



Secondary school pupils' experiences of participating in adapted farm-based education in Norway

Inner motivation and personal development outcomes

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Abstract

The Norwegian government approves farm-based education for pupils who do not benefit sufficiently from ordinary school. The aim of this article is to contribute knowledge on secondary school pupils' experiences of such programs, and how they affect inner motivation for school. The article is based on qualitative interviews with thirteen pupils in years nine and ten (ages 14–16) from farms located in different regions of Norway. The pupils experienced the farmers' care and involvement, became part of a safe and inclusive community, were given the opportunity to try varied practical activities, experienced personal development, and gained new motivation for school. Using basic psychological needs theory and recovery theory, it is found that the pupils experienced relatedness to other pupils and to the farmers, improved their social and practical competence, and experienced autonomy (self-determination) through voluntary participation. The farmers and the community can be described as autonomy-supportive and "restitution-nourishing" and as contributing to personal development and the development of inner motivation. This strengthened the pupils' self-confidence, hope for the future, and their attention in and efforts at school. The findings from the study indicate that motivation developed in one learning context (the farm) can influence the motivation for another context (ordinary school).

Keywords

farm-based education, secondary school pupils, practical activities, supportive environment, inner motivation

Sammendrag

Norske myndigheter tillater bruk av gård-skole-tilbud for elever som ikke får tilstrekkelig utbytte av ordinær opplæring. Hensikten med artikkelen er å bidra med kunnskap om ungdomsskoleelevers erfaringer med slike tilbud og hvordan de kan bidra til utvikling av indre motivasjon for skolen. Artikkelen bygger på kvalitative intervjuer med 13 elever på 9. og 10. trinn (14–16 år) fra gård-skole-tilbud i ulike regioner i Norge. Elevene erfarte gårdbrukernes omsorg og engasjement, ble del av et trygt og inkluderende fellesskap, fikk muligheten til å prøve varierte praktiske aktiviteter og erfarte personlig utvikling og ny motivasjon for ordinær skole. Ved bruk av selvbestemmelsesteori og recovery-teori finner jeg at elevene erfarte tilhørighet til de andre elevene og til bøndene, økte sin sosiale og praktiske kompetanse gjennom aktivitetene og det sosiale fellesskapet, samt opplevde autonomi (selvbestemmelse) gjennom frivillig deltakelse. Bøndene og fellesskapet på gården kan beskrives som autonomistøttende og "restitusjonsnærende" og bidro til elevenes personlige utvikling og utvikling av indre motivasjon. Dette førte blant annet til styrket selvtillit og fremtidshåp og økt oppmerksomhet og innsats på skolen. Funn i studien tyder på at motivasjon utviklet i én læringskontekst (gården) kan påvirke motivasjonen for læring i en annen kontekst (vanlig skole).

Nøkkelord

gård-skole-tilbud, ungdomsskoleelever, praktiske oppgaver, støttende miljø, indre motivasjon

Introduction

Over the last 20–30 years, farm-based education has been established in Norway and other European countries for pupils who find it difficult to meet the expected standards for academic achievement, behaviour, or social interaction in regular school environments (Hassink & van Djik, 2006; Hassink et al., 2020; Krogh & Jolly, 2011; Sempik et al., 2010). The pupils may be struggling with academic skills, e.g., reading, writing and mathematics, or may have social, emotional or attention difficulties (Ministry of Education, 2017; State Special Education Service, 2021). These pupils often have low motivation for school, problematic behaviour, and academic challenges (Jahnsen et al., 2009; Grimsæth, 2016; Arnesen & Jentoft, 2022). Motivating pupils can be challenging (Skaalvik & Skaalvik, 2015), but previous research on farm-based education shows that the pupil's motivation for school increased when this type of education was provided (cf. Grimsæth, 2016; Fifolt & Morgan, 2019). Motivation for school is crucial, as it “promotes learning indirectly, through effort, concentration, persistence and adequate learning strategies” (Berger & Karabenick, 2011; Skaalvik & Skaalvik, 2015, p. 13). The aim of this article is therefore to contribute knowledge on how secondary school pupils themselves experience farm-based education, and how this can contribute to increasing motivation for the regular school. This will be useful knowledge for school developers both in Norway and abroad.

According to Norwegian legislation (Education Act, 1998), pupils who cannot obtain satisfactory results from a regular educational environment have the right to special education as a supplement. This supplement can be both academic and social, and the aim of such inclusive education is to give a sense of achievement based on abilities and resources (Education Act, 1998). The learning objectives differ from those of regular education and are often simplified or removed entirely (Directorate of Education, 2022a). Farms are one of several arenas selected for inclusive education outside regular school in Norway (Directorate of Education, 2010), where pupils both with and without special needs can attend. They receive part of their educational training on the farm one or more days a week, usually for a year or more.

“Into the farmyard” (Inn på tunet, IPT), is a Norwegian association responsible for providing organised and quality-assured welfare services on farms (Ministry of Agriculture and Food and Ministry of Local Government and Regional Affairs, 2012). Most of the farms in Norway offering farm-based education are part of IPT under the auspices of the Norwegian Food Foundation. IPT has an approval scheme for the farms and their resources, which includes safety procedures. According to the relevant Acts and regulations, the principal of the school is responsible for the quality of the educational content at the farms. The pupils in question must initially have an expert assessment and recommendation to attend an alternative learning arena from the Educational Psychological Service (EPS). An individual decision and an Individual Learning Plan (ILP) must be made for each pupil. The purpose must be clearly stated and may be linked to academic or social content. The pupils normally participate in practical farm-related activities adapted to their needs and interests. Some of the farmers have additional staff with various professional backgrounds, typically within the education, social welfare and healthcare fields, or have a certificate in a vocational subject (cf. Arnesen et al., 2022; Ihlebæk, 2016). In this article, I will refer to all adults at the farms as “farmers”, including the manager and assistants.

In recent years, the need to change the teaching methods in secondary school in Norway has been recognised. The report “Youth level in development 2012-2017” has been a comprehensive initiative from the Ministry of Education in Norway with the main goal being: “motivation and mastery for better learning through more practical and varied teaching”

(Lødding et al., 2018, p. 9; cf. Ministry of Education, 2011). New curricula include more practical activities, and the Norwegian education authorities emphasise that a broad repertoire of learning activities and resources is required to motivate pupils (Directorate of Education, 2022b).

Motivation research and the farms as an alternative learning arena: Knowledge we have and knowledge we need

Pupils have various types of motivation, and it is interesting in this context to look into what researchers have found when asking pupils themselves what is important for their motivation for school or for learning. Dæhlen et al. (2011) looked into secondary school pupils' opinions on what was important for them when it comes to motivation and effort. One of the main findings was that pupils wanted variety. Furthermore, a motivating teacher must be engaging, knowledgeable, patient, helpful and kind, and should provide suitable and challenging tasks. Varying forms of teaching, and practical subjects, contributed to well-being and greater school effort. Those pupils who appeared to have poor school performance linked their challenges to the teachers to a greater extent than pupils who appeared to have good school performance (Dæhlen et al., 2011, pp. 7-8). The importance of the teacher and the school environment is supported by an analysis of international research, published in a professional journal, which shows that social support and a sense of belonging are important for pupils' motivation, regardless of context and age (Federici & Skaalvik, 2015). These studies show that the pupils' relationship with the teachers, and the nature of the teaching are particularly important for pupils who appear to be academically weak.

In an analysis of Norwegian and international studies on farms as an educational programme, Grimsæth (2016) argued that farm-based education can strengthen pupils' motivation for learning, improve learning outcomes and promote education and identity development. This coincides with findings from an American study (Fifolt & Morgan, 2019), where principals and teachers experienced that the farm-based education enhanced the pupils' motivation and interest in school.

Research from the United States and Norway points out that pupils experienced a sense of responsibility, new relationships and self-efficacy in farm contexts (Fifolt et al., 2018; Krogh & Jolly, 2011), thus indicating positive development. Some Norwegian studies (Kogstad et al., 2014; Sollesnes, 2018; Steigen, 2018) show that farm-based education strengthened important recovery factors, such as hope, coping, meaning and dignity for youth and young adults with psychological challenges (17-27 years of age) in vulnerable situations. Meaningful activities, a smaller community, nature, and animals contributed to these changes, and there was also an increase in social inclusion. Other research on youth (cf. Follesø, 2010; Frøyland & Fossetøl, 2014) has found that close follow-up and acknowledgment by adults is important for young people, especially those with challenges relating to family and friends, or those having learning difficulties. As we can see, several studies, regardless of context, find that close follow-up by adults and varied teaching are important methods that can help vulnerable pupils.

We thus have some knowledge of what motivates pupils with a challenging starting point, and we have some knowledge about positive outcomes from farm-based education. Nevertheless, we have limited knowledge on how pupils in farm-based education are motivated, and whether this motivation has an impact on the rest of the school week. We also need more knowledge on the importance of adults and their approach to pupils in such programmes.

For teachers and others working with pupils with challenges, this is important knowledge that can help to create a more motivating school.

Moreover, several studies have called for more research into pupils' experiences of pedagogical teaching programmes on farms to expand on previous findings (Andreassen & Grimsæth, 2007; Murray et al., 2019). This article uses interviews to examine the experiences of 13 pupils in years nine and ten (aged 14-16) who participated in this type of farm-based education in four municipalities in Norway. Based on the pupils' experiences, this study poses the following research question: *How does farm-based education contribute to the development of the pupil's inner motivation for school? And what significance do the relational and social aspects of such an education programme have?*

Theoretical perspectives: basic psychological needs theory and recovery theory

To improve my insight into and understanding of the pupils' experiences uncovered through the analysis, I have chosen to explore their experiences using a well-known theory in the context of motivation research: basic psychological needs theory (BPNT), formulated by Ryan and Deci (2017). Furthermore, I have chosen to use some perspectives from recovery theory (cf. Borg et al., 2013; Glover, 2005) to elaborate on BPNT, with an emphasis on relational belonging (relatedness). Both theories are relevant to this study as it is looking into important elements of interpersonal relationships, which can be particularly important to vulnerable young people (cf. Frøyland, 2012; Frøyland & Fossetøl, 2014).

BPNT is one of six mini-theories within self-determination theory (SDT). The assumption is that humans have three basic innate psychological needs that must be satisfied for the optimal growth and development of inner motivation (Ryan & Deci, 2017): 1) *Need for competence*, which refers to feeling confident and effective; 2) *Need to feel relatedness*, which refers to feeling respected, cared for, caring for others, and belonging to groups important to the person in question; and 3) *Need for autonomy*, which refers to feeling independent and able to make one's own decisions (Ryan & Deci, 2017). Niemiec and Ryan (2009) claim that people develop an inner motivation when doing something interesting and enjoyable; this is the opposite of external motivation, which is activated to obtain a reward or avoid punishment. According to BPNT, there are two types of autonomous motivation: inner motivation and internalised external motivation. In this article, I will focus on inner motivation.

Inner motivation has been associated with optimal learning results (Ryan & Deci, 2017). In BPNT, the learning environment and its design are decisive for the type of motivation that pupils develop. Niemiec and Ryan (2009) found that teaching practices that support pupils' sense of autonomy, competence and relatedness contribute to inner motivation. Contexts and teachers facilitating such practices are described as *autonomy supportive* and enhancers of pupils' inner motivation (Reeve & Jang, 2006). Ellingsen-Dalskau et al. (2015) showed that basic needs related to autonomy, relatedness, and competence are essential for adults in a farming-care context and help them back to education and work. In this study, I base my understanding of motivation on BPNT, which holds that the context (here, the farm context, including the activities, farm environment, farmers, and local community) can promote or inhibit the satisfaction of the three basic needs, thus having an impact on the pupils' development of inner motivation and commitment to an ordinary school.

Changes that pupils experience can also be understood from a recovery theory perspective (Borg et al., 2013), which can be defined as not only a "personal process" but a "social process", where the contextual and relational aspects of the surroundings and environment are

in focus (Borg et al., 2013). Recovery theory is particularly relevant as it is concerned with health-promoting factors in the person's environment, and how such factors affect development and psychosocial functioning. Health-promoting factors in the context of this study may include the farmers' efforts to strengthen the pupils' commitment, self-confidence and hope for the future, and to facilitate the pupils' connection to themselves, relationships with others and inclusion in the social farm communities (cf. Glover, 2005). Recovery theory can thus augment BNPT's emphasis on the importance of satisfying basic psychological needs, such as relatedness. The "social process" that takes place in a relational community involves looking for resources within oneself in interaction with others, and thus building hope for a meaningful future (cf. Borg et al., 2013).

While BPNT is widely applied in school contexts and is used to explore classroom practice (cf. Niemiec & Ryan, 2009), no studies have, to the best of my knowledge, applied this theory to pupils' experiences of inclusive education in farm-based education programs, and in combination with recovery theory. Since BNPT emphasises internal motivation for pupils' learning outcomes, and recovery theory emphasises the contextual and relational aspects of the surroundings and environment, it will be interesting to see how alternative learning arenas can contribute to this area.

Data and method

Research design and data collection

This study employs a qualitative design based on data gathered from semi-structured individual interviews with year-nine and year-ten pupils in farm-based education, where a reflexive thematic analysis has been applied to the textual data (cf. Braun & Clarke, 2019; Braun et al., 2022).

The informants were recruited from five farm-based programmes for secondary school pupils, located in four municipalities in the eastern, western and central regions of Norway. The farms were identified using Quality Assurance in Agriculture (KSL), Matmerk's national overview of IPT farms (Into the Farmyard), and tips from relevant advisors at the County Governors' agricultural departments. A strategic selection was used to include various examples of organisational collaboration, particularly related to the farmers' contractual relations with the school. My aim was to include farms where the farmer either was a self-employed entrepreneur or employed by the school or local authority. Both female and male farmers were included. The staff consisted of members both with and without pedagogical qualifications. Five farms were chosen in accordance with these criteria. They differed in terms of organisation, school collaboration, involvement of professionals and activities. Four of them were quality-assured through Matmerk's certification scheme, and one was organised as a foundation. In three of them, all the pupils had individual decisions relating to special education and Individual Learning Plans (ILPs), whereas in the other two, not all the pupils had such a decision/ILP.

Fifteen pupils from these five farms agreed to participate. However, two girls did not show up for the interview, leaving a sample of 13 pupils, comprising two girls and 11 boys. The inclusion criteria for the informants were as follows: (1) pupils in year nine or ten, who (2) had participated in a farm-based education programme for at least three months, and (3) were at the farm at least one day a week. These criteria were justified by my aim to talk to pupils who spent more weekdays at school than at the farm. Six were from year nine and seven were from year ten. During the interviews, two participants indicated they had very

little contact with their ordinary school, while the other 11 went to ordinary school three or four days a week. The pupils had participated in the farm-school programme from one and a half to three years. Those who recruited the pupils were associated with the programme either as a leader on the farm, as a school inspector or an adviser at the local authority. The various representatives handed out information letters about the study and participants' rights to relevant pupils. They also obtained declarations of consent from the pupils and their parents for the pupils' participation.

Some of the pupils stated they had difficulty concentrating, attention deficit/hyperactivity disorder (ADHD), challenges in the classroom environment, lack of motivation for school, conflicts with teachers, illness, truancy and other difficulties. Some had clear diagnoses, while others had more complex challenges. The pupils, parents and schools had applied for this alternative programme. The allocation of places was decided through collaboration between the schools, educational and psychological counselling services and those responsible at the farms. In several cases, the aim was to improve the pupils' overall school week.

All the interviews were conducted during April–May 2019. Eleven pupils were interviewed at the farms, one at school, and one over the phone. The interviews, lasting from between 15 and 40 minutes, were recorded. An interview guide (Kvale & Brinkmann, 2017) containing five main topics was used: (1) the overall content and organisation of the educational programme, (2) the social community at the farm, (3) experiences of the activities, (4) differences between traditional school and the farm-training, and (5) new experiences. Other topics emerged during the interviews and were then explored through follow-up questions. The pupils chose whether to walk around or sit down during the interview. Three chose to walk around, nine chose to sit. One pupil who was prevented from coming was interviewed over the phone. Relevant extracts from the interviews were translated from Norwegian into English for use in the findings section.

As a former adviser for “Into the Farmyard” with the central authorities in Norway, I had some preconceptions that I tried to bear in mind throughout the study (cf. Malterud, 2011). Since I had worked with several IPT farmers and employees in various municipalities earlier, I was familiar with both advantages and challenges. To address this possible bias, the pupils were asked for critical reflections. The findings were also discussed with other professionals and supervisors. My prior knowledge could also be seen as an advantage in helping me to ask relevant in-depth questions.

Analysis

The interview material was transcribed orthographically and amounted to 64,937 words. A reflexive thematic analysis approach was used, going back and forth between the different stages of analysis as inspired by Braun and Clarke (2019) and Braun et al. (2022). This involved a process of reading, coding, recoding the data, and generating themes.

The transcribed material was thoroughly investigated with an open mindset, coding the interviewees' experiences. I collected these under main themes, for example: “A Day off from school”, “Learning in a different way”, “Part of a community”, “Gaining new experiences of themselves”. I worked on understanding the content of the main themes and sub-themes through mind maps and discussions with supervisors. I created four main themes and nine sub-themes. These themes covered the pupils' experiences and how such programmes contributed to the development of motivation for school. The findings and themes are presented in the findings section, and in Table 1.

An inductive approach was used to collect data. Initially, I had no specific theories in mind. But through the analysis process, it became evident that several pupils had experi-

enced close follow-up and new motivation for school, and I realised that BPNT and recovery theory was appropriate for gaining a deeper understanding of the pupils' experiences of these programs. The transcriptions and the identified main themes and sub-themes were reviewed with these theories in mind, and with an additional look at how the programs contributed to the pupils' experience of autonomy, competence, and relatedness. Some of the sub-themes were refined and changed in this process, for example, *Activities close to one's interests*. The interpretation of this, viewed through the lens of BPNT and recovery theory, is presented in the discussion section, where the article's research question is addressed.

Ethical Reflections

The study was approved by Sikt – the Norwegian Agency for Shared Services in Education and Research¹ (no. 271950). Both the pupils and their parents received written information about the study, and written consent was also obtained from both. Children are considered a vulnerable group within research ethics (Backe-Hansen, 2016) so the interviews were conducted in familiar and safe surroundings. The participants were clearly informed that participation was voluntary. This led two pupils to withdraw. Familiar adults (e.g., teachers or farmers) were available to the pupils both before and after the interview, both at school and at the farms. The pupils could bring an adult with them to the interview if they wished; one pupil chose to do this. In presenting the results, fictitious names have been used to ensure anonymity.

Findings

This article aims to answer the following research question: *How does farm-based education contribute to the development of the pupil's inner motivation for school? And what significance do the relational and social aspects of such programmes have?* Four main themes were conceptualised through the analysis of the pupils' experiences that emerged in the interviews: 1) the farmers' care and involvement, 2) being part of a safe and inclusive community, 3) the opportunity to try new and practical activities, and 4) personal development and new motivation for school. The first three seemed to prepare the ground for the fourth. Table 1 presents the main themes and sub-themes.

Table 1 Main themes and sub-themes in the analysis

| Main theme | Sub-themes |
|--|--|
| The farmers' care and involvement | Seen, affirmed, and valued by an adult |
| | Being challenged and trusted |
| Being part of a safe and inclusive community | Trial and error in a safe community |
| | Enough time and support |
| | A secure and accepting social community |
| The opportunity to try new and practical activities | Activities close to one's own interests |
| | Activities leading to visible results |
| Personal development and new motivation for school | Better self-confidence and new skills |
| | Increased attention and effort at school |

The farmers' care and involvement

The pupils experienced a genuine sense of the farmers' involvement, which included both affirmation and expectation. They experienced close relations with the farmers, and several of them perceived the farmers as genuinely interested in them and wanting to help them achieve their goals. As Harald put it, "You kind of feel like the adults are seeing you ... you're there like ... where it's mostly *you* that matters or ... and the others then ... They would rather know what *you* want to be and what *you* want to do, then they try to do their best for you so you can do it." Another pupil, Fredrik, explained, "Yeah, you get more attached to them, I think, because they're really engaged in you somehow; you get better help." Harald's and Fredrik's statements show that they felt important, close to, and involved with the farmers. They felt welcomed and valued by the farmer.

The pupils were divided into small groups of three or four. Several pupils pointed out the importance of small groups. Fredrik stated: "I think it's better here because there is better help and fewer people, so more people can try out different activities and learn new things." The farmers' facilitation made him feel affirmed, which helped him to learn practical and social skills.

Some pupils stated indirectly that their challenges at home affected their schooling and behaviour. Some said they knew they had behaved inappropriately, and that they still had good and bad days. The pupils perceived the farmers as sensitive in the way they treated, understood and looked after them, as this quote from Kristian illustrates: "Me and Jon [farmer's name] have a bit in common, you know. I started here with a bit of a bad past, but that's the past. Jon doesn't think about it; Jon takes everything positively ... Everyone here likes to be with Jon." The farmer's expression of care helped Kristian to feel accepted and respected, which aided him in dealing with his feelings. Kristian further indicated that the farmer adapted the activities according to how he felt each day.

The following extract from Ole's interview illustrates how the pupils achieved learning by being challenged, trusted, and given new tasks: "I drive on the road here with the Gator and the ATV [all-terrain vehicle] and other vehicles ... I couldn't drive before, but they were like, 'Get in, start it up, and drive on!'" Kristian had a similar experience: "I have built up so much trust here! You can't really start working until you're 15. I will be 15 this summer, but I have worked here for a while on weekends and earned money."

The pupils felt trusted by the farmer and felt he expected them to be capable. They were excited about taking part in activities they were barely old enough to do, which reinforced their experience of trust. Ole and Kristian described building trust because someone had faith in them and challenged them. Kristian improved his self-confidence as he developed a relationship with the farmers.

Being part of a safe and inclusive community

The pupils experienced a social community on the farm that made them dare to try new activities, including both practical skills and being involved in the social environment.

The pupils stated that they had learned several new skills, and the analysis revealed a culture that tolerated mistakes. This increased their self-confidence. Silje described that she felt more confident when she was on the farm compared to school. When asked why, she replied:

I don't know. I think it depends a lot on the teachers here, or the adults here; they help you a lot, but they're not doing things for you ... They let you try, and then you may be off the mark a little, so you can make a mistake. But it's okay because then they find a solution, and everything is good again.

Silje highlighted the connection between her feeling confident and a community where it is safe to make mistakes. In this case, the safe community was created by the farmers as they showed the pupils that they wanted them to succeed and stayed with them until a solution was found. In turn, the pupils learned that arriving at the correct solution might involve making a few mistakes along the way. The participants also described that they had all the time they needed to complete activities. As Fredrik described:

Yeah, you challenge yourself more here. I have not done these things before, so you spend a little more time on them, and as you have time – because it's a whole school day – you usually get things done. And it's a very good feeling. And then, they're good at boasting here somehow, all of them ... so they boast about other people.

Fredrik found he had more time to complete activities at the farm than at school. As a result, he successfully managed activities, which made him feel good, and he received positive feedback from the adults at the farm.

Several activities were new to the pupils, and the farmers first demonstrated them thoroughly. Fredrik explained, "Everyone is quite good at teaching – because they don't give up until you can do it, so it's quite a lot of fun ... They can show you five times ... if that's what you need." Fredrik found this motivating. Several pupils appreciated this way of learning; the farmers had ample time, the pupils worked together with them until the task was finished, receiving encouragement along the way.

The quality of the farm's social community was emphasised by several pupils, such as the perception that it was safe and supportive. Silje found the farm "less scary" than school. When asked why, she replied: "I think there are fewer people here ... so you're not *judged* quickly here, like you are at school."

Silje experienced the social community on the farm as more accepting. Later, she elaborated on this, saying that the environment at her school was not easy for her, neither when it came to her peers nor her teachers. Fredrik mentioned the importance of humour: "I really think it's very good. Everyone can sort of joke, and joke with everyone without taking it seriously. It's a good environment, I think ... At least everyone talks with everyone." Although Silje's and Fredrik's experiences were at different farms, they both described a community in which they felt accepted and included.

Kristian talked about the importance of having friends at the farm: "I have things to do with Morten [name of pupil]. I work with him a lot ... he just helps really, because he has helped me a lot, then I will help him, then he will help me further." Kristian's statement shows that he experienced the social community as fellow pupils helping each other, which was important to him. Several pupils made new friends and enjoyed being with others with the same interests. Some mentioned, however, that they felt a loss of contact with their friends at school. Others experienced themselves as more "normal" when they met others who were also struggling in school.

The opportunity to try new and practical activities

Almost all the informants highlighted the variety of activities and the opportunity to learn something in their own fields of interest. Volunteering was an important aspect. Each pupil had chosen individually, in consultation with their parents and school, what to participate in. The farm activities seem to have played a key role when considering this. Ole explained:

The first thing I noticed was a pupil riding an ATV. And then I immediately became interested. ‘Wow, are we allowed to drive here!’ [I] saw that the pupils often worked on their own and saw that they were doing a lot of exciting things, everything from farming to welding to woodwork and all sorts of weird things, so those are things I like.

The activities provided on the farm were of interest to Ole and were decisive for his choosing to participate in this program. Another pupil wanted to become a farmer and emphasised the opportunity to learn about farming. Several pupils highlighted the importance of having appealing and relevant activities, such as Fredrik, who was interested in construction work: “Yeah, I follow this because then there’s something I can take with me further in working life ... I feel it’s something completely different because I’m *interested* in it.” Fredrik connected his interests with topics he saw as relevant to his future education and working life. The relevance of the activities motivated him to concentrate on the tasks. This engagement contrasted with school, where some said they “sat with their heads on the desk”, “tilted the chair”, “walked out of class” or were “truant and struggled to keep up”.

The various activities on the farm included animal husbandry, plant care, cooking, logging, building construction, welding, handling tools, and driving various machines and vehicles. The variety was enjoyable, but they also valued the fact that the tasks were necessary. Several pupils commented on the contrast with the sedentary and monotonous school day. The practical activities provided visible and satisfying evidence of what they had achieved, as Fredrik explained:

I think it’s fun because I like to use my body, when I can use my hands somehow ... if we’ve constructed something, for example, the house down there, when I come here, every time, I can say, “I’ve been a part of that”. Like, it will stand for years. Each time I drive by, I say, “I’ve been a part of that,” so I think it’s really good. I like to be active.

In becoming involved in this work, Fredrik felt useful and gained ownership over both the process and the product, creating a result he was proud to point to. The house was concrete proof of what they had achieved together.

Personal development and new motivation for school

Through the training on the farm, the pupils experienced personal development in relation to building self-confidence, gaining new skills, having a greater attention span and making more of an effort at school.

Some pupils felt that the farm contributed to their personal development, as Simen noted: “I may have become more confident in myself, a better version of myself.” Silje believed that the farm’s social community had an impact on her personal development: “I don’t think I’m the same here as I am at school because at school, I’m quieter.” Silje changed her behaviour on the farm, where she was more extroverted, suggesting she was gaining self-confidence in an environment she perceived as inclusive. Many other pupils also mentioned the positive experience of gaining and developing new skills.

Almost all the pupils stated that they looked forward to spending the day on the farm. This contrasted with the ordinary school, where some said they had difficulty concentrating, lacked motivation, and even refused to go to school. Others had difficulties within the classroom environment, and some were aware that they were not academically strong. The pupils used phrases such as “it’s a break” and a “bright spot in the week” to describe the days

on the farm. Others said that they felt happy when they returned home. One of the boys said, “A farm day is a good day!”

Several of the informants found that the day on the farm increased their attention span and their efforts the rest of their school week. Some stated they felt more alert and awake at school after a day on the farm, which they found motivating. In this connection, Andreas said that it was:

Much better, much better, a completely different school day. You're more attentive ... when you get to school. You're more awake, you're not so tired ... you're kind of a little more involved than the others [pupils in the class] at the end of the week ... you're the one who, in a way, is most lively, the others are more tired ... when you've had two days doing something else.

The training on the farm contributed to a better overall school week and seemed to supply a shot of energy. Some believed this improvement was because they had “exhausted themselves” at the farm, “been challenged”, “done something fun” and “something interesting”. Ole said: “When I come back on Thursday and Friday, I tend to work a little more ... according to my teacher. He saw that after I started here, I started to submit more schoolwork... So, I think it has helped quite a lot since I started here.”

Other pupils also stated that their motivation for learning and school had improved because they better understood the importance of education. As Fredrik remarked, “I feel like I'm more positive about getting through school.” One pupil stated he had never been absent from the days on the farm. Another pupil quit a few months before his lower secondary school leaving exams to better focus on school. Others indicated that they gained new experiences and insights relevant for their future career choices.

Discussion

In the following sections, I will discuss how the pupils' experiences can be understood through the perspective of BPNT, recovery theory and relevant research in the field to assess how such programmes contribute to promoting inner motivation for school.

Relatedness due to close follow-up by farmers in small groups and inclusion in social communities

The interviews and my observations clearly pointed to the fact that the farmers were key personnel in the farm programme's efforts to help the pupils. Several of the farmers and their employees had relevant training and experience in working with young people. By treating the pupils as individuals, adapting activities for them, and facilitating an inclusive and social community, they created an environment that was premised on establishing close relationships. The pupils described the feeling of being cared for, both by the farmers and fellow pupils. This perception reflects the understanding in BPNT that belonging requires a sense of mutual care (Ryan & Deci, 2017), which can also be understood as a form of mutual recognition or being acknowledged. The feeling of mutual care and acknowledgment (relatedness) occurs through inclusion in small groups with close follow-up by farmers who are perceived as caring and respectful. The pupils experienced that the community on the farm was based on trust where there was room for a trial-and-error approach. This finding aligns with previous research highlighting the quality of the social community and a close relationship with the farmer as the key ingredients in creating the trust needed for young people to

be able to discover new qualities and aspects of themselves (Arnesen et al., 2022; Ellingsen-Dalskau et al., 2015). Follesø (2010) found that young people dropping out of school often feel a lack of acknowledgment. However, when pupils experience a good social learning environment, and feel they are seen and heard by adults (the teacher), the risk of interruption in their schooling is reduced (Aaboen Sletten & Hyggen, 2013). Similarly, BPNT claims that when pupils perceive that teachers and adults genuinely like, respect, and value them they feel a sense of relatedness (Niemic & Ryan, 2009).

In this study, the pupils who experienced relatedness and acknowledgment through participation in various activities also gained self-confidence. This aligns with other research on pupils attending farm-based education (cf. Fifolt et al., 2018; Krogh & Jolly, 2011). Being connected to both the farmer and fellow pupils in small groups seems to have given the pupils the confidence needed to engage in new and interesting activities, thus acquiring new academic and social skills. It seems that they were included in what Glover (2005) has called “recovery-nourishing” environments that contribute to an individual’s growth and development. It also appeared that the acquisition of new skills on the farm had a positive impact on the pupils’ motivation to participate, both on the farm *and* in subsequent school activities. The experience of developing practical and social skills in a hands-on environment seemed to foster a sense of enthusiasm and engagement. This increase in motivation appeared to be carried over to their participation in further school activities because they may have felt more confident and capable and experienced that they mastered both the activities and the social community at the farms. Promoters of small groups for learning argue that “pupils who have experienced defeat and social maladaptation in school must be allowed not to be there. These pupils feel better in a small and safe group, where they are seen and given tasks that they can succeed in” (Jahnsen & Nergaard, 2007, p. 15). The pupils in this study confirmed that security and belonging are closely linked to an increase in competence, which emphasises the importance of feeling relatedness and security in a learning situation.

Competence through interesting, practical and challenging activities

According to Gagné and Deci (2005), to fulfil competence requirements, it is crucial to feel acknowledged and challenged by being given new or demanding activities that increase the pupil’s confidence. The pupils in this study described an environment that had a wide range of practical, challenging and new activities, often within their special fields of interest.

The pupils were encouraged to try out new activities where they experienced mastering and developed new skills, which could involve social, academic, or practical competence. Research has shown that pupils with autonomy-supporting teachers improve their inner motivation, competence, and self-confidence and that a flexible and challenging environment can also increase inner motivation (Niemic & Ryan, 2009; Ryan & Deci, 2017). The findings from this study agree with several other studies on vulnerable youth that underscore the importance of close individual support and facilitation, varied activities, dedicated adults, time to accomplish tasks and stability (Dæhlen et al., 2011; Follesø, 2010; Frøyland, 2012; Kristiansen & Skåberg, 2010; Lyng et al., 2010; Rambøll, 2009).

Autonomy through the voluntary aspect and independent activities

The pupils’ remarks show that the varied activities and social environment on the farm helped them to increase their social and practical competence, and for many of them, this contributed to them gaining greater self-confidence. The farm-based education programme is based on a positive premise: it is voluntary (in contrast to compulsory school) and aims to provide activities that are focused on the pupils’ interests. The farmers played a key role both

in adapting the activities and facilitating the pupils' increasing independence in the work. According to BNPT, inner motivation is promoted by the combination of autonomous choices and enjoyable activities, which is part of satisfying the need for autonomy (Ryan & Deci, 2017). For young people, developing autonomy is an important part of becoming independent and responsible (McElhaney et al., 2009). The work-related activities can also affect independent career choices after secondary school.

Personal development and inner motivation

The pupils developed inner motivation, as was evident through their commitment to being involved on the farm. They expressed joy and satisfaction with the activities, valued the adults' involvement and experienced personal development. Personal development can be understood in different ways, including how it leads to changes in their level of self-confidence, knowledge, motivation, and social interaction (Moxnes, 2000). While personal development is a constant throughout life, it is often associated with children and growth through maturation and experiences (Moxnes, 2000), including both positive and negative changes. In this study, most of the informants experienced positive changes. In farm-based education, inner motivation and personal development appear to be two processes that are closely linked and that develop when basic needs have been satisfied.

The changes the pupils experienced can also be understood as "being in recovery" through the lens of recovery theory (Borg et al., 2013), where the focus is on health-promoting factors in a person's environment. Recovery has been linked more and more to the individual's social setting, where social support from networks, communities and society is involved (cf. Topor et al., 2020). This understanding, emphasising the role of key personnel, points out that no one can experience recovery alone. An important finding in my study is that the social processes taking place in the community foster the pupil's personal development, especially due to the adults' relational approach and facilitation: showing trust and generosity, giving encouragement, and facilitating a cooperative and accepting environment. This can be understood as the farmers' efforts to strengthen the pupils' commitment, self-confidence and hope for the future (education and belief in their own abilities). This reinforces the pupils' connection to themselves, their relationships with others (relatedness) and their social inclusion in the farm communities (cf. Glover, 2005). In this way, recovery theory can augment BNPT's emphasis on the importance of meeting basic psychological needs, such as relatedness. The "social process" at the farm uncovers resources within oneself in interaction with others, thus the community can be termed a "recovery-nourishing" environment (cf. Glover, 2005), or an autonomy-supportive environment (cf. Niemiec & Ryan, 2009). For some pupils, the farm contributes to inner motivation and personal development, which in turn strengthens self-confidence and hope for the future. The findings from this study indicate that farm-based education can equip young people to cope with the transition to upper secondary education.

Limitations

A strength of the study is the fact that I visited each farm and participated in some activities and meals, which gave me better insight into the programmes. There are some limitations as well; I did not interview any pupils with negative experiences. Those recruited may have been the most positive or well-functioning pupils, potentially leading to a skewed selection. Another weakness is the skewed gender distribution, reinforced by two of the girls not attending the interviews. Other studies (Jahnsen et al., 2006) also find a preponderance of boys in alternative learning arenas, which is in line with statistics from the Norwegian

Directorate of Education national primary school's information system (GSI) (Directorate of Education, 2023). This is interesting, and the study could possibly have revealed other experiences with a different gender distribution, which certainly is an area that should be further investigated.

The interviews were of different lengths due to age and maturity. The walk-and-talk interviews lasted longer because several things were brought up naturally when walking around on the farm. Some of these topics had little to do with the central themes. The telephone interview did not differ significantly from the others, except I did not meet the informant face to face. My overall impression though, was that all informants sincerely shared their thoughts.

Concluding remarks

The Norwegian government has decided to give preference to standardised schooling. This has several advantages, such as ensuring that pupils receive an almost “equal” education through common guidelines and teaching requirements, number of teaching hours and assessment in various subjects. However, not all pupils benefit from this. This study reveals that farm-based education represents a type of supplementary, inclusive educational programme for those who cannot reach their potential for learning and social interaction in the ordinary school environment.

The findings demonstrate the importance of giving some pupils a context where adults with the capacity to work closely with them become involved and provide challenging practical activities. Several pupils experienced personal development and became more motivated for regular school by spending one day a week on the farm where they engaged in activities they found interesting, while also having a break from regular school. Motivation developed in one learning context (the farm) can therefore influence motivation for learning in another context (regular school). Even though the findings are not unequivocal, the study suggests the need for more diverse schooling. Indeed, it is important to ask if school has become too academic for some pupils.

Farm-based education can be considered to be in line with the new curricula introduced in the autumn of 2020 (Ministry of Education, 2017), which emphasise in-depth learning and a more practical approach, as well as interdisciplinary topics, such as public health and life skills. The experiences of the pupils in this study are important considering recent studies that point to a trend where motivation among some pupils in Norwegian primary and secondary schools is declining (Wendelborg & Utmo, 2021). The findings in this study may be important for actors in both the public and private sectors who work in education for pupils who lack mastery and motivation in ordinary school and are interested in more practical work tasks.

While this study elaborates on existing research (e.g., Grimsæth, 2016), there is still a need for further research on pupils' experiences, on the retrospective significance of such educational programmes for pupils, on gender distribution and on the specific academic learning outcomes achieved.

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Noter

- 1 Previously NSD – Norwegian Centre for Research Data.

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