

Teaching Tips/Notes



Metaphors in Agroecology Education: One Personal Method of Learning

Metaphor: the application of a word or phrase to an object or concept it does not literally denote in order to suggest comparison. [Webster's Desk Dictionary, Gramercy Books, New York, 1993]

Among multiple methods of learning, personal metaphors created by students while walking the farm and rural landscape and while working on farms have been particularly useful in establishing identity with the context of farming and food systems. In the literature on metaphors and learning, there is frequent reference to the dominance of traditional "teaching and learning" by transmission of knowledge, while much less common is an appreciation of learning as a social process (Martinez et al., 2001). Educators in Finland refer to these two models as an "acquisition metaphor" and as a "participatory metaphor" (Paavola et al., 2003). They add a third metaphor that relates quite directly to our approach in the Agroecology MSc programme, that of "knowledge creation". It is within this third arena that we have assigned students to create their own metaphors while walking the landscape and exploring new places in the farm and rural community context. Some revealing examples are presented below.

Learning objectives are to 1) encourage students to observe carefully the physical landscape and especially its biological elements, 2) provide opportunity for personal identity with these elements in ways that are uniquely appealing so that they will dig more deeply into their own learning, and 3) offer safe space to present and discuss these individual metaphors within the immediate learning community as well as listen to others' creative ideas. We have successfully included this dimension with the initial transect walks across the farm and the rural landscape in several short workshops as well as in semester-long immersion courses in agroecology.

Methods for the discovery of personal metaphors are rather simple. We ask students or workshop participants to be alert observers as they traverse the landscape, and while they are soaking in the sounds, sights, smells, and feel of the experience to seek some element with which they have a particularly personal identity. This could be a plant, an animal, or a specific feature of the place. We ask them to remember that feeling, and to share it with the group when we reassemble, but only if they are comfortable doing so. Although we often use this exercise early in the schedule of a course or workshop, it is encouraging to observe the level of trust and confidence in the group that has often been built in a very short time, and this is related to other activities in community building [see Building a Social Learning Community, NACTA J., in review] and the abilities of the instructors to create safe space and an affirmation of individuals for their previous experiences and qualities that are brought to the group.

Outcomes of the exercise have been observed in a number of workshops and classes, but to date have not been adequately assessed in a systematic way. Probably the best indication of outcomes is to provide a number of specific metaphors that students created from the activity, several of them in a workshop on nutrient cycling in Tingvall, Sweden in a 2003 course.

As an agroecologist and sustainable agriculture advocate in my department, even among the grad students, I feel like that one brown and white cow in the herd of Holsteins that we visited; it seems like everyone must be looking at me.

I feel like that clump of perennial grass that is prominent in the pasture we walked through, with deep roots that go down into the soil and the history of Sweden, just as my own ancestors belong to this land.

When I walked by the dairy barn there were several swifts that flew out from their nests and then swirled around above me in the air; it seemed like I would like to be wild and free and be able to sail around like that and observe things from above.

Over by the milking barn there is a large manure lagoon above ground ... you have all seen it ... that is about 3 meters deep and 20 meters in diameter. On top there is a green scum or crust, and several small birds carefully walking around and picking up insects from this rich medium. When I am in

my department back on campus, I feel like those birds – there is useful stuff here to harvest, but any mis-step or reference to sustainability could send me into deep manure with my professors and colleagues.

These are exciting and even visceral types of identity with living entities in the environment on a dairy farm. They probe individual feelings and encourage a type of learning about oneself as a component of the landscape and its activities that would be inaccessible in a classroom, and highly unlikely on a field trip that turns into a lecture on cropping systems by the instructor or a farmer. We consider this a valuable stimulation for learning in agroecology.

References

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Martinez, M.A., N. Sauleda and G.L. Huber. 2001. Metaphors as blueprints of thinking about teaching and learning. *Teaching and Teacher Education* 17(8):965-977.

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