Breakout 8A

Essential Principle: The atmosphere constantly interacts with other components of the Earth system. (Second Chance)

Group Participants: Wendy Abshire (Facilitator), Kristin Conrad (OPL), ... (apologies that I missed the introductions of participants...)

Introduction: Hello, online participants. My name is Kristin Conrad, and I will serve you as group 8A's Online Participant Liason (OPL). I will both capture the gist of the discussion, and will relay selected comments from online participants, back to members of this breakout session. We hope that you will enjoy and participate in this important discussion.

NOTE: Please refresh your browser (PCs use F5 key; Macs use function+F5) every 30 - 60 seconds to view the most recent comments.

BEGIN BREAKOUT SESSION REPORTING

General comments before going into specific FCs

- There is a proposal to combine 3, 5, and 6.
- There is a proposal to bring in Goddard examples under 1
- Need to introduce "feedback" concept
- The group is pasting (between documents) specific comments that came in from the Goddard group as examples under some of these FCs. Unfortunately, I cannot type them in by hand that quickly. I'll try to get the gist...
- Group is combining some of these FCs, so I will start a new list below current version.
- "Spheres need to be defined
- FCs 2,3,5,and 6 were about ways of describing/teaching about a "system"

The group is spending the first 10 minutes writing their comments and edits on sticky notes to revise the FCs, below. I will write the edited statements and some comments below each original. Stay tuned...

#1 The atmospheric processes interact and transfer energy and matter with other components of the Earth system such as: water, ice, land, and living things. For example, hurricane formation, carbon cycle, etc.

- delete hurricane formation
- separate into the different Goddard examples
- drop "interact"
- #2 Prediction of atmospheric phenomena requires knowledge/understanding of the components and the interaction of components of the system. Example, blizzards.
 - delete this it does not belong under this EP.
 - this is too detailed for this level
 - · Blizzard is not a good example
 - •

#3 Interactions of components of the Earth's system produce (emergent) phenomena unique to the system. For example, abrupt climate change. (another example would be the ozone hole)

- abrupt climate change already discussed in another principle
- delete ozone hole reference
- some people do not like the word "emergent"
-could result in phenomenon that are unique
- #4 Sustainability requires understanding and reaction to the system. The planet cannot be maintained/sustained without humans changing their interactions with the Earth system.
 - · deleted this one

#5 Within the atmosphere there are biogeochemical cycles which vary across timescales.

slight rewording

- #6 Historical interactions between the atmosphere and other systems affect current behavoir of the atmosphere
 - · keep this
- #1: Atmospheric processes interact with the other components of the Earth system via both energy and matter transfer such as: living things, water, ice, and land.
 - NASA/GODDARD examples G1 G3 are here...
- #2: Delete
- #3: Interactions of components of the Earth's system cause changes and produce (emergent) phenomena unique to the system.
- #4. delete
- #5. There are biogeochemical cycles that vary across various time scales that affect the atmosphere.
- #6. Historical interactions between the atmosphere and other systems affect current behavoir of the atmosphere

Online Viewers: Please use the "Add Comments" button below to add your comments and suggestions.