LOCAL LIFE SKILLS: CLIMATE CHANGE
SEMESTER-LONG COURSE TEACHING PLAN
GRADES 8 or 9

UNICEF PRIORITY ACTIONS

This course requires investment of some time and energy on the part of UNICEF. The results of this investment however have the potential to have a nationwide learning impact on environmental topics, and so should be well worth it.

1. Tipping points game: https://treecer.com/en/store/product/Tipping%20Point UNICEF will need to purchase this game and make Khmer translations, then photocopy and make one set available to each school that is doing the LLS on climate change. It may be advisable to contact the games writer and ask permission to copy (consultant has tried via LinkedIn), but given that the translation into Khmer and use is not for sale, this should be fine under copyright laws.
2. Students will write stories which need to be published into a book/pamphlet, or put online on a special site created for sharing these stories. UNICEF will either need to pay for binding into small books to share with other schools, or find a website where they can be published, either on the UNICEF website, or through a site independently set up for "Cambodian Climate Children" or similar
3. UNICEF will need to create 15-minute long expert videos for the sustainability expert speaker. These can be stored on a UNICEF or MoEYS site or server and shared with schools as requested. Below is a list of people who can be contacted to talk about sustainability in Khmer

   Saron Chhem: Owner of Domlei sustainable clothing boutique, Phnom Penh. Whatsapp: +855 15 670 639 www.domlei.com - She is aware and is happy to be recorded. The rest of the speakers have been recommended by her.

   Dai Khmer Sustainable Beauty, Phnom Penh, https://www.facebook.com/daikhmer1/

   Villageworks sustainable handicrafts, Phnom Penh, Whatsapp: +855 12 995 944 https://www.facebook.com/villageworkssongkhem/

   Green Lady Cambodia, Sustainable Menstrual Products, Phnom Penh, Phone: 012 300 557 https://www.facebook.com/greenladycambodia/ https://www.greenladycambodia.com/?fbclid=IwAR3atS3SVcr09RP3Ma5kndW77-pHg4s1umRkt1AZQvg637B32IBmHM8ugMs

   Hatha Neary, Sustainable Teas, Toul Kork Phone 098 983 039, https://www.facebook.com/HatthaNeary/, https://hatthaneary.com/en/?fbclid=IwAR2LgUhhXjxN_YW2Jtk_3xsXdWrJ6ZEIADopdZm2RG_2MOHZKZwEt2V94-A

To give the interviews structure and consistency, it is recommended they are an interview format, and the speakers are asked the following questions in the following order. Let the interviewees see the questions first so they know what will be asked and have time to think about responses. It is recommended to share the questions with them a few days in advance of the actual filming:

- Please tell us your name, your age, location, the name of your business, and what it sells?
- What does sustainability mean to you?
- How does your business try to achieve sustainability? Tell us about your products, your packaging, your sourcing, your labor standards and pay, transport of products, recyclability, energy use, and everything you can about the lifecycle of your products?

- What inspired you to create a sustainable business?
- From where and how do you learn about sustainability issues? What do you watch or read?
- Can you tell us about any difficulties you face in trying to prepare and sell your products? (for example, does your product cost more to produce, and therefore you have to sell it for a higher price that people don't want to pay?)
- What do you think could help you overcome those difficulties?
- Why do you think it is important for Cambodia to embrace sustainable living? (please speak to environmental or health problems you are aware of because of a lack of sustainability, or anything you know about Cambodia's development plans and how they could lead to environmental damage or greater climate change if not done well)
- Do you follow other sustainable practices in your life outside of your business? If yes, could you tell us what they are and why you do them? (for example, using solar energy to save money and reduce GHG emissions, turning off all power whenever things are not in use, recycling water, etc.)
- Could you tell us about other sustainable businesses or business people that you know of?
- Do you have any ideas for other sustainable businesses that you would like to start, or even if you don't want to start them, businesses that Cambodia needs?
- What would you suggest students, and everyone does, to take small steps towards more sustainable lifestyles (drive motorcycles less and bike instead? Only buy clothes made out of natural fabrics? Turn off electricity when leaving room or not using? Avoiding plastic and carrying sustainable bags and utensils with you? Drinking water from dispensers, not plastic bottles? Etc??)
- Any other last words?

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Specific course topic: Climate Change and Bad Living Styles Causing Pollution and Death in our Community

Related Topics for Further or Future Study: The Environment and Ecosystem Services; Biodiversity and Biodiversity loss; Land Use: Agriculture and Deforestation; Ocean Acidification; Plastics Pollution; Air and Water Pollution; Pollution and Human Health; Water Conservation; Climate Mitigation Technologies; Global and National Climate Policies and Action

Resources and materials needed: Community members with disaster/climate impacts experience, local or national level Ministry of Environment authorities, university climate or environment scientists, Local Life Skills (LLS) guidelines, Climate Change Reference Document (CCRD) associated with this course plan; computers, projectors and screens; smartphones; paper, markers or colored pencils; flipcharts; tape; small colored papers; chalkboard or white board and writing accessories.

Resource note: Please use computers and screens, or drawing/chalk boards when available rather than printing paper. It is always better to save paper. Saving paper saves trees and helps mitigate climate change! This lesson – of using fewer natural resources and living sustainably – is one you must constantly teach your students through both course content and good example. Likewise, make sure to turn off all electrical equipment when not in use and make sure students understand this is important to do as well.

Duration: 1 semester (33 teaching hours, 2-3 teaching hours per week). Teachers will likely need to use extracurricular time available to complete the activities with students.

Target skills: An understanding of science related to climate change, an understanding of climate change impacts in school community, practical life skills (locally relevant climate knowledge and adaptation solutions, what to do in disasters), and soft skills (creative thinking, analysis, cooperation, resilience, and personal values).

This document contains: a semester of lesson plans for the teacher; notes on where to find further supporting information; ideas for student and teacher activities in the classroom and in the community

Supplementary material: is in the CCRD included with this course plan. Specific figures that to reference are noted in the lesson plans below. The Annexes to this document and to the CCRD also suggest other resources to use or search for online. The teacher can use material directly from the CCRD, or adopt it as they see best for their students and their community. The teacher must also reference the MoEYS climate change textbooks for Grades 4, 5, and 6 to see what students have learned so far. The teacher must also review science textbooks for grades 1-6 to see what science topics students have covered so far: that will allow the teacher to adjust these lesson plans as needed and help the students recall past learning.

Learning the topic: Climate change is complex. The teacher must read the CCRD carefully, do their own online searches to supplement and clarify as needed. They should also watch https://www.youtube.com/watch?v=SsHUdPl0JJI and https://www.youtube.com/watch?v=5cFWtolhA3A and https://www.youtube.com/watch?v=OkZRRT6Zg4I to support their adult learning.

Tips for Lesson Planning

Climate change relates to almost every other topic taught in schools, as well as all other LLS curricula. Climate change impacts health, finances, social interactions, the environment, livelihoods, and general present and future quality of life. When teaching children about climate change we want to help them understand the causes of climate change through an explanation of the science, and we want them to see how it affects them right now. We can do this by providing real-life examples of how it is directly impacting their lives, the lives of their families, and the lives of the people, natural habitats and animals around them.

The students should already know what climate change is, but may still have some incorrect ideas. Many students (and adults) confound the ideas of climate change with other environmental problems, such as general waste and pollution, as well as ozone layer depletion. Therefore, during these lessons, the role of the teacher is to remind them about the basics of climate change and other environmental issues, to teach them new material on climate mitigation and sustainable living and to lead them through practice on climate-smart living.

Most importantly, this lesson needs to focus on consequences of climate change locally, and ways of living sustainably to help lessen global climate impacts. In grades 8 and 9, children should be ready to plan out simple but advanced actions and advocacy for their community.

Our final goal of teaching about climate change in this unit is to incite action: children and youth will experience far more severe impacts of climate change than older generations have. Children and youth are and must be the voice of the future. Lesson planning should help students recognize the problem situation, identify the specific causes and consequences of the problem, develop and carry out solutions and then communicate to or teach the community, largely by themselves.

This lesson should build upon all the other soft skills (LLS) the students have learned, including, but not limited to: problem-solving, critical thinking, resilience, cooperation, communication, participation, negotiation, creativity, and decision-making. It should also build on past science classes they have had, so for this reason, it is important the teacher reviews science curriculum from earlier years.

These lessons can and should use a variety of teaching aids, including diagrams with moving parts, pictures of climate impacts locally, in Cambodia, or around the world, videos of climate activism in youth, teaching vides, and news stories that illustrate how severe climate change is in Cambodia and the Mekong countries and the world.

As a teacher, you can will have to support learners' as they become aware of the things they do that can or may cause damage to the environment and increase climate change. You will also need to help them brainstorm solutions to problems through direct action or activism, or ideally, both. You can do this by:

1) inviting guests the students can relate to who can talk about the direct impact of climate change on them;
2) showing videos if no guests are available.
3) inviting local scientists or science practitioners to give information through engaging models;
4) providing time for researching a set of local climate change problems;
5) engaging learners in dialogue about those problems;
6) engage the students as peer teachers;
7) helping them implement practical solutions and training them how to communicate and teach about what they know.

Overall Course Objectives

The objective of this semester-long course is to: 1) teach students about the basics of the atmosphere and climate change, including the difference between the ozone layer and climate change, and other forms of environmental problems 2) make sure they understand what causes climate change and what are some impacts around them; 3) understand how to be ready for and recover from disasters; 4) be motivated to carry out campaigns in their village to adapt to climate change. By the end of the sessions, learners will be able to:

- Explain what climate change mitigation is and differentiate between mitigation and adaptation
- Understand what sustainable living is
- Talk about how youth around the world are taking climate action
- Identify a real-life solution to climate-smart living in their community and carry out that action
- Develop a sustainable-living communications campaign

Soft Skills (LLS) are Strengthened or Integrated in the Lessons: In this lesson plan, the students will be learning and reinforcing their existing knowledge about the 12 core "soft skills" taught by the LLS curriculum. How these skills are or need to be integrated into each lesson is noted in the far-right column of the semester course plan. They are:

- **Problem-solving**: Throughout the process of recognition of the real-world problem, identification of a problem of priority and development of its actionable solution, learners will learn to solve the problem in their current capacity.
- **Critical thinking**: As learners go through the process of analyzing the root and secondary causes of problems to find solutions, they will have to compare solutions among those that they brainstormed, conducting analysis comparing the impact and relevance of the solution.
- **Creativity**: Learners will be creative as they need to come up with their own solutions and causes to the identified problem. They can be vocally, artistically and/or intellectually creative.
- **Cooperation**: The groups are expected to produce one synopsis of the problem, the causes, and the solutions, and one activism project. In doing this they learn to cooperate with others, ideally learning respect for others and how to compromise where necessary.
- **Decision-making:** Since students are requested to select one priority solution among a few that they are offered, their prioritizing skills and decision-making skills based on the justification they developed will be strengthened.
- **Negotiation**: When a group selects priority actions and solutions, the group members are expected to agree on their decision as a group. Learners will try to convince others to select a particular problem and solution by expressing their own justifications. to reach consensus.
- **Communication**: Throughout the process of problem identification, development of a solution and coming up with a proposal, each learner communicates her/his idea and thought. Learners will also listen to others carefully to understand and appreciate different points of views.
- **Resilience**: Climate adaptation is often used interchangeably with the word "resilience." Through understanding climate change, and understanding what sorts of adaptation actions are needed to stay happy and healthy, they are teaching themselves one aspect of resilience
- **Participation**: Participation means children a say in their education, listening to them and involving them in school life, valuing children's opinions and ideas, and giving them control of their learning. Participation improves ownership of governance in schools and communities.
- **Empathy:** Climate change impacts different people differently, depending on where they live, and more importantly their socioeconomic status. The students need to learn that it is important to consider how the most vulnerable: elderly, very poor, handicapped, are affected.
- **Respect for diversity:** Similar to empathy, students need to understand that diverse viewpoints are important in understanding climate impacts, how to mitigate climate change, how to adapt, and how to live sustainably. What works for one does not work for everyone.
- **Self-management:** Students will have individual roles in more complex projects – they will need to manage their time and behavior so that they help the team. Likewise, they need to learn how to moderate their own behavior so it is more sustainable and healthy for the planet.

Month	Week	Hours	Teacher Activities	Target Soft Skills
Step 1: Understanding the topic			**Objective:** Over the course of the semester, the students will review what they know about climate change and they will learn new information on climate mitigation. They will start by reviewing what they learned about climate change in the past, and trying to make links, (through their own observations) about environmental problems in the community, including death of plants, animals or people, areas that seem polluted, and any other environmental stresses (heat, drought, too much rain) that they experience. and they will understand and be able to practice climate-smart, sustainable living. This will be done through a combination of adult-teaching, peer teaching and self-exploration,	
1	1	2 (t=2)	**Teacher priority activities:** teacher shows on screen or draws out large figures showing 1) the layers of the atmosphere; 2) the photosynthesis diagram; pictures of climate impacts and other environmental problems (Teacher to read CCRD 4-6, Lessons 1-4). Materials: computer and screen, or chalk/white board and chalk/markers, flip chart **Activity 1: Personal experiences with problems (30 min).** Start with problem identified above (climate change and poor living practices around waste, energy, water) and have them talk about their experience and observations on these issues. Have them brainstorm some ideas about how they can collectively address the problem. Since they have learned nothing yet, these guesses might be off, but that it ok – just note them on a flip chart and compare their responses to later in the semester once they have learned. **Activity 2: Recalling. (60 min).** The students should have learned about the basics of climate change in grades 4-6 LLS programming. However, they may need a refresher. This one class is to be spent recalling what they learned, using resources from the CCRD grades 4-6. If the students have not yet learned the basics, you as a teacher will have to re-teach them about the GHGs, the causes of climate change, and climate impacts vs other environmental problems. However, this course plan is written assuming they have already learned. The students are given copies to share the CCRD grades 4-6 reference book. They are given 30 minutes to read/skim Lessons 1-4. Teacher assigns 2-3 (depending on class size) students to one topic each, then asks students come to the front of the room to teach for a up to 5 minutes/topic): • What is a Greenhouse Gas (GHG)? • What are the 3-4 major GHGs? • Why are GHGs necessary? • What happens when we get to many GHGs? • Why is photosynthesis important for regulating GHGs? • What kinds of human activities emit GHGs? • What is the difference between climate change and the ozone layer problem?	**Communication:** Students will have to communicate clearly and correctly to be able to teach **Participation:** Students will be expected to fully participate in the lesson by teaching. **Critical thinking:** In writing their assessments of the videos, students will be asked to think critically about what was good and bad about the video. They are not just to report on it but also critique it. **Self-Management:** As teachers, the students will have to manage their time and behavior so they are respected and helpful as teachers.

			• What are other environmental problems that are not necessarily related to climate change? • Can anyone provide links between these other problems and climate change? • What are some of the impacts of climate change around the world? • What are some of the impacts of climate change in our community? • What are the consequences of those impacts? • What are some things we can do to make ourselves ready for those impacts? Clue: answers for all of these questions are in CCRD Grades 4-6 Lessons 1-4. **Activity 2**. **Climate Change Video. (30 min)** As an additional memory aid, the students are to spend the rest of the class watching this: https://www.youtube.com/watch?v=PacBrZUXNSE Ideally the teacher can show it on a computer and project onto a screen. If that is not possible, ask students to watch on smartphones and share with a neighbor if they do not have one.	
			Homework: students to search YouTube for other basic climate change videos in Khmer. They are to watch one of at least 5 minutes, and write a page in their journal summarizing it. Teacher to make sure they completed their assignment next class and grade them accordingly.	

1	2	2 (t= 4)	**Teacher priority activities:** read Lesson 7: Tipping Points, CCRD (7-9). Have computer/screen or chalk/drawing board ready. Display (draw/print out if you cannot display) the five figures/photos from that chapter. Materials: computer and screen; if not possible, chalkboard/drawing board. **Activity 1: Feedback loops and tipping points (45min)** Teacher to teach material from Lesson 7 CCRD. Teach for 10 minute periods and then space out lecture by asking questions. Questions to ask: • Can you give a practical example of a tipping point? (clue: when one more grocery is added to a bag, it rips; when you lean a certain distance out of the window, you could suddenly fall, when just one more drop of rain on a weak roof causes it to collapse, etc.) • What can we do to minimize urban heat islands? • What could we do to stop forest die-offs? • What can we do to stop permafrost melting? • What can we do to slow down ice melting? • From what you have learned about climate before, can you think of other tipping points (clue (this question may be tough to answer, but let them guess. Other tipping points are corals bleach once oceans get too hot or acidic; wind and water patterns (gyres and jetstreams) can change if the Earth's surface warms; **Activity 2 Tipping Points Game (75 min)** Teacher to break students into groups of 4 and pass out Khmer version of Tipping Points Game (https://www.amazon.ca/Tipping-Point-Climate-Change-Card/dp/B096H9GPP8/ref=sr_1_1?crid=FHF9KVR37AC&dchild=1&keywords=tipping+point+climate+change+game&qid=1623769229&s=toys&sprefix=tipping%2Ctoys%2C193&sr=1-1). Tell students to read the directions and once they have understood it, begin playing. They may not be able to complete the game during class time, but they will at least get an understanding of what the idea is, which will reinforce tipping points to them. **Homework**: Students are briefly told that the next class will be about climate change mitigation, which is the lessening of climate change through actions that remove GHGs from the air, or at least reduce the amount added. Their assignment is to find a story or video online (or on TV or radio or newspaper) about this topic, read about it, and then be prepared to talk for 2 minutes about what they read in the next class.	**Cooperation**: The groups will have to work together to make sure the game works. **Communication**: Students will work on their communication skills as they present their assessments of the videos to the class. **Critical thinking**: The tipping points game naturally encourages **problem-solving** and critical thinking skills.

1	3	2 (t=6)	**Teacher priority activities**: Teacher to read CCRD Lesson 8 and have all pictures printed out or preferably ready to show on screen. Materials: Computer, projector, screen; or chalkboard/whiteboard and chalk/markers. Print outs of impacts from reference document or other sources if computer not available. **Activity 1: Student Presentations of mitigation. (45 min)** Allow about half of the students 2 min to stand up and talk about what they read or watched about mitigation, and how they felt about the article. Depending on class size, they can have more or less time, but limit the activity to 45 min. After each presentation teachers asks one student: • What did you like about her/his report? • Did you disagree with anything? Why or why not? • (you may ask additional questions about why this mitigates if the presenter has not already explained) This way each student gets positive feedback and suggestions for improvement. **Activity 2: Teaching climate change mitigation. (45 min)** Teacher refers to CCRD Lesson 8 for source material. Today the focus is on teaching the material on mitigation in built systems. The teacher will go through the mitigation options in built systems, showing corresponding figures. The teachers should ideally look up more info about these topics online, as the CCRD does not always go very deep into the subject. After describing each option according to the material in the CCRD, the teacher should select a new student to ask each of the following questions (one student per question so that everyone gets a turn to talk and everyone is encouraged to critically think): • Have you ever seen this option in our school or community? If yes, where? • What places in Cambodia or in the world need to use this most? (encourage them to think critically – if you are talking about food waste, maybe they need to think about rich and wasteful countries like in America and Europe; maybe they can also think about all the plastic waste in Cambodia, or what to do with rotting food left on shrines; what about overdevelopment in Cambodia? The cities are growing faster than they need to and there is less natural land)? • Why do people not do some of these things? (clue: people drive cars instead of taking bikes over short distances because they like air conditioning, or because cars are a status symbol, or simply because they are lazy. People don't turn off electricity because they forget, or they don't realize how bad it is for the planet, or because they are rich and can afford the bill so they are just lazy). **Activity 3: Presentation Skills. (30 min)**	**Problem-solving:** By finding a real-world problem, and identifying a solution, they are thinking through problem solving. **Critical thinking:** By identifying an environmental problem and then trying to find solutions, they are improving this skill. **Communication**: By presenting their ideas, they will need to learn to communicate clearly. **Self-management:** students will be responsible for thinking through their presentation and staying within time limits, demonstrating self-management

			The students have already given presentations, but the teacher should go over good presentation rules with them, which include: • Never more than 6 lines of text per slide • Use clear pictures where people's faces and eyes can be seen (if showing humans) and not taken from behind • All pictures must be clear • Use a variety of formats for your slides – some slides can just be a picture, some can be words, some can have a quote – keep them interesting for the audience • KNOW what you want to say, and NEVER just read from your slides. • Take one minute or less per slide. Keep things moving so that people don't get bored looking at one slide too long • Speak loudly and clearly; use emotion and engage your audience with enthusiasm Ask: • From your experience, can you give suggestions on other good presentation skills? • Can anyone describe how they prepare themselves for a presentation or any speaking? What steps do you go through to get mentally and physically ready? Explain to the students that they will be in charge of teaching the class about mitigation options in the natural sector and artificial mitigation options. The CCRD Lesson 8 contains detailed information on some of the topics, but not all of them, so they will have to search the internet for more information. Depending on the size of the class, divide groups up into 3-4 and have them each take on one of the topics (i.e., agriculture, tree planting, carbon capture, methane capture, meat eating, composting, biogas, etc.) Instruct them to also look up information online in Khmer or English (if they can) to supplement the CCRD.	
			Homework: Students have to teach the next class on mitigation in natural sectors and mitigation technologies. They each will have to prepare slide presentations (or if absolutely not possible, they will have to do drawings on flipcharts, prepared ahead of time). Each presentation should be about 10 minutes, and each student should take turns speaking. Ideally most of the class time will be spent with student teaching.	

1	4	2 (t=8)	**Teacher priority activities**: Study CCRD Lesson 8 on natural systems and technological mitigation. Look up questions you have online. Be ready to support the students with corrections and questions. Materials: computer and screen, or chalk/white board and chalk/markers; flipcharts if no computer and screen are available, but try to prioritize computers and projection screens. **Activity 1: Student Presentations of mitigation. (75 min)** After each student presentation, ask questions of the presenters, as well as the other students. Suggestions to use (as appropriate): • Have we seen this sort of mitigation in our community? In Cambodia? Where? • What things about this form of mitigation do you have? What do you not understand? (clue: try to answer or ask other students to guess) • What do you think about the criticisms of these forms of mitigation? Do you understand why it can be dangerous to depend on one solution only? • Do you understand why we must work on many options at the same time? Explain why? • What options here can students do? What options must governments or businesses do? • What was your favorite topic and why? • What was your favorite presentation and why? • Can you name one good thing and one less good thing about each student presentation, so we can learn how to improve our speaking and presenting skills? **Activity 3: Expert presentation (30 min)** Using teachers and school administrators, find a local speaker who can talk about one of these mitigation actions. Perhaps someone in your community has used cover cropping or low till agricultural techniques, or made compost piles. Perhaps someone has installed or worked with solar panels, or perhaps people have been involved in tree planting. If no one is locally available, ask for support from the commune council to reach out to someone in DMoE or MoE or a university who can come and talk to students about mitigation. Students are encouraged to ask questions at the end of the presentation. If they are not asking any, teacher should be prepared with question prompts appropriate for the subject being discussed. **Activity 3: Reflection (15 min)** Students are given 5 minutes to make notes in their reflection journal about what they liked and didn't like about the class, as well as how they felt about the presentation exercise. Was it hard? Just right? Too easy? What do they wish they had done better? What were they most proud of about their group? How did they feel about having to cooperate with their groups? Was it hard at times and how did you solve problems? **Homework**: Students to count how many pieces of plastic they see on their way home from school. Note it in their notebook, as well as types of plastic. They will have report the next class.	**Decision-making**: Since students are requested to select one problem among a few that they may find, their and decision-making skills based on the justification they developed will be strengthened. **Problem-solving:** By finding a real-world problem, and identifying a solution, they are thinking through problem solving. **Critical thinking:** By identifying an environmental problem and then trying to find solutions, they are improving this skill. **Communication**: By presenting their ideas, they will need to learn to communicate clearly. They also need to listen to other and learn from them as they are critiqued. **Creativity**: Students will be creative as they need present their lectures, using ideas from multiple sources.

2	5	2 (t=10)	**Teacher priority activities**: Study Lesson 9 CCRD. Have pictures printed or ideally ready to show on computer screen. This lesson and the next are about sustainability, and one important lesson in sustainability is to use few resources, i.e. no paper, Materials: Computer/screen, drawing board and tools for drawing, printed pictures of impacts if there is no other option. **Activity 1: Sustainable living and its principles (60 min)** Teacher to explain the principles of sustainable living from CCRD. Show the figure showing the three pillars and how they overlap and sustainability is somewhere in between. Before you go on to the next section, stop and ask students if they have ideas about how to live sustainably (clue: answers are the types of actions described in the section titled "what to do to live sustainably?" If a student gives a correct answer, ask them or if another student if they can explain WHY it is sustainable. Talk briefly about conserving energy and water, food waste, recycling and focus the rest of the lesson on reducing use and plastics. Remind students what they should have learned in grades 4-6: plastics are not directly related to climate change, but the production of plastics creates ad lot of GHGs, and the burning or degradation of plastics also emits GHGs. So there are indirect links. But more importantly, plastics pollute the atmosphere in many ways (refer to CCRD Grades 4-6 Lesson 4 on plastics pollution). Ask questions like: • Can they think of a time when they wasted food, or when they saw food waste? (clue: everyone should have seen rotting food at shrines. Or rotting food in garbage. Where does this food go?) • Can they think of a time when they saw water wasted? What happened? • Can they think of an example of energy waste they have seen? What happened? • Can they recall what they learned about food and other biomass waste from earlier lessons? • What happens when a restaurant makes too much rice? Have you seen this? What could the restaurant do instead of throwing the rice in the street? After the reminder about the links between plastic and GHGs, ask a handful of students: • How many pieces of plastic did you see on their way home from school. What were they? • Why do you think they were there? What could we do to change this? • Can you tell us about a thing you have seen with too much packaging? What is a solution? **Activity 2: Local sustainability expert (15min)** UNICEF will have recorded 15 minute presentations from a number of Cambodian's working on sustainability videos. Choose one of these to show the students.	**Participation**: Students will have to work together equally to start filling in their inventory sheets. **Respect for Diversity**: As students hear stories from sustainability experts, they will understand different points of view from different parts of the country. **Empathy:** Sustainability experts should be able to speak to problems of injustice, unequal pay, and environmental degradation, helping students empathize with other people and unfamiliar issues. **Critical thinking:** Filling out the inventories will compel students to think critically about energy and waste usage in their homes.

Activity 3: Plastic use and consumption patterns at home (45 min)
Students to work on making a household consumption checklist. Students can work on these in groups of two, but each student must produce their own unique list.

Date of purchase	Type of product used					
	Food and drink	Toys	Books	Household tools	Clothes	Beauty products
	Ex: plastic juice bottle	Ex: plastic doll		Ex: shower caddy	Ex: shirt with plastic wrapper	Ex: shampoo bottle

Ask the students in class to work with a partner and start filling in their own sheets with all of the things they can think of in their house in these categories. They might not know the date of purchase, but should try to fill it in approximately. Ideally by working together they can help each other think of things.

Students should know make a consumption needs worksheet. Again, they can work on them in pairs.

Product?	Could we live without this?	Packaging materials?	How will the packaging be disposed of?	Will the product be consumed or disposed?	If disposed, how?	Is there a better alternative? What is it?	Is that option possible for my family? Why or why not?
Bottled water	Yes	Plastic	Thrown in trash	Consumed		Yes, water dispensers	No, we cannot afford it
School shirt	No	Plastic	Thrown in trash	Disposed	Trash once it is too old/small	Yes	Turn that old shirt into a craft or usable object
Etc.	Etc.	Etc.	Etc.	Etc.	Etc.	Etc.	Etc.

			Finally students need to fill out an energy waste audit. They may not be able to get all done in the available time, but they should at minimum have them drawn and start to full them out. Their homework is to finish these three checklists. This is included as **Annex 9**. If this seems too complex (to do all the calculations) the last columns can be removed, and just ask the kids to fill in columns A to F.	
			Homework: The students' homework is to fill out these tables. Ask them to fill out at least 10 rows for each, more if they want to. They will be expected to report out next class time on what they found, and they will be asked to focus on three products where they think they can really make change (i.e. items they really could live without, or items they really can and will use more effectively.)	

2	6	2 (t=12)	**Teacher priority activities**: Study Lesson 9 CCRD. Have pictures printed or ideally ready to show on computer screen. This lesson is again about sustainability, and one important lesson in sustainability is to use few resources, i.e. no paper, Teacher to identify vacant lot in area that students can be brought to. A vacant lot would be a space that no one is living in or using as a field – it could just be an area with grass and no forest, maybe there is trash in it, maybe not. Teacher to take pictures of vacant lot to display on computer screen. Figure of pillars of sustainability also shown. Materials: Computer, projector, screen, smartphones are essential for this lesson. Borrow from school director or administrators if one is not available in the classroom A**ctivity 1: Reporting on household consumption. (45 min)** Each student asked to get up and talk about their household consumption (briefly list some of the things one their list) and then talk about the three products where they can make the most difference or change. If there are too many students, limit to 45 minutes. Questions to ask: • Why did you choose these three products? • What do you think your family/parents will feel about eliminating this product? • What did you identify as a thing you cannot change? • Why is that? What resources would you need to make that change? (Clue: students may not be able to switch to water dispensers because their family is too poor to afford one; students may not be able to avoid buying plastic wrapped beauty products because they don't know where to access ones in biodegradable packaging and/or they are too expensive) **Activity 2: Sustainability and climate on a blank slate. (45 min)** Teacher to briefly explain today's practical: imagine they are given a blank public space. What would they do to use it sustainably, based on the three pillars of sustainability. Remind them of the pillars, and then show the space they are to go out to. Flip then through slides of pictures in **Annex 5** about uses of empty space – you don't need to explain them all, just briefly tell students what they are looking at. Take the students on a field trip out to the space, and assign students as class monitors, who will also have duties: Walk out to the vacant lot, and divide the students into groups of no more than 10. Have one monitor oversee other groups while teacher manages one. Teacher and each monitor should have a paper, something solid to write on, and a pen. On the paper should be the following questions: • Describe what you see here. What is in this lots (Trees? Grass? Garbage? Animals? Bare soil? Food waste? Other things?) • Imagine now we wanted to develop this lot into something that helps our community be more sustainable or ready to adapt to climate change. What could we do with this lot? (there are no wrong answers, but hopefully children will think of things like: plant a garden, study the	**Critical thinking:** By identifying home waste issues, they are improving this skill. **Communication:** They will be presenting oral reports, yet again practicing clear, accurate and engaging communication. **Creativity:** In the vacant lot, exercise, they will be challenged to be creative in their use of the lot. **Problem-solving:** In the vacant lot, exercise, they will be challenged to solve the problems of poor land use. **Participation**: students will need to understand they all must participate in the sustainability planning, and their collective views will make the plan stronger. **Negotiation**: students will have different ideas about what to do with the lot. They will have to negotiate with each other to come up with the best, or combined solutions.

			neighboring forest and plant the right trees, use plastic waste to create art, build a space for relaxing/a park using sustainable or recycles materials, build a craft or art market for community members to sell sustainably made products, create an exercise area for people to come and exercise/socialize together, build a community education center, build safe housing for the very poor, etc. Prompt them with these ideas if they do not come up with them themselves). • Of all the ideas we have brainstormed, which ones do you think the community needs most and why? • Of all the ideas we have brainstormed, which do you think are the most possible to implement and why? Students should also take pictures of lot from various angles on their smartphones. This willl be part of their exhibition at the end of the semester. **Activity 3: Sustainability planning (30 min)** Now everyone can go back to the classroom (to get out of the heat and have a board to use) • What stakeholders would we need to talk to develop this lot? How would we talk to them? (clue: talk to education coordination committee and commune council. They should know who owns the lot. Then you would have to talk to the owners of the lot, and convince them to make it into one of the ideas. You would also have to talk to the potential users, depending on what it is) • How will your plan support the needs of the community now and in the future? • How will it promote the economy, environment, and society?	
			Homework: Tell students the next two classes will be on positive sustainability or climate efforts for their community. Think about what you would do to make the community aware of climate change and sustainably living, or preparing them for climate-related disasters? What techniques would you use? What story do you want to tell? They can think about the blank lot exercise, but they need to also think about everything they learned all semester and reflect on what they think is the most important thing to do and why. Student to write at least two pages of brainstorming, that they will then use to discuss and plan the following sessions.	

2	7	2 (t=14)	**Teacher priority activities:** Teacher to study CCRD Lesson 10. The class will be spent going over actions, with a particular focus on what youth have been doing around the world. Materials: Computer, projector, screen; or chalkboard/whiteboard and chalk/markers. Pictures of actions from CCRD, to display on screen. Videos cued up and ready to show on screen. **Activity 1: Cambodian climate action (45 min)** Teacher to go over first parts of Lesson 10 about Cambodian climate action for mitigation and adaptation. Teacher to also talk about how the government is supporting this, as well as local NGOs, and various international organizations. Teacher to ask: • Have you ever seen the logos of any of these organizations? If yes, did you know what they were doing? • Have you or your friends or family ever worked with/talked with these organizations? • How do you feel about these people who are working on climate action in Cambodia? Are you happy they are doing this? Or do you think it's a waste of time? • How do you feel about international people or organizations in Cambodia? Are you glad they are helping or do you wish they would leave? Why or why not? • Have you seen any of these projects or actions in our community? • Have you ever been involved in any actions like this? When? What did you do? Did you like it or not? Why or why not? • What do you wish people would come to do in our community? **Activity 2: Children's Climate Action (45 min)** Teacher now to talk about climate change and children and children's climate action from Lesson 10 of CCRD. Read portion of September 23, 2019 Global Youth Climate Action Declaration from **CCRD Annex**. Show pictures of climate activists. Teacher to show, on screen, slides from here: https://weshare.unicef.org/CS.aspx?VP3=SearchResult&ALID=2AMZIFHQQXXP (action UNICEF – translate to Khmer_ After going over the material, show the following two brief videos: • https://www.unicef.org/eap/childutopia-story-5-youths-and-1-dream-city (action UNICEF - create file with Khmer subtitles) • https://weshare.unicef.org/archive/15759-Philippines-Fridays-for-Future-Mitzi-YT-2AMZIFB3M6LT.html (action UNICEF - create file with Khmer subtitles) **Activity 3: What would you do? (30min)** Teacher to explain to class that their end of semester project is going to be related to these last two lessons: sustainable living and climate action. Ultimately, we want the children to do five things: 1) an	**Respect for diversity**: By viewing and learning about other Cambodians and other children being climate advocates, they will understand diverse abilities and perspectives **Creativity**: students will be creative as they brainstorm activities. **Negotiation**: Students and teacher will negotiate as teacher leads students towards 5 activities. If these activities seem to be too many for the class, they can negotiate less. **Decision-making:** students will have to make decisions about their strengths and life goals and place themselves in activities that correspond. **Participation:** students should learn about how participating for climate action can make a difference, and makes them part of a greater world community

			education campaign about sustainable living (particularly about reducing plastic use, saving energy and water, reducing land fires, using land wisely, composting or using biomass/food waste wisely), 2) videos about climate change and/or sustainable living in their community, 3) writing personal stories about climate and sustainability, 4) creating art out of trash as a way to sustainably beautify their community, and 5) be teachers for their community. The goal of the teacher here is to let the students brainstorm first, but then guiding them towards the goal activities. Teacher to write ideas on the board. Teacher to tell the students to refer to their homework from last class, but also think about what they learned today. Teacher to ask: • Think back to everything we have learned about sustainable living and climate action. What did you find to be the most interesting points and why? • What did you find to be the least interesting and why? • What kinds of sustainable living do you already see being practiced in our community? • What do you see as the biggest problems related to sustainable living in our community? • What do you, as students, feel like you have the power to do? What can you not do? • What kinds of food and biomass waste do you see in the community? Where is it most? • What could we do to inform the community about the problems of food waste and benefits of composting? • What could we do to inform that community about the benefits and importance of sustainable living? • What one promise can you make in your life with respect to sustainable living? (Clue: carry zero waste kit with them and never drink from small plastic bottles)	
			Homework: Students must write out one-two pages how they would do the chosen activity (who they would talk to, what steps they would take to start, and complete). These ideas will be refined in later lessons, and for now the students just need to be challenged to think on their own.	

<table>
<tr><td colspan="3">Step 2: Collecting information</td><td colspan="2">Objective: Collect information from communities which allow students to assess community understanding and attitude about the selected topics.</td></tr>
<tr><td>2</td><td>8</td><td>2 (t=16)</td><td>Teacher priority activities: Teacher to look online to find examples and stories of children’s climate actions in Cambodia. Look on google.kh or check through Khmer videos on YouTube. Some are suggested below. Teacher to find local or national-level expert on marketing and communications. This can be almost anyone who knows how to advertise or change behavior. It could be a local news person, or a local restaurant owner who had to advertise their business, or a local nurse who had to reach out to the community about handwashing or COVID. There are many examples. If you cannot find someone locally, have your school director reach out to UNICEF for support.
Materials: Computer, projector, screen; or chalkboard/whiteboard and chalk/markers.
•

Activity 1: Presentation from marketing or behavior change expert. (40 min)
See instructions above. If speaker is not strong speaker, probe them with questions like:
• What was the behavior you were trying to change or action you were trying to bring about?
• What was your primary message? Did you have supporting messages?
• Who did you talk to? Who were the most important targets?
• Who did you have help you? What did they do?
• Where did you communicate or advertise? What mediums did you use?
• Was what you did effective? Did you see change or sell your product?
• How did you measure effectiveness? Did you track numbers? Did you survey later? Did you just sense an improvement?

Activity 3: Planning for community questionnaires. (80 min)

Advocacy activities.
Teacher explains that for the rest of the class time students are going to be planning out their advocacy campaigns. They will be working in groups of ~5 each to do different parts of the campaign. Teacher suggests that they divide up the campaign as follows (but ask for student suggestions and consider them if feasible):
1. Video (need story writers, narrators, shooters, and actors, and learn to use YouCut – described later)
2. Posters and flyers for community
3. Books telling personal stories and community stories
4. Teaching session on semester of learning
5. Sculpture and exhibition curation: photo exhibition of sustainable and unsustainable practices, photo exhibition of uses of vacant lot, screening of other climate videos, reading of their stories, screening of their video, sculpture made of trash and glue/tape</td><td>Communication: This is the primary skill they are learning for the rest of the semester. They are learning how to communicate in different ways and how each way is important to achieving an end goal.

Participation: Participation in these activities and improves ownership results makes the project more successful.

Cooperation: It should be emphasized how students need to cooperate to project communication and community improvement goals.

Self-management: Students will be encouraged to think of their best skills and then work within their projects according to their strengths.

Creativity: brainstorming</td></tr>
</table>

They can fill out the table below (draw on board):

questionnaires will require creativity

Students should be allowed to choose what two activities they most want to be involved in. If there are too many students interested in one, negotiate with them until enough are able to be convinced to go to another group. Students will all have to take part in exhibition, but some can some be in charge of curating it. Otherwise there should be groups in charge of the posters, and another of the video, and then another group doing writing.
Now, in order to understand what the community most needs and is most ready for, the students will need to go out and do community interviews. They should have already done this in earlier LLS programming, so should be familiar with what they need to do. Regardless, the teacher needs to help them plan.

Develop questionnaires.

Using guidance in LLS guidelines, help students plan out questionnaires. It is up to you and the students to come up with questions, but ultimately you have four goals:

- to assess how much the community knows about mitigation and sustainable living
- to see what they think of your potential sustainable living ideas

What action?	Where?	How/materials?	Who to Involve?

- to see if they have other ideas about the community could do to be more sustainable
- to see if they ideas about where, how and with who in relation to your original plan

Teacher helps students design interview questions that they will go out and give to adults in the community. In same groups of three, plan out 12 questions that each group will ask, Groups will do the same questions, just split them up to go to different community members, so they get a large

sample size. That means that if you have 40 students in class, and you split them into groups of 3, you will have 13 groups, who can possibly interview 7 people each in the time allotted, you will have 78 responses to each question. Ideally you want to get 100 responses, so divide up the groups smaller and cover more area with each group if needed. Remind students to keep on schedule and manage the interviews for time.

13*7 = 91 responses

The teacher will have to adjust this up or down depending on community size.

Depending on whether or not students did climate change LLS in an earlier grade, the questions can be modified (if they have done climate change at an earlier grade, the community will already have been asked some of these questions and the questions can be eliminated or modified to test community retention. These questions could be questions like:

- Do you know what climate change is and what causes it?
- Have you noticed more droughts/heatwaves/floods in the past ten–twenty years?
- Do you know what climate change mitigation is?
- Did there used to be trees in this area?
- Have you ever heard of the principle of sustainable living? What is it?
- Do you ever see too much plastic waste clogging drainage canals?
- Do you use a lot of plastic? Such as?
- Do you throw a lot of plastic away? Do you know what happens when you burn it or throw it away? Do you ever think about waste and what happens to it?
- Do you ever run out of water?
- Is it hard to keep your house/business cool?
- Are your energy or water bills ever too expensive?
- What do you do with food waste, if any? What do you do with agricultural or garden waste?
- We are planning on doing this campaign to help our community with sustainable living – what do you think of these ideas? Which do you like better and why?
- (if they like one): What ideas do you think are most important? Why? Who else should we talk to for help? Would you like to help?
- (if they don't like either): what other ideas do you have? Where should we do that? Why should we do that? Who can we get to help with materials and work?
- What would you personally like to learn more about?
- What forms of media do you use (radio, TV, Facebook, TikTok, online or paper news, etc.)?

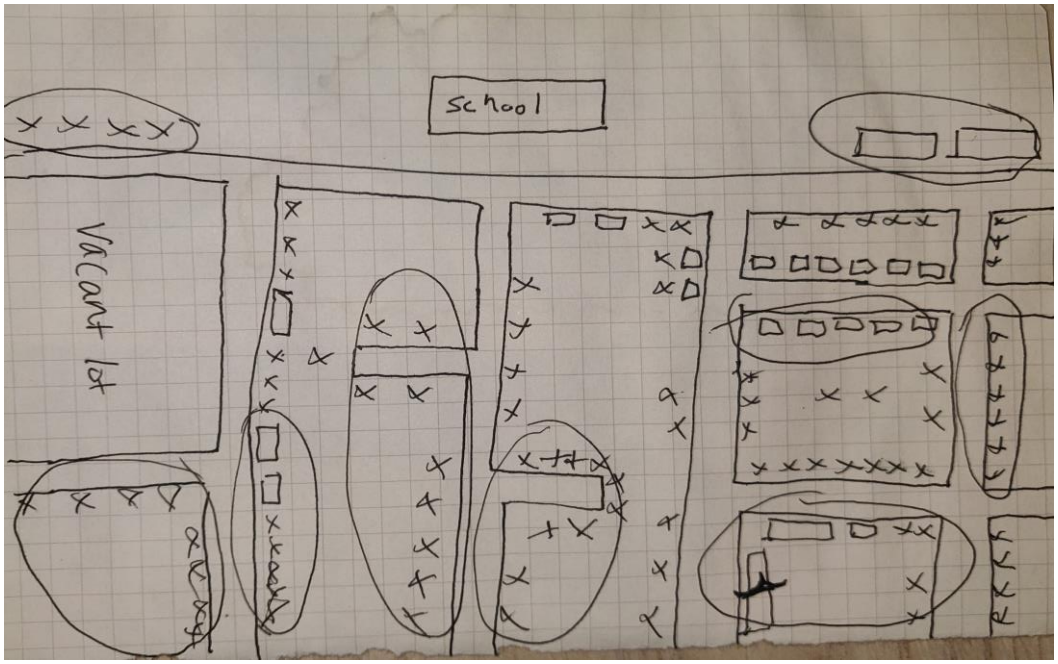
These are just examples, and the teacher will have to help the students come up with the questions appropriate for their community. The goal is to understand what your community knows, so that the

students will learn how to analyze audience beliefs and design effective communications tools.

The students should have a table like below set up in their notebook. Explain that with this survey, they are going to be capturing slightly more complex information than they might have in years past. That is because this year they are trying to really understand their audience, therefore they have to get demographic information on their audience so they can design targeted communications that will reach their audience.

	Question1	Question 2	Question 3	Question 4	Question 5	Question 6
Gender Age Job #children education	Answer Q1	Answer Q2	Etc.			
Gender Age Job #children education						

Homework: Watch Climate Smart Agriculture in Cambodia (9min): https://www.youtube.com/watch?v=Jsxet829B-U and Importance of Pollution Control Management (10min): https://www.youtube.com/watch?v=A1kekS1xbAs and take notes in reflection journal on what they've seen about good storytelling in these videos, what they liked, what they didn't.

3	9	2 (t=18)	**Teacher priority activities:** Find chaperones to take students into the community if necessary; if the students are old enough and it is not necessary, use your contacts and those of your school director, the education coordination committee and the commune council to ensure that the community members are ready to receive students. Materials: Screen and computer or large drawing board and markers/chalk, problem tree from last class, research planning **Activity 1: Interview Rehearsal (30 min)** Teacher guides students through rehearsal of interview. Have students pretend to be easy to talk to, have some students refuse to answer, have some students be willing but quiet, and have some be talkative. Help the students understand all of the behaviors they might encounter and give them tips for dealing with these behaviors (ask question a different way; give suggestions for answers; move on to another question; ask if they have a different question they'd prefer to answer; repeat questions if they didn't get answered; politely cut off and re-ask question if person is talking too much). If the students have done this before, this time can instead be used to map out where students will go to do their interviews. Create map roughly like one below and assign students "territory" for interviews.  **Activity 2: Interviews/collecting information. (90 min)** Send students out to collect information. Remind them to manage time carefully and to cut people off	**Participation**: Participation in activity planning and rehearsal will help strengthen their skills in these areas **Communication:** students will have to learn to speak clearly and with good knowledge behind their statements to adults. They will also need to learn to moderate communications and be brave enough to redirect conversations that are going astray. **Appreciation for Diversity and Empathy:** students will be interviewing a wide variety of people to gain an understanding of community views and needs regarding climate change and sustainability. They should see how poorer, older or handicapped people have special and more urgent needs.

			politely if they speak to long, explaining that they need to move on because they have a lot of people to interview. Make sure everyone briefly reports back by end of class and teacher explains homework to each.	
			Homework: Students need to summarize their interview responses. Students to total up their responses neatly in a table. They can work on their own or in groups outside of class. They should have a table with questions, responses, and type of person that response came from (gender/age /job/education level /rural or in town, parent, etc.). Each group should produce a set of recommendations for what they think the campaign should focus on and why	

<table>
<tr><td colspan="3">Step 3: Data analysis</td><td colspan="2">Objective: Analyze the information to identify understanding of and care about climate change and its impacts in the community. Help students refine their solution/s, using problem solving approaches.</td></tr>
<tr><td>3</td><td>10</td><td>2
(t=20)</td><td>Teacher priority activities: Teacher must identify parents/other teachers who can act as chaperone for research trip. Teacher to set up interview with a few members of the commune council. Teacher to communicate with other teachers and ask for help spreading the message that the children would be coming around to do research.
Materials: Students use their notebooks. Teacher needs to have drawing/chalkboard for discussion afterwards.
Activity 1: Reflection on Interviews. (20 min)

Use the self-assessment poster to guide the reflection on local knowledge interviews. Use a selection of the following questions, or others that you think might be important?

• When you were asking questions, was it hard to get good answers?
• What did you do to get better answers?
• What was the result?
• Was it difficult to work in group?
• Did you ever feel like people didn’t want to be interviewed?
• How did that make you feel?
• Which question/s did you find more difficult to get good answers to?
• What did you do to overcome the problem?
• Do you think you learned anything new from the interviews today?
• Did you help the group?
• Did the group listen to you?
• What could you learn from last time you did interviews that helped you this time?

Activity 2. Analyze the data collected (70 min)

Introduction: Teacher displays all of the questions the students asked in a matrix and begins filling out the answers that each group got (table below):

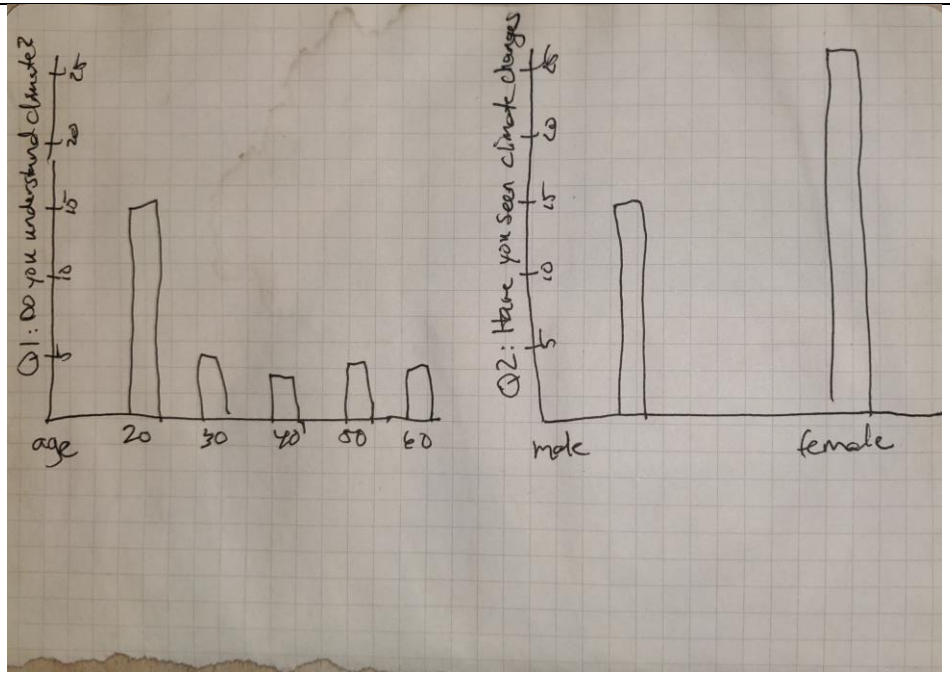
<table><tr><td>Question 1</td><td>Group 1 answer</td><td>demographics</td><td>Group 2 answer</td><td>demographics</td><td>Etc.</td></tr><tr><td>Question 2</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Question 3</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Etc.</td><td></td><td></td><td></td><td></td><td></td></tr></table>
The teacher explains that we are now going to compare answers that each group got with answers the others got. We are also going to compare the information between interviewees and see if we can see patterns in our audience responses. Teacher to draw out graphs like the ones shown below.</td><td>Communication: Students must communicate clearly and bravely with community member in order to gather the needed information

Cooperation: Students will learn to cooperate with fellow students as they share interview duties.

Creativity: They will need to be creative in eliciting information from skeptical or reluctant community member.

Participation: All students must participate in the interviews in order to learn how to communicate; they will also be able to observe community participation and see how their job is easier when the community participates.

Appreciation for Diversity and Empathy: students will be interviewing a wide variety of people to gain an understanding of</td></tr>
</table>



Teacher facilitates and guides students questioning and providing feedback:

- How much knowledge about climate change does the community have? What members of the community are best and worst informed?
- How much knowledge do the people have about sustainability? Who has more and less?
- What do people think about plastic use? Do they understand why it's a problem? Do they have solutions to the problem?
- Is food waste an issue anywhere? What is done with the food? How could we suggest change?
- Why do you think some people thought this way?
- What do you think would help change their minds?
- How receptive do you think people will be to your communications campaign? What do you think will be the most effective messages?
- What are some of the problems we might encounter when doing our activity?
- Did people not understand climate change? How do we solve that?
- Did people have wrong ideas? How do we politely correct them?
- What groups understood things best? Which understood it least?
- What kinds of tools do we need to communicate to these people (posters, photos, videos, flyers, radio show, adult advocate?)
- What sorts of messages to we think are most important to convey?

community views and needs regarding climate change and sustainability. They should see how poorer, older or handicapped people have special and more urgent needs

Critical-thinking: the data analysis should encourage critical thinking – not only about why the results are as they are, but also critical thinking about how to analyze the results and why it makes sense to analyze in certain ways.

			These questions will have to be adapted based on the actual questions the students asked and community responses.	
			Homework: Students to think of one problem they encountered while doing their community research and write a page about how they would solve that problem, who they would talk to, what they would do differently, what sorts of support they need.	

Step 4: Developing the communication plan			**Objective**: Identify climate communications campaign for community and Cambodia. This plan should include a video, writings to be published and disseminated nationally, posters, and a local photo and teaching exhibition.	
3	11	2 (t=22)	**Teacher priority activities:** Based upon community research and students planning, start thinking about where to get the resources needed to implement the action and think about the communications plan that you will have to start guiding the students through. Prepare poster with information from local marketing expert. Prepare poster of project communications plan (**Annex 2**). Materials: Notes/results from students, drawing/chalkboard, flipchart poster with the information from the local expert. Computer and screen to be used if possible (less waste). **Activity 1: Communications Planning. (100 min)** Now that the students have collected and analyzed their audience, the community, they must make their communications plan. Explain to students that their final project of this semester will be to create an advocacy campaign for their community. This campaign must contain several different mediums – they must make a video, they must teach, and then they can do demonstrations, or art using garbage materials. They can select what group they want to be in, but if there are too many students in any one group, try to convince them to move elsewhere. All of these activities will be curated in a final event for teaching the public. Teacher to hand out **Annex 2**. Divide students into groups based on the primary activity they have chosen (local campaign, video, writing, presentation, sculpture/curation lead). Tell them to elect two leaders or spokespeople for their groups. Explain that at the end of the class they will have to describe communications plans clearly – what resources and tools they will use, what messages they will convey, where the activity will be placed/done. Teacher will have to provide support to the groups following the guidelines below; please also take into account information from the local marketing expert. Once they have completed all activities, they will curate their exhibition altogether. <u>Video Group:</u> Tell students they will be making 3-5 (depending on time and learning curve) TikTok videos on their smart phones. There are tutorials here for how to make videos. Ask them to watch several tutorials: https://www.youtube.com/watch?v=xsBQPxQ92fE (Khmer) https://www.youtube.com/watch?v=KLyzCvnkaDE (Khmer) https://www.youtube.com/watch?v=vAho-cr5UxY (In English, but very comprehensive and not too difficult to follow) Explain the steps to making a video:	**Problem-solving**: Students will be challenged to think about the practicality of their solutions and how they can find help or resources to solve them. **Critical thinking**: Through the stages of identification/developing the solution of problems, learners will need to go through the process of analyzing the root cause (immediate and secondary causes) of the problems to come up with the possible solution. **Creativity**: Learners will be creative as they need to come up with their own solutions and causes to the identified problem. They can be vocally, artistically and/or intellectually creative. **Resilience:** As they are thinking through their

			Step 1: Determine and get to know your audience (done, but, how can they also reach a nationwide audience? What common themes did they find among all the people they interviewed? Might these apply nationally? What is the most important thing they can teach their community and teach the rest of Cambodia about their community?) Step 2: Write a storyboard and script. The pre-production phase is the longest and most important step in creating a quality video. Great films aren't improvised, and the video shouldn't be either. Suggest that they aim for a five 1-minute videos. Each video should be its own story, but should lead to or be related to the rest. They must now write out a story board and script that will take that time. Please also keep in mind that these videos COULD be, at least in part, about the local communications campaign. It does not have to be, but that is an option to keep in mind. At story board is a series of drawings of what they want to show in the video. A script is what they will actually say. These can be done concurrently. They need to write out their overall message and brainstorm about how they can convey this message. For example, do they want to focus on the links between plastics, climate and poor health? Will their overall message be about using less plastic? They must figure out their overall message, then plan out how they want to show this…will it all be video? Will there be someone speaking throughout? Will there be still shots added in? Will there be drawings added in? Storyboard it out while working on the script and then make sure it all flows. This is a heavy exercise and will take a lot of time. Then the next steps will be: Step 3: Record your narration Step 4: Record your screen or capture video Step 5: Edit the video Step 6: Add a video intro (drawing or animated heading) These steps will all be done in the next classes. But, they should also plan out their dissemination plan in this class. Step 7: Share your video. The school should set up a TikTok account if it does not already have one and the students should share their videos on this channel. They should also be asked to share with MoEYS and UNICEF for further promotion and reference. Remind them that other students from all around Cambodia will be learning from them! This is a chance to educate others, and maybe even become a little bit famous in Cambodia! Show these example of children's climate video (but teacher may find others online): https://www.youtube.com/watch?v=uOa5zem4504 Other examples of storytelling videos, though not necessarily made by children include: • https://www.youtube.com/watch?v=oBAt90X8VME Earth Tanks for Older People	solutions, the resilience of the community needs to be at the forefront of the thoughts. They should also be thinking about how their community education might make their community more resilient. **Decision-making:** Students will have to make decisions how to place themselves in the activities, and how to help others. **Communication**: Everything from here forward in this unit is focused on communications: from audience understanding, to good design, to clear messaging, to use of space and art to convey ideas. **Cooperation and negotiation:** students will have to divide up tasks, particularly for the sculpture and video and community campaign groups. The teacher will have to help them negotiate roles so they are fair,

			• https://www.youtube.com/watch?v=DfFK27CT2nM Climate Smart Farmer Field Schools https://www.youtube.com/watch?v=dwaO0r8WV9k Cambodia's obsession with plastic <u>Local communications campaign group:</u> This group needs to ask many of the same questions as the video group: • What do you know about your audience? • What common themes did they find among all the people they interviewed? • Might these apply nationally? • What is the most important thing they can teach their community and teach the rest of Cambodia about their community? • What do you think are the most important messages you want to convey locally? How will you do this (posters of what size? Small guidelines sheets? Photos with captions? Instructional message?) • Where will these be placed for greatest impact? • What kind of "brand" can be designed? (suggest that one or two students who are the best drawers come up with a logo or character that is a common theme for all their messaging. Some ideas – eco-warrior gecko; trash-loving crocodile; sustainability-loving elephant • They should fill out the table below, or one similar as appropriate The students should write all of these plans into their project proposal forms, and then begin sketching out some of their ideas for characters, and mapping out where they will campaign, where they will get the resources (paper, tape, markers, etc.). If they get done with planning and character design before the video group is done with their assignment, the artists should join the video group to help them incorporate the logo into their planning. They should also liaise with the writing group to similarly help them with cover design for their book. <u>Book Writers Group:</u> This group may be able to get their work done in the shortest amount of time. Each student in this group will be tasked with writing their own climate and/or sustainability that they want to tell, from their own personal experience, or maybe about their community, or maybe about something that happened to someone they know or interviewed. While discussing in group, each student needs to write out their own individual story plan and then subject their plans to group critique. The students should understand that their story: • Must be five pages. It can be up to ten pages if they want. Can include a half-page photo or drawing (two half pages or one full page if a longer story). • Think about these rules of good short story writing:	and guide them through good cooperation.

Understand that a short story is not the same as a novel.
Start as close to the end as possible. Don't make it too long.
Keep up the pace.
Keep the number of characters small.
Give the reader someone to root for.
Create conflict!
Suggest a backstory but don't elaborate.
Appeal to the five senses.

- Then the process should approximately follow these rules:
  Identify the focus of your short story.
  Write a compelling beginning.
  Create a powerful ending.
  Read your story out loud.
  Edit and revise.
  Ask for feedback.

The students, by the end of class should have mapped out, in their notebook, the theme/main messages, the characters, the backstory, the setting, the conflict, the ways of appealing to senses, and how they will start it and end it. They should work on these individually, and then in group, take turns sharing and critiquing each other's work. Make sure the students understand they must listen to and consider others suggestions, but in the end, they must decide for themselves what it the best plan. However, they must be able to logically justify this plan.

<u>Presentation Group</u>

This group will be in charge of putting together an educational presentation of all they learned this semester, in 20min. They should cover GHG effect and causes of climate change, impacts, mitigation measures, and sustainable living, making sure to make the links between sustainable living and how it can slow down climate change and simply make their environments and bodies healthier. They can mention adaptation briefly if they want to, if it was covered in earlier grades, but the focus this time should be on mitigation and sustainable living. Ask them to focus on sustainable living most relevant to their communities (plastic use, no plastic burning, using environmentally friendly or natural cleaning products, no open defecation or throwing waste in fields, no using fire to clear land, etc.).

They must remember the good presentation guidelines they learned earlier and follow those to create their slides. Make sure to ensure the students have access to computer time (school computers, teacher's computer, etc.) so they can put together their slides.

<u>Sculpture and Exhibition Group:</u>
Art is a form of communication that can be very effective at getting messages across. Garbage art has become very popular in recent years – it is a way to create beauty in public spaces using

			materials that would otherwise go in the trash. Show your students the picture of trash sculptures below and in **Annex 8**.  It is possible that some groups may be done before others. Whatever group is done first, have them start planning the curation event, if there is time. The sculpture group is in charge of planning the curation event, but all students can or may need to help.	
			Homework: Ask all students, regardless if they are in the video group or not, to practice with the YouCut app. Ask them to all come in with a 20-30 second video they have made over the week – the video does not have to be scripted, the teacher should just be able to see that the students have figured out how to use the app to splice videos together, add in music and animations, or whatever. Though not all students are in the video group, being able to use video software on their smartphones is a useful communication skill.	

<table>
<tr><td colspan="3">Step 5: Implementing the plan</td><td colspan="2">Objective: To raise awareness through the community and through Cambodia about how climate change is impacting it, and engage community members and other stakeholders to collectively mitigate climate change, live more sustainably, and take actions to protect their environment and health.</td></tr>
<tr><td>3</td><td>12</td><td>3 (t=25)</td><td>Teacher prior activities. Teacher to know and understand all student plans and be ready to support them as needed. Teacher to identify and confirm use of exhibition space.
Materials: posters, markers or colored pencils, scissors, colored paper, tape for community outreach group.
Activity 1: Explaining to peers. (30 min)

Using the communications plans the students filled out last week, the teacher draws the communications plan documents on the board (or projects on computer if one is available).

Teacher asks student to elect a spokesperson or two for each group, and each group has to clearly explain to the others what their plans are. The students from other groups must be encouraged to ask them questions, the teacher can help guide the students with questions as needed:

• Why is this one area better than another? Are we doing it in enough places? Could we do more? Should we do less?
• Why this message and not others? What sort of behavioral change or awareness do you hope bring about because of this?
• What will the results be? How will this help the climate? Or help Cambodians?
• Could there be something more creative added to the format?
• Is there too much in it and should it be simplified?
• Is there any way we can measure that impact (their might not be, but see what ideas they have)?
• How will we maintain this in the future after class ends (i.e., a plan for repostering, or making the posters more durable through printing on strong papers, advertising our work more broadly so more can see it).

(optional Activity 1a): Replanning and incorporating edits (60 min)

It is expected that through the group work from the previous week, students will already have had enough feedback and will have well-refined plans. However, if the whole class review of the activities uncovers needs to changes or faults, use another 60-90 minutes of class time to let the students revise their plans. Students can be fluid between groups if one group needs more help than others, for example. If this optional activity is carried out, end class when it is done, and start a new class with the following activity. If this optional Activity is not needed, carry on as below.

Activity 2: Carrying out concurrent activities (120-150 min)

Students to carry out activities as planned in previous class. This includes filming video, narrating it,</td><td>Problem-solving and critical thinking Students will be challenged to think about the practicality of others' projects and solutions and how they can find help to improve them.

Creativity: Learners will be creative as they need to come up with their own solutions and causes to the identified problem. They can be vocally, artistically and/or intellectually creative.

Cooperation: The groups are expected work together to decide who does what based on their interests and skills.

Decision-making: Students will have to make decisions how to place themselves in the activities, and how to help others.

Negotiation: Some students may want to do the same thing, or no students might want</td></tr>
</table>

			and editing it in the software and adding in animations or decorations as needed. This also includes writing time for the students writing stories. Finally, this includes designing posters, flyers, pictures or whatever is needed to do the community awareness campaign, and to the degree possible, finalizing all materials and starting the distribution process.	to do anything. The students will need to learn to negotiate to find fair solutions, including sharing spokesperson duties and equitably sharing work.
			Homework: Students videographers and community campaigners to finish off all projects outside of class time. Student writer groups must share their stories with two other writers each for edits and the homework is careful editing for grammar, style and flow of the student's stories.	

4	13	3 (t=28)	**Teacher priority activities**: Prior to class, the teacher must do all the preparation to gather materials for both the adaptation activity/s and the communication activities. This will include making sure there is poster paper, pictures are printed out, coloring pencils or markets, and all tools needed to do adaptation activity. Teacher should be planning this out weeks in advance in case they have to order supplies, like paint, saplings, seeds, shovels, soil, wood, whatever is needed.
			Materials: noted above, as needed depending on priority activities. Post-it notes or small bits of paper and tape for noting where things go. Glue, Colored tape or other creative material for displays, which except for tape, will ideally be created from repurposed objects. Computer and screen.
			Introduction: Teacher explains that in this class, and the next, they will finally be executing the activities they have been learning about and planning all semester. Teacher splits students up into groups based upon the choices they made and the groups they were in in the previous lesson.
			
			Activity 1. Making the Exhibition Plan. (60 min) LSEP
			
			Teacher to show students exhibition space. Class will be held in this space. This will likely be a large classroom at school, but could also be a community event space if one exists.
			
			Teacher to lead students through exhibition setup planning. The students should have done this before, but if not they must plan out:
			• What the teacher will say in the introduction.
			• What order the students will present their four projects in? How will these fit into overall design?
			• What are the key messages?
			• What sorts of pictures and ideas will be displayed on the walls. BE CREATIVE and make it compelling, artistic and frightening. Climate change and environmental damage are major crises. How do we convey this?
			  ○ With pictures of impacts from around the world and explanations of how this could occur in Cambodia (starving children from droughts, sick people in floods)
			  ○ Pictures of impacts and repercussions in Cambodia
			  ○ Pictures of solutions (zero waste kit)
			  ○ Quotes (look online to find quotes about climate change that are powerful. Get help from an English speaker if necessary. Write this on a big banner that dominates a wall. Think about creative ways of setting up an exhibition.
			  ○ Frames, use of color, use of the brand/theme you have designed
			  ○ Pictures of people from the community, so they can relate (for example, picture of local experts who talked about sustainability, or pictures of people who were interviewed, with quotes from what they said below – only using quotes that are positive and show people's knowledge or questions).
			
			See **Annex 4** for Exhibition planning ideas. By the end of an hour they should have mapped out what they want to put and where. The teacher will have mapped out the exhibition plan with the help of
				Cooperation: The groups will have work together and follow their own prescribed roles, or learn to cooperate and adjust when roles depend on each other.
				
				Resilience: community and personal resilience in the face of climate are the core of this activity. Students will be learning that both practical actions and effective communications improve their resilience.
				
				Decision-making: As they are preparing and implementing, they will have to make decisions and adjustments on the spot
				
				Problem-solving: Students will encounter unplanned challenges in implementing their plans. They must be able to find ways to solve the problems or move on and adjust course.
				
				Communication: Students will learn about planning and process of many aspects of

			students. Sticky notes will be placed around the room to mark out layout of exhibition. Layout plans to include screen to show video, podium for students to read stories at, and pans for showing pictures of mitigation activities, sustainable living, vacant lot use, their local campaign and art, whatever the students want to show (ideally all of what they learned this semester).  One idea for creative design. More shown in **Annex 4** Key messages the students should consider delivering are: • Climate change refers to the change in average temperatures and weather patterns over decades-long periods. Right now, climate change is happening very rapidly compared to in the past, and this is because of human activities • Many human activities let out greenhouse gases, which trap heat in the lowest layer of our atmosphere, which causes warming in many places, but also generally causes changes in wind and water patterns. • Human activities that release greenhouse gases include: driving too many gas-powered vehicles instead of biking or walking instead; burning coal or oil for energy instead of using clean energy like solar or wind; putting fertilizers on our fields; letting open waste rot (landfills, human waste in water, animal waste, etc.); using too much energy; using too many products made out of fossil fuels (plastics, polyester or fake clothing fibers).	communication, from key messages, to how to put together and effective exhibition, to marketing and advertising. **Critical thinking:** for all students, but especially those doing the communications, they need to think about what methods will be most effective and how to best implement them.

- Cambodia did not cause climate change, but we will contribute to it if we continue to cut down our forests and use lots of energy, burn plastics, use fertilizers, let human waste go into the water
- In addition to climate change, there are many environmental problems in Cambodia which damage our health and prevent us from getting richer; these are things like water pollution, air pollution, plastic waste, and unsustainably development practices like building over our natural lands and forests, building cities too quickly and too big
- But, Cambodia already is and will continue to be BADLY HURT by climate change
- We already experience floods or droughts. These make us sick, and make it hard to produce food. This will get worse.
- As sea levels rise, more and more of Cambodia will be flooded. It is possible that in the next 70 years most of Cambodia will be underwater.
- We cannot become a richer country if we keep suffering from climate change and climate disasters. Therefore, we must learn to adapt, and learn sustainable living so we do not contribute to the problem.
- There are many ways to live sustainably (list the things learned over the semester)

Activity 2. Organizing the resources and rehearsing the duties. (120 min)

Once the exhibition plan is in place, students and teacher begin building displays and arranging the exhibition space as desired. Think of using colored tape to frame or decorate pictures, and using found objects (trash) to build additional sculptures for the wall or floor.

Encourage the students to be very creative and use as few resources as possible in setting up their display. It is understood that some pictures of phrases need to be printed, but keep this to a minimum. Use chalk directly on walls, or write directly on walls if possible. Teacher to take care of printing out photos or drawings as required, or passing off duties to a reliable student.

Teacher works with students to create invitations. These ideally should be made as a single PowerPoint slide, decorated with whatever logo the students have designed, and then filled in with basic details about when and where the exhibition will be. The slide should then be saved and shared with all students via WhatsApp and/or Telegram. The students are instructed to send this to out as many family and friends as possible so they can get a big crowd at the exhibition the following week.

After the exhibition is all set up and the invitations are made (these can be done concurrently by a small group of students who understand PowerPoint best), the teacher should lead the students through a rehearsal of what will happen. For example, the day might look like this:

- Teacher introduction (10 min)
- Student teaching session and Q&A (30 min)
- Student introduction to video project and screening (10 min)

			• Student led explanation of the vacant lot plan and what is in the exhibition (10 min) • Student led explanation of their community campaign plus Q&A (30 min) • Student readings of their climate stories (30 min) • Free time for guests to walk around and ask questions (30 min)	
			Homework: Sending out invites to contacts, and asking their contacts to pass on the invites to as many people as possible. This is a great showcase of student work and creativity and a good chance for the community to come together and learn how to build their community stronger.	

4	14	3 (t=31)	**Teacher priority activities:** Talk to commune council and make sure at least one representative (if not more) will be at the exhibition day. Coordinate with school directors to so they are there. Do your own outreach in the community to get parents and community members to come. Coordinate with other teachers so that children from other grades will have time to come and spend at least an hour at the exhibition (ideally it will be a school event and they can stay for the whole time). Materials: Materials should have been set up in the space during the previous lesson. This is another class in which it will be a priority to get a computer and screen – showing pictures on screen is absolute necessity, as one of the themes is less waste. Visitors also must have a multi-media experience and so that details can be easily seen. **Activity 1: Teacher presentation. (10 min)** Teacher welcomes the visitors and explains that they are here to learn about what climate change is, and what the students are doing to help protect the community from it. Teacher begins by giving their own presentation on what climate change is: explaining the layers of the atmosphere, where the GHGs are, and what sorts of human activities are causing climate change. The teacher does not have to create new material, but can use the lectures given to students earlier in the semester **Activity 2: Student teaching session and Q&A. (30 min)** The student teachers are invited to give their presentation, limiting it to 20 minutes and leaving time for audience questions at the end. If the audience is not asking questions, the teacher should be prepared with questions to ask them based on the teaching and learning of the semester. **Activity 3: Student introduction to video project and screening (15 min)** Students should give a 10-minute introduction on the video process: why did they do it, how did they do it, why did they choose this subject, how does this match with activities of other youth climate activists around the world, what they learned, etc., and then show the video. The video can be paused for the next speakers, but should be displayed again during the open exhibition at the end. **Activity 4: Student led explanation of the vacant lot plan and what is in the exhibition (10 min)** Teacher and students now jointly lead attendees to show off their adaptation activity. During this tour, the community should be encouraged to ask any questions, and allow students to attempt to answer before correcting them, if necessary. Once at the demonstration site, have one of the students (chosen in advance) to give a quick, 5-10-minute explanation of what they have done and why, what their experience was, etc. A**ctivity 5: Student led explanation of their community campaign plus Q&A (15 min)** Students explain why they chose the messages they did, why they chose their logo or branding, and why they think these actions are so important for the community. They should ask attendees to ask questions and the students can try to answer them, with support from teacher and school director as needed.	**Communication:** Students have to communicate clearly and with enthusiasm. They will need to be able to engage in back-and-forth communication and critique during the question section. **Resilience:** community and personal resilience in the face of climate are the core of this activity. Students will be learning that both practical actions and effective communications improve their resilience. **Creativity**: students will have already used creativity in setting up their presentations and the exhibition, but they will have to think for themselves and be creative to answer any unexpected questions that may be given to them. **Critical thinking**: Also, when answering unexpected questions or challenged, they will have to critically evaluate possible responses before giving

			Activity 6: Student readings of their climate stories (30 min) Readings, leave time for questions at end. If there is not time for all students to read each one, ask student to volunteer. If there are too many volunteers, pick names from a box, so that it is random and fair. Remind all students that their stories will be published by UNICEF and shared even if they don't get to read that day. **Activity 7: Free time for guests to walk around and ask questions (45 min)** Guests may or may not stay and look at the exhibits. Students should be ready to answer questions, and may want to station themselves close to whatever part of the exhibit they are most closely associated with, i.e. if they curated the vacant lot project, they could talk about that, or if they worked on the video, they could talk about that. During the remainder of the exhibition, the video should be left playing so guests can watch it again.	one. They need to have been given tools to assess why they chose one option over others.
			Homework: Students are given **Annex 1** and asked to fill it out before the next class.	

Step 6: Reflection and evaluation			**Objective:** To encourage students to reflect and learn from all steps of learning over the semester, including how they could have improved their experience in carrying out outreach and activities in the community	
4	15	2 (t=33)	**Teacher priority activities:** Teacher prepares the template for students to fill in with challenges and recommendations in the activities report as well as planning for next year (**Annex 7**). Teacher prepares to guide students through the situation analysis and planning for next year (**Annex 8**).	**Critical thinking:** for all students, but especially those doing the communications, they need to think about what methods will be most effective and how to best implement them. **Communication**: Student will need to clearly express their views and also listen to others carefully to understand and appreciate different points of views. **Resilience**: Students have been learning about physical and behavioral resilience all semester, but here their own emotional resilience should be stressed. **Participation**: Participation entails valuing children's opinions and ideas, and giving them control of their learning. Participation teaches learners to engage proactively. In this final lesson, as all lessons
			Materials: Self-assessment poster (should be on display already, since class 1), challenges and solutions (**Annex 6**) table drawn large on board or paper, to fill in during discussion, and community strengths and weaknesses (**Annex 7**) for planning for next year.	
			Introduction. Teacher congratulates students for all the work done and for the communication activity. Teacher explains that today they will reflect about all the work, to learn for the future what was easy to do, what more difficult, what new, what already known. **Activity 1. Reflecting on the learning process, the research process, the implementation and communications. (40 min)** Ask students to take out homework assignment from week 14 **Annex 1**. Ask students to provide examples of SITUATIONS, BEHAVIOURS (what they did) AND IMPACT (the result of their actions). Make three assessment posters/drawings on board, and as them to reflect on the learning process, the research experience, and the implementation/communication process. SITUATION: Can you mention a situation? *or* "When we were...." BEHAVIOUR: What did you do? How did you improve during the semester? IMPACT: What was the final result? End by asking students to divide in pairs and answer to the following questions: Which activity did you find the most difficult? Which one did you like most? What would you do differently next year? Ask students to do real examples from the class. Then, teacher is to ask pairs (teacher will randomly pick 4-6 pairs maximum) to share their answers and discuss with the rest of the class. **Activity 2. Finalizing the research activity report. (40 min)** Teacher explains to students that they will need to prepare a short report to help other students to do the same activity in the future. The teacher tells them they need to summarize what has been written on all the self-assessment posters on the board, as well as add in their own thoughts about what has been most fun, most difficult, most satisfying, and what they would do different. Then they need to write their own last part called **challenges and recommendations Annex 6** for other students. Teacher recalls what students discussed in the previous activity and asks them what they would like to tell other students	

			that might help them to do the same project in the future. Teacher asks students to work in small groups of 3-4 and agree on 1-2 challenges/recommendations. Teacher ask them to share and teacher asks each group of students to nominate one writer and produce a 3-page report. **Activity 3. Next year topic selection. (40 min)** Teacher asks students to think about a topic that they might be interested to propose next year in the local life skills curriculum and inform the student council about the options chosen. Using the guide in **Annex 7**, teacher helps students to identify some of the problems in the community that most affect them and opportunities.	all semester, students should understand how their participation was valuable and added, and where it could have been stronger.
			Homework: Enjoy the break from class, and try to implement the consumption reductions at your house, with your family, and with your neighbors! Build more garbage sculptures to decorate the outside of your house creatively if your parents allow it!	

Annex 1. Self- and Group-Reflection Form

Class:		
Name:		
Q1. Did you enjoy the course? Circle one response and write the reasons.  YES OK NO		
Q2. Do you think these skills were strengthened through the activities?		
Skill	**Strengthened**	**Why or why not? How did your behavior or ideas impact the team, positively or negatively?**
Problem- solving	**YES OK NO**	
Critical thinking	**YES OK NO**	
Resilience	**YES OK NO**	
Cooperation	**YES OK NO**	
Communication	**YES OK NO**	

Participation	 **YES OK NO**	
Negotiation	 **YES OK NO**	
Creativity	 **YES OK NO**	
Decision-making	 **YES OK NO**	
Empathy	 **YES OK NO**	
Respect for Diversity	 **YES OK NO**	
Self-Management	 **YES OK NO**	
Q3. If you were given another chance to do the same activities, how will you behave differently? How do you think your behavior or ideas impacted the group?		
Q4: What sorts of support would you like to get from your teachers, other students, or your family in dealing with climate change?		

Annex 2: Project Communications Plan

Group Name	
Group Members	
Project Title	
Problem Identified	
Project Goal	
Materials/ Equipment required to implement the project	
Reason why this project was chosen to solve the problem	
Project Problem Description:	

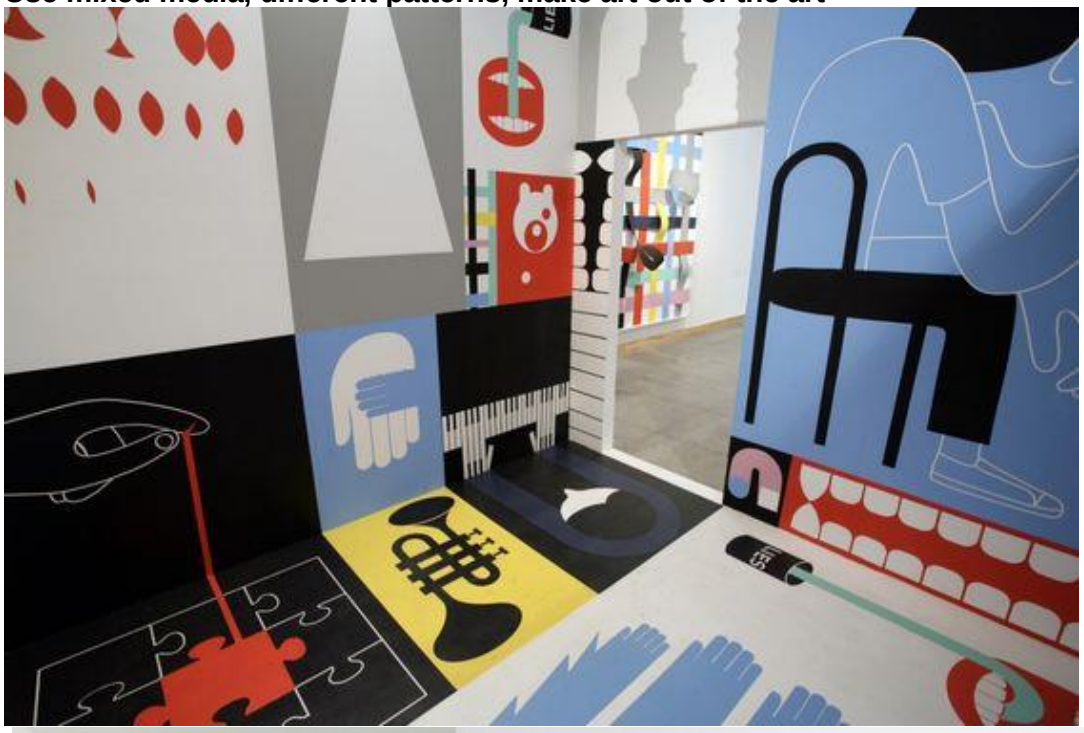
Communication Solution Description/Key Messages:
How will you measure the project outcome?

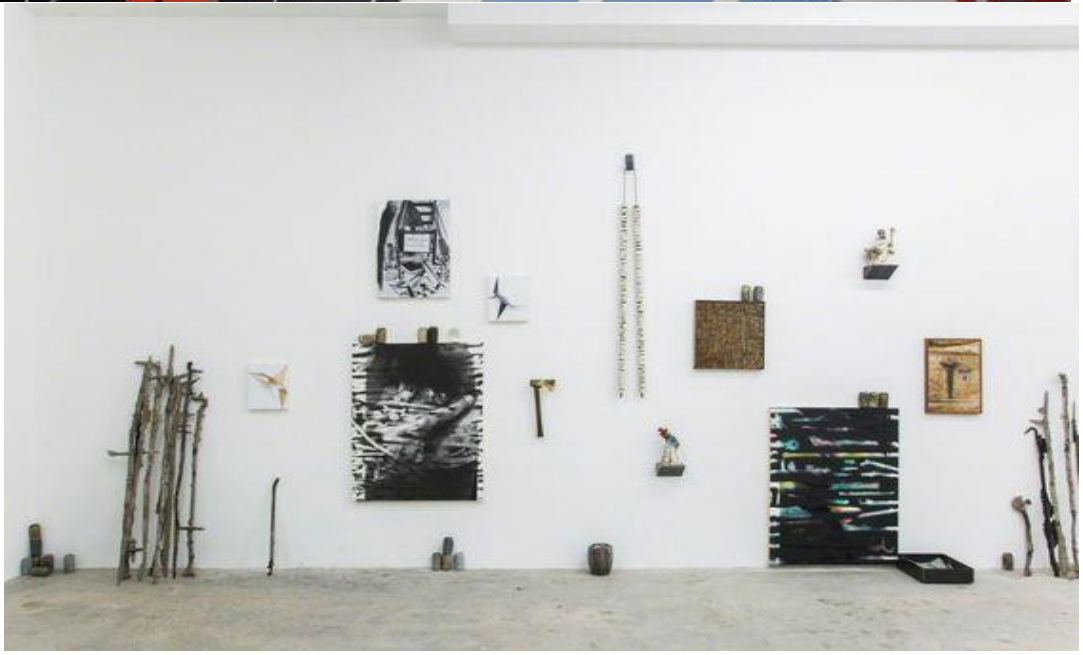
Annex 3: Exhibit Space ideas

Frames, different textures, whole wall drawings

Using unconventional objects to line walls (plastic sculptures from trash??). Use floor and wall space creatively

Use mixed media, different patterns, make art out of the art





Annex 4: Ideas empty lots

Kiosk Store or Service

Food Truck or stand

Farmers or Art Market

Community Garden

Community Orchard

Exercise space

Park or playground (made of recycled materials)

Entertainment and event space

Campground

Outdoor photography studio

Community education space

Housing for poor

Community art space

Annex 5: Self-Assessment poster

INSTRUCTION: Teachers, based on students' needs, decide the target soft skills and the expected learning outcomes, at soft skills level. Use the examples in the local life skills guideline to get ideas. Schools use the 12 soft skills as a reference and will have free choices to determine learning outcomes that respond to learners' need (ultimately, all selected skills will contribute to the 12 soft skills in the curriculum standard. For example, one of the 12 soft skills is communication, which sub-components include skills such as listening and summarizing skills). Hence, the outcomes defined, will contribute to the 12 learning standards defined by MoEYS.

Assure it is ready before you start the first lesson. Read the statements to them and make sure they understand clearly. On a weekly basis, use it for reflection, at the end of the lesson.

WEEKLY SELF ASSESSMENT	
I participate in the discussions	 **YES MAYBE NO**
I always listen to peers	 **YES MAYBE NO**
I contribute in the group work	 **YES MAYBE NO**
I finish my work on time.	 **YES MAYBE NO**
I know when a classmate is sad and I try to help.	 **YES MAYBE NO**
I will confident to share my ideas.	 **YES MAYBE NO**

Annex 6: Activity Report

Describe the challenges you faced during the activity and how you solved them. Give some examples of challenges: Extra time needed to do some activities, difficulties in contacting some stakeholders, difficulties on understanding the material, difficult in implementing, etc.

Challenges	Solutions

RECOMMENDATIONS

In this paragraph, please describe any suggestion you think might help other students to do the same research you did. Some information that might facilitate their work, for example (which source of information helped you most, or very useful material your found in the library), or the importance of rehearsal to do interviews, or check that everybody is clear about their roles before starting an activity, etc.

Annex 7: Situation Analysis
Teacher guides students to think about possible new OPPORTUNITIES AND PROBLEMS they might propose in the LLS programming in the upcoming year.

Start by asking students, in their everyday life, what they are interested in learning more. Teacher can use school to school partnerships to get some ideas about possible problems/opportunities identified by other schools in the same district or province, to inspire students.

PROBLEMS

Possible questions:

Is there any problem in your community that is affecting you or your friend and family? Environmental scanning of problems in the community that affect you directly or indirectly and places where you often go to.

Is there anything you studied at school that you would like to observe and learn more in your community? Or are there any livelihood activities in the community that you would like to explore and could be possible options for your future employment?

OPPORTUNITY

Possible questions:

Is there anything interesting that is happening in your community that you would like to learn more about? Any interesting activity? Any business?

Is there any lesson that you could learn from people around you (successful and failure) on those problems and livelihood activities identified?

Techniques to use to determine answers and write report:

- Brainstorming
- Discussions
- Use examples from other schools
- Organize the information using students point of view.

S = STRENGHTENS (that represent possible opportunities to research more)	**W= WEAKNESSES** (that represent possible problems to research more)
What is successful in the village?(i.e. a business, a service, artists work, NGO projects, youth initiatives, etc.) What makes our village better than other villages? What people knows our village for?	What is not working well in the village?Is there any problem that is affecting your life in the village?(i.e. lack of water, floods, many accidents, drug abuse, etc.)What can be improved in the village?

Annex 8: Trash art ideas. For more ideas go to Google or google.kh and search for “trash sculptures” or “trash art”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AGIL
FRAGIL
OFR


MAKE


Main Gallery


WASHED ASHORE
Exhibit Open
11 am to 4 pm

Annex 9: Energy Waste Audit

A	B	C	D	E	F	G	H	I	J
Product	Is it on now?	For how many hours/day is it usually on?	How many hours less could it be on?	Does it have a standby mode? (5% of power of on mode)	(if yes) How many hours/day it standby mode on?	Average watts/hour per product (from internet	Total hours on: C + F(*.05)	Cost of running appliance per year (H* G)÷ 1000) *610 Riels/kWh* 365days	Cost savings if turned off more: ((F*.05) +D)*G)÷ 1000) *610 Riels/kWh* 365days
Fridge	Yes	24	0	No	0	200	24	1068720 riels	0
TV	No	4	2	Yes	20	200	5	222650 riels	133590
Standing Fan	Yes	24	12	No	0	0.04	24	214 riels	
Ceiling fan						0.03			
Lightbulb						5			
Etc.	Etc.		Etc.	Etc.	Etc.	Etc.	Etc.		
Etc.	Etc.		Etc.	Etc.	Etc.	Etc.	Etc.		
								TOTAL COST (ADD ALL ROWS)	TOTAL POSSIBLE SAVINGS (ADD ALL ROWS)