

Simple Games for Explaining Sustainable Development

Simple Games for Explaining Sustainable Development

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Paper Tear Exercise

- Your goal is to create with a piece of paper precisely the shape I am thinking about.
- I will tell you what to do.
- Follow my instructions exactly.
- Do not ask questions.

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Features (Merkmale) of Poor Communication

- I did not tell you the final objective; I only tried to describe how to achieve it.
- Therefore I was not able to use your creativity.
- The words were ambiguous (mehrdeutig).
- Communication was only in one direction, not interactive.
- There was too little time.

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When I hear, I forget
When I see, I remember
When I do, I understand

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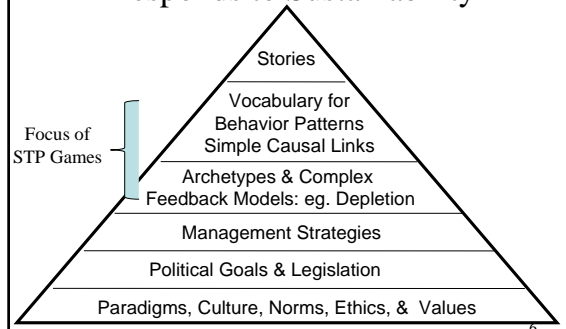
The Impact of Games

Games have a positive educational influence that no one can appreciate who has not observed their effects. Children who are slow, dull, and lethargic; who observe but little of what goes on around them; who react slowly to external stimuli; who are, in short, slow to see, to hear, to observe, to think, and to do, may be completely transformed in these ways by the playing of games.

Jessie H. Bancroft, *Games for the Playground, Home, School, and Gymnasium*, The Macmillan Company, NY 1920.

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Ways a Society Perceives and Responds to Sustainability



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Arms Crossed Exercise

- You are able to change your habits (*Angewohnheiten*).
- But it requires careful thought.
- At first you may make mistakes.
- And at first it will make you uncomfortable (*unbequem*).

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Outline of the Presentation

- Functions of games
- Description of the *Systems Thinking Playbook*
- Components of the game experience
- The maximum debriefing cycle
- Other issues
- Examples of short games
- Informal discussion

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Functions of Games

- **Social & psychological goals - introduce the participants to each other, develop group goals, release physical energy, promote trust.**
- **Illustrate important points about communication, group process, paradigms, and cause-effect.**
- **Provide a shared vocabulary, shared metaphor.**
- Explain the past behaviors of a system.
 - Metaphoric vs literal games
- Test the effects of alternative policies.
- Predict future behaviors of a system.

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Description of the *Systems Thinking Playbook*

- The book contains 30 short, well-tested games along with detailed instructions for introducing, running, and discussing them.
- Included is a two-hour video that illustrates how each game can be used.
- It has been translated into Russian, Chinese, Spanish, Thai.
- It is distributed by The Sustainability Institute
 - http://www.sustainer.org/tools_resources/games.html
- Participants of this workshop can buy the book with a discount.

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Components of the Game Experience

- The expectations, experience, emotions, and other information brought in by participants.
- A sense of importance and utility conveyed by the operator.
- The frame which links the game to real life.
- The experience of the game:
 - Mechanics, supervision, goals, materials, participants, feelings.
- The logical and emotional features of the debriefing.
- Efforts to get participants to commit to making change.

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The Maximum Debriefing Cycle: 7 Questions

- What behaviors (übliche Verhaltensweise) occurred in the game?
- Do you see those behaviors in real life?
- What features of the game caused those behaviors?
- Do you find those features in real life?
- What features of the game could be changed to achieve better behaviors?
- What features in real life could be changed to achieve better behaviors?
- Are you committed to making these changes?

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Other Issues

- Suitability for different ages, genders, and cultures
- Responsibility of the operator:
 - Safety
 - Competence (Rule of 10)
- Literal versus metaphorical games
- Developing a balanced learning experience
- Professional societies
- Sources of games:
 - *Games Trainers Play*, Scannell and Newstrom
 - <http://www.abebooks.com/>

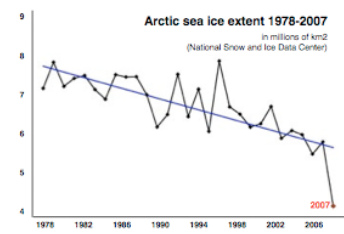
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Examples of Short Games

- Paper tear
- Arms Crossed
- Frames
- Hands Down
- Circles in the Air
- Avalanche
- Paper Fold
- 1-2-3 GO!
- Triangles

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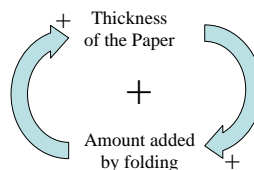
Behavior of the Ice Cover



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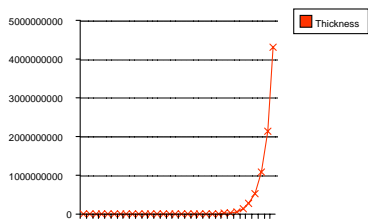
Paperfold Exercise

- After 4 folds the paper is 1 cm thick. How thick will it be after 29 more folds?



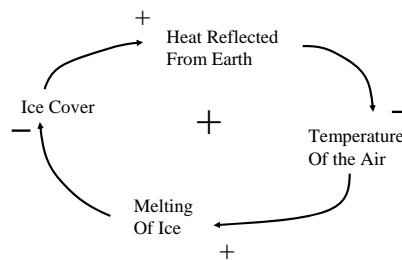
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Behavior of the Paper



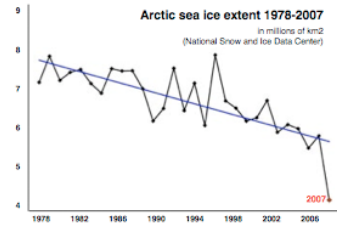
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Ice Cover Feedback Loop



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Behavior of the Ice Cover



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