SUSTAINABILITY PLANS
Student Training Manual

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PART 1 – PREPARE (READING)

INTRODUCTION

This manual is to be used by you – a student leader – to help your high school develop a Sustainability Plan and an Implementation Strategy for that plan.

The Ottawa biosphere Eco-City Initiative (OBEC) – a volunteer organization – developed the Sustainability Plan as a simple tool to involve people in sustainability. OBEC created this manual for you and will send one or more trainers to each of your training sessions (training is broken down into a small number of sessions). Sustainable Youth Canada – Ottawa Chapter has also been assisting with development, by providing feedback from high school students.

This manual details the process you can follow to create and implement a Sustainability Plan for your school. The Sustainability Plan will be your school's agenda for action. It will show key issues and projects that address those issues, for ten Themes of Sustainability (see table below). You will choose those issues and projects by leading a workshop of other students from your school. It explains every step you and other student leaders can take to do this in an effective manner, without taking an excessive amount of time. You do not need any prior knowledge of sustainability and you may be in any grade. The only requirement is that you be interested and show enthusiasm. After you read the manual, a trainer will help you use it in short workshops at your school, for the different stages of the project. This manual and accompanying training material, have everything you need to successfully create a Sustainability Plan and Implementation Strategy.

The first part of this manual explains sustainability and tools to address it, including the Sustainability Plan. The second part leads you through a step-by-step process to: gather ideas from fellow students in a one-period (50 minute) workshop, put those ideas into a Sustainability Plan, and make sure there is implementation and follow-up. The third part of the manual has two evaluation questionnaires for you, plus a short list of resources. At the back and in an accompanying CD, there are appendices containing the training aids referred to in the manual.

The next steps in the process will depend on you, leading your school in creation of its Sustainability Plan. We congratulate you for taking the time to create something so important for your school, your community and your world.

Themes of Sustainability

THEME	WHAT IT INVOLVES
Transportation	Movement of goods and people
Energy	Heating, cooling, lighting, power for production, energy sources
Design	Design of buildings, communities and public spaces
Habitat	Urban and rural places supporting wild animals & plants, on land & water
Food	Local food, organic food, urban gardens, heritage crops & animals
Natural Capital	Soil, water, wood and other natural materials used for human needs
Waste	Processing & reduction by reuse, recycling, design, conversion to energy
Health	Clean air & water, safety, tranquility, access to nature by vulnerable groups
Recreation	Non-motorized especially outdoor, urban & rural, greening of sports events
Sense of Place	Feeling of belonging that enhances environmental & social stewardship

What You Can Add As Student Leaders

Ideas come from students; leadership comes from students

Creating a Sustainability Plan is an important opportunity for your school. This will guide everyone in the school in their actions for sustainability. For this to be your school's plan, the ideas in it need to come from the students. Your school's ownership of the plan will be even stronger because students lead the creation of the Sustainability Plan.

Your understanding and enthusiasm for sustainability make you leaders

Anyone can be a leader. You choose to be leaders in this process because you are interested in improving the world around you. You are willing to learn about sustainability, to gather ideas through a workshop, and to put those ideas into a Sustainability Plan. Two key qualities of your leadership will ensure success: i) your understanding of how to create a Sustainability Plan, ii) your enthusiasm for what your school can do with that plan.

Your leadership continues as other students come to you with questions on sustainability

You may be surprised at how quickly some other students will pick up on what you are giving them. Students who become interested in sustainability may start coming to you with questions and ideas. That can give you an opportunity – if you want it – to be an ongoing school leader for sustainability.

BACKGROUND

What is this project?

OBEC has previously completed two sustainability plans with local schools: All Saints Catholic School in 2012 and Woodroffe High School in 2014. Building on these past experiences, this project will train up to 20 students at three different Ottawa high schools to lead their schools in the development of Sustainability Plans. Benefits to these schools could be significant in terms of: student engagement, student leadership development and connections to the local communities.

The Environment and People

To live in our world, we use natural resources such as: clean air and water, soil, minerals, plants and animals. We also rely on human resources such as families, schools, and transportation and information systems. When we have enough of these, in quantity and quality, we can live well.

In the distant past, humans were not powerful enough to change the natural world. They took what they could from nature and used human resources (such as families, tools and tribes) to help them survive.

In the recent past, mankind has become very powerful. Technology allows people to take so much from nature that the whole natural world has begun to change. As well, this exploitation of natural resources can even harm people by polluting air and water.

Over the past 50 years, people have become more aware of the problems created by over-exploiting nature. The impacts on both the natural and human world have been well documented, from melting ice caps to the struggles of the urban poor in the developing world.

Fortunately, awareness of a problem is a first step towards finding a solution. This has led to many actions and some of these have been quite successful. For example, water quality in many North American and European waterways is much better than it was even a few decades ago. Also, international organizations are making neighbourhoods healthier in cities around the world. However, many other problems still need to be solved.

Sustainability

One key idea that has come out of all these efforts to reduce environmental damage is the concept of sustainability.

Sustainability means using the resources we need to have a good life, but leaving enough resources for others – including future generations – to have a good life too.

Citizens all over the world have been encouraging governments and businesses to work towards sustainability. Dozens of cities around the world are now good examples of sustainability,

and hundreds of large corporations are implementing techniques to reduce pollution, save energy and conserve natural materials.

This is good, but it is not enough. There are serious environmental and related human problems in many of the world's cities. Even modern cities like Ottawa need help to become sustainable.

In all these cities, one particular resource can promote rapid progress towards sustainability. That resource is the energy and ideas of ordinary people. Their involvement is already taking place. Through clubs, schools, community groups and other organizations, people are developing and testing their own ideas for sustainability. The actions of people working together are changing neighbourhoods and cities, and can even change countries.

The biosphere

The word biosphere comes from Latin and means "sphere of life." It is the Earth's outer shell of land, water and air that sustains all life. Currently, human activities are putting so much pressure on the biosphere that its capacity to sustain natural and human life is being reduced. But if our city and surrounding rural area become more sustainable, the pressure on the biosphere will be reduced. If many cities and rural areas do the same, the biosphere can remain healthy.

The biosphere or "sphere of life" (NASA photo)

THE BIOSPHERE ECO-CITY APPROACH

A Biosphere Eco-City (BEC) is an idea on how to make an urban area and its surrounding countryside sustainable. The name refers to the "biosphere," and "Eco-Cities" which is a worldwide movement for sustainable cities. BEC is meant to provide benefits for both people and nature, including sustainability of the biosphere.

BEC uses Themes and four simple Tools to engage everyone in sustainability. These work by promoting Involvement, Understanding, Initiative and Sharing. For detailed information, see the OBEC website (obec-evbo.ca).

Themes

The biosphere Eco-City model divides sustainability into 10 Themes that are easy to understand. They are also action areas for sustainability. Themes connect people and organizations that share common interests and want to cooperate. The Themes are explained more fully in Appendix 1.

Examples of Themes: Transportation, Food and Natural Capital

Tools

1. **Database of Sustainability Projects** – Summaries of projects, with contact information, are placed in a database that anyone can view. This is an easy way to share information. There are hundreds of projects in the Ottawa Database (see obec-evbo.ca). Projects that you create, through your Sustainability Plan, will be welcomed in the Database.

2. **Sustainability Plan** – This is an agenda for action on key issues of sustainability. Any type of an organization (community group, school, business etc.) may develop a Sustainability Plan. It is more fully explained below.

3. **Demonstration Projects** – These are projects in which methods, used to achieve sustainability, are made understandable. This way people and organizations can build on each other's knowledge. Demonstration projects often show innovation. For example, a builder might display an energy-efficient house and offer guided tours to explain the technology used. A recent BEC demonstration project was the Ottawa Sustainability Tour. This is a self-guided tour by car, bus or bicycle that can take you to sites that demonstrate the 10 Themes of Sustainability. You can download a tour book from the OBEC website (obec-evbo.ca).

4. **Council of Stakeholders** – Bringing together people and organizations to talk about sustainability will lead to cooperation and better projects. Anyone can attend Ottawa BEC Council meetings and can get dates and times of meetings from secretariat.ottawabec@gmail.com.

SUSTAINABILITY PLAN

A plan of activities you develop together to for all of you to live and work sustainably

A Sustainability Plan is an agenda for action produced by members of an organization. To create it, members take part in a workshop with ten groups for the 10 Themes of Sustainability. For each Theme, members suggest and agree on a) key issues of sustainability and b) projects that could address those issues. In essence, they are developing their own plan to live and work sustainably. Where the organization is a school, participating members will be its students and staff.

Everyone can personalize their copy of the plan by choosing which actions they want to take

Everyone in the organization gets a copy of the Sustainability Plan. On the last page they write down the issue they want to address and their project to address it. This can be something from the Sustainability Plan, or a new idea they got from reading the plan.

You can see examples of the All Saints Catholic School Sustainability Plans (Appendix 2) and Woodroffe High School Sustainability Plans (Appendix 3).

IMPLEMENTATION STRATEGY

The Implementation Strategy outlines timing and good approaches to implementing the projects in the Sustainability Plan. Because most projects can be carried out in several ways, the Implementation Strategy will only suggest ways to proceed. Research and a project plan are usually needed before starting a project.

What you can also create from the Implementation Strategy is a Calendar for Action. This is simply a list of projects sorted out by time of year (season or month). In Appendix 4 you can find the "Woodroffe Calendar for Action."

PARTNERS

The Ottawa Biosphere Eco-City Initiative

The Ottawa Biosphere Eco-City Initiative (OBEC) is an all-volunteer non-profit organization, founded in 2009 to make Ottawa more sustainable through the Biosphere Eco-City Model. It uses Themes and Tools from the model to engage everyone in sustainability, and promote stakeholder cooperation. OBEC seeks project partnerships with other organizations.

Sustainable Youth Canada

Sustainable Youth Canada is a youth-led non-profit founded in 2013 with the aim of involving young people in sustainable activities. Through a network of affiliated regions across the nation, Sustainable Youth Canada prides itself in maintaining the Canadian Sustainable Youth Registry, while empowering young people to lead local events and fundraisers for environmental and energy sustainability.

Your School

The teachers and administrators of your school are essential to creation of a school Sustainability Plan. Such a plan will address several school goals: a) participation in school board efforts to address environmental issues, b) creating a positive linkage with the community, c) training students as environmental leaders. Those leaders are you and your team.

The City of Ottawa

Funding for this project was generously made available through the City of Ottawa's Community Environmental Projects Grant Program

PROJECT SCHEDULE

At any one school, the project schedule is as follows:

Pre-training Session

- Project partners get permission from school
- School recruits up to 20 students for training group
- Recruited students read Training Manual
- School selects classes (mixed grades or single grades) to develop Sustainability Plan
- School divides those students among 10 Themes and provides handout on the Themes

First training session

One-day session at the school (60-90 minutes, depending on depth):

- Student leaders customise a presentation for a workshop of selected classes
- Student leaders prepare to lead break-out sessions of the workshop

Post training session

- Student leaders make presentation and lead discussions in workshop (1 period)

Second training session

- Student leaders collate information from workshop
- Student leaders use information to create the school Sustainability Plan

Third training session

- Student leaders create an Implementation Strategy
- Student leaders create a short presentation to present results to the school (optional)
- Student leaders evaluate the project and their personal lessons

Project wrap-up and implementation

- Student leaders present Sustainability Plan and Implementation Strategy to the school (optional)
- Trainers, student leaders and school follow up on implementation of Sustainability Plan

PART 2 – PROCESS (WORK)

1. Organize Participation

Steps to start this are simple but essential

There are a few simple but essential steps to take in preparing for development of a Sustainability Plan at your school. They are as follows:

1. **Involve teachers:** Teachers do not need to devote much time to the process of creating a Sustainability Plan, but some of them will be involved because their classes will participate in a workshop to generate ideas for the plan (see next step). Often there will be one teacher who will coordinate the other teachers and get the permission of the school Principal to hold a Sustainability Plan workshop.

2. **Engage student leaders:** The school needs to recruit up to 20 students to lead the process of developing a Sustainability Plan and Implementation Strategy. The work could be accomplished with half that number, but it would be easier if there were two students specializing on each of the ten Theme of Sustainability. The school could simply assign students to this project, but the easiest way might be to use members of the school environment club. This project might also help to recruit new members to such a club. Student leaders may come from different grades and if so, this provides continuity.

3. **Select students for workshops:** There needs to be enough students to provide 10 discussion groups for the 10 Themes of Sustainability. The minimum is about 50 (5 students in each breakout group) and a practical maximum is one class per Theme (20-30 students in each breakout group). Projects at previous schools used 160 students and about 80 students, respectively. Larger groups have more ideas; smaller groups are easier to manage. But if teachers participate with their classes, a full class for each of the 10 Themes should not be too large. The workshop (presentation and breakout discussions) will take a full period.

4. **Assign students to themes:** Students should know their breakout groups ahead of time, to do some research on their Theme. Then they will bring more ideas to the discussions. Teachers can assign the Themes a week or two before the Sustainability Plan workshop. In Appendix 1 there is a two-page description of the Themes. It will be helpful if students have some understanding of all Themes, because some projects may relate to more than one Theme. A very good resource for viewing projects by Theme is the Database of Sustainability Projects on the OBEC website (obec-evbo.ca).

5. **Reserve locations:** The student leaders will need a place for training sessions of up to 90 minutes, with a teacher to supervise. OBEC will facilitate the training. This will probably be at noon or after school and a classroom would be quite suitable. A space will also be needed for one school period for a brief assembly of all participating students and then for break out discussions.

2. Prepare for Workshop

(Estimated time 60-90 minutes)

2.1 Finalize PowerPoint Presentation

Your team's presentation will explain sustainability and the workshop to participating classes

The workshop to create the Sustainability Plan is simple and will start with an assembly of the classes who will provide ideas for the plan. Your team will make a short presentation to them to explain sustainability and the process to create a Sustainability Plan. One or two of you can present this with all of you at the front. This should take 15 minutes, including questions.

If the workshop does all ten Themes in one session, you will make the presentation once. If the school has two sessions with five Themes in each, you will do it twice. Depending on the size of the group, this assembly could take place in a large classroom, the library or the auditorium.

Use and modify the presentation in Appendix 5 and on the CD

In Appendix 5 is the text of a presentation to a school on sustainability planning "Presentation Colonel By V2." The full PowerPoint version is on a CD in a pocket at the back of your training manual. You are encouraged to use this presentation and make what change you need (change school and neighbourhood information where needed). You may also customize it to suit your ideas or develop an entirely new presentation, although this will take extra time.

Be positive. Success motivates people more than failure

A suggestion about presenting on sustainability is to avoid being too negative. People are more motivated by hope than by despair. While we may hear depressing environmental news, there have been many successes. The PowerPoint in Appendix 5 was developed highlights issues as well as solutions. Feeling they have a chance to succeed will motivate your fellow students to take action. Examples of success will give them ideas upon which to build.

See Appendix for tips on making good presentations

In Appendix 6 you will find "Tips on Creating Good Presentations." You may want to look at this if you are planning to modify the PowerPoint or creating a new presentation

Choose a coordinator and divide up the work

You are a team, so use that to your advantage. Whether you are 10 or 20, there is more than enough of you to lead development of a school sustainability plan, if you are organized. Divide up the tasks. Choose one of your members to coordinate the team. Select a couple of people to do the writing. Two or three people could look for pictures to use in the presentation. One or two more, with good technical skills, could format the PowerPoint. Then choose one or two people to make the presentation (different voices add interest). Others could be observers and provide suggestions.

Present the PowerPoint to the team. Practice. Edit. Make the presentation simple

When you finish your draft PowerPoint presentation, have the presenter(s) practice it on the rest of the team. This allows the presenter(s) to get comfortable with the presentation. You might use this practice as well to cut the message back to only those few key points. Just mention what the participating classes need to know about sustainability, the Sustainability Plan and the workshop. Simplicity should be the goal.

When finished make backup copies

When the presentation is finished and is well rehearsed, make sure it is on a laptop, on several memory sticks, and that a copy is provided to the school.

2.2 Practice Leading Discussion Groups

Remember that you will facilitate discussion by Themes after the presentation

After the Power Point presentation, the students in the assembly will go to 10 pre-assigned locations to discuss the ten Themes of Sustainability. Members of your team, responsible for individual Themes, will go with them to facilitate the discussions and take notes.

Identify tools – blackboard/flip chart and notebook/laptop, worksheets to hand out

The students in the group you will facilitate should have done some research and thinking on their Theme of Sustainability. Having the proper tools will help you capture their ideas and reach agreement on what to include in the Sustainability Plan. So make sure that the place where you will lead the discussions will have a blackboard or flip chart, on which your group can see ideas being discussed. You will also need a notebook or laptop to capture your own ideas. Each of the students in your discussion group will write ideas on a "Worksheet for Breakout Sessions" (see Appendix 8), which you will collect at the end of the discussion.

Student leaders each choose which of 10 Themes to facilitate. Find out if teachers will help.

You will facilitate the breakout discussion sessions of the workshop. There are 10 Themes of Sustainability, so each chooses a Theme. If there are 20 on your team, two leaders can specialize on each Theme. If you are 10, then each of you will focus on a different theme. Make yourself a bit of an expert on your Theme, so that you will be able to understand and use all of the ideas proposed by students in your breakout session. If there are two leaders for each discussion group, one could speak and the other could take notes.

If a whole class is participating in the Sustainability Planning workshop, the teacher may be interested in helping. Find out if they are available to help facilitate the breakout session. For example, you might wish to ask the teacher to lead the brainstorming section or to write ideas on the blackboard (or flip chart).

Practice leading discussion groups a few days before the school workshop

A few days before the school workshop takes place, it would be useful if everyone on your team practiced leading a discussion on his/her Theme of Sustainability. The best way to do this is to break up into groups of five and each taking turns asking the others to suggest key issues, projects and implementation ideas for his/her Theme. This should take about 30 minutes.

To make sure this happens, it has been incorporated into the first training session. But if you want to get together on your own informally later, you can practice more. The purpose of this practice is to let you get a feeling for leading a discussion group and recording suggestions.

3. Conduct the workshop

(Estimated time 45 – 50 minutes)

3.1 Present Your PowerPoint

Arrive early for the presentation and check the equipment. Practice.

When giving the presentation, arrive early to make sure all the equipment is working properly. Check the slides and the sound. Practice with the clicker and the microphone, if you have one.

Have the whole team of student leaders sit at the front for the assembly

There are two reasons to have all the student leaders at the front during the assembly. One is to provide moral support for whoever is presenting, and the other is to show students that you are the leaders. Then they will know who will facilitate the discussions right after the assembly. Students may also want to know who to ask about the Sustainability Plan later in the year.

When presenting, use a confident posture, smile, speak clearly and show enthusiasm

There is something called the power position which encourages the audience to believe what you are saying. Keep your head up and your shoulders back, and people will automatically focus on you. Smile and they will tend to trust you. Speak clearly (not too fast) and the audience will be able to follow what you are saying. Show enthusiasm, and your interest in the topic may rub off on them. Put this all together and the audience will tend to believe your message.

Allow just a couple of minutes at the end for questions

You have to restrict the time for questions, because you need time for the discussions that follow. Some students may have missed or not understood something important, so you want to clarify that for them. Tell them that there are two minutes for questions.

Answer questions in order, politely and speak to the whole audience

When you call for questions, pick the first hand up. You can have another team member watch and tell you whose question is next. When you answer a question, thank the person for the question, repeat the question, and deliver your answer to the whole audience.

Don't get sidetracked by someone who wants to argue or debate

If a question is too long, or is an opinion rather than a question, thank the person and suggest they hold their idea for the upcoming discussion. If the person wants to argue, smile and say that there really is not time for a debate, but you are glad to see their interest. If they become a problem (not likely in an assembly with teachers present) you may suggest that they meet with one of the teachers to discuss making that point the object of a personal research assignment.

Use your team members to answer questions if you need them

If you are the presenter, remember that other members of your team will be at the front of the assembly to support you. If you are not sure of the answer to a question, you could ask if another team member would like to answer it.

3.2 Lead Your Discussion Sessions

Help students brainstorm, discuss and agree on recommendations

Your job now is to facilitate the discussion. You will help students in your breakout session to a) brainstorm ideas for issues, projects and implementation, and b) discuss and agree on which of these they want to recommend for the Sustainability Plan.

If there are two of you, one leads the discussion and one takes notes

If there are two leaders in your session, one can lead the discussion and the other can be taking notes. The first will probably use a blackboard or flip chart to display key ideas during the discussion. The other will use a notebook or laptop for notes. If there is time for an assembly after the breakout session, one of you may summarize your group's recommendations.

Explain that brainstorming is getting out lots of ideas quickly and building on them

The purpose of brainstorming is to get a lot of ideas out, without judging them. Any idea, no matter how crazy it seems, can have value. This is because one idea may stimulate another idea in someone else. So when someone suggests an idea, the other people in the session should not criticize it. Instead they should try to build on it or offer their own idea.

If your group starts slowly, put out an idea. Spend 10 minutes on brainstorming

If the brainstorming part of the session is slow to get going, you can put out a few ideas of your own. For example, you might say something like "Instead of recycling kitchen waste, we should spread it on our lawns for the hungry squirrels and racoons. What do you think?" After a couple more crazy ideas and jokes, your group will probably start generating practical ideas. Cut the brainstorming off at 10 minutes. You need to move on at that point.

Students write ideas on worksheets, which you collect. Also record ideas you discussed.

You will bring enough worksheets for your breakout session to hand out to each student (see Appendix 7). This worksheet has two purposes: a) let students to record ideas they want to raise, and b) to provide a record of ideas not discussed. You can consider those later when producing the Sustainability Plan. So ask students to write all their ideas on their sheets and say you will collect the sheets at the end of the discussion.

The worksheet has three columns: Issues, Projects and Implementation Ideas. Write the same three columns on the blackboard or flip chart, so your students can see group ideas recorded. During the discussion, you or your partner, or the teacher will write suggestions in those columns.

When writing suggestions on the blackboard or flip chart, just use a few key words to capture an idea idea. For example, a student may say "the large number of parents driving their kids to school is causing congestion and contributing to the carbon load in the atmosphere." That is way too many words. Paraphrase it to get the idea across while keeping it short. Just write, "driving to school – CO_2."

Ideas may be all over the place. Do your best to organize them.

You are going to need to be flexible. Ideally, your discussion would follow a logical sequence: a) get suggestions on issues of sustainability, discuss them, select three or four key issues, b) go through the same process for projects and c) so the same for implementation.

More likely though, students in your groups will have suggestions for issues, projects and implementation all at the same time. That's where the blackboard or flip chart will be very useful. With each new idea, take a second to decide if the suggestion relates to a) an issue, b) a project or c) implementation, before writing it down in the appropriate column.

Don't be discouraged if ideas seem to come too quickly and you are not sure if they make sense. When you take time to summarize the discussion after the workshop, it will be clearer.

Tell students to keep recording their ideas to add to for their own Sustainability Plan

When you end the brainstorming part of the session, you can mention to students in your group that they can keep brainstorming on their own. When they get a copy of the school Sustainability Plan, they will be able to add their own ideas to make it their personal plan.

After brainstorming, help the students choose what to recommend from the group

After brainstorming you will have a lot of ideas in your three columns on the blackboard or flip chart. You will then need to lead the group to select the issues, projects and implementation ideas that you want to recommend.

Get consensus on key issues first

Start with the key issues of sustainability. Try to get consensus in the group decisions. Questions you can pose to the group are "Which are key issues from our point of view? Which do you think that we should address as high school students and communities?"

Cut column 1 down to three or four key issues. Students can make a note of their favourite issues.

You need to get down to three or four key issues. If there are too many, the Sustainability Plan will not be able to focus student efforts and will be unmanageable. You may have a student who wants to hold on to their idea when the group does not agree. Encourage them to keep their idea, because then they get the school Sustainability Plan they will be able to insert their own ideas and make it a personal plan. Suggest they write their ideas in a notebook so they don't lose them.

Reduce Column 2 to two to four projects per issue at most. Think quickly

Now do the same thing with projects. Good questions to ask the group here are "Which projects would be easy to do, and give us experience? Which projects are important because they would lead to other good projects?" Try to get two to four projects per issue.

You may find that there are good suggestions for projects, but they relate to issues that have not been listed. In that case you need to make a quick decision. Do you want to put that extra issue in, or do you take out the projects? If you're not sure, leave it in for now and decide later.

Don't worry about making mistakes. You'll have the information to review later

Don't worry about making a wrong decision. One of you will be taking notes on everything discussed. Also, you will be collecting all of the students' work sheets from the session. Later when the team collates ideas from the discussions, to produce the main table of the Sustainability Plan, there will be another opportunity to decide what to include.

For column 3, ask questions to get students to suggest implementation ideas

Finally do the same thing for implementation ideas for each of the projects. You just need a few words here, such as "Ask Algonquin College how they did this" or "Partner with a community environmental group." Questions you can ask to stimulate ideas are "Where can we get resources (people and money) to implement this? Who is doing this sort of thing and can give us advice? When can we start it?"

Accept most implementation ideas. Don't waste time. You can review them later.

You don't need to spend much time on deciding which implementation ideas to take for selected projects. You can accept most of them. These are just suggestions. Later when the school or anyone else decides to implement a project from the Sustainability Plan, they will use these implementation ideas as a starting point to build a project plan.

Keep track of time and keep the discussion moving along. Try to finish early

Keep track of the time. If you have say 30 minutes for the breakout session, it would be better to finish the discussion at 25 minutes and use the final five minutes for an overall review. That is much better than running out of time and not getting it done. Remember that you are keeping all the information, so it is all right to move along quickly.

Don't forget to collect the worksheets from all the students in your breakout session.

3.3 Wrap-up (if time permits)

If there is time left, return to the assembly and have a quick wrap-up

There may not be time left after the group discussions to return to the assembly room. If there is not, students will proceed to their next class. If there is, one of the facilitators from each of the ten discussion groups may read out one issue, a project to address it, and one implementation idea for that project. This is a nice thing to do because it gives all the participating students more perspective on the overall Sustainability Plan they helped develop. But if there is not enough time to return to assembly, don't worry. This step is not essential. The leadership team has all the input it needs to create a good Sustainability Plan.

4. Data Assembly

(Estimated time 45 - 60 minutes)

Put the ideas from your notes and student worksheets in a table for your Theme

Assembling the ideas from the workshop sessions for your Theme may take 30 minutes. Everyone can work on his or her own Theme at the same time. Putting the information from the 10 Themes (10 discussion groups) together may take another 15-30 minutes.

Each team member should open the "Template – Table for Input Assembly" (in Appendix 8 and on the CD) and make a copy for their Theme. Ideally there will have been two of you in each session, so you can work together on this. Name your copy for your Theme (e.g. Input Assembly – Habitat). On this copy fill in the priority issues, projects and implementation ideas.

Your resource material for this will be the notes you took in the workshop sessions, notes you took during a wrap up an assembly (if there was one), Ideas you got from leading the discussions and the student worksheets.

Sustainability Theme	Priority Issues	Projects	Implementation Ideas
Transportation (Movement of goods and people)			
Energy (Buildings, production, energy sources)			
Design (Built environment)			
Habitat (Urban and rural places for wild animals & plants)			
(Etc)			

Template – Input Assembly (sample)

Projects may address more than one issue. List them in whatever order you like.

During the breakout sessions, you had tried to match projects to priority issues. You may see, however, that some projects address more than one issue. So in this table, you don't have to put projects beside particular issues. Just make one list of issues and one of projects, in whatever order you think looks best. For each Theme the lists are short, so the order is not critical.

Based on input, you can change the priority issues you listed in the breakout session

In the breakout sessions you agreed on three or four priority issues. But in collating the information afterwards you may find more good issues, on the student worksheets, which were not mentioned in the session. You may add these. You may even add in an issue that was not stated but is implied by a project, as mentioned under "Lead Your Discussion Session" (above). Try not to have too many though. You can take out issues that seem less relevant to students. Also remove issues that have no projects to address them.

Too many issues make the Sustainability Plan unworkable. Decide on what to include.

Remember that the purpose of this plan is to focus the school and students on priority issues. A list of three to six issues for a Theme may do that. A list of ten to twelve issues may be too much for your plan. You decide on how many to include.

Based on input, you can change the projects you listed in the breakout session.

The same as you did with the issues, you may find more good projects on the student worksheets that were not mentioned in the session. You can add them to the list if they address any of the priority issues for your Theme.

You may have more projects than issues, or the same number.

The number of projects for your Theme may be more than the number of issues, or they may be the same. Even six projects can generate a lot of activity for sustainability. If you list many projects though, make sure they are all good.

Keep only the best suggestions so that the Sustainability Plan clear and focused.

Use your judgement. Remember, the Sustainability Plan needs to be clear and focused. Too much information will ruin it. Keep the ideas with the most impact. If you are worried about cutting out someone's ideas, put the secondary ideas in a second table of "other suggestions." You will be able to review these later when writing and editing the Sustainability Plan.

Change the wording to keep the meaning clear, if needed.

You can change words to make the meaning clear, or combine suggestions where the wording is similar. Also leave out ideas that are not serious, for example, "eliminating exams to save paper." That wouldn't go into the Sustainability Plan (although it would have been fine in the brainstorming phase, because it could have led to other ideas).

Divide projects into three types, using colour and font type to differentiate

The last thing to do with the listed projects, for each Theme, is to divide them into three types: i) Projects for the school, ii) Projects for students to do with families and friends, iii) Projects best done with neighbourhood or community groups. Find a way to distinguish the three types. In the All Saints and Woodroffe Sustainability Plans the colours red, blue and green were used for this. Also, three very different fonts were used so that the three types would be clear even if the plan were printed in black & white.

The column of implementation ideas will be used later for the Implementation Plan.

Note that the "Template – Table for Input Assembly" in Appendix 8 (and on the CD) has a column for implementation ideas. These ideas are matched to the projects in the column to the left. The same ideas for implementation may appear beside more than one project. This will make this table fairly long for each Theme. Don't worry about that, this is just a working table. The priority issues and projects from this table will go into the main table of the Sustainability Plan. The implementation ideas will not go into the plan, but will be put later into the Implementation Strategy (described below).

Save your work at regular intervals and back it up on memory sticks

Save your work at regular intervals. For each Theme, one of you can save it every ten minutes or so on the laptop. The other person can save it on a memory stick. When all sections (Themes) of the main table are completed, have someone make a new copy of the original Template and call it Table for Input Assembly – All Themes. Integrate all information from the ten separate tables for the 10 Themes into this new table on a laptop. Then save that table on several memory sticks. Backup is very important because this is your assembled data and you do not want to lose it.

5. Create the Sustainability Plan

(Estimated time for writing and editing 75 minutes. May combine with Session 4, above)

5.1 Writing the Plan

(Estimated time 45 minutes)

Chose two to four team members to write and edit the Sustainability Plan. Others may begin the Implementation Strategy.

Two to four good writers are more than enough to write and edit the Sustainability Plan. While they do this, the rest of the team can be working on the Implementation Strategy. All the data they need for the Sustainability Plan is the table produced in Data Assembly.

Copy issues and projects into the Sustainability Plan table. Then write, edit and format to complete the plan.

You have now gathered and organized all the information you will need for the main table of the Sustainability Plan. Transferring this information to the Sustainability Plan template is simply a matter of copying. After that, all you have to do is a bit of writing, editing and formatting, and the plan will be completed.

Sustainability Theme	Priority Issues	Sustainability Projects
Transportation (Movement of goods and people)	- Too much traffic (example)	- Bike/walk/carpool to school (example) - - Develop bike rental system/repair old bikes to donate (example) - - Support a passenger rail system (example) -
Energy (For buildings, transportation, manufacturing and agriculture)		
Design (Of buildings, roads, public spaces and communities)		
(Etc.)		

Table of Sustainability Plan (sample)

Copy the Sustainability Plan template. Make changes to the copy and keep a duplicate*.*

Open the "Template – Sustainability Plan" (in Appendix 9 and on the CD) and make a copy called Sustainability Plan – [name of your school]. Put this on two computers or laptops, so you always have a backup. Every time you complete a section or make changes on the first copy, you will put the very same information on the second.

Fill in columns for issues and projects by Theme*.*

Go to the section of the plan called Priorities and Strategies for Action. Take the information from the two columns for Priority Issues, and Projects from the Table for Input – All Themes, and put it into the same columns of the main table of the Sustainability Plan. Now that table will show Sustainability Themes, Priority Issues, and Sustainability Projects.

Make sure the title reflects your school

TITLE – This is on the top left-hand corner of the template. This contains the name of your high school and mentions partners in the project. Check that this is correct.

Keep or change description of "What is Sustainability"

WHAT IS SUSTAINABILITY? – Some University of Ottawa students wrote this section for the Woodroffe High School Sustainability Plan. Keep the words if you like them, or change them. Remember to keep it short (six lines or fewer).

Keep or change description of "What is this Sustainability Plan"

WHAT IS THIS SUSTAINABILITY PLAN? - This describes how the plan works. You can use your own words but probably won't need to change what is already there.

Keep or change description of "Biosphere Eco-City"

BIOSPHERE ECO-CITY – The same as with the previous piece, you can modify but you'll probably keep what is already there.

Keep or change description of "Themes of Sustainability"

THEMES OF SUSTAINABILITY – This part is important because it helps people understand the main table. You may keep the wording or change it. Remember to keep this short.

Keep or change description of "Ottawa biosphere Eco-City Tools"

OTTAWA BIOSPHERE ECO-CITY TOOLS – The Sustainability Plan you are developing is one of the tools. The others are briefly described too because they are relevant to the plan. For example, students may wish to look at the Database of Projects to see what others are doing for sustainability and get ideas for their own projects. You probably won't need to change much here. But if you think of better ways to describe the Tools, or if you need to eliminate a word or two for space, do it.

Add the name of and a short description of your high school

(NAME OF YOUR SCHOOL) HIGH SCHOOL – You need to put the name of your own school in the heading. The description for Woodroffe was left in as an example. Replace it with a similar description of your own school. A teacher may help with this.

Make sure the title reflects your school. Keep or change wording.

(NAME OF YOUR SCHOOL), OBEC AND SYC PARTNERSHIP – You need to put the name of your own school in the heading. This section recognizes that the Sustainability Plan was initiated by a partnership of three organizations – your school (which you represent), the Ottawa biosphere Eco-City Initiative (OBEC) and Sustainable Youth Canada (SYC). It briefly describes the process used to create the Sustainability Plan at your school. Change the wording as needed.

Add your school's name and a short description of its sustainability vision

SUSTAINABILITY VISION FOR (NAME OF YOUR SCHOOL) STUDENTS – You need to put the name of your own school in the heading. The description for Woodroffe was left in as an example. You need to put in one for your own school. The wording may be very similar to what was used at Woodroffe. You may want to write the vision this before the school workshop and put it in your presentation. Or you may write it when you write the plan. You may wish to have one of your teachers look at this vision statement.

Add the name of and a description of your school's neighbourhood

OTTAWA AND (NAME OF YOUR SCHOOL'S NEIGHBOURHOOD) - You need to put the name of your own neighbourhood in the heading. The description for the neighbourhood around Woodroffe was left in as an example. The first paragraph about Ottawa is pretty standard and you probably won't need to change it, except perhaps for updating the population figure. The second paragraph should briefly describe the location and character of your neighbourhood. It describes human aspects, key elements of the built environment and important natural features (school staff may have a description of the school's catchment area). This paragraph creates a general view, or mental picture, of the neighbourhood. Like the rest of the Sustainability Plan text, it should be short and easy to understand.

Use a map of Ottawa. If you can, identify the school's neighbourhood on it.

MAP – The map in the template was used in the Woodroffe Sustainability Plan. Feel free to substitute or create one of your own. You may wish to highlight your own neighbourhood (school catchment area) on your map. Make sure the file size isn't too large, as you want the final size of the plan to be suitable for email and web use.

Show Themes, issues, projects. Add pictures to columns if you want to fill space.

PRIORITIES & STRATEGIES FOR ACTION – If you have better words for the heading, you may use them. What is in the template is similar to that used in previous Sustainability Plans.

Here you insert the list of issues and projects from the Main Table Template 2 that you produced when you collated information from the breakout sessions (Data Assembly, above).

Note that you may insert photos, in this column or the issues column, as fillers to balance out the columns. Those photos should relate to the Themes in which they are inserted. Again, avoid large images.

Encourage students to choose issues and projects for themselves.

GET INVOLVED – YOUR PLAN FOR ACTION – This last section of your schools Sustainability Plan allows every student in the school to personalize their plan. They can take any action as part of their personal project to addresses their priorities for sustainability. This can include joining in a project undertaken by the school. Students can even add issues and projects

that were not listed in the plan. These personal additions may happen because the Sustainability Plan caused them to think of new ideas.

Ask students to make a commitment and keep the Sustainability Plan for future ideas.

When a student fills out this last page, they make a commitment to themselves. Each student will decide when and how to get involved. Ideally, they will keep a copy of the plan, to serve as a reminder of actions to take. Use the wording you think will motivate them to do this.

Keep or change the wording of this section

There is suggested text for this section, but you can customize it as you see fit. You'll want to keep it fairly open and make sure it is no more than one page.

The 'thank you' near the end is to each student using the plan. Check that the wording is what you want.

Try to find room to list members of your team

Create some room at the end of the report, so that you can list the members of your team, both for your own credit and so that people know to whom they can direct questions about the plan.

Show the logos of the partners, including your school, who helped develop the Sustainability Plan

The last things on the last page are the logos of the partners for development of the Sustainability Plan. The first logo should be that of your school. In the template, you also have logos for the Ottawa Biosphere Eco-City Initiative, Sustainable Youth Canada, and the City of Ottawa.

Divide the writing among team members to save time

The easiest way to write the plan quickly is to divide the work. For example, a couple of people might work together to review each section. Two or three other people may be looking for a few pictures to use as fillers in the plan, especially where you want to balance columns in the main table. This may include a couple of photos from the presentation and breakout groups you facilitated. All team members contribute to the table. One person could coordinate this work.

5.2 Editing the Plan

(Estimated time 30 minutes)

Two people can edit the Sustainability Plan and show the draft to the team before finalizing

The last thing required to complete the Sustainability Plan is a final editing. Two people could do this – one focusing on the writing and the other on the format. If it helps, a third person may act as a sounding board for their ideas. The objective is to create a document that is attractive, easy to read and understand, and simple enough to view on any computer or tablet. In terms of wording, remember, "Less is more." In terms of display, remember to keep it simple. You don't need high-resolution pictures and you don't want a large file. The final version should be a PDF. When the editing is done, they can show the draft to the rest of the team for approval before finalizing.

The Sustainability Plan has been completed

Well done!

6. Create an Implementation Strategy

(Estimated time 45 - 60 minutes)

There is a rating system for the projects. Try it and decide if you want to change it.

The process for the Implementation strategy, described below, includes a rating system to set priorities for which projects to do first. If you think this is too complex, feel free to simplify or change it. But the rating process may help stimulate your thinking, so you should try it before you decide to modify it.

Suggests ways to implement projects described in a Sustainability Plan

The implementation strategy describes the way in which the school proposes to implement the activities described in the Sustainability Plan. If many activities are listed it will not be possible to do them all at once. Sometimes it will be best to start with simple projects to give people experience and confidence. There may also be projects that should be done first because they make it easier to do some other projects later. In addition, the seasons of the year may dictate the timing of many projects listed in the sustainability plan.

Includes other factors that support implementation of projects

There are other factors that support the implementation of a project in the Sustainability Plan. Things such as: money or volunteer resources, people who have useful knowledge for the project, organizations that can help. Including these things in the Implementation Strategy can lead to more success in developing projects.

Implementation ideas came out of the workshop to create the Sustainability Plan

In the workshop to create the Sustainability Plan, students were asked to suggest ideas for implementing the projects that were proposed. If these ideas were recorded during the workshop discussions, they will provide a head start for creating an Implementation Plan.

All the information you need is in the last three columns of the Input Assembly table

All the information you need for implementation is in the "Table for Input Assembly – All Themes" where you combined input from your breakout discussions. You will be working with the last three columns of that table.

One person can coordinate. The others can be divided among the Themes

Choose someone to coordinate your work on this. They could be walking around the room seeing how you are doing and looking for links between projects. The rest of the available people could be assigned to the ten Themes. Some may be writing the Sustainability Plan at the same time.

Copy the Implementation Plan template. Make changes to the copy and keep a duplicate.

Make a copy of "Template – Implementation Strategy" (In Appendix 10 and on the CD) and call it Implementation Strategy – [name of your school]. Make an identical copy on a second

computer or laptop. Remember to keep transferring information to this second copy every ten minutes or so, as a backup.

Transfer issues, projects and implementation ideas to the Implementation Strategy

Transfer all of the information from the last three columns of "Table for Input – All Themes" to the Implementation Strategy. This will give you a table showing Themes, priority issues, projects and implementation ideas. There is a blank fourth column to rate projects, which you will now use.

People who facilitated Themes in the school workshop will set priorities for those Themes

Give a copy of that Implementation Plan to the leaders who led discussions on each of the ten Themes. They will set priorities for implementation of projects for their Themes.

Rate each project as: (A) already underway, (E) easy or (L) leads to other activities

For each project in your Theme assign one of three criteria: already underway (A), easy to do (E) and leads to other activities (L). This third criterion (L) may be added to one of the other two (i.e. A&L or E&L). Put the letters for the criteria in the fourth column of the Table. This will help you to get an idea of which projects you will propose as priorities.

Reorganize projects within each Theme by the ratings you gave them

Reorganize the projects within your Theme. Projects already underway (A or A&L) have first priority. Projects that are both easy and that lead to other projects (E&L) are second. Projects that are only easy to do (E) are the next priority. Projects that lead to other projects (L) but are not easy, are fourth. Projects with no letters are last. Rearrange the projects to put them in that order in the table.

Work quickly. This is not an exact science. Your best guess is fine.

Do this quickly. Don't worry about making mistakes. The purpose of this exercise is to put the information in a form that is easy to understand and apply. The process to start a project depends on many factors (including chance). So it doesn't matter too much whether you rate a project as #2 or #5 on a list. What matters is that you come close (e.g. you know the project is not #20).

Quickly estimate the cost for each project: under $100, under $500, over $500.

You have one more thing to do to estimate the priority in which you want projects implemented. You estimate how much it might cost to do them. This also is a guessing game. But you should all use the same financial ranges, because you will be combining all your projects in one table. If you think a project has no cost put a bold **F** (Free) beside the project. If you think it would cost less than $100 put one "dollar sign" ($). Less than $500 put two "dollar signs" ($$). More than $500 put three "dollar signs" ($$$). Put this right after the project name.

Expand on implementation ideas, adding your own ideas

By thinking about the projects, you may be able to strengthen the implementation ideas. You may think of ideas that could apply to several projects, e.g. "Get advice from school board," "Find a source of funding etc." Add your ideas to the Implementation Strategy. This is particularly useful for projects suggested for the school to do.

Make two more documents to complement the Implementation Strategy

You have now completed an Implementation Strategy, but there are two more documents you can develop from it, if you like: a Calendar for Action, and a Fundraising Strategy.

7. Create a Calendar for Action (optional)

(Estimated time 30 minutes)

Organize projects by time or year to suggest when to start them

Make a copy of the 'Template – Implementation by Season' and name it Calendar for Action. By Theme, re-group all of the projects of the Sustainability Plan according to season of the year, and put them in the Calendar for Action. This is a simplified version of the Implementation Strategy that you can give to all students as general guidance. Don't worry about priorities for projects, here, that would make it too complicated. You could choose the following five categories: Summer (June – August), Fall (September – October), Winter (November to March), Spring (April – May), and Any Time of Year. Start the list with any season, depending on when you complete the Sustainability Plan. You can get ideas on how to do this from the "Woodroffe Calendar for Action" in Appendix 4.

8. Present the Sustainability Plan to the School (optional)

Ask school to distribute the Sustainability Plan to all students and put on school website

When the Sustainability Plan and Calendar for Action are completed, you will provide them to all students in the school. Ask school staff to distribute both documents to all students, asking them to select projects for themselves. The documents should also be put on the school website.

Make a short presentation of the completed Sustainability Plan in a school assembly

If possible, you can also present the plan to the school at an assembly, and then distribute the documents as described just above. This latter approach is a bit more work, but more satisfying. It may be more effective too. Here are details of that presentation:

1. Create a short talk of about 5 minutes, and mention the following: i) the occasion – completion of the school's first Sustainability Plan and Implementation Strategy, ii) The process – a workshop with xx number of students, selecting key issues and projects for 10 Themes of Sustainability, plus ideas on how to implement them, and putting all the ideas

together, iii) the finished plan – you can show copies to the school, iv) the big picture – that several local schools are participating, and v) Thank everyone involved for helping to create the plan. See "Template – Handoff Presentation" (Appendix 11) for an outline.

2. Choose one or two of your team to make the presentation to the school.

3. Ask school staff to arrange a time to do this.

4. Have the whole leadership team on stage when the presentation is made.

Create a group to implement the Sustainability Plan, in cooperation with school staff

Implementation of the Sustainability Plan will take months or longer. You need a group to take charge of this. It could be your team, the school environment/sustainability club or schools staff. Involvement of school staff is necessary for projects recommended for the school.

Continue as an advisor to other students on your Theme of Sustainability if school supports

If you want to remain involved, you might offer to be a "sounding board" or advisor to other students developing projects for the Theme you covered in your discussion group. If this is the case, discuss with school administration how to do this. For example, the school might give you a title (e.g. Sustainability Advisor – Energy) and assign an email address for you to use (e.g. sustainabilityplan_energy_[schoolname]@ocdsb.ca).

9. Evaluation

9.1 Evaluating the Project

Complete a short questionnaire, to go to project partners, on how well the project worked

How well did the project work? Can you suggest improvements?

In Appendix 11 (in the manual and on the CD) you will find "Questionnaire – Project" which gathers your opinions on how well the process worked to create a Sustainability Plan. Each member of the team should fill it out. If there is time, discuss the results and then one member can synthesize the input from everyone. You may also recommend improvements to the process to create Sustainability Plans and Implementation Strategies.

9.2 Evaluating Personal Lessons

Complete a short questionnaire, to go to project partners, on what the project taught you

What did you learn about your own abilities and interests? Do you enjoy leadership?

In the Appendix 12 (in the manual and on the CD) you will find "Questionnaire – Personal V2" which gathers your opinions on what this experience taught you. Each member of the team

should fill it out. If there is time, discuss the results and then one member can synthesize the input from everyone. This questionnaire is mostly for your own personal benefit, but you may have some general comments to pass on about the benefits of this experience. These two questionnaires will go to OBEC and SYC; school staff may also wish to see them.

10. Implement The Sustainability Plan

Discuss proposed school projects with school staff and send their choices to all students

In the Sustainability Plan, projects suggested for the school are identified with a different font and colour. These same projects are also ranked and evaluated for cost in the Implementation Strategy. Your team can now discuss with school staff, which projects it would like to undertake. The names of those projects can be provided to all students when the Sustainability Plan is distributed, so they may volunteer for some of them.

Ask school to put PDF of Sustainability Plan on school website and assign to all students

The completed Sustainability Plan should be converted to PDF and put on the school website. The school may then ask all students to read the plan and choose a project for themselves. This is best done as a class assignment, where there will be tracking of project initiation and completion. Your team may want to be part of a tracking system that extends into subsequent school years. Some classes could focus on specific themes of even choose a common project for the class.

Develop a fundraising strategy for projects in cooperation with school staff

If you are interested in ongoing involvement, you team may wish to help with fundraising for projects. In the Implementation Strategy, a) look at the cost estimates for priority projects, b) see where you can combine them, and c) do research on where to get funding. Don't forget fundraising projects at the school. This will be an ongoing exercise that continues after you provide the Implementation Strategy to the school. It is something that a school club may wish to do, in cooperation with school staff. It is suggested that you number and date your versions of the Fundraising Strategy, as they change over time (e.g. V1 2015 Nov 24).

11. Follow-up

Suggest to partners ways to follow up and participate if interested

Your team will understand the Sustainability Plan better than anyone else in the school. If you have ideas on how to follow up on implementation on projects, you could give them to the school to share with OBEC and SYC. As suggested above, you might wish to become advisors to students developing projects on individual Themes of Sustainability. Also, you might wish to help with fundraising (previous section). Creation of a school Sustainability Plan is an important accomplishment. But keeping track of projects implemented and providing resources for these activities will contribute greatly to the Sustainability Plan's success.

PART 3 – TOOLS TO USE

EVALUATION

Evaluation of Project

Complete a short questionnaire, to go to project partners, on how well the project worked

How well did the project work? Can you suggest improvements?

In Appendix 11 (in the manual and on the CD) you will find "Questionnaire – Project" which gathers your opinions on how well the process worked to create a Sustainability Plan. Each member of the team should fill it out. If there is time, discuss the results and then one member can synthesize the input from everyone. You may also recommend improvements to the process to create Sustainability Plans and Implementation Strategies.

Personal Lessons

Complete a short questionnaire, to go to project partners, on what the project taught you

What did you learn about your own abilities and interests? Do you enjoy leadership?

In the Appendix 12 (in the manual and on the CD) you will find "Questionnaire – Personal V2" which gathers your opinions on what this experience taught you. Each member of the team should fill it out. If there is time, discuss the results and then one member can synthesize the input from everyone. This questionnaire is mostly for your own personal benefit, but you may have some general comments to pass on about the benefits of this experience. These two questionnaires will go to OBEC and SYC; school staff may also wish to see them.

RESOURCES

Course on Public Speaking

Christopher Leadership Course in Effective Speaking (www.clcottawa.com)

Presentation Resources

Duarte, Nancy, *slide:ology: The Art and Science of Creating Great Presentations*

Reynolds, Garr, *Presentation Zen: Simple Ideas on Presentation Design and Delivery*

Roam, Dan, *Back of the Napkin: Solving Problems and Selling Ideas with Pictures*

LIST OF APPENDICES (in manual and on CD)

1. Ten Themes of Sustainability (In manual, PDF on CD)
2. All Saints Sustainability Plan (PDF on CD)
3. Woodroffe Sustainability Plan (PDF on CD)
4. Woodroffe Calendar for Action (In Manual)
5. Presentation Colonel By V2 (text in Manual, Power Point on CD)
6. Tips on Creating Good Presentations (In Manual)
7. Worksheet for Breakout Sessions (Word on CD)
8. Template – Table for Input Assembly (Word on CD)
9. Template – Sustainability Plan (Word on CD)
10. Template – Implementation Strategy (Word on CD)
11. Template – Implementation Ideas by Season (In Manual, Word on CD)
12. Template – Handoff Presentation (In Manual)
13. Questionnaire – Project (In Manual, Word on CD)
14. Questionnaire – Personal V2 (In Manual, Word on CD)

APPENDIX 1 - TEN THEMES OF SUSTAINABILITY

Sustainability means taking only what we need from the world to live well and leaving enough for future generations to have a good life too. So what we do today is important because it can make life better or worse for people who come after us. Our actions can also make life better today by reducing pollution and improving health for everyone.

The best way to make our city sustainable is to focus on the things that interest us most. People have different interests. The Themes below divide sustainability into broad areas of interest. You can think about them and decide what are the issues and actions we need to take for each Theme. But for your own activities or projects, pick what interests you.

Theme 1 - Transportation
"movement of goods and people"

When people or goods travel a shorter distance, it saves energy and time. Riding a bus uses less energy than driving a car. Bicycles use even less energy (although the riders may need more Power Bars). RightBike repairs old bicycles and rents them at a cheap rate. Should schools help with that? Is it more efficient to have our pizza delivered or pick it up? Why not make our own? Are pedestrian bridges a good idea?

Theme 2 - Energy
"for buildings, transportation, manufacturing and agriculture"

Heating and cooling buildings use a lot of energy. Planting trees around buildings reduces energy use. So does more insulation. Do we need more electric cars? Should people just use pick-up trucks for farm and construction work, and use cars for family trips? Is it better to buy a barbecue made in Ontario rather than one shipped from another country? Should we eat organic food because it does not use fertilizers made from petroleum? Should farmers use gas from cows to run machinery?

Theme 3 - Design
"of buildings, roads, public spaces and communities"

Proper design of buildings will reduce energy use and improve indoor air quality. When houses are built in neighbourhood clusters, with green spaces in between them, residents can meet each other and experience nature more easily. Street crossings should be safe for pedestrians. Pathways allow people to walk or cycle where they need to go. Do we need more pools and trees in parks so people will use air conditioners less in the summer?

Theme 4 – Habitat
"living places for plants and animals, both urban or rural, on land or in water"

Habitat is the place where plants and animals live. City parks and trails provide habitat for many species. If two parks are connected with a green corridor, animals can move from one to the other to breed and maintain their population. Rural green spaces support more species. But even small urban spaces such as planted rooftops can provide habitat for birds and butterflies. Lakes, rivers, ponds and streams are habitat for fish, birds, animals and insects. How can keep them more natural?

Theme 5 - Food

"local or organic food, urban gardens, heritage crops & animals"

Food from nearby farms is fresher and uses much less energy for shipping. Vegetables grown at home taste great. Organic crops and animals do not pollute the environment with artificial fertilizers, hormones or pesticides. They also do not harm pollinating insects, such as honeybees. Heritage crops and animals are varieties used in the past. They may not grow as fast, but can resist modern crop diseases and taste really good.

Theme 6 - Natural Capital

"soil, water, wood, air and other natural materials that meet human needs"

Natural capital is the elements of nature we use to meet our needs. To be sustainable we want to protect soil and water, and use natural materials in smart ways. Compact cities use up less farmland. Forests and ponds keep our groundwater clean. Construction sites that reuse cut pieces of wood are conserving natural capital. Producing maple syrup is a sustainable use of a forest.

Theme 7 - Waste Control

"reducing, reusing, recycling and processing of waste, and conversion of waste to energy"

Smart design creates products that last a long time and this reduces waste. Tools that are 100 year old still work. When we use old things in new ways, such as growing tomatoes in an old barrel, we are recycling. Reuse is a special form of this, giving unwanted items to others. Garbage should be disposed of properly and can even be converted to energy.

Theme 8 - Health

"clean air and water, safety, tranquility, and environmental needs of vulnerable groups"

Clean air and water are important to our health. Fewer vehicles on the roads will keep our air cleaner. Taking old medicine to the drug store reduces river pollution. Pathways must be kept safe for people using them. Spending time in natural areas relaxes us. Seniors and handicapped people need the outdoors too. How can we help them?

Theme 9 - Recreation

"**non-motorized activities, urban or rural recreation, 'greening' of events"**

There are many forms of non-motorized recreation that we can call sustainable. For example, tennis, basketball, swimming, softball, soccer etc. Do you do any of these? Rural areas provide recreation for urban residents. This includes: fishing, camping, sailing, kayaking, skiing etc. Farm visits are a special type of rural recreation that provides extra income to maintain small traditional farms that are easier on the environment. How can we make sports events "greener?"

Theme 10 - Sense of Place

"**feeling of belonging to a community or city, that leads to care for others and environmental stewardship"**

When we like where we live, it makes us feel we belong. This leads to a sense of community. And then we tend to care more for people and the environment around us, i.e. stewardship. What parts of your neighbourhood or city give you a sense of place? How do music, sports or other events increase the feeling that where we live is special?

APPENDIX 4 - WOODROFFE CALENDAR FOR ACTION

The following actions are ideas for Woodroffe High School to start making sustainability a lifestyle. These are merely ideas that we have thought will be easiest to implement in your school. We have organized it by seasons because we feel it is important to connect the actions to the weather conditions. We hope that you feel this is a helpful implementation plan and will help Woodroffe become a more sustainable school! Thanks again and let us know if you have any questions!

Spring (March, April, May) Actions

- Increase knowledge about sustainability throughout the school

- Confront the misconception of Sustainability

    o Make sure students have pride if they are taking sustainable actions

- Expand compost program

    o Compost bin in every room

- Encourage reusable water bottles

    o Stop selling bottled water

- One plant in every classroom

- Clearly label what goes in what bins for waste

- Encourage biking and walking to school when the weather warms up

- Earth Day

    • Clean up a local park

    • Switch off lights all day (only if it doesn't cause an inconvenience)

- Clean up your closet or home and have a garage sale

    • Raise that money that can go to charity or towards a cause within the school

- Instead of using the dryer for clothes hang to dry in the sun

- Plant trees in the space around the school

- Begin discussion on new bike racks

Summer (June, July, August) Actions

- Clean up school area before students leave for the summer

- Care for the trees planted around the school

- End of school year BBQ

- Keep Air Conditioner at 25 degrees

- Utilize the parks in your area for outdoor activities

- Implement new bike racks

- Teachers prepare for:

    - Research if it is possible to donate food that the cafeteria throws away

    - Research how to implement reusing battery programs

    - Research places where clothing can be donated to after clothing drive

    - Start discussion on water foundations that have water bottle filling station

Fall (September, October, November) Actions
- After school once a week outdoor activities that change with the season

- Continue implementing the sustainability plan

- Guest speakers for environmental club

- Raking leaves on school ground for composting

- Bottle Drive competition once a month between classes

    - Winner gets to have a pizza party with that money

- Field trip to local farms

- Free fruit basket in the office

- Tupperware Awareness Week

Winter (December, January, February) Actions
- Terra20 representative come talk to the school about sustainability

- National Sweater Day

    - Turn down the heat and have blankets and sweaters available to all students

- Encourage outdoor winter sports for gym class

    - Hockey

    - Skating (canal)

    - Snowshoeing

- Clothing Drive

Eco-traction rock instead of regular road salt to ensure students' safety

APPENDIX 5 - PRESENTATION TO COLONEL BY HIGH SCHOOL – TEXT

SALUTATION

Good morning/afternoon Teachers and fellow students

HOOK

Actions we take now can change the future

For us and for the environment

So, I have a challenge for us

POINT

Let's change our future now!

THE PROBLEM

Our big environmental problem is unsustainable growth

How did it happen?

For most of history, nature was powerful and people were weak

Any tool – the bow and arrow, the plough – that helped people get more from nature was a good thing

Then mankind got powerful

And without planning to do it

- Eradicated millions of American Bison,

- Wiped out the Atlantic Cod fishery

- And spread pollution over air, land and water

Unsustainable growth was

Destroying tropical rainforests

And making the quality of life poor for many people

It was even threatening the biosphere (or Sphere of Life)

The Earth's outer shell of land, water and atmosphere that sustains all life

People realized we needed a new approach, so life would have a future

THE SOLUTION

That new approach is called Sustainability, which is:

Taking what we need for a good life, but leaving enough for others (including future generations) to have a good life too

Experts applied Sustainability in many places, with good results

Rivers that had been declared dead, were now teeming with life

Neighbourhoods that had become unliveable, were now healthy places to live

And planning was producing amazing sustainable cities around the world

THE CHALLENGE

But there is a glitch

An expert-led approach is too slow to make most of the world's 3000 cities sustainable

They need a new resource

THE ANSWER

That new resource exists all over the world

It is the energy and ideas of ordinary people – people like you and me

When people work together on Sustainability

They will transform cities and countries

They will create a better future

THEMES OF SUSTAINABILITY

The way to address a big job is to break it into smaller parts

We divide sustainability into 10 Themes (Transportation, Energy etc.),

That cover the action areas of sustainability

I'll go through then quickly

Transportation – How kids get to school, how we ship our goods, how people get to work. These are all issues of Transportation.

Energy – Energy is used for many things, including heating our houses, travel, manufacturing and farming.

Design – Design of buildings and communities can support sustainability. This is the Algonquin Centre for Construction Excellence, with LEED platinum designation for design that is known around the world.

Habitat – Habitat is living places for plants and animals. On the right you see the Fletcher Wildlife Garden, run by volunteers, which protects species in the middle of Ottawa.

Food – Sustainable food is grown with minimal impacts on the environment and maximum benefits for health. Local food and agricultural biodiversity are important.

Natural Capital – Natural capital is elements of nature used to meet human need. This includes: air, water, soil, and other natural materials.

Waste – Processing of waste is important. If we reduce, reuse and recycle, we can help a lot.

Health – Being healthy and safe out of doors is important. But for many seniors and handicapped children, outdoor activities are difficult. This playground at Brewer Park provides outdoor fun for children of any abilities. Notice the wheelchair ramp in the play structure.

Recreation – There are a lot of opportunities in Ottawa for non-motorized sustainable recreation – cycling, skating or taking part in the world's largest one-day beach volleyball tournament, for example.

Sense of Place – Every city and neighbourhood need places or events that make us feel we belong. For example, Dows Lake and the Tulip Festival. People with a strong Sense of Place will do more to help others and to protect the environment.

SUSTAINABILITY PLAN

A sustainability plan is an agenda for action

That we create together

We select key issues for each of the ten Themes of Sustainability

And suggest actions for: our school, our communities and ourselves

We'll create a Sustainability Plan for Colonel By in a few minutes

WORKSHOP

Next we'll divide into 10 groups for the ten Themes.

You should already know your Theme.

One of us here will be in each group to help and take notes.

Then for half an hour you'll provide ideas for your Theme.

Start with brainstorming. Get all your ideas out. Even crazy ideas may lead to good ones.

Then pick key issues, actions and implementation ideas to recommend for your Theme

We'll gather your ideas for the Sustainability Plan

CONCLUSION

In conclusion,

Unsustainable growth threatens the natural world as well as us

We need to apply Sustainability – taking what we need, but leaving enough for the future

Experts have produced good results with this approach

But we need to move faster

Involving ordinary people is the best way to do this

For our contribution, we are going to create a Sustainability Plan for Colonel By

This can change the future. Let's do it!

APPENDIX 6 – TIPS TO CREATE GOOD PRESENTATIONS

Here are a few tips you can use to make your presentation easier to prepare and give. They will also make it more effective. It is not a review of techniques for PowerPoint, Keynote or Apache. You can learn those on your own. But you don't need sophisticated techniques to make a good presentation. The simple approach works well.

Tip 1 – **Know what you want the presentation to do**.

For example, in your case it may be "Make students feel that sustainability is important and that they want to contribute in the upcoming workshop sessions." Write that down so you can refer back to it when editing and practicing the presentation.

Tip 2 – **Know your audience and direct the presentation to them**.

In this case you are presenting to your fellow students. People like you. Don't direct it to the teachers, or even to some outside experts that you might meet. Use language that all the students in your school will understand. Think of what interests them. For example, you might want to convince them that developing a Sustainability Plan: a) won't be boring, b) will be interesting, c) can be done with friends, d) can let them put their own ideas into action.

You can also show that you respect your audience. Don't act as if you are smarter than them. Talk to them as if you are having a conversation. If you feel comfortable, ask your audience questions and make the presentation interactive. What you might also do is talk to a couple of students ahead of time and work their questions into the presentation. Use their names or keep them anonymous, depending on what they wish.

Tip 3 – **Have a clear point**

The point is the first part of a presentation to develop. All the other parts relate to it. It is easy to understand and remember. Keep it to five words or less if at all possible. For example, "Sustainability – you make it happen" or "What you do today matters." You will repeat the point – perhaps with slightly different words – a few times during the presentation and at the end.

Tip 4 – **Start with something interesting to "hook" the audience**

A controversial idea can get people's attention. For example, "What you do today is the best thing you can do for your future." Or the "hook" might be a question, such as "Do you know that our everyday actions can make our city a better place to live?" As well, you could begin with a personal statement like "As I was putting a stack of pizza boxes in the garbage last week I thought, can I eat better and help the environment?" The "hook" is meant to grab the interest of your audience so they will listen to your point that follows right after it.

Tip 5 – **Use examples to illustrate your point**

Your presentation is essentially a series of examples that support your point. Each one is a mini-argument. For example, if your presentation was on bicycle safety for children, you might say:

HOOK – Do you think the mandatory wearing of helmets is important?

POINT – Helmets prevent head injuries.

EXAMPLE – Toronto statistics for 2009 show that head injuries in children, as a result of bicycle accident, declined 79% after the passing of the helmet law. Other cities had similar results. It is clear that helmets do prevent head injuries (restatement of your point in different words).

Tip 6 – **Put your main point in your conclusion**

In the same way that you restated your point at the end of each example, do the same in the conclusion. That way your audience will carry around the main point in their heads after your presentation is finished.

Tip 7 – **Keep the presentation simple**

You already identified what your presentation to do. For example, "Make students feel that sustainability is important and that they want to contribute in the upcoming workshop sessions" (Tip 1, above). Now only put in what is necessary to achieve that objective. You are selling ideas here. Something that is simple and short is easier to sell.

If you have some great ideas that seem to relate to the presentation, but don't really strengthen the main point, leave them out. Instead, record those ideas in your notes in case you can use them to answer a question at the end. Or use in some future debate. It is hard to keep out great ideas, but ideas that don't directly relate to what you want to achieve in the presentation will distract from it.

Tip 8 – **On slides, use words only to illustrate ideas**

You never want your audience to read your slides as they would a report. If you want people to read, hand then a report. But if you want them to listen to you, use very few words on your slides. Just use enough to illustrate an idea. For example, imagine a slide that says, "Because we now have the knowledge about how our actions affect the environment and the lives of other people, it is time for all of us to act on that knowledge and change our ways." It may be true but it has no impact. There are far too many words. And if you read the words out loud, you will frustrate your audience because they can read the slide much faster than you can speak it. Instead, the words on the slide could simple be "Time for action!" and you can explain them in

your own words. The slide then would only be a cue to an idea. People will then listen to what you say.

Because you will have very few words on a slide, you can make them quite large. Try this. Type the words on your screen and then step back two meters and make sure they are very easy to read.

Tip 9 – **On slides, use pictures to illustrate ideas**

Pictures can be a great way to illustrate an idea. Sometime you don't need any words on the slide at all. With the right picture, you'll be able to explain the idea. But simplicity applies here too. For example, if you are talking about organic sheep, you don't need to show the whole flock, the farm buildings and equipment. All you need is to show one or two animals. What you say will explain the idea and the picture will be the cue.

Similar to words on a slide, you want a picture to be clear. The optimum resolution for a photo that covers the whole screen is 1024 x 768 pixels. But an easy way to tell is to step back two meters from the screen and see if the picture is clear.

By the way, you pictures may also be symbols (e.g. arrows, circles etc.) or clip art. These can be effective ways to get across an idea. Resolution is usually not an issue. Just use your judgement on what is clear.

Tip 10 – **Be enthusiastic**

Did you know that enthusiasm is infectious? If your audience sees that you are "turned on" by an idea, this will make them more interested in what you have to say. Even people who may not agree with you at the start will listen more carefully to find out why you are so "fired up" about something. You must have been enthusiastic to volunteer to be a sustainability leader, so let your enthusiasm show!

APPENDIX 12 – IMPLEMENTATION IDEAS BY SEASON

This is a presentation in which the members of the leadership team (you) present the completed sustainability plan to the whole school. It is very short and can be fit into a general assembly that includes other topics. This presentation is not essential – the school can simply distribute the sustainability plan to all students with a note – but it is a nice touch. All of you can be on stage, but only one or two of you will speak. Here is a suggested presentation (change it as you wish).

This presentation can simply be read if that is easier. If two people do it you can alternate paragraphs.

"Dear students and teachers. Our school has done something quite important; created its first sustainability plan. And we are here to present it to you.

What is this Sustainability Plan? It is an agenda for action to bring us more in harmony with the environment. The plan suggests a) projects for the school to do, b) projects for students to do with family and friends, and c) projects to do with the community. For example, our Sustainability Plan proposes: (name a couple of projects).

How did we develop the Sustainability Plan? The team of people you see here volunteered for training from the Ottawa biosphere Eco-City Initiative and Sustainable Youth Canada. This took place at short sessions at the school and was fun. Then we had (xx number) classes take part in a one-period workshop to suggest key issues and projects for the plan. These are organized by ten Themes – Transportation, Energy, Food, etc. From their input, our team produced the Sustainability Plan, an Implementation Strategy and other material.

Here is the Sustainability Plan [hold up a copy]. It is on the school's website and everyone needs to read it. Don't worry; it is short and easy to read. Then everyone can pick a project to do. This can even be something that is not in the plan. You should do something you enjoy.

Thank you everyone for the time you put into creating the Sustainability Plan. This includes members of the project team, classes who participated in the workshop, teachers and school administrators. Thanks to the Ottawa biosphere Eco-City Initiative and Sustainable Youth Canada for creating the project. And thanks in advance to all of you for joining in. Let's do this and show we are the best school around".

APPENDIX 12 – HANDOFF PRESENTATION

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APPENDIX 13 – PROJECT PEREFORMANCE

Questionnaire for Leadership Team on Its High School Sustainability Plan Project

Please rank the degree to which the project succeeded in reaching the following goals. Circle the numbers 1-5, with 5 being "To a great degree" and 1 being "Not much"

Explained sustainability to fellow high school students	1	2	3	4	5
Created a good presentation on sustainability	1	2	3	4	5
Gathered ideas from most students in a workshop	1	2	3	4	5
Produced a sustainability plan for our high school	1	2	3	4	5
Showed cooperation of school and partners (OBEC, SYC)	1	2	3	4	5
(The project) operated in an organized manner	1	2	3	4	5
(The project) was a worthwhile experiment	1	2	3	4	5
(The project's) instructors provided useful direction	1	2	3	4	5
(The project) time allocation was appropriate	1	2	3	4	5

Is the approach replicable? Do you think the sustainability plan could be applied to other schools or other organizations? Please provide your thoughts here:

If you have other personal comments and suggestions, please provide here:

APPENDIX 14 – PERSONAL EXPERIENCE

Questionnaire for Leadership Team on Its High School Sustainability Plan Project

1. Please rank the degree to which the sustainability plan project provided you with each of the following experiences. Circle the number that most closely identifies your experience, with 5 being "To a great degree" and 1 being "To a very small degree"

Translating ideas into activities	1	2	3	4	5
Making effective presentations	1	2	3	4	5
Reaching a target audience	1	2	3	4	5
Rapid project development	1	2	3	4	5
Meeting strict deadlines	1	2	3	4	5
Quick adaptation	1	2	3	4	5
Team work	1	2	3	4	5
Community service	1	2	3	4	5
Project Evaluation	1	2	3	4	5

2. Did the project help you learn anything about your personal preferences or abilities that may be useful in the future?

3. Please provide any additional comments and/or suggestions.