# Grade 4 Spanish IPC Unit: Energy

(Submitted by Eileen Cabrera Chávez, 2017, while serving as Spanish and EAL teacher at International School of Havana, Cuba)

| Tool(s) used:            | ● Sustainability Compass  
|                         | ● Pyramid Lite (VISIS)  
|                         | ● Triangles Game  
|                         | ● Clock Partners  
|                         | ● Idea Incubator  
|                         | ● Y Chart  
|                         | ● Clap once  
|                         | ● Casual Connection Circle  
|                         | ● No talking collaboration |

| Purpose of using tool:   | ● Research  
|                         | ● Generating Questions  
|                         | ● Synthesizing Thinking  

**Overview:**

The selected tools to carry out this project were useful to strengthen students’ knowledge on the issue and to support learning. They made this activity enjoyable for the students and facilitate understanding.

I wanted my student get familiar with system thinking and the Sustainable Developmental Goals in order to designed a more detailed project in the community if possible. The use of the Triangle Game, the Sustainability Compass and the connection circle were very helpful and facilitate understanding.

The project was aligned with the IPC unit Energy. One of the developmental goals is the access to a sustainable modern and safe energy. Based on this and what they had learned in IPC the Pyramid Lite was successfully completed. The students ‘ideas were great! The Clock Partner tool gave them the opportunity to work with different classmates sharing knowledge, points of views and ideas.

<table>
<thead>
<tr>
<th>Context of lesson/case study:</th>
<th>Spanish First Language classroom</th>
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<tr>
<td>Participants (# and description):</td>
<td>Grade 4 Spanish First Language students (17 students and Spanish teacher)</td>
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**Topic, Theme, or Key Understanding of unit/project:**

Topic 1: IPC Energy

The project was to establish a curricular link among the IPC’s unit “Energy”, the Sustainable Development Goals and Spanish First Language. With this project my students got familiar with the Sustainable Developmental Goals, apply their previous knowledge from IPC and at the same time their Spanish vocabulary increased because they learned new words and used tenses studied in classes.

| Length of unit/project: | Project: 2 weeks (5 class periods) |
## Resources/materials & setting required:

<table>
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<tr>
<th>Material:</th>
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<tbody>
<tr>
<td>• Poster paper</td>
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<tr>
<td>• Markers</td>
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<tr>
<td>• Sustainable developmental goals coloured cards</td>
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<tr>
<td>• Brochures with sustainable developmental goals.</td>
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<tr>
<td>- Objetivos de Desarrollo Sostenible, donated by the UNO. (Spanish Version)</td>
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<tr>
<td>- “El Mundo que Queremos”, created by the Movimiento mundial por la infancia de Latinoamerica y el Caribe MMI-LAC. Octubre 2014.</td>
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<tr>
<td>• DVD Agenda 2030 “Para el desarrollo sostenible” from the United Nations.</td>
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<tr>
<td>• Reading “Importancia del Ahorro de Energía”.</td>
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<table>
<thead>
<tr>
<th>Setting:</th>
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<tbody>
<tr>
<td>• Grade 4 classroom</td>
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<tr>
<td>• Playground</td>
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<tr>
<td>• Stage</td>
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## Lesson Plan/Description of the Project:

### Lesson 1
- We went to the school’s stage and sit in a circle to brainstorm about what is a system.
- They perform the Triangle Game which they enjoyed. They were able to see how all is related and understood how a system functions.
- After a brief introduction and explanation to sustainable developmental goals my students choose a number from 1 to 17 and were given the corresponding goal in a card. They read and later each of them gave a brief description of their goal to the rest of the group. (While doing this activity I realized the vocabulary used was difficult for my students and I decided to look for more friendly version of these goals)

### Lesson 2
- At the beginning of the lesson we did the Clock Partner tool.
- They were asked to find their clock partner # 2 and read the introductory part of the brochure “El Mundo que Queremos” created by the Movimiento mundial por la infancia de Latinoamerica y el Caribe MMI-LA. Octubre 2014.
- Each student received a sustainable goal’s card to read and analyse to later exchange with their Clock Partners # 8. (This part of the class was to make my students clearly understand the goals which were not very clear in the previous class).
- Later they were asked to line up and according to the number of the goal they had, they form two lines and stand face to face. Odd numbers to the right and even numbers to the left. They enjoy getting ready for the Idea Incubator and it was good to see then asking each other the meaning of (par /impar) the translation to even and odd in Spanish.
- After the incubator they were divided into two different teams and debated about what they have learned from the learning strategy used. (The debate is one of the abilities they need to develop in Spanish)

### Lesson 3
- At the beginning of the class I gave a brief explanation about the Sustainability Compass.
- Then I asked my students to find the corresponding word in Spanish for each of the Sustainability Compass parts. They came out with very good translations which were used in the posters.
In 2 teams made of Clock Partners 9-10-11-10 and 3-4-5-6 they complete the Sustainability Compass Chart with the goals given in picture coloured cards taken from a Spanish flipchart provided by a United Nation group who visited the school. While they were completing the Sustainability Compass I was walking around the class observing their performance and it was surprising to see that there were some students who were taking the leader role of the activity. However, there were other students who did not understand or were not sure of what to do and remain quiet.

I asked those quiet students to complete a Y chart in pairs to define sustainable development and two other students who were having difficulties in understanding the project were asked to write a paragraph about “How do they imagine the world into 50 years?”

The two compasses and the Y chart were successfully completed. A member of the team explained why they decide to place the goals in the different parts of the Sustainability Compass. The writing of the paragraph was send as homework.

Lesson 4

The class started by playing the video of the Triangle Game they did on the first class for them to see how a part of the system affects other parts and the rest.

Later I showed a picture with an example of a Casual Connection Circle for them to have an idea of what were they will be doing.

The poster for the connection circle were previously prepared to save time. Another set of cards with the goals were placed around the circle in clock wise order. The challenge in this activity was not to talk to each other. (It was difficult for them to remain in silence because they wanted to give reasons of their connections and at the same time say they did not agree with their partners’ connections).

After this activity it was time for them, in their teams, to reflect and discuss on the final results of the connection circle. Later they share with the other group to check the connections done.

This activity brings about positive discussions among the students.

Lesson 5

They brain-stormed about the topic Energy and the importance of saving it which was very easy for them because they were familiar with it, but the challenge was to do it in Spanish.

After that they were asked to find their clock partner # 7(The number that Energy has in the sustainable goals) and read in pairs “La importancia del ahorro de energia”.

The next activity was a whole class brainstorming in which they had to give ideas answering the question from the Pyramid Lite.

In group of four they were asked to fill-in the Pyramid Lite and get ready to present it in front of the class.

Oral presentation of the Pyramid Lite.

Teaching tips/ideas:

Before applying any of the system thinking tools it will be good to analyse if it is the correct tool to use. Think about what you want your students to learn or accomplished.

While or before planning your project take a look at all the System Thinking tools and learning strategies, because it is possible and useful to use some in the same activity. It makes learning exciting and enjoyable.

Reflection

Plusses:

The use of the tools was significant because they made learning challenging and enjoyable. The tools where appreciated by the students because they learned something new in a new different way.

Learning about the sustainable developmental goals make my students participate in debates, share ideas and point of views at their own thinking level. This was a very beneficial task because somehow they are more aware of the great importance of these goals.
- It was good to see how easy the use of the tools and learning strategies for my students was.
- They did something different in the Spanish class. Activities were not related to the subject itself but language abilities were practiced in the project.

**Challenges:**

- In the draft of the planning I chose some tools to carry out the project. Later while the planning was on going I decided to change, so the project was carried out implementing tools that were not planned this was risky but the outcomes were satisfactory.
- For this project I choose the Grade 4 class and our lessons are late in the afternoon and one is first period in the morning. At those times of the day my students were tired and it was difficult to motivate them to start the class.
- I started the project using a brochure donated by the UNO in which the vocabulary was difficult for my grade 4 students to understand I should have thought of that before.
- For the performance of this project it was necessary to be flexible and reschedule the Spanish lesson plan.

**Suggestions for other practitioners and educators:**

- Evidence and Resources:

  **Triangles Game:**

  - Starting the activity
  - All students moving
  - All students moving
  - When this student moved the system stopped
Individual Reading of the Goals:

Sustainability Compass:
Ahorrar Energía

[Image of a hand-drawn diagram related to energy conservation]

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