

Farm-school cooperation for sustainable learning

“How can we contribute to fostering hope, courage and resolve in children so that they may participate in a productive way in shaping their surroundings?” This was the question a group of teachers and students posed at the Agricultural University of Norway (now: Norwegian University of Life Sciences) in 1995. More precisely, the goal was to create pedagogical arenas to facilitate committed, caring and continuous work with nature, enabling an experience of connection and belonging which can serve as a foundation for sustainable education.

This was the start of our national project “Living School” (1995-2000) in which examples of such arenas were developed. One component consisted of schools using the school grounds as an extension of the classroom with school gardens as an essential element. Another component consisted of farms which developed an intensive co-operation with neighboring schools to allow the pupils to participate in taking responsibility for nature on a larger scale (Hugo 2000, Parow 2000, Jolly and Leisner 2000). It is this cooperation with farms, “The Farm as a Pedagogical Resource”, which we will present here (Jolly et al 2004, Jolly and Krogh 2010). We will describe some of the aspects of the work in Norway including our model for relationship-based experiential learning, site research on the relevance for sustainable education as experienced by pupils and former pupils, and also touch on recent development of this work in Tanzania.

On the basis of the first years of experience, we initiated courses for farm-school cooperation in 2000. The world of the teacher and the world of the farmer have similar challenges, but divergent cultures, frames and practices for learning. While small farmers in Norway have problems with recruitment and have also been marginalized in relationship to wages and positive interaction with the local community, the schools face problems with physical and teacher resources, relevance for daily life and motivation for learning. In Norway we have seen how these two arenas can supplement each other, providing a basis for concrete understanding of sustainability and motivating pupils to learn based on practical experience with societal relevance and mastery of skills. The farm can widen the scope of learning activities offered by the school and educate children/youth in a multiplicity of different forms of intelligence (Gardener 1983, 1999).

In order to implement such cooperation between schools and farms, we have offered accredited courses for the farmers and teachers through the University where they can develop a plan for integration of learning goals in the practical work of the farm. In these courses the teachers can obtain a basic understanding of the principles of sound environmental agriculture, whereas the farmers achieve insight in the goals and needs of the school. The participants are given a framework to form a lasting cooperation.

Research on this type of learning has given us the opportunity to develop a model for learning – relationship-based experiential learning – inspired by William James, John Dewey, Lev

Vygotsky, Maurice Merleau-Ponty, Abraham Maslow, Viktor Frankl, Roberto Assagioli, Aaron Antonovsky, Albert Bandura and others (Jolly 2009; Jolly and Krogh 2010). The foundation for our model is that the pupil forms relationships connected to the task: social relationships with fellow pupils, teachers and instructors such as the farmer; relationships to tools and development of physical skills; relationships to the elements in nature such as soil, plants, animals, minerals, and weather. Together the relationships form the context for the task which is being done. The farm and the farm production is also placed within the overall organization of society, through the simple mode of production (Krogh 1999).

Our model for relationship-based experiential learning builds upon the recognition that the ability to act is based on more than comprehension. Comprehension is important and necessary, but not sufficient to stimulate an impetus for sustainable action. The primary stimulus is triggered through meaningful participation in activities which have a clear and useful result. This gives emotional experience and empathy which nourishes inner motivation. The emphatic experience is immediately connected to the context of the activity. The clearer and more obvious the task tells about utility, connection to and benefit for someone or something, the better are the premises for inner involvement and consequently cognitive understanding. Humans are basically empathic and intuitive and their capacity to act is kindled through activities and experience which radiate positive effects. Feelings and participation must first be linked to positive experience and empathy. This nourishes the cognitive interest and also gives nourishment the inner motivation for and initiative to act sustainably. It is of little help to reflect critically without having something you are passionately concerned about.

Research from questionnaires and interviews with pupils and former pupils supports our experience that this type of learning is a vital foundation for future decisions towards a sustainable life-style. According to the results of the inquiry through questionnaires and interviews with pupils and former pupils this type of learning also exercises a lasting influence in determining future actions. Documented in an extensive case-study, it seems that seeds have been sown for development of citizens who think and act according to the viewpoint of sustainability.

The knowledge gained from the Norwegian project will be used in a project which starts in Tanzania in 2012. Both Norway and Tanzania are characterized by migration from rural to urban communities and decreasing interest among youth for agriculture as an occupation and educational path. In Tanzania this development is of critical importance. At the same time as the population increases, the climate changes lead to more unstable and generally poorer conditions for agriculture. The need to develop an ecologically and economically sound sustainable agriculture is precarious and the social-cultural sustainability in agriculture is threatened by the advanced age of farmers. Farm/school cooperation in Tanzania will focus on the building of skills and knowledge in ecological and economic sustainable agriculture connected to the best

practices with pioneer farmers as instructors. Experience from the farm tasks is used in school lessons to improve the pupils' level of performance, as also shown in the project "Closing the Achievement Gap (Lieberman and Hoody 1998).

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