

The Farm as a Pedagogical Resource

Health and learning from farm activities for school children in Norway

Abstract

The development of cooperation between farms and schools in Norway to improve the health and learning for school children and youth will be presented in this paper. The rapidly changing childhood environment and increasing number of children with diagnoses presents western countries with challenges in relationship to the traditional school model. Farms represent a pedagogical resource which can contribute to improved health and nutrition, a sense of coherence, a feeling of identity and learning through direct experience. Projects include both general and curative education. At the same time the farmer achieves closer contact with the community and added income. Through courses offered through the University of Life Sciences, regional projects with farms and schools have started up in 12 of the 18 different counties of Norway. The courses are built upon developing and evaluating projects during the course period and offering advisory help during the course. There will be reference to the extensive evaluation of both courses and existing projects in the pioneer region of Norway, Northern Trøndelag.

“When can we come back next time, Tormod?” Tormod has heard this many times when meeting pupils from the local school. Tormod has taken over his ancestor’s dairy farm in Northern Trøndelag and has broadened its range of activities in co-operation with the local school. This has led to school days at his farm. “Why are the boys always so nice when they’re at the farm?” a girl in the fourth grade asked her teacher. The children take part in the work at the farm and follow production through the year. They have a lot of questions for Tormod and send him drawings and little stories. The way the children care for the animals and their intense interest and enthusiasm are important for him. From Tormod’s point of view, the farm has not only a new source of income, but also more meaning. He has school age children himself and he knows that the pupils seldom look forward to the next lessons.

Tormod has participated in the course “The Farm as a Pedagogical Resource” which is offered through the Norwegian University of Life Sciences as an essential part of the program “Living Learning”. This is a growing movement to develop collaboration between farms and schools and to encourage school gardens in able to enhance both learning and health. The course which will be presented here attempts to facilitate development of pedagogical work on farms in co-operation between farmers and teachers in different regions of the country. The pedagogical projects encompass children who have special needs as well as general education at all levels.

In this article we will present the background for this work and refer to results of an evaluation of the project undertaken by the Høgskolen i Nord Trøndelag (Northern Trøndelag University College). We will

then discuss the possibilities and challenges for “The Farm as a Pedagogical Resource,” as a source of health for children who spend increasing amounts of time at school and in other sedentary activities, as a pedagogical platform for teaching, as a source of identity for a population which is further and further removed from farming and primary production, and as a source of income for the farmer. “Green care” on farms is thus seen at our institute as an essential element for building health in children, as a prerequisite for learning, as an important tool for teaching and as a contribution to strengthening both the income and the roll of the farmer in the local community.

Background

“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 (AUN) in 1995 (now the Norwegian University of Life Sciences, UMB). In light of the most recent developments in climate research this question is of increasing relevance. The massive catastrophe scenarios in the media must be met with measures for concrete experiences of positive cooperation with nature. A project was launched to create pedagogical situations in which committed, caring and continuous work with nature could go on, enabling pupils to experience connection and belonging to their natural surroundings.

This was the start of the national project “Living School” (1995-2000) in which examples of such situations were developed. One component consisted of eight schools which used the school grounds as an extension of the classroom – with gardening as an essential ingredient. Another component consisted of

eight farms which developed an intensive co-operation with neighboring schools to allow the pupils to participate in cultivation of nature on a larger scale.

The eight selected farms in “Living School” were spread over the whole of Norway. The University assisted in making contact with schools and regional authorities, the latter regarding economic support. Conferences and a newsletter aided the exchange of experience and further development among the participants. Each farm developed its own “model” with respect to the needs and financial frames of their school partners as well as their own possibilities – both agriculturally and in regard to human resources. The common goal was to facilitate continuous contact between the pupils and the farm so that a “matter-of-fact” familiarity in relationship to the animals and to the seasonal work at the farm could be established. The emphasis was placed on participation over time which allowed a greater identification and provided an alternative arena for children with different capabilities to use their talents. Close contact with the teachers enabled the activities on the farm to become a part of the regular curriculum.

The Norwegian government, mostly through the Department of Education and the Department of Agriculture, appropriated 1 million Euros to this project. The school authorities welcomed this initiative especially because they were in the process of renewing the school curriculum in the direction of more “outside” work involving direct experience and participation in practical tasks.

Results from these five years were presented in two Norwegian publications summarizing the experiences with school grounds as well as with farm-school co-operation (Hugo 2000, Parow 2000). We will focus here primarily on the work between farms and schools as this is the work that has given rise to regional intensification and development of courses first in Northern Trøndelag and later in other regions of Norway. However, work with school gardens is to a large degree included in the farm-school projects. Farmers create gardens with the children and often participate in school garden courses as a follow up of their initial pioneer phase.

Aspects of health as motives for farm-school cooperation

During the last 10 years of farm-school cooperation, the health-related motives for such projects have become increasingly obvious. Although infant mortality is extremely low and Norwegian children generally enjoy an unprecedented state of good health, chronic plights such as allergy and asthma, overweight, diabetes, eating disorders and psychological disorders are steadily increasing. Since these health problems have grown rapidly in the course of short time, the causes must come from changes in the physical and social environments

rather than from genetic dispositions. We want to look briefly at some of these changes in relationship to what farm-school cooperation has to offer.

Physical health

Both children and youth have an increasingly sedentary lifestyle. Research done in Germany with 12 to 15 year olds confirms that between 2002 and 2005 there was a radical decrease in such activities as bicycling (from 71% to 52%), climbing trees (from 46% to 32%) and taking a walk (from 30% to 17 %) (Brämer, 2006). A study carried out in several regions of Norway between 2000 and 2004 has shown that as many as 30% of boys age 15-16 sit more than 5 hours in front of the computer or television screen each day. The same study showed that between 10 and 20% of youth in this age group could be designated as physically inactive, defined as participation in activities where they sweat less than one time a week (www.fhi.no). The lack of physical activity and more hours in an indoor environment also contributes to the increasing frequency of asthma and allergies.

There is also a general increase in weight and in the number of overweight children. An investigation carried out to compare weight of 9 year olds and 15 year olds between 1975 and 2000 showed an increase of around 3 kilo for both girls and boys, with the exception of 15 year old girls who had only gone up 1,9 kilo. A recent examination of the weight of 8 and 12 year olds in Oslo has shown that the number of overweight children varies according to the part of town where they live from 29% to 15% (www.helse-og-velferdsetaten.oslo.kommune.no). In general there are between 10-20% overweight children and youth in Norway.

Eating disorders are common among around 10% of the population in Norway, but studies show that 20% of young athletes in some sports have problems. An investigation of boys from 12 to 19 in Oslo show that over half are dissatisfied with their physique and the study estimates that 20% are in danger of developing eating disorders (www.nih.no). In addition there is concern for the high level of sugar use and daily consumption of fast foods.

Therefore in spite of low infant mortality, there are many reasons to be concerned for trends in the physical health of school age children and youth in Norway. The problems are also not solved with one additional lesson per week in physical education at school. Promoting a active lifestyle and giving children access to healthy food habits have become concerns of both the school and the society at large

Psychological factors

Data from the psychological health services in Norway give evidence for a rapid increase in the number of pupils who are treated for Hyperactivity (ADHD), behavior disturbances and depression. Between 2002

and 2005 the number of patients with ADHD was more than doubled. Consultations for behavior disturbances increased from around 6000 to approximately 8000, whereas the numbers for depression increased from 5000 to 7000. This is only the 4% which receive help. It is estimated that between 15 and 20% of Norwegian children have psychological problems which need treatment. In addition it is estimated that 10% of the pupils have such serious behavior problems that they demand special attention in the classroom.

The theory of salutogenesis

Whether it is children with special needs or children with no obvious health handicaps, the question is also if farm activities can contribute to the prerequisites for health? One of the most basic tenets of the theory of salutogenesis (“creation of health”) in the work of Antonovsky (1997) is that an important premise for the development of sound health is to be found in the experience of coherence. This is to be understood not only as an experience of, and insight into, the origins of objects in our daily lives, but also an experience of being able to contribute to and affect the connections surrounding us. Insight into how food is produced in nature, where textiles and building materials come from or how inside temperature is created is removed from childrens' experience. In spite of early access to the world-wide-web, children are in a large degree cut off from participation and a fundamental understanding of the basic tenets for daily life. Working together to feed the animals, harvest the vegetables, fell trees to build a shelter, card the wool or cook the meals on the farm, the pupils gain experience from whole processes and feel themselves as important contributors to meaningful daily tasks. Self-esteem and self-confidence grow along with each task which is mastered. Unrest, insecurity and anxiety which can be observed in the class room subsides when the pupils have a chance to find a useful place in meaningful work.

All of these problems which concern the physical and psychological health of children and youth can be addressed through farm-school cooperation. Learning by doing practical work at the farm means a higher level of physical activity which can also contribute to a better weight balance. Participating in the production of food and being actively engaged in cooking and serving meals creates a framework around food and eating which can help children build a personal relationship to food. Farmers and teachers report a normalization of these problems during sessions at the farm. The children with diagnosed behavior disturbances come often to the farm with special assistants. For the adults who work with these children and for their parents it is obvious that most all of them thrive at the farm. The comment often heard at courses from farmers is that the problem-children at school are their largest resource. The work gives them a focus and a chance to succeed which they do not easily find in the classroom.

The cooperation between farms and schools makes significant contributions to both health problems and prerequisites for building health. But do the projects become sufficiently integrated in the lessons and learning at the school? In the next section we will explore this question.

A pedagogical platform

Activity in the Norwegian school system is guided by “L 06”, The Curriculum for the 10-year Compulsory School, comprised of one document which contains a general statement of principles and another which contains descriptions of concrete subjects. The principles serve as guidelines in all state schools and lay great emphasis on the importance of the local community as a learning arena by underlining the importance of utilizing the community actively. It is also considered important to strengthen knowledge about and connection to nature, both as a means of earning a living and also in regard to traditions and the way people live with the natural resources in the local area. At the same time, emphasis is placed on practical work and the connection between theory and practice. Goals of competency are given for all subjects after the 2, 4, 7, and 10th class levels, but there is a large degree of freedom in choice of methods to reach these goals.

The goal with the farm-school projects is that the activities on the farm become an integrated part of the life and learning at the school. They should not be in addition to the other things the pupils normally do. At most schools, parts of the subject-matter for the different classes are allocated to the work at the farm. The activities at the farm become a part of the ordinary year plan, and the preparation and “digestion” of the events at the farm are done at the school.

The attitude of the parents and the teachers to the work on the farm has been charted using questionnaires (www.gspr.no/upload/pdf-er/evaluating%20-%20GSPR.pdf.file) The results from five schools which were researched in Northern Trøndelag show overwhelmingly positive response from both the parents and the teachers:

- They are not worried that the farm work is done at the cost of theoretical learning. Quite the opposite, they see as a strength the fact that the children have a chance to acquire practical “pegs” on which to hang their more theoretical learning.
- The parents and teachers wish that the co-operation with the farm increases, and that this must be a priority for the school and the local government.
- The parents see the worth of their children’s participation in practical work and that they receive values which a traditional school day can not give them.

The attitude of the parents is most likely a “mirror” of the standpoint of their children. When the youngsters look forward to the work at the farm, it is natural that also the parents are positive to it. Many parents wrote that they had not heard about school activities for a long time, but now their children came home brimming with things to tell. The parents’ relationship to the project and the pupils’ experience seems to be important for the project’s success and its foothold in the local community.

Building identity through learning at the farm

What do the pupils learn when the classroom is moved to the farm? Are there greater advantages for learning as compared to in the classroom? It is too early in the process of evaluation to say anything decisive about this, but the teachers are convinced that pupils do learn from their work at the farm. Many teachers stress the importance that pupils learn “other” things. The pupils see and do things in practice, they learn to work together, they become acquainted with a profession based on local resources and they have contact with several generations.

The philosopher Martin Heidegger (1977) maintained that human beings create meaning through “stepping into the world.” The construction of meaning occurs through action, through a participative contact with the world which surrounds a human being. Without any form of participation, one has nothing over which to reflect. Reflection will be empty or completely speculative. “It’s not enough to have concepts to think with. One must also have something to think about.” (Hylland Eriksen 1993: 45). Through sowing, weeding and harvesting in the garden at the farm, learning about living organisms can make science lessons more relevant. Taking care of rabbits and experiencing lamming gives food for thought about the cycles of life which can be a motivating factor in studying biology and the environment.

Both teachers and farmers feel that the youngsters have a need for another type of school day. As the Norwegian professor of pedagogy, Tom Tiller, asks in his book, “Is it not possible that children are tired at school and lack interest in learning because they lack a meaningful context for their learning and see neither how things are connected to each other nor how they themselves can make any difference?” (Tiller 2002). Farmers and teachers notice that some of the children get a “kick” out of doing practical work. They also experience that it is positive for the children to be able to follow the life-cycles of plants and animals at the farm, and that, in this way they achieve a greater understanding of the processes in nature around them. One farmer emphasizes this and adds that it looks as if the children also enjoy it. As he says, “*It’s good to do things in practice when one has time for it – it leaves traces in the body.*”

When learning connects to the physical body, as knowledge-in-use, learning is at the same time connected to lived-experience and to place (Molander 2000, Krogh 1995, Jackson 1996). If school stretches out its boundaries to include activities in the local community, the pupils also build up their identity in connection to a sense of place. This foundation and an experience of meaningful “rooting” will follow the pupils throughout their education and professional lives. In spite of increasing mobility, most Norwegians choose a primarily local base when they settle down to have their own family. If they have had meaningful experiences of integration into their local community as children, the probability will increase that they move back and choose the place they grew up in as their residence. “The Farm as a Pedagogical Resource” can contribute to preventing even greater depopulation of Norwegian small towns through identification and an experience of contribution.

“The Farm as a Pedagogical Resource” is also a good example of a new kind of job within a society which, in to an ever greater degree, demands experience and a sense of identity. The project is part of a commitment within the field of cultural economics which focuses on how local knowledge of nature, food and culture can be converted into actual resources for local development (Ray 1998). Several of the farmers see the project as a foundation for school “businesses,” where the products of the pupils’ work could be sold at the farm along with other local products coming either from the farm or elsewhere in the small town. This, in turn, opens up to new visions of uses and possibilities for the resources at the farm, for example in the restoration of old buildings.

A source of income and reintegration for farmers in the local community

Research carried out in Trøndelag shows that farmers have become more dependent on extra income in agriculture and forestry since the middle of the 1980’s. Earnings from work outside of the farm are the most important and have increased most, but also income connected to agriculture has increased (NILF 2002). In spite of this, only a few of the farmers say that they participate in the project for purely economic reasons. The background for their participation is generally more complex:

“Finding work to fill out the seasons at the farm and achieve a better balance during the year is important to increase the profit margin. At the same time, I must be patient and think long-term, because I want to work with children.”

In spite of the fact that economics is obviously a basis for the farmers in developing pedagogical work at the farm, it is clear that participation in the project and the contact

with active and interested school children puts farming in a new perspective.

Several have characterized the collaboration between farm and school as a “lift” which is positive for their own feeling of worth. They have another type of contact with people in the local community when their children have been on the farm, as one farmer says:

“I come in contact with people in a completely different way when their kids have been on the farm. It’s great when they come into the store and want to talk. I get to know the children.”

Getting started: Courses for development

The advisory work with the eight farms and schools in “Living School” was the foundation for the development of systematic training courses. Their experience has been utilized in assisting new initiatives and designing courses. Since 1999, accredited university courses have been offered for teams of farmers and teachers who wish to work together.

The training courses are also based on long experience with continuing education for teachers, farmers and consultants at UMB. Earlier courses have shown that a pre-condition for satisfactory learning and results for the participants is a focus on their own work experience and goals. This means that there should be a good portion of course time set aside to presentation of the participants own experience and project ideas. Further, the course material should be directly related to their experience and presentation of material should be formed in an accessible language with concrete examples. Participants carry out projects at their own work place which are connected to the theme of the course. Extensive consultation is given in connection to planning and execution of the projects. It is important that the participants are followed up, encouraged and given help to evaluate their own projects. Thus, these training courses are built up around the following principles:

1. Co-operation between Farmer and Teacher

The farmer and the teachers draft a pedagogical plan for the pupils at the farm. The intention is to find a foundation for the project and the pedagogical activities both at the farm and at school. Through evaluation of resources and needs, the farm and the school can discover the complementary contributions they can make to a joint project.

2. A Common Vision

The goal and the gist of the pedagogical activities take their point of departure in visions for both the farm and the school which are to be developed by the farmer and the teachers. While the farmer is concerned with economic development, communicating traditions and values in agriculture, as

well as creating new activities and relevance regarding the work at the farm, the teachers are concerned with how practical and concrete experience from agriculture can facilitate learning for the pupils. The course emphasizes creating a common vision for the school and the farm through each project. The connection between the utilization of local knowledge, experiential learning and a reconstruction of local identity is a natural point of departure for such a vision.

3. Practical Implementation

In the course of one year, the farmer and the teacher have the task of planning a concrete project, executing the initial stages and evaluating their project. A sketch of a project is the entrance ticket to the course, i.e. concrete plans for a “pilot project” for each farmer-teacher team. The first session begins with a description of the pre-conditions and frames for the project (for example, a description of the farm and its production, the school community and school grounds, etc.). A presentation of all the course projects is made at the end of the course. Thus the core of the course work is comprised of the contents of each individual project plus the experience the participants bring with them from what they have done between the course sessions. Through implementing and evaluating a pedagogical endeavor, the teacher and the farmer can illustrate and develop their ideas for utilizing the farm as a pedagogical resource – for themselves, for the pupils, for the school, for the local government and the local community. The intention is also that the spectrum of practical experience which the participants bring with them creates a common space for reflection as well as support for the development and execution of the individual projects (see Schön 1987). In this way, the course members are co-workers in the continuous development of new examples which enrich the project flora of “The Farm as a Pedagogical Resource”.

4. Experiential Learning

The course has experiential learning as a basic principle, both for the participants and for their pupils (Dewey 1938, Kolb 1984). Through practical work with the development of each individual project, the course teams are engaged in making their own experiential basis. The principle of experiential learning is also relevant for the pupils who receive both practical understanding of where food comes from, what goes on and is produced in their small town, as well as why it is important to learn theoretical subjects such as science and mathematics. The principle of teaching is phenomenological, according to Merleau-Ponty (1962), who maintains that consciousness is originally not about “I think that...” but about “I can...” According to contemporary teachers, the conscious use of all senses

and physical abilities is a vital factor in motivation for environmental education (O'Loughlin 1998: 293).

Experiential learning is also the point of departure for work with the curriculum. In a course session called "the inverted curriculum" the participants do practical tasks together in groups. Afterwards the tasks are broken down in steps and analyzed as to key qualifications and prerequisite knowledge. In a next step the participants go through the different parts and subjects in the state curriculum to find where such learning is relevant. In this way the teachers and farmers gain familiarity with all the parts of the curriculum and learn to plan the tasks for the children from the real work of the farm, instead of constructing tasks to fit the text of isolated subjects.

The course also offers the opportunity to try different forms of art (such as singing, drawing, painting, etc.) and hand work (binding of wreaths, extraction of tar, etc.), which can be done with the children as a method of working with and through their experiences on the farm.

5. Close Advisory Work

Advice and counseling concerning the organization and financing of each project is an essential part of the courses. The advisors are available between the sessions and the participants send reports through the network communication system to be read and commented on by the advisors before the next course session.

6. Differential Approaches for Varying Age Groups

The success of the work at the farm is dependent on finding the right tasks and the appropriate approach for each age group. Each course session attempts to describe the typical attributes of an age group. Thereafter, the participants are given concrete exercises in relationship to needs and modes of understanding of this age group. This is to insure that both the farmers and the teachers will be better prepared to look not only the work at the farm and the requirements of the curriculum, but also the age-related needs of the children when designing the sessions at the farm.

Participants in the courses write a paper about their goals, plans, implementation and evaluation of the pedagogical project, for which they can earn credits at UMB. The written work can also be of use in making the project known for administrators, politicians, parents and the community at large.

Where the courses have been followed up with a regional project and a project leader, such as in the region of Northern Trøndelag, the chances for making this a permanent part of the local curriculum are maximized. In this region north of Trondheim where there has been a coordinator for the project since 2002,

a large number of local governments have supported projects for all schools in their districts.

Evaluation and research

A team of researchers have documented the development of projects in the area of Northern Trøndelag over four years. Three reports have been published during this time, focusing respectively on the development of the project through the courses and the effect for both schools and farms (Nergård og Verstad, 2003), the creation of new projects and the growing acceptance for another form for learning (Nergård og Verstad, 2004), and the role of school leaders, politicians and the municipal governments (Hovdal, Nergård og Verstad, 2006). Generally it can be said that these reports confirm that the goals concerned with learning, with extra income for the farmer and with the network building between farmers and teachers has succeeded, but there are areas for improvement. There are still challenges in relationship to long term financing and to integration with the other lessons at the school.

The latest report focused on the role of the local governments and one of the researchers concluded by saying: "Using the farm as a teaching arena gives the pupils a sense of mastering, a possibility to come out of the classroom, effective learning and a sense of belonging to their local community. But not all of the municipalities have managed to integrate this as a lasting form for learning after the first project phase is over." (www.hint.no/nyheter/nyhet.php?ID=1501)

Conclusion: What can farms contribute to the needs of children and tasks of the school?

Through our courses with farms and schools we see the effects of repeated work-periods at the farm. The farm work provides "meaningful contexts" where the children are motivated to learn through practical experience that sheds light on the origin of products in their daily life. Concrete tasks give them insight into ecological connections and man's place in nature. Development of manual dexterity strengthens the foundation for learning in all subjects, at the same time as they learn to cooperate and solve problems as they turn up. The children or youth can learn with their bodies and senses, which is not only the basis for enduring memory, but also essential for physical health. Outside in nature they learn to know other living organisms - a prerequisite for stewardship and engagement in environmental issues.

All these aspects and many more apply in even greater degree for the increasing number of pupils who are "losers" at schools. The children with diagnoses, with concentration problems or psychological crises are perhaps those who need what farms and farmers can give

them most of all. The school, not the health authorities, has the responsibility for these pupils, but cannot offer them adequate alternatives within the four walls of the school. Farms can offer an arena which can fulfil the obligation of the school to meet the needs of the child.

The strategy for achieving farm-school projects in Norway has been based on gathering experience through national pilot projects, which have given the necessary competency for regional intensification. Participation in the regional courses is restricted to teams of teachers and farmers who have expressed a desire to work together. Their concrete development projects are the main stay of the course work. The regional courses employ experienced farmers and teachers to follow each project, while also engaging local advisors to anchor the projects regionally. Emphasis is laid on the needs of the pupils, the school and the local community rather than on agricultural economy. With this focus, the improvement of farm economy appears as a side benefit.

Literature

- Antonovsky, A. (1997): *Salutogenese. Zur Entmystifizierung der Gesundheit*. Tübingen: dgvt-Verlag
- Dewey, J. (1938): *Experience and Education*. Macmillan, New York.
- Brämer, (2006) *Jugendreport Natur '06: Natur obskur*. Philipps-Universität Marburg
- Heidegger, M. (1977): *Building Dwelling Thinking*. In D. K. Krell: *Martin Heidegger, Basic Writings (introductions to each selection by Krell): 320-339*. Harper and Row, New York.
- Hovdal, Knut Arne, Nergård, Tone og Verstad, Berit (2006). *Kommunen – en snublefot eller tilrettelegger for GSPR?. Gården som pedagogisk ressurs i Nord-Trøndelag. Evalueringsrapport nr 3. Rapport nr 31*. Steinkjer: Høgskolen i Nord-Trøndelag
- Hugo, A. (2000): "...å ta skrittet ut". *Utearealet som læringsarena. Prosjektrapport Levande skule (1996-2000), del 1. Det norske hageselskap, Oslo*.
- Hylland Eriksen, T. 1993. *Små steder – store spørsmål. Innføring i sosialantropologi*. Universitetsforlaget, Oslo.
- Kolb, D. A. (1984): *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall, Englewood Cliffs, New Jersey.
- Jackson, M. (1996): *Phenomenology, Radical Empiricism, and Anthropological Critique*. In M. Jackson (ed.): *Things as They Are: 1-50*. Indiana UP, Bloomington.
- Kolb, D. A. (1984): *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall, Englewood Cliffs, New Jersey.
- Krogh, E. (1995): *The Phenomenology of Landscape. Dr. scientarium theses 1995:15*. Department of Economics and Social Sciences, Agricultural University of Norway.
- Krogh, E. and S. Gjøtterud (2003): *Elven og virksomheten. En innføring i naturbruksdidaktikk*. In press, Landbruksforlaget, Oslo.
- Merleau-Ponty, M. (1962): *Phenomenology of Perception*. Routledge & Kegan, London.
- Molander, B. (2000): *Human beings and their orientation in the world: On knowledge, understanding and information*. In L.J. Lundgren (ed.) *Knowing and Doing. On Knowledge and action in environmental protection: 29-49*. Swedish Environmental Protection Agency, Stockholm.
- NILF (2002): *Økonomien i jordbruket i Trøndelag. Utviklingstrekk 1991-2000. Tabellsamling 1995-2000. NILF-notat 2002-6*. Norsk institutt for Landbruksøkonomisk forskning, Oslo.
- O'Loughlin, M. (1998). Paying attention to bodies in education: theoretical resources and practical suggestions. *Educational Philosophy and Theory*, 30(3):
- Nergård, Tone og Verstad, Berit (2003). *Læring gir næring – næring gir læring? Gården som pedagogisk ressurs i Nord-Trøndelag. Evalueringsrapport nr 1. Rapport nr 16*. Steinkjer: Høgskolen i Nord-Trøndelag
- Nergård, Tone og Verstad, Berit (2004). *Først læring – så næring. Gården som pedagogisk ressurs i Nord-Trøndelag. Evalueringsrapport nr 2. Rapport nr 23*. Steinkjer: Høgskolen i Nord-Trøndelag
- Parow, K. (2000): "Det store spelet". *Gården som pedagogisk ressurs. Prosjektrapport Levande skule (1996-2000), del 2. Det norske hageselskap, Oslo*.
- Ray, C. (1998): *Culture, Intellectual Property and Territorial Rural Development*. *Sociologia Ruralis*, Vol. 38, no. 1.
- Schön, D. A. (1987): *Educating the Reflective Practitioner*. Jossey-Bass, San Francisco.
- Tiller T. og R. Tiller (2002): *Den andre dagen – det nye læringsrommet*. Høyskoleforlaget, Kristiansand.

INTERNET

- www.fhi.no. Sitter fem timer foran skjermen
- www.hint.no/nyheter/nyhet.php?ID=1501 Ildsjeleer viktig for Gården som pedagogisk ressurs
- www.helse-og-velferdsetaten.oslo.kommune.no Undersøkelser om vekt blant barn
- www.nih.no. Stadig flere gutter får spiseforstyrrelser
- www.gspr.no/upload/pdf-er/evaluering%20-%20GSPR.pdf.file