### School Strategic Plan: Empowering Students to Become Global Citizens Through the Columbus Way

(Submitted by Jose Vega, 2018, while serving as Science Teacher and Environmental Strategic Plan Leader at The Columbus School, Colombia)

| Tool(s) used:          | • Sustainability Compass  
|                       | • Pyramid Lite (VISIS)  
|                       | • Systems Iceberg  
|                       | • Behavior Over Time Graphs  
|                       | • Causal Loop Diagrams  
|                       | • Triangles Game  
|                       | • Ladder of Inference  
|                       | • School Self-Assessment  |

| Purpose of using tool: | • Strategic Planning  

**Overview:**
The purpose of using the various systems tools were to help our school strategic plan team refocus their efforts into a more streamlined vision. A vision that was more collaborative and allowed different members to work on common goals that impacted student learning and students experiences.

| Context of lesson/case study: | Strategic Plan group over three half day sessions. These are the leaders of specific school-wide initiatives as outlined by our “Columbus Way” which details our goals and priorities.  

| Participants (# and description): | 12 participants:  
|                                   | • Superintendent  
|                                   | • Elementary Principal  
|                                   | • Middle School Principal  
|                                   | • High School Principal  
|                                   | • Head of Business  
|                                   | • Head of technology  
|                                   | • Athletic Director  
|                                   | • Head of Communications  
|                                   | • Foundation Director  
|                                   | • Environmental Initiative leader  
|                                   | • Head of Human Resources  
|                                   | • Director of Learning  
|                                   | • Independent Student Project Teacher  

| Topic, Theme, or Key Understanding of unit/project: | Empowering Students to Become Global Citizens Through the Columbus Way  

| Length of unit/project: | Three separate half day meetings over three months, still have not concluded process. This team meets once a month.  

| Resources/materials & setting required: | Google Slides presentation file: [Timoneros Systems Thinking PPT](#)  
|                                           | Butcher paper  

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Empower & Connect Learning Communities to Educate & Act for Sustainable Future  
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Lesson Plan/Description of the Project:

SESSION 1 AUGUST 31, 2017

Managed sessions with a ppt. Began with title slide (Empowering Students to Become Global Citizens and Pursue Excellence Through The Columbus Way) which provides context for meeting strategic Plan Committee, which is called Timoneros (helmsman in English).

Systems Intro: I briefly stated what systems refers to; Systems allows us to think and operate in a complex and interdependent world. Since this was a strategic plan meeting I provided a brief overview of the school’s 5 main goals which are to be achieved through 8 various initiatives or groups.

Goals: Stated goals for the day and near future:
- Define how your initiative’s actions empower students to become global citizens
- Use systems tools to make a plan to action related to today’s goals
- Integrate systems into your daily practice

Mantras: Introduced and elaborated mantras as a way to set minds at ease:
- Embrace the complexity
- Simplicity is just on the other side of complexity
- It depends...

Define Sustainability: I asked everyone to individually define sustainability in broad sense. Next, share as a group, then find commonalities and define as a group.

Define: Next I defined sustainability according to Compass Education as a way to clarify how we were going to use the term.

Visual: I went visual to show what sustainability is and is not with simple graphics.

A Sustainable Society: Showed characteristics of how Compass Education views a sustainable society (slide 12), and asked participants to share thoughts on keywords.

Triangles Game: Used Triangles Games to reinforce systems characteristics. Described rules and purpose of game, went outside and ran 3 simulations.
- Plotted connections visually in number wheel
- Debrief: allowed for comments from participants and reinforced some systems characteristics
  - Small movements create big impacts
  - Some parts in a system have the most influence (highest leverage)
  - A system is a web of complex interdependencies
  - One part’s behavior can cause unexpected results or unintended consequences
  - Systems have delays
  - The behavior is driven by the system, if want to change the behavior, change the system

Leverage Points: Introduced concept of leverage points as a means to effectively make progress towards our overall goal of producing students as global citizens. Will circle back to leverage points.

Pyramid: Introduced the Pyramid as a way to take action through use of several systems tools. Provided overview while revisiting our central challenge or goal: helping students become global citizens.

The Sustainability Compass: Level 1 what is happening? Introduced the Sustainability Compass as a way to map out what is currently happening. We set up around the room the materials necessary to map as a group. 4 large papers as their own quadrant. Discussed what we saw and identified trends. Here I mentioned behavior over time graphs and causal loop diagrams, but we did not engage.

Iceberg: Level 2, why is it happening? Intro Iceberg including extensive example from our own Ecolumbus initiative. Allowed time for each timonero (initiative leader) to begin filling out their own Iceberg according to their own work as it pertains to the overall goal of creating global citizens.
End session 1: 4 hours

SESSION 2 OCTOBER 20, 2017
Coaching, Systems Iceberg, and action plan/strategic plan. Session two was set up as a three-station rotation, where each initiative leader or pairs of strategic leaders met with three different people (also strategic plan leaders) for a different purpose. Station 1 was to sit down with a coach to explore initiative ideas through reflective coaching questions. Station 2 was an Iceberg review with myself and my co-initiative leader from ECO-lumbus (environmental initiative). At this station we helped others through completion or analysis of their Iceberg as it pertained to their initiative and our central challenge of creating global citizens. The third station was for strategic planning conversations about past and present conditions of individual initiative plans. The rotating stations were reflective in nature, and allowed several members to think about their role in a larger picture.

End session 2: 4 hours

SESSION 3 NOV 3, 2017
Reviewed Iceberg and mental models from last two sessions.
- Direct instruction on what is the ladder of inference, using videos and examples
- Video debrief with shoulder partner
- How might the Ladder of Inference help us become more empathetic?
  - Avoiding “my initiative”
  - How this relates to filtering in what you want to see during recruiting
  - “I” sentence stems are problematic since our school has 3 cultures/can be seen as preventing those assumptions by self questioning to arrive at the “we”
- Goal is now for each Timonero (strategic plan member) to complete a Ladder of Inference template to determine how mental models affect their work.
- How might working with an aligner (principals that aren’t initiative leaders) create a more complete Ladder of Inference?
  - Can be difficult to check your own assumptions
  - Add in more points of view
  - Aligners have seen the work of many initiatives and can broaden perspective

Look at example created by ECO-lumbus:
- Look at our identified mental models in Iceberg
- Understand the beliefs, assumptions, meaning associated with mental model in LOI
- Pair-up: Aligner with Timonero copies template and fills it LOI in order to examine 1 mental model at a deeper level.

End session 3: 2 hours

Yet to be finished, SESSIONS 4 and 5 ARE TO COME...

Teaching tips/ideas:
- All systems tools must be accompanied with relevant examples
- “I do, we do, you do” as an instructional strategy for complex systems tools
- Scaffold for your audience; my audience included several non-teachers who don’t engage in regular professional development

Reflection

Plusses:
- Having a central challenge or questions was critical to tie everything together. For our purpose, we
chose “Empowering Students to Become Global Citizens and Pursue Excellence Through The Columbus Way.” This was complex, but allowed every participant, whether they have direct contact with students or not, to force themselves to see their work with a focused goal.

- Introducing tools requires clear examples of how to use the tools. I created examples to share after introducing the tools. We also created templates that allowed members to practice while having a resource on the same page.
- Our second meeting was more reflective in nature while using the iceberg as a way to anchor our conversations.
- Tools were central to how to use systems. Participants liked the focus on doing versus listening and thinking about systems. The tools provide interactive and collaborative time within the learning.
- Building in intentional reflection and processing of tools is critical. This is something that we had to build in and didn’t foresee originally. We had several partner discussions.
- Fortunately most in our group were open-minded, we didn’t have to “water the rocks” as Mike Johnston would say. This made engagement fairly high.

Challenges:

- Continuity is important for learning systems thinking. We had lots of application time after introducing systems tools and showing examples. But our strategic plan meetings are once a month and if we happen to cancel one, that severely impacts our continuity with content and motivation to continue doing systems thinking.
- The scope of this goal was to complete the Pyramid, which was ambitious. One must guarantee time in order to complete a Pyramid.
- Working with non-teachers (many strategic plan members are not teachers) requires a balance of theory and practice. This is where focusing on doing with the tools was helpful.
- I would reconsider how many templates we have. We tried to use the saying, “if it’s not written down it doesn’t exist.” We wanted to capture thinking. Each teacher could decide on the outcomes and products when using the tools.

Suggestions for other practitioners and educators:

Although I felt I streamlined the teaching of systems by embedding the theory into practice around a central question, the more limited the scope the more successful one can be. This is not meant to discourage being ambitious with systems, but rather to encourage considering the purpose of using systems and planning accordingly for that. I would not recommend teaching systems for the sake of learning systems, but rather for intended outcomes or for encouraging thinking like a systems thinker, which requires more time, practice, and opportunities to use tools.

Evidence and Resources:
How to Embedding Sustainability in school culture

Strategic Plan Group
Timelines: Sign, principals, HR, Finance, foundation (social), 4H, Life (youth, HR), communications, Values (grants, awards)

Education + Operation
Informal → Formal (institution)

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