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Organic Food for Youth in Public Settings: Potentials and Challenges. Preliminary Recommendations from a European Study

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Tracing Food Education for Sustainable Development in iPOPY Countries

Recommendations for learning about sustainability and organic food within educational contexts

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Abstract

Food Education for Sustainable Development (FESD) is evolving into a topical entity included in education in European countries due to the growing focus on environmental and health problems, which cause a 'sustainability deficit' within the food system. This paper presents qualitative and exploratory research results from iPOPY project, carried out in Denmark, Finland, Italy and Norway regarding FESD and organic food in public food service for young people. The national core curricula in the studied countries seem to allow FESD although it is addressed in school contexts in varying ways through different school subjects; to some extent, the implementation depends on teachers' other school activities and school food culture. There are teachers who engage in innovative FESD with students, creating new connections between conceptual, practical and experiential education by networking with other teachers and food system actors. Results suggest that pupils and students would achieve more profound learning outcomes if a whole school approach with integrative and coherent educational strategies would be applied and school food culture would be considered from the point of view of SD. The school caterers seem not to be too much involved in FESD but their and their organization's roles are becoming more important. For successful learning about sustainability and organic food among young people, teachers, caterers, students and school administration have to be included in the process.

1. Introduction

Schools and public food service have been recognized as promising arenas for advancing sustainable development and changing the way people eat (Morgan & Sonnino, 2008). This paper traces education and communication about organic food and sustainability aimed at young people and discusses the findings from the ongoing iPOPY (innovative Public Organic food Procurement for Youth) project, which focuses on organic food in public food service for young people. Schools are main arenas for formal learning and school meal systems are the major public food services to young people. Festivals are collective events that can be understood as arenas for social and informal learning and opportunities to experiment with pleasure and meaning (Purdue et al., 1997).

Food Education for Sustainable Development (FESD) is often understood as part of Education for Sustainable Development (ESD), which refers to normative improvement of economic viability, state of environment and socio-cultural well-being (Morgan & Sonnino, 2008). Currently, FESD is gaining momentum within educational developments in European countries. However, as a cross-curricular theme, it represents rather a reformist concept when compared to international mainstream education based on different school subjects.

The iPOPY work package 4 explores the practices, perceptions and preferences linked with organic food in schools and other public settings in the four iPOPY funding countries (Denmark, Finland, Italy and Norway). This paper, which mainly is based on case studies in Finland and Norway, presents findings of actors' (teachers', caterers', students', school administrators' and festival visitors') views and learning about sustainability and organic food in the contexts of education and leisure. The qualitative research aims at analysing the actors' experiences and learning in order to respond to their views when proposing improvements for FESD. The findings also convey recommendations for implementing FESD within schools.

2. Methods

This paper is based on findings from iPOPY work package 4. The paper focuses on qualitative case research in Finland and Norway, whereby observation and individual interviews and focus group interaction were used

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to produce qualitative data. In this paper, food education in Italy is also dealt with briefly because some of the iPOPY data on school meals was also collected in Italian schools by observation. Italy has more organic food in schools than these Nordic countries (examples of iPOPY research sites in Figure 1).





Figure 1: Examples of iPOPY sites of research: Primary school in Italy and music festival in Norway Photos: Gun Roos

The qualitative research is based on cases, including primary, upper secondary and vocational schools in Finland, a cadet school in Norway and a Norwegian music festival (Table 1). These sites were selected to represent schools with progressive educational aims such as ESD and food service using both conventional and organic food or only organic food like the music festival in Norway. The cases in Finland included schools, because the free meal served at Finnish schools offers a stage for iPOPY research whereas in Norway, there is no public food served for pupils or students at school but they mainly bring their lunchbox to school. Other formal and informal educational contexts in Norway such as a cadet school and a music festival were therefore selected as cases for the iPOPY project. Teachers and caterers were interviewed individually, whereas focus group discussions were conducted with pupils and students at schools and participants in the event. The interview guides included questions about understanding, learning, evaluating and committing to sustainability and organic food by the respondents. The interviews were tape-recorded, transcribed and analysed for content and discourses, following principles of qualitative categorization of perceived differences in actors' accounts and behaviours (Bauer & Gaskell, 2000).

Table 1: Studied cases in Finland (FI) and Norway (NO). Numbers of interviewed teachers, caterers and young people in focus groups.

Sites of research	Type of site	Teachers	Caterers	Young people (number of focus groups)	Total interviewed
Primary school FI	Suburban	3	3	5 (1)	11
Primary school FI	Urban	3	4	13 (2)	20
Primary school FI	Suburban, remote	3	2	9 (2)	14
Vocational College FI	Suburban, remote	2	1	11 (2)	14
Upper secondary school FI	Suburban, remote	3	(2)	10 (2)	13
Music festival NO	Urban	-	-	9 (2)	9
Cadet schools, Norwegian Defence NO	Suburban	-	-	11 (2)	11
TOTAL		14	10	68 (13)	92

3. Results and discussion

3.1 Teachers

Teachers are central actors in education. In this part we will first focus on teachers and education in Finland. To illustrate European variation, food education in Italy, a European country serving more organic school meals than Finland, is presented. Finally, the role of cross-curricular FESD is discussed.

3.1.1 Teachers and Food Education for Sustainable Development in Finland

In Finland, ESD is part of the national core curriculum as a thematic unit which is supposed to be taught through all school subjects (Uitto, 2009). The statutory free school meal is considered as part of education, particularly pertaining to nutritional, cultural and manner tuition (Manninen, 2009). The 'environmentally dedicated' schools have also the possibility to reorganize their activities according to FESD and gain visibility by becoming certified by the international FEE "Green Flag" program or by the Finnish educational development foundation (OKKA). Altogether about 200 schools have complied with these programmes, and some of these schools serve organic food, among other more typical environmental activities. The ESD as a generic unit for all Finnish schools also frames FESD which is most often relevant for some particular subjects such as home economics, biology, geography, environmental and nature studies, and sometimes even languages and mathematics. Finnish teachers in case study schools presented a strong acceptance to the idea of ESD in general, but simultaneously a hesitation about how to deal with it in education; ESD seems to allow for individual variations across teachers and schools. In general, the teaching is directed by educational aims more broadly in primary schools but when national matriculation examination draws near in upper secondary school (pupils aged 16-18 years) the focus on subject knowledge grows ever stronger. Therefore, in lower classes there seems to be more space for experiential and practice based education. The teachers of the Finnish primary case study schools expressed a varied focus on ESD. The dedicated teachers aimed at a education of environmental ideas, introduced environmental practices, organized experiential learning in the vicinity of schools or at educational farms, and developed Green Pupils' Boards for pupils interested in environmental education. These teachers networked with 'external' actors such as caterers and technicians, and introduced them to teach and guide pupils about FESD. Additionally, these teachers organized organic food to be served at school meals by (considerable) administrational efforts, as a signal of sustainable practices. The 'ordinary' teachers expressed other educational interests and therefore worked according to basic educational aims including the concept of sustainability and organic food in their teaching. Finally, there were teachers who felt themselves as struggling with other problems which demanded more attention than ESD or FESD. (Mikkola, 2009a).

3.1.2 Food Education for Sustainable Development in Italy

In Italy, Food Education (FE) is a compulsory topic in primary and secondary school but it is taught without a particular school subject; therefore, it becomes 'disseminated' among teaching, as in Finland. Italian food education has a strong tendency to highlight nutritional, food cultural, environmental and rural aspects (Morgan & Sonnino, 2008) and it can be considered as a variety of FESD. Educational material has been published by both national, regional and commercial stakeholders within the food system. This FESD seems to vary in its implementation, like in Finland. The school meals are statutory but funded by family incomedependent progression, which is not visible to pupils (Morgan & Sonnino, 2008). Although the national and regional laws promote the use of so-called 'quality food', including organic food, at school meal service, pupils are not informed about this and may not be aware of the organic quality of the food served at school. In general, the FESD at Italian schools historically aimed at food security, after which food safety became an issue; finally, recently quality food, including organic food, has become the target for the Italian school meal system (Spigarolo & Donegadi, 2009). In Italian schools there are Canteen Commissions, where parents, school staff and caterers meet to discuss and ensure the quality of the school meals. These bodies may be regarded as co-operative bodies for FESD (Spigarolo & Donegadi, 2009).

3.2 Caterers

In this part caterers' views and roles in FESD within Finnish case study schools are presented. Public caterers often meet limitations with funding and often find it difficult to buy organic food. They are interested in SD and organic food but more often than not restricted by organisational practices of the catering industry. They would like to exert more influence on the developments towards sustainability and moreover, and they express interest in learning more about sustainability and new practices.

3.2.1 Caterers' views on sustainability and organic food

Finnish caterers had different positions in terms of their powers to procure organic or local food; executives had more responsibility for the budget, whereas managers could impact within these limits on the quality of food. The executives' and managers' professional identity for sustainability (Mikkola, 2009b) was studied as social force for sustainable food choices. The caterers' choices depended on the alignment of (existing) organizational sustainability strategies, their own views about sustainability and its practice as well as availability and price of organic and local food on the market. In case of positive alignment of these factors, the executive caterers were able to buy organic and local food, work together with the supply chain actors

and feel happy about their professional position. In case of lack of support by the organizational strategy and supply chains on the market, the executive caterers were trying to deal with sustainable choices. Finally, if they were critical or delimited about their views for sustainability, in spite of some level of organizational support, they focused on other developmental aims within their professional work rather than to search for organic products. The managers shared partly these approaches; they seemed to be happy when organic food was used by the organization, but were often found to disagree with their superiors about the procurement criteria of conventional food. Some managers were concerned about the health quality of food, some created distance to (un)available organic food and again some paid no attention to their unsystematic choices for sustainability. These results support that sustainability and organic food, understood as a sustainable alternative, have become identified by caterers as an option for exhibiting sustainability aspects in catering. However, there seems to be need for orchestration of the use of organic food within the organizations, co-operation with suppliers and more profoundly informed decisions about sustainable food choices. (Mikkola, 2009b).

3.2.2 Caterers' response to the organic message

The caterers studied seemed to view organic food as an alternative to conventional food and thereby saw it as a potentially more sustainable option, as a 'call for goodness' in terms of environment, health and animal welfare (Mikkola, 2009b; Mikkola & Roos, 2009). Some attached this quality feature to local food too, and were additionally interested in presenting themselves as progressive professionals working for a 'morally sensitive' organization. However, those who were unable or unwilling to 'join' the 'good organizations' - due to lacking understanding of sustainability criteria on the chain level, economic or availability problems seemed to develop a negative response to this organic message (Mikkola & Roos, 2009). The organic message as moral communication (Luhmann, 1990) suggests the features of moral behaviour and calls for procurement of organic food. The caterers' negative response included arguments such as free school meal service being already on a morally high level and organic food being 'new luxury' not feasible for cheap and democratic school meals. The caterers also saw more urgent improvement needs elsewhere, for instance in renovation of old kitchens. Finally, organic food was criticized for lack of particular micronutrients and fortified vitamins, and that the evidence of weak quality of conventional food was missing. The caterers also presented resistance to 'trends' and saw their activities as firmly based on legal and nutritional agreements about school catering. The analysis suggests that the organic message needs to be designed in ways not calling for negative response by caterers and even to be designed as a solution to their dilemmatic situation. (Mikkola & Roos, 2009).

3.2.3 Caterers' learning at the workplace

The participatory research approach (Bruges & Smith, 2008) for developing the use of organic milk with caterers was implemented as a response to political quest for increasing the use of organic food in public catering (Mikkola, 2009c). The researcher organized the dialogue with caterers and industry in turns whereby their messages to one another were condensed and mediated by the researcher. The caterers were complaining about the composition of organic milk, which in Finland is not fortified to increase the vitamin D content in skimmed organic milk. Furthermore, there were no large packaging sizes available, and in low-fat organic milk, which is usually not homogenized in Finland, the fat tended to form a layer on top of milk column. The caterers experienced difficulties in explaining the sustainability quality of organic milk because the contrast between conventional and organic Finnish milk types, as perceived by them, was not very obvious. Furthermore, due to the milk market competition between wholesalers, organic milk was not available despite the contract for delivery. The response by industry concluded that vitamin D fortification of organic milk was dependent on national legal developments connected with EU directives, and therefore represented a heavy and slow procedure. Changing packaging sizes would be a major industrial investment, and therefore not done on light grounds for minor product segment under conditions of heavy market competition. The researchers' suggestion for caterers to see the use of organic milk as an "intermediate mediating strategy" (Deane-Drummond, 2006) was reflected upon and a test to use organic milk for two weeks accepted by caterers. The trial increased caterers' interest in quality of organic milk because of a possibly healthy fatty acid composition, and the use of one litre packaging was not considered very difficult; some organizations even were positive to this size for occupational safety reasons. Positive price and quality developments were expected to take place regarding organic milk. The study emphasises the need for learning at the workplace (Tynjälä, 2008), which seems to be a positive option in the hectic working life in catering industry (Mikkola, 2009c).

3.3 Students and young people

The results from iPOPY cases in Finland and Norway show that young Nordic consumers mainly see organic food and sustainability as positive developments but they also express ambiguity related to features such as commercial interest, price and inequality between food system actors. Views of young people in Finland and Norway about SD and organic food are presented, and the whole school approach is discussed. Students and young people at public events serving organic food are central actors because they represent the consumers and users of these public food services.

3.3.1 Students and sustainable development

Finnish students' views pertaining to learning about sustainable development and within this frame, organic food, were explored as discursive perspectives (Mikkola, 2009d). Particularly, the change towards sustainability was studied as ecological communication. The young people in their teens and early adulthood knew the expressions related to sustainable development; they were talking about 'future generations', 'saving the nature', 'improving SD', and how human every-day behaviour affected the use of resources such as food, water and energy. Regarding economic behaviour, efficient use of natural resources and saving was seen important, but, however, in competitive ways. Particularly in food production young people expected that chain actors respect and follow regulations, for example, they expected the organic label to be trustworthy. In addition, they were interested in scientific evidence of the organic quality. Science was expected to offer support for political disputes in conditions of uncertainty, in order to yield 'right' decisions. Religion was evident as moral sphere, which contrasted 'large populations' with 'limited means' and suggested that well-off people were in position to share efforts for SD rather than people less well-off. In general, a moderate way of living was approved necessary and expectations of fairness expected instead of 'eco-bluff'. The young people could be understood as competent citizens in terms of SD, but judging themselves as less well-off people they voted for modesty and expected organic food to be competitive and truly fair, without luxury connotations. Stress was laid on economically feasible and innovative solutions in the use of organic food (Mikkola, 2009d).

3.3.2 Whole school approach

The whole school approach (Morgan & Sonnino, 2008) refers to a system of FESD whereby the teachers, caterers, supply chain actors and pupils or students are connected to the school meal system in such a way that they would better understand the sustainability aspects of their food. This ideal seems to rarely become a reality, as suggested by our case studies presented here, and confirmed by studies of Norwegian schools by Marley (2008). However, there were schools with FESD approach, whereby teachers, administrators, caterers and supply chain actors were working together to ensure that the school meal service contributed to SD in one way or another. This kind of practice was identified in Green Flag and OKKA Foundation certified schools and whereby parents were aware of organic food being served at school meals. However, the price of the food, it's origins, and particular environmental quality features of food were rarely explained anywhere. The pupils' critical understanding and awareness of organic food as well as local food was there, but could be developed further (Mikkola, 2009e). In general, these case studies do not allow to draw conclusions about the extent of FEDS across schools in Finland but they suggest that a promising development is in its initial phases. Environmental and sustainable education certifications, such as Green Flag or OKKA could offer one strengthening sign or background for this development. However, the FESD needs to be implemented on the conditions of the national school food cultures present in the particular country and school (Roos, 2009).

3.3.3 Public events for young people - Festival context

The Norwegian Øya music festival, one of the cases in the iPOPY project, provides young people an opportunity to taste and experience organic food, which may effect perceptions and learning about organic food. The young Øya participants described the festival as a positive experience, and thus organic food was introduced in a positive context. Organic food was viewed as different from conventional food, and there seemed to be an expectation that it would be better for themselves, animals or environment, or taste better. But not all were sure about what made organic food different and why. There was a shared opinion that organic food is more expensive, and that the food sold was small portions for a lot of money. Festival food was mainly associated with necessity, fuelling the body and high price. Some of the participants had noted the information on organic food, but others had not registered the posters or even that the food was organic. There were mixed views on the transmission of organic food from festival to everyday context; some thought organic festival food had a positive effect, whereas others described festivals as separate worlds with limited influence (Roos et al., 2009).

4. Conclusion and Preliminary Recommendations

FESD seems to be developing as an educational orientation in iPOPY countries. The orientation seems to respond to current sustainability deficiency, but it needs efforts for cooperation between different actors who have traditionally not been engaged in shared activities. As problem based and cross-curricular education, aiming at dealing with local community problems of all kinds by education (Beane, 1997), this activity should deserve more attention and resources. Different school food cultures, shared beliefs and priorities driving the thinking and actions related to food at school, means that it is not possible to give one strategy that fits all for how to integrate FESD and organic food (Roos, 2009). However, the iPOPY work package 4 work in FESD conveys some preliminary recommendations for teachers, caterers, students and administrational bodies as future collaborators. The recommendations for formal educational contexts are listed below in Figure 2.

4.1 Teachers

- Focus on problem based education and ESD may offer a frame for FESD as an entry point to extensive societal 'rectifying' move with pupils, students and caterers as well as supply chain actors
- Try to network with other food system actors in order to develop innovative FESD as a whole school approach
- Look after combining conceptual (scientific), practice based and experiential learning of FESD
- If possible, try to use certification schemes as tools for reflecting and developing contextual FESD
- Young people learn about organic food through hands-on activities and by experiences within but also outside the school environment; link these activities if possible
- Establish a Canteen Commission with caterers, parents and pupils for sharing developments within FESD

4.2 Caterers

- Try to pay attention to school meal as an educational event and as enjoyment of tasty food
- Learn at your workplace about quality of sustainable food, including organic food
- Inform teachers, pupils, students and others about the quality of ingredients, their origin and price
- Participate with teachers in FESD
- Suggest a shared and strategic sustainability approach, including organic food, for your organization
- Establish a Canteen Commission with caterers, parents and pupils

4.3 Pupils and students

- Ask about sustainability aspects of your school meal from your caterers and teachers
- Think about how SD and organic food can be part of teaching and learning of different school subjects
- Make an effort to participate in 'Canteen Commission' with parents, teachers and caterers
- Think about the work behind and value of the school meal for all eaters!

4.4 School administration

- Think about the possible certification of school in terms of ESD, including FESD
- The certification may bring about useful reflection and development of FESD
- Establish a Canteen Commission with caterers, parents and pupils
- The educational achievements may improve as actors have access to high level nutrition
- Make young people aware of the sustainability status of their education collect and share possible evidence for this at your school!

Figure. 2: Recommendations for various actor groups for development of FESD

In conclusion, this paper sees that FESD has a cultural gap to fill, but, however, the concerted effort for it's implementation represents a novel challenge for traditional organisation of education.

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