How does Forest Pedagogy contribute to Education for Sustainable Development (ESD)?

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Overview

1. What is sustainable development?
2. What is successful learning?
3. How does Forest Pedagogy contribute to both sustainable development and successful learning (i.e. education)?
4. Conclusion & Discussion
1. What is sustainable development?

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Earth Overshoot Day 2017: 2nd August
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Could you please stop breathing for 5 minutes?
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«I love the fact that human genomes can be found in only about 10 percent of all the cells that occupy the mundane space I call my body; the other 90 percent of the cells are filled with the genomes of bacteria, fungi, protists, and such, some of which play in a symphony necessary to my being alive at all, and some of which are hitching a ride and doing the rest of me, of us, no harm. I am vastly outnumbered by my tiny companions; better put, I become an adult human being in company with these tiny messmates.»

2. What is successful learning?

John Hattie:
effective learning = successful social interaction.

2. What is successful learning?

John Dewey (1859 – 1952):
«Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results. »
2. What is successful learning?

Stuart Brown

«Humor, games, roughhousing, flirtation and fantasy are more than just fun. Plenty of play in childhood makes for happy, smart adults — and keeping it up can make us smarter at any age.»

(http://www.nifplay.org/, see TEDtalk
https://www.ted.com/talks/stuart_brown_says_play_is_more_than_fun_it_s_vital?language=de)
2. What is successful learning?

Manfred Spitzer

«Only when I touch water can I learn what it means that water is wet. At the same time I hear it gurgle or drip, I see waves and reflexes, I smell the sea or the gras at the river bank. All this taken together gives me a holistic impression, which creates in me – together with lots of other similar experiences – a complex and differentiated representation of water.

If I do not (yet) have these inner representations, I cannot understand the most colourful pictures and shrill sounds coming from my computer.»

2. What is successful learning?

Learning and learning environments

For learning to be successful you need: a *stimulating, rich* learning environment otherwise the modification of synaptic connections in the brain doesn’t occur.

(Source: Wilhelmus Storz: Die neuronale Plastizität

2. What is successful learning?

What is needed for successful learning?

• Successful authentic social interaction
• Systemic understanding of the interdependence of human beings
• Doing, creating, shaping and experiencing enable and support learning
• Playing makes you clever
• A stimulating, rich, varied learning environment
• Touch is not optional
2. What is successful learning?
3. How does Forest Pedagogy contribute to both sustainable development and successful learning?

‘best practice’ forest pedagogy offers provide:

• A stimulating multisensorial learning environment
• Strong social interaction in a real-life environment
• A strong emotional connection to the learning environment
• Experiential, hands-on learning with authentic role-models
• A systemic understanding of human-nature interaction and sustainability as a concept (sustainable forest management)
• Opportunities to play

effective learning which enables feedback & transfer into daily life
Lernen mit der Natur
3. How does Forest Pedagogy contribute to both sustainable development and successful learning?

Holistic learning, just like that

«All aspects of the learner’s personality are stimulated and you don’t have to constantly think: have I forgotten something? (...) Every time when you go outside, you can tick every aspect. This is the beauty of it: it happens naturally without you having to push and pull.»

(Triny Gorza, nature based pedagogue, Schule Lorentzweiler, Projekt «Natur erliewan an der Schoul»)
3. How does Forest Pedagogy contribute to both sustainable development and successful learning?

Natur based learning promotes a lot (but not everything)

- Increases well-being
- Dampens stress
- Increases feelings of self-worth, self-confidence, self-awareness
- Increases creativity
- Improves motivation to learn and explore
- Strengthens self-discipline and self-reliance
- Improves concentration
- Can improve cognitive learning ability
- Improves language skills
- Improves social interaction
- Fosters co-operation

- Fosters communication skills
- Play is more varied, intense and creative
- Improves resilience against illness
- Kids move more outdoors
- Improves movement skills
- Improves environmental knowledge
- Kids who know more are less touchy, fussy
- The earlier the better
- Kids need perceptions with all the senses

3. How does Forest Pedagogy contribute to both sustainable development and successful learning?

Competences of successful forest pedagoges

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<th>The programme promotes environmental education skills for sustainable development in several of the following areas:</th>
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<tbody>
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<td>• Gaining knowledge</td>
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<td>• systemic / systems thinking</td>
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<td>• Future-oriented thinking</td>
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<td>• Cooperation</td>
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<td>• Participation</td>
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<td>• Developing empathy</td>
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<td>• Critical reflection about values</td>
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<td>• Planning and action</td>
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<td>• Taking on responsibility</td>
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3. How does Forest Pedagogy contribute to both sustainable development and successful learning?

And ESD?

In order to understand sustainability and live sustainably it is crucial to understand the fundamental systemic relationships, for example how human life fits in with the life-support system of planet Earth, society and the economy. Or, one cannot make sense of sustainability without a systemic ecological understanding.

Understanding such systems is a lot easier out in nature than indoors.

This means: there is no meaningful ESD without (nature based) environmental education such as forest pedagogy.
4. Conclusion & Discussion
Many thanks for your attention…. & questions