

Whole-school PD: Introducing Systems Thinking

by Samantha Peiffer

Tool(s) used:	<ul style="list-style-type: none"> • Sustainability Compass • Systems Iceberg • Systems Mapping
Purpose of using tool:	<ul style="list-style-type: none"> • Generating Questions • Synthesizing Thinking • Guiding Discussion • Professional Development <p>Overview: We used introduced three systems thinking school to our school community to introduce Compass Education and Systems Thinking into our educational mindset. We chose the Compass, Iceberg and Systems Mapping (basic) to demonstrate complexity and interconnectedness of our school community.</p>
Context of lesson/case study:	Professional Development
Participants (# and description):	19 participants, general director, principals from elementary, middle school, school counselor, library tech specialist and teachers across all departments.
Topic, Theme, or Key Understanding of unit/project:	Provide an overview of Compass Education and introduce three Systems Thinking tools.
Length of unit/project:	1 hour
Resources/materials & setting required:	Posters, youtube video, compass template, iceburg, school related vocabulary, string, post its in a classroom and utilizing outside space.
Lesson Plan/Description of the Project:	
<p>Compass Education Training: January, 2017 Facilitators: Ella Williams, Samantha Peiffer, Theresa LeValley Audience: Colleagues at Colegio Interamericano Duration: 1 hour Learning objectives: 1. Define sustainability and systemic thinking 2. Apply three systemic thinking tools in the classroom/committees/leadership *Compass *Iceberg thinking systems *Web 3. Reflect and make a plan to move forward with the newly acquired skills Materials: Video of parachuting cats Posters School related words Post its Markers and pencils String Iceberg Compass templates</p> <hr/> <p>Activities: (Ella) 5 min. Go over COMPASS Education and the learning objectives from the posters. Define sustainability and systemic thinking on a piece of paper (30 sec.). Time you, stop, and switch papers explain the other person's definition... switch again. Put your definitions on the posters! (Theresa) Summarize: Explaining someone else thoughts allows you to give up control/ownership of your own thoughts and have a more profound connection to other's perspectives. (Sam) Reveal posters with the definitions... Sustainability: Compass definition- A set of systems conditions that allows humans to flourish indefinitely. (Emphasis: not the right definition, just theirs) For example, some disagree with diction of humans Systemic Thinking: a collaborative analysis that allows thinkers to examine ALL aspects in the situation that would affect the outcome in a positive or negative way. When individuals have a better understanding of systems, they are better able to identify the leverage points that lead to desired outcomes.</p>	

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(Ella) 5 min. Parachuting cats video (youtube) <https://www.youtube.com/watch?v=XbK9T7Df7uw>

Whole group debrief:

(Theresa)

*What are some take-aways from this video?

*What is an example of linear thinking? (spraying for malaria and mosquitoes)

**Turn and talk to a partner about a time where you were thinking linearly, and had unintended consequences AKA "parachuting cats."

**For example: Indonesia story (mosquitos, malaria, DDT, roofs caved in, caterpillar population exploded, bees died, geckos eat caterpillars and are poisoned, cats ate geckos and then died, rat population increased, bubonic plague, ends in parachuting cats to kill the rats, WHO played a role) – Stories are important in your toolbox in order to introduce common vocabulary in a memorable and engaging way

(Sam)5 min. Introduce the COMPASS (4 points Nature, Economy, Well-being, Society). Introduce the tools you can use in the classroom to promote systemic thinking. (Compass, Web, Iceberg)

(Ella) We chose vocabulary associated with our school to help our group make a deeper connection and practice systemic thinking...we DON'T want any "parachuting cats" :) We will use this vocabulary in the following 3 break out sessions that will last approx. 10 minutes each. Each of us will facilitate and when you can hear me "clap once, twice etc." we will rotate.

school words click here

Ella (1 large group) 10 min

Sam (3 groups) 10 min.

Theresa (small group-all) 10 min.

Compass:

Chart paper with envelopes that have pre-sorted vocab words. Groups/teams must sort the words silently?

Gallery walk (host and guest).

*explain the teaching tool and talk about how to use the gallery walk

Iceberg:

Go over poster and define each category.

Create mini-posters with different topics (silently writing what they think goes in each).

Come up with mental models at the bottom.

Web:

Choose the talking points (vocabulary words)

Assign words

Verbalize how they connect and then connect

Show cause and effects by moving physical bodies

**Explain the triangles game, cause and effect etc.

To discover a structure/tool in which to guide your systemic thinking practice. To help consider ALL perspectives. Facilitates empathy and understanding of your community in a very passive, compassionate way.

Systemic thinking and getting in touch with the mental models that are an integral piece of the structure...generally it points back to education.

Cause and effect and the interconnectedness from systemic thinking.

10 min Wrap-Up:

(Sam) Story- Tie this into linear vs. systemic thinking video about parachuting cats.

(Ella)Think- pair -share about how these activities promote systemic thinking.

Share with whole group

(Theresa)Why is systemic thinking an important part of our society and global view?

Exit Ticket: "Parking-Lot Reflection," please take a moment to reflect on your learning from the workshop. On 3 post-its, please write ! (something that surprised you) ? (something you have a question about) :) (something you will take away and use from this workshop). You are free to leave once you have posted. Or you may stay, wait to see others' thoughts and reflections and then go.

Reflection

Plusses:

We had really positive feedback, our planning and resources from the training helped us be very effective in delivering maximum take away from a really limited time slot. We were re-inspired to use Compass and these models in our leadership groups and classrooms all over again.

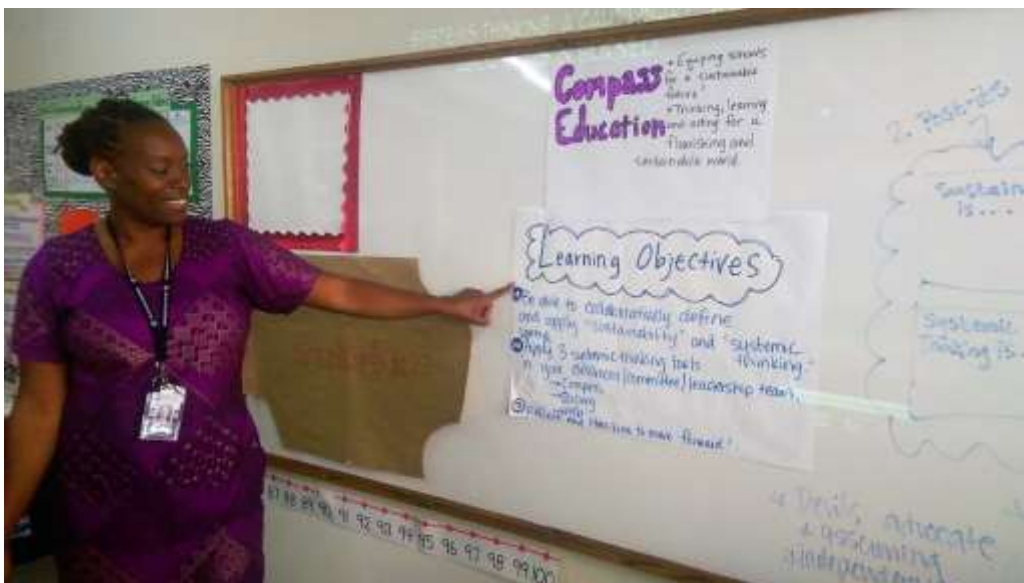
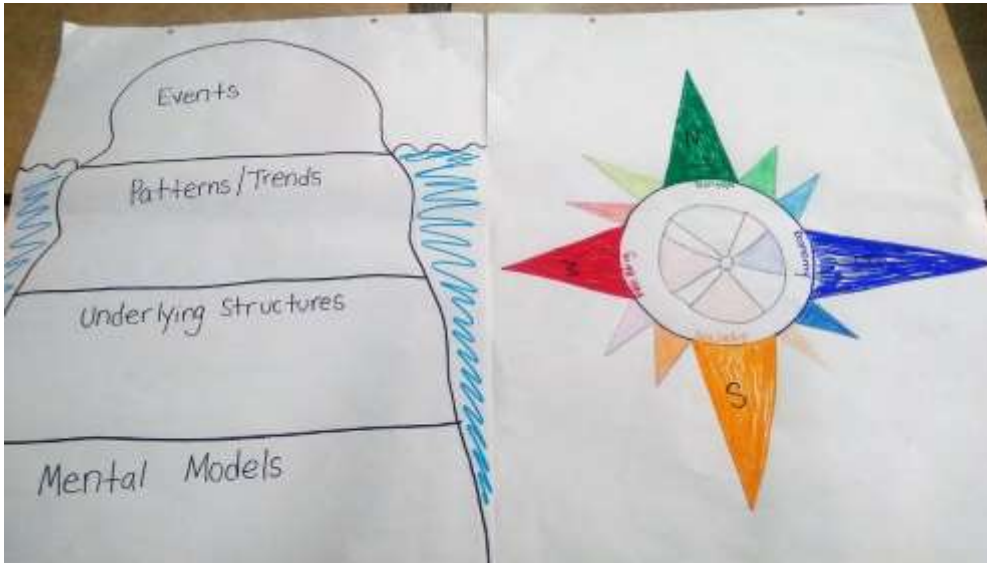
Challenges:

In the future we would extend the time of our training. Change and do a Compass introduction and Iceberg in small groups rotating.

Suggestions for other practitioners and educators:

They could use this as a great introductory tool, but would recommend to use a longer time period to introduce and to do the Systems Mapping in whole group.

Evidence and Resource:



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Case study submitted by: Samantha Peiffer, 2017, while serving as Grade 3 Subject Teacher at Colegio Interamericano de Guatemala

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