### Tool(s) used:
- Sustainability Compass

### Purpose of using tool:
- Guiding Discussion
- Generating Questions
- System planning IPC unit on Plants and Flowers in order to enhance our young children’s thinking.

#### Overview:
Using Sustainability Compass we provide our EY1 young learners with opportunities to develop their understanding of what a system is and to make connections between many aspects related to a system. With this tool, we planned our unit from a more cohesive perspective to facilitate our young learners’ understanding of plants’ connections to other aspects of life. Our learners may not only see plants as living things but also as a system where we can all interact, develop concepts and skills related to many other things we did not focus on before. It is also a great opportunity for us teachers to learn how to best integrate sustainability learning and systems thinking into unit and lesson planning for young learners both in the classroom and off campus.

### Context of lesson/case study:
- Plants and Flowers Unit: EY1 classroom, EY garden/ outdoor areas, field trips (organoponico, Botanical Garden)

### Participants (# and description):
- EY1 class. There are 12 2½-3 year old children from different backgrounds: 1 Chinese, 2 Japanese, 1 Argentinean, 1 Brazilian, 1 Spanish, 1 US/Panamanian, 1 Italian/Cuban, 1 German/Cuban, 1 Scottish/Cuban and 2 Spanish/Cuban. All our students are EAL. 2 local teachers with experience working together for 3 years now using different co-teaching models.

### Topic, Theme, or Key Understanding of unit/project:
- IPC Unit Plants & Flowers. This unit is part of the Early Years programme of the International Primary Curriculum (IPC). This curriculum has been specially written for young children who are in schools out of their home country and sets out clearly what children should learn in four groups or ‘strands’—these are called ‘Independence and Interdependence’, ‘Communicating’, ‘Exploring’, and ‘Healthy Living’. The EY curriculum is aimed at stimulating student’s learning, development and growing by the combination of the Foundation Stage (FS) of the UK National Curriculum and the IPC. These programmes cover the main areas of learning at early ages: Language, Communication and Literacy; Personal, Social and Emotional Development; Physical Development; Knowledge and Understanding of the World; Creative Development and Mathematics.

Planning this unit using the Sustainability Compass we have been able to provide our young learners with great opportunities to develop their skills in all areas of learning and to make connections between nature and many other phases of their own life. Equally important for them is to begin to build good habits in terms of sustainability at this early age though hands on activities and play. With this particular unit, our children learn to take care of plants and develop the concept of plants as living things and everything they need. They plant beans, water plants. They do not pick flowers or leaves or they do not step on the grass. In addition, they learn
that we get healthy food from plants and that many things around us come from plants too. We support our learners to develop their awareness of our environment and the importance of protecting nature by reducing the use of paper, recycling materials and taking care of our school resources. We have the aim of instilling these concepts so that the children grow into adults that think, learn and act to change the world into a sustainable and flourishing planet.

**Length of unit/project:** 8 weeks

**Resources/materials & setting required:** We used a great range of resources and materials for this unit:
- Gardening tools, pots, seeds
- Theme-related books
- Arts and Crafts materials
- Cameras
- Photos, pictures, videos CDs, IT

**Lesson Plan/Description of the Project:**

**Lesson Plan/Description of the project:**
- Review [IPC unit documents](#)
- Brainstorm together (teachers: Mariana and Maritza) ideas using the Sustainability Compass tool
- Plan the unit using the Sustainability Compass. (attached)
- Set up centres, allocate resources.

**Teaching tips/ideas:**
- Use a variety of Sustainability and Systems Thinking Tools
- Plan age appropriate activities
- Hands on activities
- Provide opportunities for children’s own life experiences

**Reflection**

**Plusses:**
- Using the Compass to plan the unit gave us highlights of a more thorough and Systems Thinking approach to understanding nature (plants).
- Our young children’s learning was enhanced through all the facilitated experiences.
- The children were able to develop their skills in all areas of learning as well as begin to develop habits in terms of sustainability at such early age.
- Planning with a colleague and co-teach. Great ideas come out of collaboration!

**Challenges:**
- We used the compass to plan the unit, but we did not share the tool with our young children.
- Very ambitious unit.
- Timing.

**Suggestions for other practitioners and educators:**
- Plan collaboratively.
- Co-teach.
- Brainstorm ideas and choose the most appropriate Sustainability and Systems Thinking tool for your unit/lesson plan.
- Compile evidence of students’ progress to scaffold learning.
Evidence and Resources:

Gardening

Sorting:
Animals that eat plants
Animals' habitat
MAKING PAPER WITH RECYCLED PAPER

LOOKING FOR PATTERNS AND COMPARING
Case study submitted by: Mariana Estrada Leyva, 2017, while serving as Early Years Teacher at International School of Havana, Cuba

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