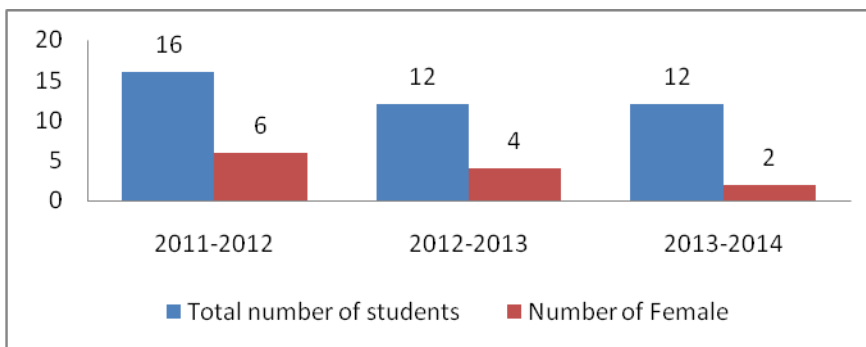
. Within three years, our engineering club worked with 40 students, 30% of whom were females. According to the graph above, we found that female students did not have much interest in construction lessons or construction work. This could also stem from the traditional roles within Khmer culture. We discovered that most of the girls thought that 'this kind of work is mostly for boys'. We discovered that many male students liked to be involved in machines, construction, programming and building. However, we hoped the female students who joined would help break the concept of classifying between boy and girls' gender specific roles.

## 2) Topics provided to students in Engineering Club

We provided 6 mains topics to students 1) Building following a manual, 2) Programing on Motor faction, 3) Programing on Sensor faction, 4) Programing on Control faction, 5) How

to connect one Lego machine to other Lego machine through Bluetooth and 6) Create their own machine - building and programming.

**Workshop during the vacation**

A) Creativity through Art

In 2010, PEPY organized a workshop called "Creativity through Art" with the aim of promoting critical thinking, creativity, and communication through involvement in art activities. The workshop was held over 12 days in July 2010. Students were divided into different groups to learn the basics of how to mix colors, draw landscape pictures, draw human pictures, draw picture of buildings, and animals. After understanding the techniques involved in drawing, students also started to learn how to make stories along with their pictures and shared these with the other groups for feedback. Moreover, students also learned how to create some new materials and animal sculptures by using the recycle stuff. According to the feedback sheet filled by the participants, they all really enjoyed and learned a lot from the workshop.

Number of participants in Creativity through Art workshop 2010

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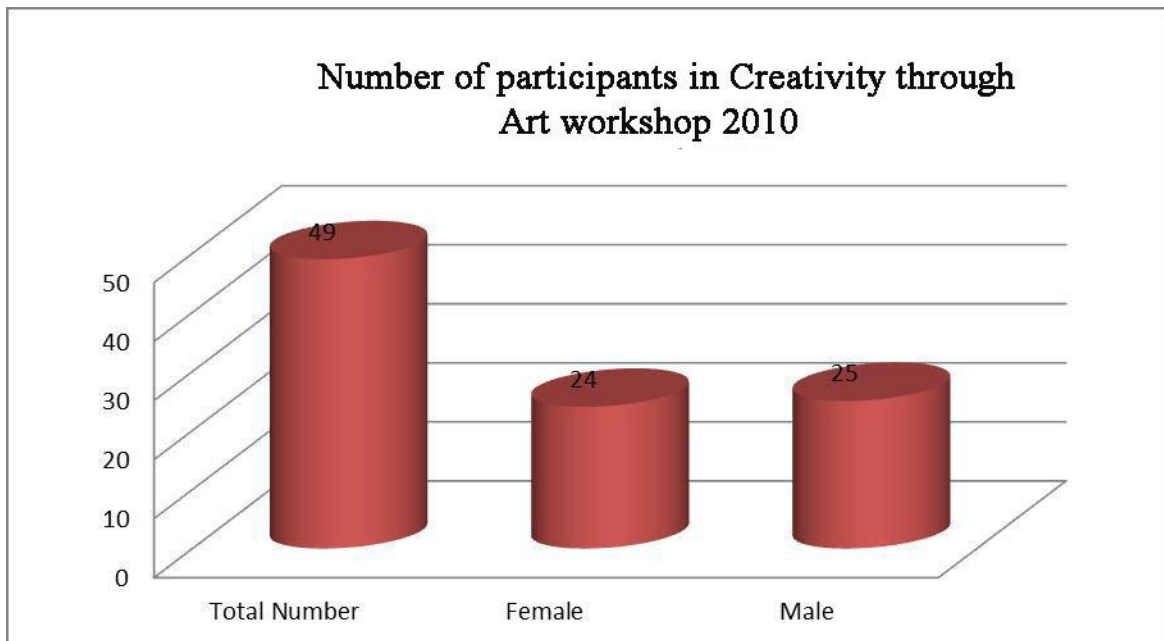
B) Book writing workshop

In 2011, PEPY organized a "Book writing workshop" with the aim of promoting writing short story, critical thinking, creativity, and communication through art activities. The workshop

was held over 12 days in July 2011. The students learned the basics of writing short stories and then drew an illustration corresponding to the story. There were 18 different stories across many themes. Moreover the students had created different sculptures and collages from paper, plastic bottles, seeds and other materials. On the final day, all the participants exhibited their work to their parents, friends and PEPY staff.


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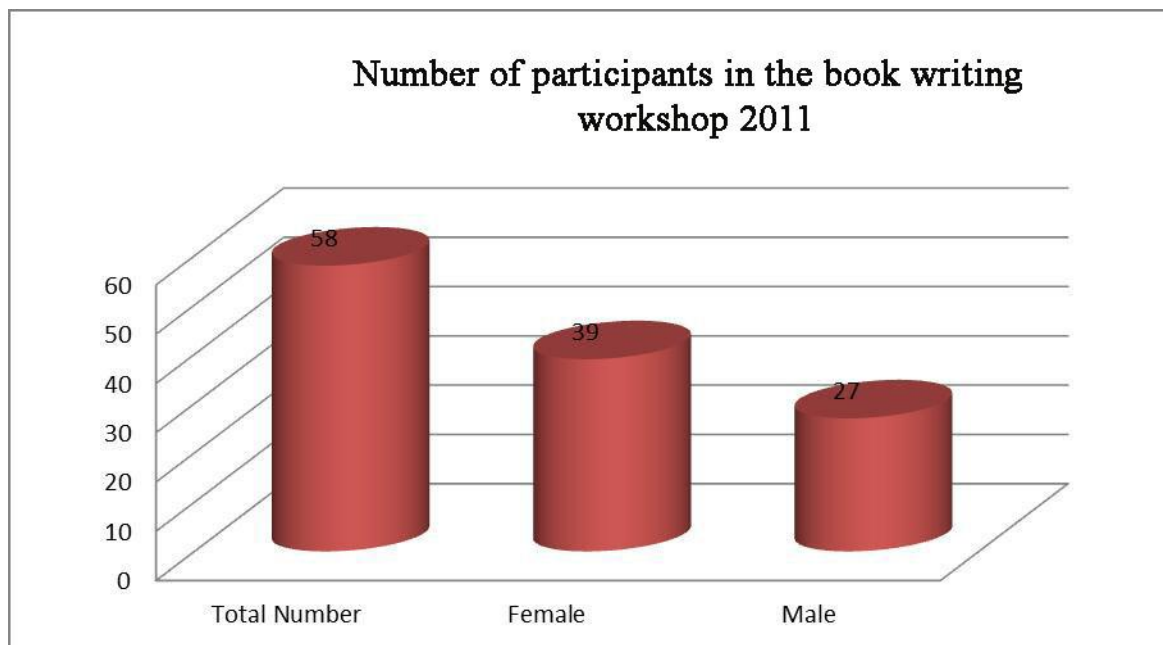
C) Book writing workshop

In 2012, PEPY organized a workshop called "Book writing workshop" with the aim of the activities being the same as the Book writing workshop in 2011. The workshop was held over 12 days in July 2012. The students learned the basics of writing short stories and illustration through pictures or collages. That year they used a different theme and produced a different style of story and artwork.

Number of participants in the book writing workshop 2012

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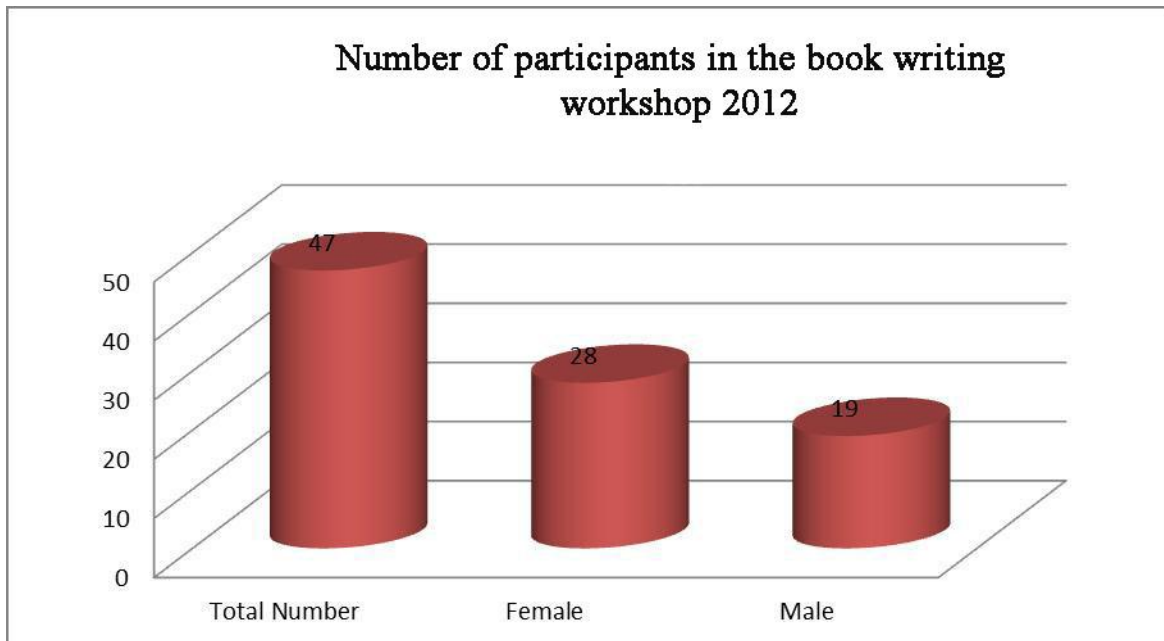
D) Lego Green City Workshop 2013

In 2013, PEPY organized a workshop called "Lego Green City workshop" with the aim of promoting critical thinking and creativity through Lego technology. The workshop was held over 12 days in July 2013 and encouraged students to become creative with Lego. The students began learning how to build designs and program various objects from Lego Mindstorm Kits. by following instruction manuals; this led on to them creating their own designs.Most students built cars, which they named 'Landcruiser' and 'Oscar'. Some children also enjoyed building a wind turbine and they even built a model hydraulic dam for Tonle Sap (lake)!

Number of participants in Lego Green City workshop 2013

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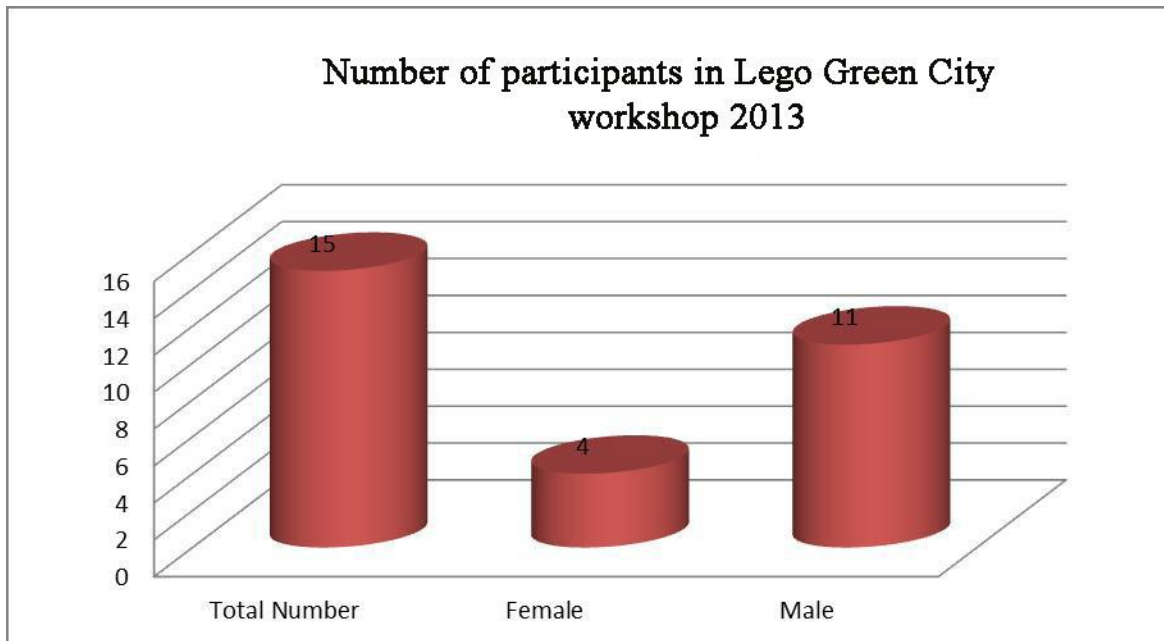
E) Lego Green City Workshop 2014

In 2014, PEPY organized a second workshop called "Lego Green City workshop" with the similar aims. The workshop was held over 8 days in August 2014. The students learned how to build a model, and program it to achieve set tasks. Students individually brainstormed ideas then formed groups to plan, design, build, and program of a functioning robot. The Green City model was used last year but this time the students expanded on the concept and created their own ideas. Students experimented with speed and distance which encompassed research skills such as making predictions and drawing conclusions. Students developed their critical thinking, problem solving skills, and ability to work as a team as the robots needed to achieve certain tasks like lifting items, transporting and moving items in a particular way. The robots were activated by different sensors such as; touch, light, sound, and ultrasonic. Many tests were performed, results explored and questions asked until the students had them operating successfully. Students learned how to film their robots and produced videos. This allowed them to show their parents and family members at home what they had been working on. On the last day of the workshop, students invited family and friends to come and watch the robots perform their tasks.

Number of participants in Lego Green City workshop 2014

Total Number	8
Female	0
Male	8
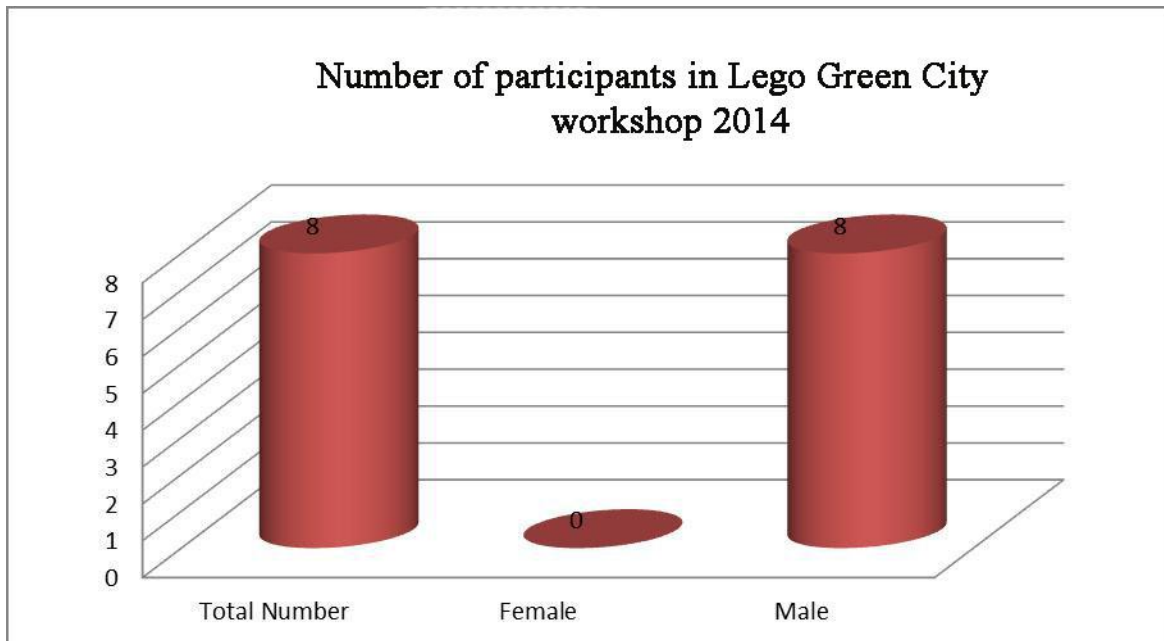
IV. OUTCOMES FROM THE PROJECT IMPLEMENTATION

- The Creative Learning Class methodology pushed the students to be active in the class through different activities like: group discussion, individual work, education games, IQ games, pair work, and debate activities.

- The CLC Method also promoted self-confidence and communication with other people. In the government class, the students found it hard to communicate in class, but after they joined in CLC class they felt encouraged to communicate better as they knew and understood one another due to work they had collaborated on in CLC. For example, tasks that involved interviewing each other, writing about their favorite friends, asking questions to teacher, answering the questions. The project also promotes the culture of sharing, self-respect and respecting one another through presentations, helping each other, finding out about their own values and other values, and sharing their knowledge to their siblings and friends.

- This method also encouraged the students to carry out research while they study in each topic.

- The project directly improved the student's critical thinking. We did many exercises through educational games, IQ games, identifying problems and finding the solution, and self-evaluation. In those exercises, the students learned how to reflect on the game, establish a case for support their ideas, express their ideas, and formulate and ask questions. Students used their critical thinking a lot in their work on the XO's.

- The students gained a lot of general knowledge through the use of technology and XO's in games such as Scratch, Turtle typing, using browsers, Abiword, Spreadsheet, and other logical games. They also learned a lot about how to use the internet in the right way and some applications in communication like Gmail, Skype, Blog, and research through the internet.

V.   IMPACTS FROM THE PROJECT IMPLEMENATION

- Around 60% (one class of approx. 32 students) of the students raised their hand when asked a question.
- About 90% (one class of approx. 32 students) could use XO computers and could access the internet.
- The students who were in the CLC class were more confident at expressing their ideas especially when working in groups. If government teacher gave students an assignment to complete in groups, the students who were in CLC project were more likely to lead those groups.
- The students were told by teachers in Kralanh high school said that the students from Chunleas Dail Junior High School were brave and confident than students from other places.
- Students enjoyed conducting research
- Students were enthusiastic about working in groups; they always showed their ideas and worked well when they participated in group discussions.
- Students were more active and built their capacity in analytical thinking skills and debating.
- Through the use of the LEGO robotics kits, students developed a basic knowledge of programming and structural design.
- Through learning the basics of computer repair in our Engineering Club, students kept their XO laptops in good working order at no cost.

- In each year, around 70% (one class of approx. 32 students) of students delivered very good presentations. They were evaluated on the information they gave, how they conducted the presentation and how they worked as a team.

VI. The story of change

Chhouy Vanchha was a student in grade 7. During that year he also joined in all the PEPY activities. He lives in Chanlease Dai village, Chanlease Dai commune, Kralanch district, Siem Reap province. He said that during primary school, he liked to interrupt friends while they were studying, he did not like to think academically, was shy and he did not finish homework. After he joined in the Creative Learning Class, he found that he liked to do scratch and research on his XO in his free time. He had the confidence to ask the teacher questions. At the end of the year he found he could do many things that he never did before like using an XO and personal computer, doing a presentation in front of the class on something that he had researched, building different objects from Lego Mindstorm kits. Significantly he added "I taught my older brother to use MS Word and PowerPoint too"

VII. CHALLENGES FROM THE PROJECT IMPLEMENTATION

- A constant challenge was to ensure we engaged government teachers in the Junior High School and involved them in the development of PEPY projects and their school as a whole. We sought to do this so as the teachers felt invested in the project themselves. .

- The project is not currently sustainable without PEPY's support

- High immigration increases dropout rates.

- The students did not come to the club during village wedding parties or pagoda ceremonies.

- Attendance was often inconsistent because some of students had gone to Thailand or were asked to stay at home to help with their parents or care for other family members, also some government teachers did not attend regularly which led to the students missing the PEPY Classes. Rice planting season, harvest season, wedding season, Khmer New Year, and cold season meant that the attendance of the students could be sporadic. The principal and teachers in the school were less invested in finding ways to maintain and improve the project, as they felt that was PEPY's responsibility. This was also a challenge when it came to managing an effective transition of the project.

VIII.   LESSONS LEARNED AND RECOMMENDATION

- Critical thinking and problem solving are not familiar concepts in Cambodia and many students do not recognize the benefit of these skills. We strive to make classes relevant to the student's everyday lives.

- It's no good having amazing learning tools if teachers do not know how to use them! Our Educators have spent a lot of time learning about XO Computers and LEGO kits to be able to use these resources to their full capacity.

- Nothing lasts forever! While the XO computers are robust machines – the battery and the mouse pad are the first things to break. PEPY was faced with either reinvesting in more computers or finding another innovative way of teaching these same skills once the XOs are no longer usable.

- We should work with schools that really need our help rather than we need their help,

- PEPY began the CLC project without a clear exit strategy, and without the school and teachers understanding that the project could be a school led project. This meant that when PEPY needed to transition out of the project, it was not easy to find a way to keep the project going as the school did not see the project as their responsibility. If PEPY were to implement a similar project in future, with long term sustainability as a key goal the team would consider the following approach:
    - Investigate how PEPY could implement the project in a way that utilizes current support systems / programs instead of creating new initiatives. This way it will be easier to secure school involvement.
    - Engaging the school from the beginning when designing the project and have a clear exit strategy regarding how / when / who would take over/implement the project at the end of PEPY's involvement.