

A report presenting best practise

“Learning and increased awareness for change”

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Educational food kitchen

- an example from Sötåsen natural resource school in West Sweden

The ongoing urbanization has increased the need for education about food production and the foods path from field to fork. Today many Swedish schools use their school canteen as an educational environment. With the right atmosphere the canteen can create a natural environment for discussions about the food being served and allows for an involvement of the kitchen staff in the student's education. This work can be further developed by introducing local or own grown produce into the school kitchen and allowing the students to follow the produce through the chain in real life. A more hands on education increases their understanding of the field, something that can help them make better (and more informed) decisions throughout their future lives. This can be done by involving the student in the menu planning, site visits at nearby farms, buying local food with the student (e.g. at the local farm or at a farmer's market) and cooking the purchased food together. Furthermore, the food being served in the school canteen can be presented by the kitchen staff or by signs at the food-serving counters. Two things that have shown to be essential for success is to establish a good dialogue throughout the chain and to keep it simple.

Introduction

The ongoing urbanization has increased the need for education about food production and the foods path from field to fork. As a way to contribute to an increased knowledge in this field many Swedish schools have started incorporating education about a nutritious diet and the origin of different groceries in their school lunches. The canteen can create a natural environment for discussions about the food being served and aids in involving the kitchen staff in the discussions. This work can be developed by introducing local or own grown produce into the school kitchen and allowing the students to follow the produce through the chain in real life. In this report the work at Sötåsen natural resource school will be presented as an example of how to work with education concerning short supply chain.

Sötåsen runs a full-scale farm including full-scale meat and crop production. Part of the school's produce is used in its canteen with an intent to increase the food and educational quality as well as contribute to a more sustainable future. In addition, it helps cover the canteen's need for vegetables, root crops and meat. In order to ensure a high educational quality the students are involved in all parts of the chain. This creates a deeper understanding of the food chain and its different parts.

Being a natural resource school with its own farm of course makes the work of showing the food chain easier, but many of the ideas are assumed to be transformable to fit different school types and educational systems. Schools can for example collaborate with adjacent

farms or mainly focus on the work done in conjunction with the preparation and serving in the canteen. A more hands-on education where the students are involved in every step of food acquisition increases their understanding of the field, something that can help them make better (and more informed) decisions throughout their future lives.

What can/has been done?

1. Planning

In order to successfully introduce own grown or locally produced produce in the school canteen all parts of the chain must work together, something that requires a good and continuous dialog between the different parts of the chain. It is also important to start the dialog early in the process, preferably already in the planning phase. Here the planning phase is assumed to include the creation of menus and cultivation/breeding plans and potentially creating/changing agreements with organizations representing different parts of the chain (e.g. slaughterhouses, carriers) among other things.

At Sötåsen this phase includes a continuous dialog between the school kitchen and the school farm in order to match the cultivation/breeding plan and the canteen menu as much as possible while still following the requirements stated in the different course curricula. This open dialog allows the kitchen to adapt the menu to what can be produced at the school farm and vice versa. Having an open dialog this early in the process helps the different parties get a better understanding of each other's needs and possibilities. It also creates an increased security for both parties since they know in advance how much they will deliver/receive. The students are involved in creating the cultivation/breeding plans based on the need from the kitchen. In this way they increase their knowledge of a large consumer's needs and requirements.

2. Logistics and post treatment

For schools not having a school farm at its disposal collaboration with farms and post treatment organizations (e.g. slaughter houses) can enable the students to see different parts of the chain in real life. During a visit the class can for example gather and buy food products that they use in a meal back at school.

In our example the steps for logistics and post treatment are slightly different for meat and root crops incl. potatoes. They are therefore treated separately here.

In the case of meat an external expert handles the slaughter and cutting of the meat. Delivery of animals and pick-up of the meat is performed by the school personal (and potentially students). A collaboration with the slaughter house enables the students to see a slaughter even though they are not present every time an animal from the school is being slaughtered. The meat is packaged by the school's kitchen staff and kept frozen until use.

Unlike the meat the root crops never leave the school facilities. After harvest they are packaged in baskets able to contain about 10-15 kg root crops and stored in a large refrigerated container located at the school farm. From there the baskets are delivered to the kitchens by a staff member from the farm. Cleaning and peeling of the potatoes is done in an adapted room in the kitchen quarters. Enabling cleaning and peeling of root crops in the

school kitchen was critical to implement the use of own grown produce. One of the reasons was the lack of available local post treatment services. The students are involved in every step from planning to kitchen delivery.

Even though the school has a large refrigerated container for storing potatoes and root crops the storage is still an area where more development is needed. It has turned out to be difficult to optimize the settings for temperature and air flow. This results in an increased decomposition of the produce and thereby an increased amount of waste.

3. Preparation and serving

A school canteen can be an excellent place to create a natural environment for information and discussions about food and its origin. The food being served can with advantage be used as starting point for these discussions. Information about the meal being served can for example be displayed on signs placed at the food-serving counters or be presented by the canteen staff while the guests take their food. Interesting points to include in the information is for example the origin of the different ingredients, their environmental footprint, how the origin and production method affect the ingredients environmental impact, a comparison between different corresponding ingredients.

Another way to improve the canteen as an educational environment is to make it a nice and welcoming area with a comforting atmosphere. This lowers stress levels, something that creates an incentive to stay longer in the canteen and increases the learning ability.



Developing the canteen to an educational area can also include work in which the kitchen try out new ingredients or old ingredients in new ways and spreading information about this to the canteen guests (both students and school staff). Sötåsen have for example used field beans to bake bread. By serving meals with innovative ingredients a wider idea of how different products can be used is spread amongst the canteen guests. Also in these situations information is spread through signs in the canteen and a dialog between the kitchen staff and canteen guests.

A collaboration with a local restaurant school (or restaurant) can enable a hands on education of the preparation part (cooking) of the food. Here the students have the opportunity to see how the produce is used at a large scale consumer and potentially cook with their own produce. This helps create a more complete picture of the entire food chain, something that can be helpful in decision-making for both consumers and producers. For the students at a natural resource school it further deepens their knowledge about their future customer/end user of their products. This can help them develop business models better suited for the target group.

4. Waste management

By visualizing the waste production canteen guests generally starts paying attention to how much they throw away, which in turn often leads to an effort to minimize waste produced. The visualization can for example be done by displaying the weight of the weekly food waste and make comparisons to previous weeks. In this way the guest can see their collective progress.

Results and important lessons

Increased dialogue creates a better understanding between different parts of the chain, which has eased the collaboration. It has resulted in a menu better adapted to local supply chain throughout the year and a school farm when considering the needs of the kitchen in their breeding and cultivation plans. Furthermore, the work in the canteen has resulted in an increased interest from students to know the origin of the food being served. If the canteen for example serves meat from the school farm the students can ask which exact animal the meat is from.

One realization resulting from the work was that there is few small local post-treatment organizations (e.g. for peeling potatoes). Although more work has to be done in order to establish if the existing organizations can cover current needs.

The most important lessons learned during development and implementation of the methods is the importance to keep it simple and start small. A starting point can for example be to have a sign at the food-serving counters with information about the food being served.

Next steps

In the near future work will focus on solving current challenges with potato and root crop storage. Work is also currently being done to further develop the canteen area as an educational space. This work includes visualizing the own grown food chain (e.g. with a poster) in connection to the canteen.

Do you want to learn more?

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