

## **Making Sense of Place: School-Farm Cooperation in Norway**

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### **Abstract**

*This paper describes the Norwegian "Living School" national project and its related university extension course, "The Farm as a Pedagogical Resource." Since the national initiative began in the late 1990s, more than 250 separate local projects have been developed through the course. Here we focus on one such project in the community of Aurland. It illustrates the basic principal of "rooting" students in life processes and in the places in which they live through participation in practical, meaningful work outdoors.*

**Keywords:** [school-farm cooperation](#), [place-based education](#), [sustainability](#), [school gardens](#), [practical learning](#), [Norway](#), [agriculture](#)

*"I can't wait for Saturday. It is going to be the best day of my life!" said a fifth-grader, as she and her class were preparing to sell plants at the local market in the town of Aurland, Norway—plants that they had produced themselves in cooperation with the agriculture school next door. While all the grades in the school have their own plots in the school garden, the fifth grade potted many of their plants and made a stand in the market in the middle of town on a Saturday. They inform their customers about the plants and what they can be used for without the teacher having to give them homework. This is real life and the students are responsible not only for producing the plants, but also for telling their customers why they should have them in their garden.*

## **Introduction**

In Norway there is a growing movement to develop collaboration between farms and schools. The university extension course, "The Farm as a Pedagogical Resource," held in regions across the country, is the most important meeting place and inspiration for the movement. This article describes this project, which is a source of identity for a population that is further and further removed from farming and primary production.

## **The Development of the Project**

"How can we contribute to fostering hope, courage and resolve in children so that they are able to participate in a productive way in shaping their surroundings?" This was the question a group of teachers and students posed at the Norwegian University of Life Sciences (UMB) in 1995. More precisely, the goal was to create pedagogical spaces in which committed, caring and continuous work with nature could occur, enabling an experience of connection and belonging, both to natural surroundings, but also to communities.

This was the start of the national project "Living School" (1995-2000) in which examples of such spaces were developed. One component consisted of schools (with students primarily in grades one through ten) using the school grounds as an extension of the classroom, with gardening as an essential part. Another component consisted of farms that developed an intensive co-operation with neighboring schools that allowed the students to participate in taking care of nature on a larger scale. The common goal was to facilitate continuous contact between the students and the farm so that a "matter-of-fact" familiarity in relationship to the animals and the farm work could develop. The project encouraged close contact with teachers so that the activities on the farm could become a part of the regular curriculum.

In contrast to what school-farm connections have been in the past, this effort was not seen as an opportunity to disseminate information about farming. Nor was the goal to let the children see a demonstration of agricultural work and life. The emphasis was on participation over time to allow for greater connection to the work, and to provide an alternative arena for children with differing capabilities to use their talents.

The Norwegian government, mostly through the Ministry of Education and Research and the Ministry of Agriculture and Food, appropriated 1 million Euros to this project. School authorities welcomed this initiative especially because they were in the process of renewing the national school curriculum towards more “outside” work involving direct experience and participation in practical tasks in the local community. Since this initial work, a new subject, “Food and Health,” has become obligatory throughout all levels of Norwegian schools. Physical activity out-of-doors with cultivation of food plants for cooking, eating and serving meals has become even more central to the curriculum. This reflects societal concerns for lack of outdoor activity, family cohesion around meals, and contact with nature and the local community, and assures that the number of projects in schools is constantly growing.

After piloting the “Living School” project at a few schools, we expanded the work through the university extension course, “The Farm as a Pedagogical Resource.” The course has been held over 20 times during the last ten years in different regions of the country, with regionally specific modifications. One aim of the course is to support the regional establishment of projects. Farmers and teachers are asked to come to the course as a team, where they receive assistance in forming a partnership to try out concrete projects with students on the farm.<sup>1</sup>

Below, we present one of the projects that was established in 1996 and recently renewed through the participation of seven teachers and farm workers in the course, “The Farm as a Pedagogical Resource.”

### **Farm-School Cooperation in the Community of Aurland**

The school in the small community of Aurland (population: 1687), wedged between vertical cliffs in a West Norwegian fjord (Figure 1), was one of the first schools to pilot the “Living School” project, starting in 1996.

The school had already begun with a small garden for the 6-year-olds, who were the youngest children in the school. The combined grade and junior high school is next door to the agriculture high school, providing the opportunity to cooperate and build up a local curriculum based on natural resources and their traditional use in the valley. Now, after nearly 15 years of experience, the school and community in Aurland is serving as a model for other communities who want to develop place-based learning.

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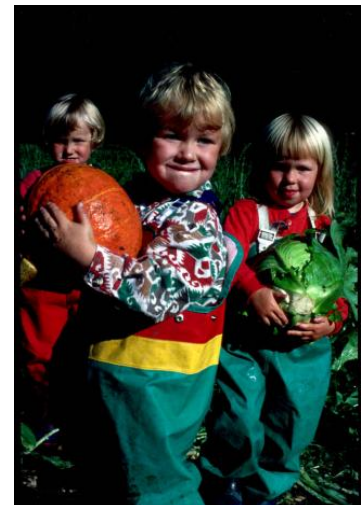
<sup>1</sup> The courses, held for farmers and teachers/school leaders, are accredited university courses. Both the teachers and the farmers can receive university credits for the course if they have documented their projects as semester papers that are approved by the university. Additionally, we offer a teacher education program at the university for farmers who wish to obtain a teaching certificate.

**Figure 1. Aurland landscape**



The connection to outdoor work with nature is established in the kindergarten, which is located in the middle of the farmyard of the agriculture high school. The children see harvests and animals, as well as youth and adults with their tools and machines as they come and go from the fields. In their own garden, each kindergartener has a bed for vegetables and flowers. The kindergarten also has its own chickens, which are tended by the children (Figure 2). In addition, the children go to the farm with their teachers to get milk, harvest vegetables, pick berries and other fruits that they use for their own meals (Figure 3).

**Figures 2 and 3. Kindergarteners with chickens and harvesting vegetables**



When the children begin elementary school, just over the road from the kindergarten and farm, they start a ten-year path of learning that will take them back to the farm many times. The farm is the basis for their practical work. In the first grade they begin with the nearest and most basic food crop, grains, which

grow outside the classroom window. In the fields at the farm they sow grains, harvest them with small sickles, ground them in a hand mill and bake bread (Figure 4). The second grade has potatoes as theme, from planting to harvesting to making local, traditional products (Figure 5).

**Figures 4 and 5. First graders harvesting grain and second graders harvesting potatoes**



The animals on the farm bring the children farther out into the landscape. The themes of sheep in third grade, horses in fourth and goats in fifth grade include trips to the grazing meadows, following the animals to the mountains, spending a night in the summer huts and making cheese (Figures 6 and 7).

**Figures 6 and 7. Following the goats to the mountain farm with supplies by horseback**



All of the classes also have their own areas in the school garden. The fifth grade has the responsibility for sowing and producing the plants for the school garden in the greenhouse of the agriculture school. They also sell plants to the community, as described above (Figures 8 and 9).

**Figures 8 and 9. Fifth graders having fun harvesting and selling plants in the local market**



In the sixth and seventh grades, the emphasis is on homemaking and conserving fruits and vegetables, both from their own garden and from harvests at the farm. The students also begin to work in the forest, learning to use both saws and axes and stack wood for the winter. They make milk products, press juice from apples, pears and plums, and create a feast for their parents. The students are also employed by the mountain management board to set nets and evaluate the fish populations in mountain lakes (Figures 10 and 11).

**Figures 10 and 11. Students setting nets and charting fish populations for the mountain management board**



In junior high school the students take on the responsibility of cultivating the landscape around the local folk museum as they learn about the cultural history of their community. This project brings the students into contact with a local mountain farmer (Figure 12) just above the folk museum, as they participate in restoring old timber flows (Figure 13).

**Figures 12 and 13. A local farmer describes the task; the students rest from their work of clearing the timber flow**



Some of the topics from the lower grades are renewed and widened. For example, the eighth-grade class has sown, harvested and threshed grains that they grind to flour in a restored water mill (Figure 14). The theme of grain is thus extended to water power, an important source of income in the valley. Retired farmers have contributed with knowledge about threshing and milling of grains and power plant workers take the students on guided study tours of the modern power plant. In turn, these farmers are invited to breakfast with rolls of the students' own production (Figure 15).

**Figures 14 and 15. A water mill used to grind grain; students serve their rolls to a volunteer farmer**



In junior high school the students learn about traditional handwork and agricultural techniques such as hesjing,<sup>2</sup> spinning and dyeing wool with local plants. The students have also made cultural trails for tourists with signs and informative texts in English and German.

In this way the children and youth grow gradually closer to the landscape through an understanding of the region's traditional economic foundations and through participation in production based on local resources. They undertake a series of manageable tasks and establish relationships with many people in the community through their work. The school is also concerned with fostering entrepreneurship and solidarity with children in other parts of the world. The students establish businesses and sell many of their products, for example, to support a home for children in Uganda started by a former teacher at the agriculture high school. From the local community, they grow out into the world with an understanding derived from the tasks they have done. In Aurland this is called a "sustainable path of learning" that the students can take with them anywhere in the world, but which they can also use to further develop Aurland.

### **Outcomes of the Project in Aurland**

The community of Aurland has recently become the center for The World Heritage Park of Naeroyfjorden. It is of utmost importance that the park has knowledgeable hosts and guides who are proud to show guests the qualities of the place. Since the park is based on the sustainable use of natural resources, it needs people who can cultivate and harvest, people who can offer products and services that originate from the local landscape, and people who can meet, understand and engage visitors. The place-based learning at the school seems tailor-made for this purpose, although the school project began long before the World Heritage Site designation.

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<sup>2</sup> *Hesjing* is the Norwegian term for drying hay on racks or fences constructed on the fields where the grass has been harvested.



There have been no systematic studies of the students who have completed the ten-year cooperation between the farm school, farmers in the valley, the mountain board, the folk museum and the school, but there are strong indications that affects of the project are already being felt:

- The new economic leader of the community wishes to work more closely with the school and involve still more participants.
- The first increase in the local population in many years has occurred, with young parents saying that this is the school they want for their children.
- The municipality has received funds from the county for developing this cooperation further to include health services, so-called "Green Care"<sup>3</sup> and employment training.
- The municipality, together with the agriculture school and the grade school, are working on a course offering for other communities in place-based learning.
- The school is participating in the "Taste Slowly" festival, where the students invite the whole community to a meal that they have prepared from their own products.

In addition, in interviews conducted with teachers from the school within the framework of a masters thesis (Borge 2010), teachers spoke of the project as a turning point, both personally for themselves and for the students. One teacher noted that she had moved to the community to partake in the "Living School" project. She described her activity in the school garden and other outdoor projects as a "renewal" as a teacher: "I became more alive (through the outdoor activities) and became a better communicator for the children." Another teacher reported that she no longer heard that Aurland was a "hole." Instead, students had become proud of the place they lived. A third teacher described former students using local resources for new products and services. For example, one young man has established a summer job catching, smoking, vacuum-packing and selling mountain trout to restaurants, stores and tourists. A young woman is using her skills in horsemanship to transport summer tourists and goods to mountain lodges. In these ways, practical knowledge and skills acquired in the community contribute to the further development of local resources.

### **Other Projects**

During the course of the last eight years, more than 500 farmers and teachers in Norway have participated in courses through the Norwegian University of Life Sciences on the use of the farm/garden as an arena for learning. More than 200 projects between farms and grade schools<sup>4</sup> have been established through these courses. In several communities the cooperation between farms, schools and the local health institutions has become economically important.

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<sup>3</sup> Green Care involves farms as sites for special education, work training for unemployed people, and work therapy for people with psychological disorders and mental disabilities.

<sup>4</sup> That is, for students from first to tenth grade.

The projects create a renewed contract between agriculture and the local community. Teachers and parents, as well as students cite knowledge about the path of food from the farm to the table as important, valuable and meaningful. Some communities have chosen the farm-school cooperation as a profile for their community to show that it is progressive and concerned with the quality of life for their residents.

The experience from many projects shows that mastering practical and meaningful tasks has been important for students. Norwegian society, just like many Western countries, is characterized by an increasing distance between young people and practical and useful tasks, especially in relationship to primary production. Children and youth find themselves increasingly in institutions (kindergarten, school, afterschool care), in organized "free"-time (sports and classes in dancing, art, etc.) or in front of screens (computer, television, film). There are fewer and fewer arenas for trying out things for one's self and for contact with competent adults as role models. Norway is experiencing a rapid growth in the number of children with psychological problems. Between 1998 and 2008 the number of Norwegian school children who were treated for psychological disorders increased by 158 percent. For the 13-17 age group, depression has become the most common diagnosis. Our findings show that in undertaking practical tasks at the farm, students experience themselves as capable and needed; at the same time they acquire insight into connections and processes. In this way, the loss of meaning that many children and youth experience today is counteracted.

Recently, researchers have used questionnaires and interviews with present and former students who had this farm experience to document the project's effects. There were many who mentioned the experience of doing meaningful work. One young man, now 27 years old, said, "Doing useful things, doing something for others was important. One felt that what we were doing was important for the farm. A good feeling." A 15-year-old wrote, "What I liked best was being outside and working and the feeling of being part of a community which did something useful." Another 15-year-old, in response to what he had learned on the farm wrote, "We have learned to work effectively, eat healthy food and be happy."

### **Learning for a Sustainable Future**

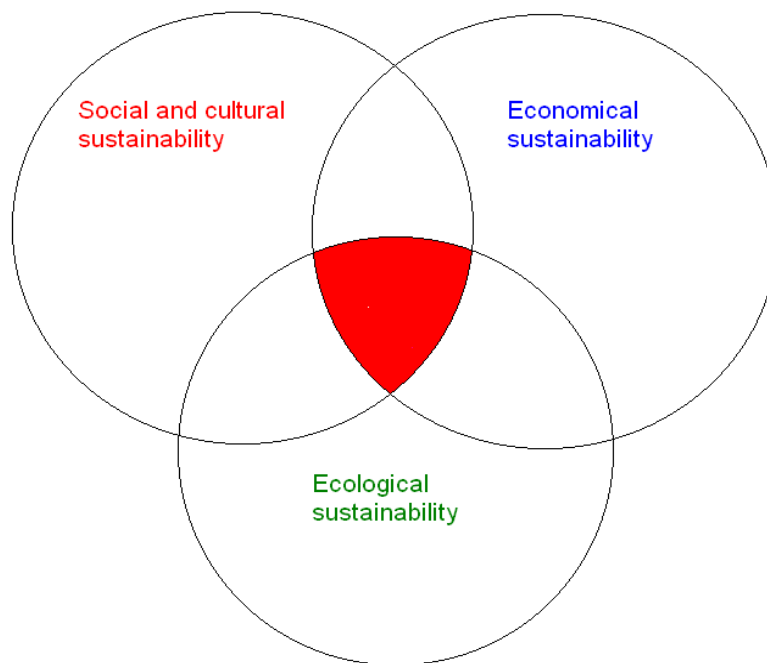
Especially from the seventh grade onward, the farm is often the basis for the theme of entrepreneurship and student businesses. The Norwegian farms often stretch from the fjords to the mountains, with large grazing areas in addition to plowed fields. Many farms are still characterized by diverse animals and food. In this way the farms are a "thumbnail" expression for the whole landscape. There is thus a short distance from the farm to the community in a larger scale.

The focus in many communities is on renewable use of the landscape through agriculture, hunting, fishing and picking mushrooms and berries, as well as conserving the products. Through participation, the students learn ecological entrepreneurship. There is also a focus on businesses that represent local traditions and skills, reflecting the increasing demand for products and services that express

the identity of a place and its traditions. The students produce for this market and thereby acquire skills in social, cultural and economic fields.

According to the Rio Declaration (UNEP 1992), sustainability is characterized by the fusion of ecological, socio-cultural and economic entrepreneurship (Figure 15).

**Figure 15. Sustainability**



The cooperation between the farm and the school in Norway builds on the foundation for sustainable development. The cooperation is a win-win situation. The farms, who struggle with poor profitability, develop new sources of income. In addition, the farmer is no longer isolated, but becomes a part of the community in partnership with educational and health institutions. Students develop a meaningful relationship to the place where they live and to primary production in society. The knowledge, values and attitudes they develop leads not only to stronger local anchoring, but is also a basic experience that can be used in other places.

The purpose of learning for sustainable development is both to develop roots to a place and feet to stand on. Society needs people who have the will, the skills and the driving force to develop a vital and sustainable future. This is the vision for our work with the farm as a pedagogical resource in Norway. As a former student wrote,

*This (food production) is of course also a political choice. We have had school debates, but they are just confusing. Politics is one thing, but a fundamental view, a view of the whole should lay at the basis in politics also. I think we got a good understanding of this at the farm.*

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