Directorate for Education
Centre for Educational Research and Innovation (CERI), OECD

Innovative Learning Environments (ILE)

INVENTORY CASE STUDY

Fiskars Model

Finland

The definition of the learning environment in the Fiskars Model encompasses the whole village community in which the small primary school is situated (students aged 6 to 12). Artists and handicrafts from the village give workshops for the students on diverse topics, for example, woodworks, fine arts, or glass blowing. Main pedagogical methods are learning-by-doing and active learning in authentic "real life" contexts. The local museum also organises workshops on historical periods, during which the children dress according to the covered period to feel as if they are "travelling" in time, and students contribute to local cultural activities, like theatre productions or exhibitions. Positive effects of the collaboration between school and village are that community members are aware of the whereabouts of the children, that generations are connected, and that the students learn about the historical and cultural heritage of the village. The school is developing a guide book that can be used by other schools.

This Innovative Learning Environment case study has been prepared specifically for the OECD/ILE project. Research has been undertaken by Leena Tornberg, Anna Mikkola, Antti Rajala & Kristiina Kumpulainen from the University of Helsinki under the supervision of Juho Helminen from the Finnish National Board of Education, following the research guidelines of the ILE project.

OECD's Centre for Educational Research and Innovation – CERI

Innovative Learning Environments' Project (ILE)

Fiskars Model

Finland

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Contents

Foreword

The model provides a continuum from early childhood until the upper grades of basic education. Students have the opportunity to develop their own strengths during six years rather than based on a few visits. Hands-on workshops, combined with normal schoolwork and the curriculum, bring informal learning into the school's daily life.

The model is expandable to different themes and different grades. Alongside arts and crafts, cooperation with experts of different areas can be introduced to the model depending on local circumstances.

Finnish National Board of Education

1 Introduction

This report is part of the OECD's Centre for Educational Research and Innovation – CERI's international study on Innovative Learning Environments (ILE). The report offers a description of one Finnish learning environment project – the Fiskars Model. The structure of the report is outlined in the following: Chapter 2 provides a description of data collection and analysis. Chapter 3 presents the model's general aims, history, and structured characteristics and patterns. Sub-chapter 3.3 presents the learning outcomes in the observed case. Chapter 4 compiles the impacts and effectiveness of the model.

The present research was conducted within the Learning Bridges: Learning and Teaching at the Intersection of Formal and Informal Learning Environments project in collaboration with the Finnish National Board of Education (FNBE). The Learning Bridges Project was a three-year (2008–2010) multidisciplinary research project funded by the Finnish Ministry of Education. The project was carried out at the University of Helsinki at the Faculty of Behavioural Sciences.

2 Data collection and analysis

The material was collected at the Fiskars primary school, which is a school of 70 pupils (grade levels one to six), five full-time teachers and three part-time lecturers. The first step in collecting the material was an interview with the project-coordinator, Johanna Illman, in October 2010. It was affirmed at this meeting that all essential documents were available for the report. It was also decided which workshop and group would be observed.

The observed class consisted of thirteen 4th grade pupils aged 9 to 10, their teacher Ethel Mattila, who also acts as principal of the school, and ceramist and workshop leader Riitta Talonpoika. Nine of the pupils were boys and four were girls. Compared to the average number of pupils in a 4th grade class in Finland, which is 21 pupils in a group, this class may be defined as fairly small[1].

The data were gathered in November 2010 over a period of two days. All relevant permissions for conducting the research were appropriately acquired beforehand. During the first day of data collection the class participated in a two-hour ceramics workshop. The workshop took place at the studio of the local ceramic artist Riitta Talonpoika. The artist's studio was located within a walking distance of the Fiskars primary school. The workshop activities were recorded with a portable video camera.

On the second day two pupil groups were interviewed. For this purpose Mattila divided the class in half and the groups were interviewed separately by two researchers. The first pupil group consisted of five boys and two girls and the second of four boys and two girls. The interviews took place at school without the presence of the teacher. In addition to the pupil interviews, two facilitator interviews with the ceramic artist and the teacher/school principal were conducted during the same day. In order to study the nature of learning in the observed 4th class, the video material was analysed with the help of the interviews. This material was then compared with the local /school curriculum and the aims of the model.

[1] Ministry of Education, 2008

3 Innovative Learning Environment – Fiskars Model

Goals of the Fiskars model:

- ✓ To connect the school activities to the surrounding community and make use of the existing resources in the teaching of culture, art and craft skills.

Summary of Chapter 3

- ✓ From the perspective of an individual pupil, the Fiskars Model is a six-year learning path. It begins when the child goes to school at age of six or seven and ends when he/she is 12 or 13 in the 6th grade.
- ✓ Each class (1-6) attends a workshop at least once a year according to the planned program in the school curriculum.
- ✓ Workshop leaders are professional artists and handicrafters working in their studios in the village.
- ✓ Main workshops include for example paper making, woodworks, visual arts, textile / knitting design, ceramics, study of nature environment, linen, blacksmith, glass blowing.
- ✓ Additional (optional) workshops: museum, exhibition, theatre, dance.
- ✓ The main pedagogical methods in the model are learning-by-doing, immersive learning and student-professional collaboration.

3.1 Aims and history of the Fiskars Model

Fiskars village. Photo: Fiskars Info, Fiskars Ltd.

Fiskars is a small village of 600 inhabitants situated in the city of Raseborg about a hundred kilometers west of Helsinki, the capital city of Finland. The village has a more than 300-year-old history as an ironworks village, and today is known as a center of Finnish art and design, with more than one hundred artisans, designers and artists residing in the village permanently (for more information see http://www.fiskarsvillage.fi/en/). The Fiskars Model is a four-year developing project funded by the City of Raseborg and the Finnish National Board of Education (FNBE).

The goal of the project is to connect the Fiskars primary school and its activities to the surrounding community and to utilize the resources of the community, the knowledge of the local artisans and artists, the village history and the surrounding nature in primary school education.

The project was a joint initiative of the village community, parents and the Fiskars primary school staff. The threat of closing the school in the village, which is quite a prevailing phenomenon in contemporary rural areas in Finland, gave an impulse for creating the model. Instead of only opposing the closing of the school, the atmosphere in the village was emphasized to show the school's significance to the village in a positive way. This angle was evident in both the project coordinator Johanna Illman's and the principal Ethel Mattila's interviews. The principal Ethel Mattila stated:"in the parents' meeting at school, when there was discussion going on about the threat of closing the school … we together, the parents and the school staff, wanted to show what it was that could not be done anywhere else … what was so valuable; then we noticed it was the special milieu [old ironworks village]; it could not be relocated. We started to connect [the positive development of the school] to this environment." The principal pointed out that parents' support and community commitment were crucial for starting the Fiskars Model project. An article in the magazine of Trade Union of Education in 2007 described the project in its initial phase.[2] The article presented the small village of Fiskars, which had involved its many artists and artisans in putting the school curriculum into practice. The model was named after the village. In the article the director of the Finnish National Board of Education at that time, Kirsi Lindroos, expressed her support for developing the model. According to her, there are plenty of lively villages with special activities in Finland, and the model should encourage all small schools (i.e. with pupils fewer than 100) and their teachers to use the resources around the school innovatively.

The Fiskars primary school had had workshops lead by professional leaders for twenty years. In some workshops the school had made use of the resources in the surroundings, but this had been infrequent, not systematic, as it became in the Fiskars Model project. Other points to develop in the model came out in the principal Ethel Mattila's interview. According to her schools are institutes owned and financed by the state (society) so they should be able to serve and communicate with their surrounding community, in this case the whole village, and the development of the school should happen together with world around it.

The Fiskars Model is a pattern for a cultural heritage learning environment. The basis for the model is the Finnish national curriculum, particularly its cross-curricular themes, which were a new development in the curriculum in 2004.[3] The objectives of the cross-curricular themes are to elaborate the general educational goals by integrating knowledge from different fields and dealing with themes more as phenomena, not as different school subjects. One closely connected to the Fiskars Model is *Cultural identity and internationalism.* The objectives of the theme are, for example, to add to the pupils' knowledge of Finnish culture and special characteristics of the local culture, but also to teach and develop pupils' cultural identity as part of the Finnish, Nordic and European societies, and as part of globalization. The cross-curricular themes are implemented in various subjects. The main subjects connected to the Fiskars Model are visual arts, crafts and history, and in the observed case, also music and languages. Cross-curricula themes can be included in the core subjects or optional subjects, or at joint events at school. According to the National Core Curriculum, they are to be manifested in the school's operational culture.

A term which recurred in many documents of the Fiskars Model is "authenticity" or "authentic": authentic environment, authentic studios, authentic working methods, and authentic materials. Sirpa Haikarainen[4] discusses the theme in her master's thesis. The Fiskars Model gets its authenticity from the history of the ironworks village. This can be seen even today in the physical environment of the village; for example, in the buildings, which are no longer in their original use but changed into modern working spaces and studios for professional artists and artisans. When these professionals act as workshop leaders it is an essential part of authenticity says Haikarainen. Allowing classes to come to the artists' own studios and working places means pupils have access to spaces which they might not otherwise be able to use, for example, for safety reasons. One aspect of the authenticity of the workshop is that pupils use the same professional tools, machinery and materials as the artists. Haikarainen considers the authenticity in its many forms as one of the features, which interest and motivate both teachers and workshop leaders to participate in the Fiskars Model. Another term, which was essential, is 'workshop'.

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[2] Opettaja 25/2007. The article is available in electronic form; see References.

[3] National Core Curriculum, 2004

[4] Haikarainen, Sirpa, 2010

In this report it refers to an activity, which is arranged during school time. The leader of the workshop represents an expert of his profession. If the workshop activity happens outside school, it happens in the leader's own workplace, in this report called studio (not workshop).

3.2 Structured characteristics and patterns

The Fiskars Model is defined as an enlarged learning environment. The basis for the model and its central working method are the workshops that are developed, and organized in cooperation with such actors as the *Artisans, Designers and Artists Cooperative of Fiskars* (for more information see http://www.onoma.org/en/), *Fiskars Museum*, and *Dancing School Kärki and Kanta*.

Fiskars is a small village where everything is situated close by: The art and handicraft studios where the workshops take place are all in walking distance from the school. When the children walk to the workshops with their teacher, their learning environment expands both socially and physically, and they get familiar with the village environment. The definition of learning environment in the Fiskars Model, hence, encompasses the whole village community in which the school is situated. Figure 1 illustrates the central elements of the Fiskars model, and their interconnectedness. It depicts the Fiskars Model as

a physical environment, but also as the six-year learning path of every primary school pupil in the village of Fiskars.

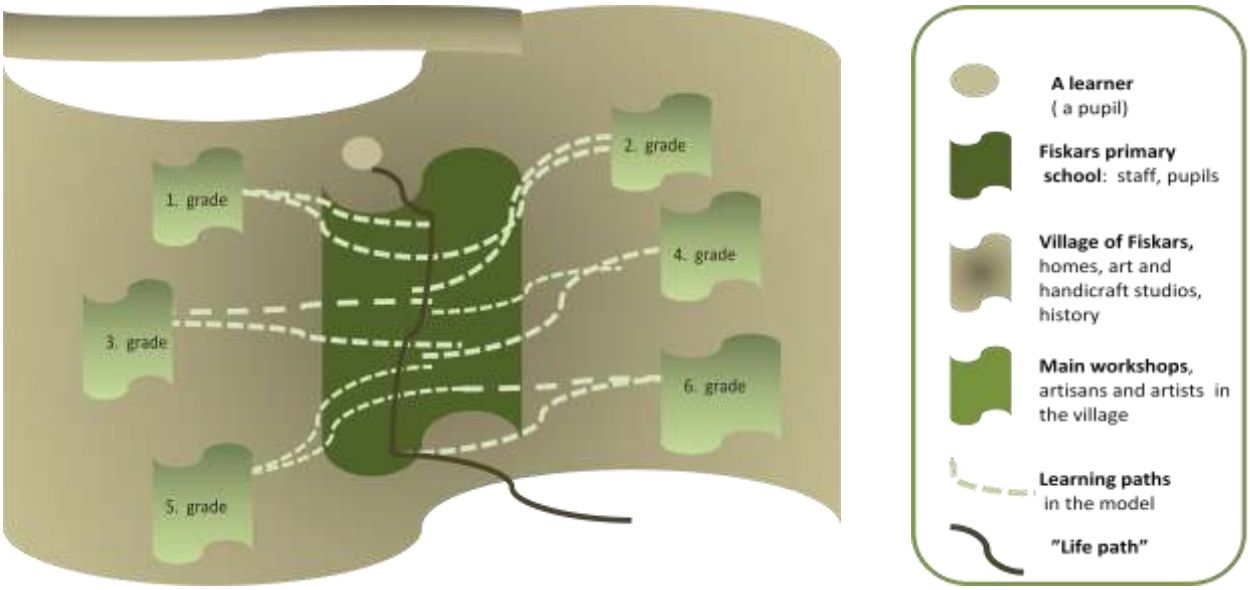

Figure 1. General model of a learner's six-year learning path in the Fiskars Model.

Sirpa Haikarainen classifies the workshops in the Fiskars Model into four groups: art workshops, handicraft workshops, museum education workshops and exhibition workshops. According to the project coordinator Johanna Illman, the core of the Fiskars Model consists of *art and handicraft workshops*. The themes - paper making, woodworks, visual arts, textile/knitting design, ceramics, nature environment, linen, blacksmith and glassblowing - for these so called main workshops come from artists and artisans in the village. The participation in the main workshops depends on the pupils' grade level. The classes attend the workshops according to the planned program in the school curriculum as follows: 1st grade - wood; 2nd grade - painting, 3rd grade - wool; 4th grade – clay, 5th grade - iron, 6th grade - glass (see Figure 2). The participation in the main workshops depends on the grade, not on individual teacher's interest in the theme. Every year each class participates in at least one art or handicraft workshop.

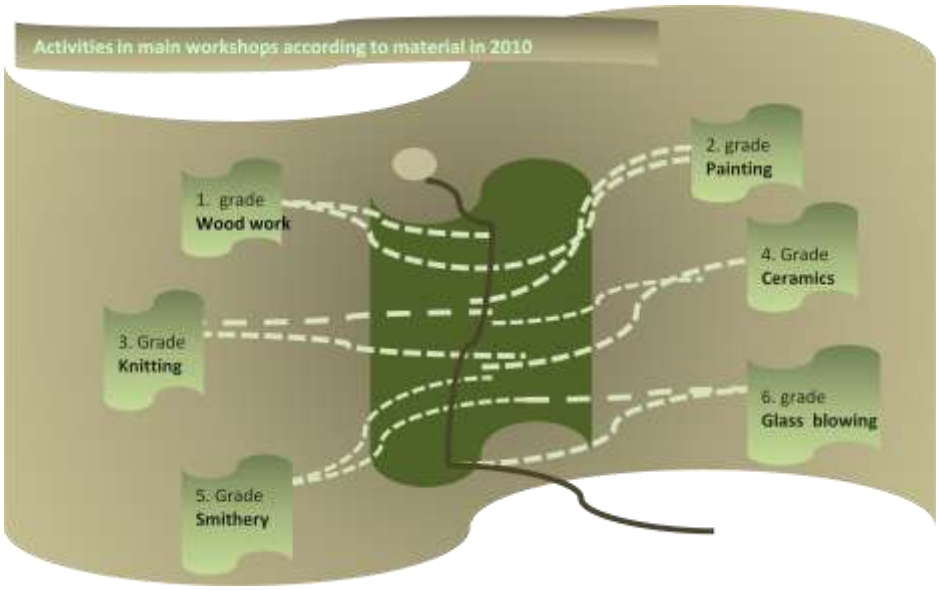

Figure 2: An example of the main workshop activities in 2010.

In addition to art and handicraft workshops each class takes part in one *museum education workshop* per year. Additional workshops (see Figure 3), such as the *Time travelling* workshop organized by the *Fiskars Museum*, are available to all grades during the year. The teacher may choose independently when taking the class to the museum workshop. Pupils' participation in the *exhibition workshops* varies. It can involve production of an exhibition in some of the galleries in the village, or it may be a visit to an exhibition with the teacher or with an artist or artisan whose exhibition is on display. Dancing workshops, organized by *Dancing School Kärki and Kanta*, are held at school. Theatre workshops and theatre visits are included in the model in co-operation with the *CulturaMobila theatre group.*

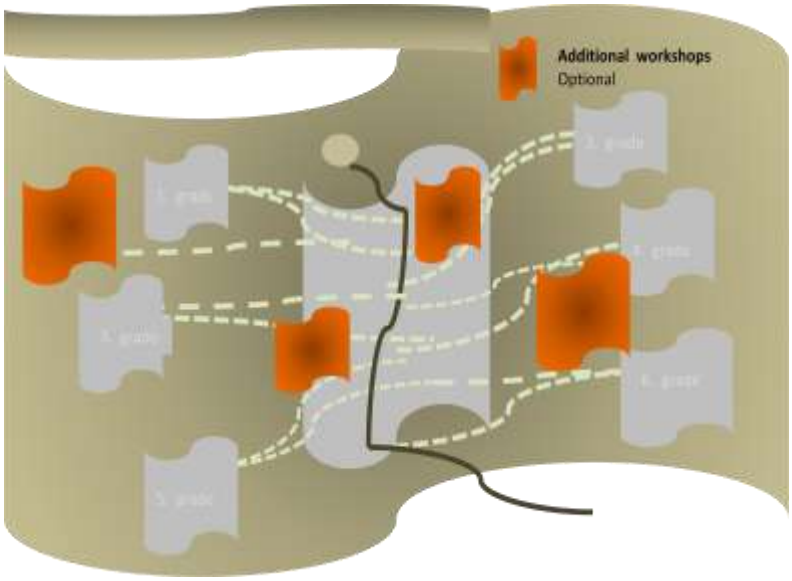

Figure 3: Additional workshops in the model.

In total, each class participates in at least two workshops during the school year: one art and handicraft workshop, and one museum education workshop. This has been a systematic practice in the model since the project began in 2007. The amount of time the pupils engage in workshop activities in a year is approximately 10 to 20 hours depending on the workshops and whether there are related pre- and post-learning activities. The Fiskars Model, and its activities are written into the attachment of the Fiskars' primary school curriculum. The art, handicraft and museum education workshops are a fixed part of the Fiskars primary school's annual plan. In addition, the school's cooperation with the *CulturaMobila* theatre group and with other members and organizations in the village as well as visits to art and design exhibitions are written into the school's annual plan.

The main pedagogical methods in the Fiskars Model are learning-by-doing, immersive learning and student-professional collaboration. Learning-by-doing and student-professional collaboration are very close to each other. All the workshops are, to the extent possible, organized outside the school environment in the studios of the artists and handicraft workers of the village, and are directed by handicraft and art professional themselves. In this way, as the principal Ethel Mattila pointed out, children have a chance to explore an artist's work and profession in practice and they will be taught to value and harness the traditions of the village and to respect their own and others' originality in creative work. The aim is not only to follow and passively look at how a professional works, but all pupils work with the same material, the same methods, and the same tools or equipment as professionals. The methods and activities are planned according to each class level in co-operation with the teacher and workshop leader. Pre- or post activities (i.e. preparation of material) either at school or on site may be related to the workshops. The pupils, for example, tear up sheets for paper pulp approximately a week before they attend the paper making workshop.

In the main workshops the principal has agreed on the commitment to co-operation, responsibilities and roles with an artist or artisan. Each teacher agrees on the practical issues (date of visiting, possible pre- or post-tasks) with the workshop leader. The artist or artisan is in charge of the implementation and execution of the workshop and the teacher's role is to maintain order. Both parties are aware of each other's responsibilities and roles in the learning situation. The principal in the interview described the process as follows: "When a workshop leader commits or comes to the project, she/he is informed that the teacher … maintains order and the workshop leader is the expert in the workshop and leads the working process.

The teacher may assist pupils or she works with them …." As Kumpulainen et. al.[5] point out, when planning and implementing out-of-school activities to foster meaningful learning, both contentual and pedagogical expertise are needed. The following excerpt from the field notes gives an example of shared and complemented expertise: The workshop leader was telling about the history of ceramic pottery and the time when it was invented. When she said that ceramics had been done for a long, long time, and that it was one of the oldest materials that people have used, the teacher, knowing that in the Finnish curriculum history as a subject had not yet started for pupils of this age, intervened with a question: What is long, long time ago [in this context]? The workshop leader understood the hint and described the time perspective in another way: thousands of years ago. She also added the connection to the pyramids in Egypt, which seemed to be familiar knowledge to the children, based on their own sources of history.

The physical framework of studios determines the nature of learning activities. Pupils' activity may be individual or simultaneous for the whole group, depending on the working material, amount of tools or equipment in the studio. When the activity is individual there are other activities in the workshop for the rest of the group. Special physical space arrangements are made in the studios as minimally as possible to preserve the authenticity of the artist's or artisan's working place. In the documented ceramics workshop only one table was added for the class of 13 pupils. At the beginning of the workshop safety rules are discussed in relation to the location.

[5]Kumpulainen, Krokfors, Lipponen, Tissari, Hilppö & Rajala (2010)

3.3 Nature of learning in a ceramics workshop

The nature of learning is observed from three perspectives: learner engagement, connections to “real life” and teachers as learners. The local curriculum defines the objectives in a ceramics workshop as the following:

- A pupil learns clay as one material and how it has been used.
- A pupil makes a utility or decorative article him/herself.
- A pupil learns the basic methods of using clay as a material.
- In addition to these main goals, a pupil finds out about the ceramics profession and respects the ceramist's expertise.
- A pupil learns to adapt to new learning methods and practices.
- A pupil learns polite behaviour and good behaviour in general when learning outside the school.
- Emotions are seen as having an important role, working should be experiential.
- Connections to school subjects: Finnish (mother tongue), visual arts and history.

Photos: Fiskars model project

Outcomes of ceramics workshop. (Not from the observed case.)

When the teacher in the observed class was asked to explain her learning objectives for the workshop, the same ones came up. Learning objectives are clearly documented in the model, which makes it easy for the teacher to follow them. In particular, the teacher emphasized the behaviour outside the school environment and respect for the ceramist's work. When discussing the school subjects she stressed the "learning of life," not individual subjects. The teacher went on to say that the time spent in the workshop provides content for visual art in three dimensional building, material knowledge and techniques in working with clay. During the mother tongue lessons the workshop is involved when the group writes about or discusses their evaluation of the works. In addition to the curriculum document, the observed workshop produced musical instruments, which can be used during the music lessons.

One of the main methods used in the Fiskars Model is learning-by-doing from professional to pupil (master-craftsman -lehrling). The revised objectives for learning in the observed ceramics workshop had been negotiated in one pre-meeting between the workshop leader and the teacher. Ceramist Riitta Talonpoika had suggested two different activities for the teacher: to work with a story and clay or to produce a musical instrument of clay. The teacher had chosen to make the instrument. Observations in the classroom during the day before the workshop showed that the teacher was music-oriented and the pupils were too, both at school and in their hobbies. The teacher said in the interview that she was going to use the workshop products, the musical instruments, in her music lessons later in the season.

The observed workshop did not need any pre-activities; this had been agreed on in the pre-meeting. The workshop had post-activities after documentation. It was suggested that one of them would be done with parents. The kiln, in which the pupils' works were burnt side by side professional works, was heated during the weekend. The kiln was heated by wood, not electricity, which was an experience itself. Another post-activity was done during school time as a group when the kiln had cooled down and all products were ready. Post-activities in the model are generally an exhibition of outputs or a presentation about workshop activities at a common event at school. In this way the lower class pupils become acquainted with activities they will be involved with in their coming school years.

3.3.1 Learner engagement – everybody is in contact with ceramics

The workshop last about 2 hours 10 minutes including transitions. The workshop leader's introduction to the theme took about 20 minutes. The pupils were active for about 80 minutes. Each pupil made their own product in the workshop. All pupils worked at the same time. Pupils mentioned in their interviews that this had not been the case in all workshops. They were positive about not having to wait their turn in the working process. The physical setting of the workshop contributed to interaction among learners, since the working space was set up around two tables so that the children could see each other working the whole time.

Learning engagement is studied here in the form of responsive and initiative perspectives. Responsive orientation is the most typical orientation in the classroom: for example, answering a question or leaving the room when asked. Thus the observed class group could be defined generally as a responsive one. A quote from the teacher supported this interpretation: "But these pupils would even dig a seven-meter-long ditch, if I asked them, and they would do it as intensively [as anything else]". The teacher had asked the ceramist to give a general description of her work, working tools and clay as material. Once in a while, the workshop leader activated pupils with several questions. These were open questions that elicited expanded pupil response. The ceramist started the introduction: "Do you know if you can find red clay in Finland or clay in general?" Several pupils answered the question first by nodding as a positive answer. The ceramist continued: "Where can you find it?" Five pupils started actively responding. Three pupils raised their hands, like they do during the lesson when a question is asked. The workshop leader gave permission to talk, just as a teacher in a classroom does. Then two pupils spontaneously started telling of their own experiences, and where they had seen clay in the home village.

The group's responsive orientation could also be seen in the way of following instructions. It was possible for the whole group to work at the same pace. The workshop leader considered the children very motivated to work under instructions. As she said in the interview: "And especially that, they concentrated on different phases of the working process and listened to what was said ..." or "…the group was calm, the work went on smoothly at the same pace; there were no problems with the group."

Orientation was changed from responsive to initiative orientation during the introduction and continued naturally in hands-on activity. During the 22-minute introduction five pupils initiated dialogues that led to several minutes of discussion in the group. The workshop leader responded to each pupil's initiative. The teacher posed three questions during the period. The teacher's initiatives might be considered pedagogically supplementary when she knew the level of knowledge of her pupils.

The pupils' discussions were lively during the workshop and they built their discussions positively on what others said. The talk was mostly consensual in the group. There is no observation of discussions in which participants would have disagreed. The ceramist commented on this: "But this was clearly a group which can discuss; when one said something the other reacted to that." When the activity was routine, such as molding several similar small balls of clay, the discussion themes varied from the nicest word in Finnish to leasure time activities. The conversation did not seem to disturb the main activity in any way.
The ceramist said: "And I think that the [children's] talking was quite relaxed, and actually, it is quite common when working with clay that people start talking easily". One aim of engagement is to create a flow-effect in what one is doing. The workshop leader confirmed in the interview that the flow effect occurred. The teacher also mentioned two pupils whose working could be defined as flow-working.

When the workshop leader was asked whether the children took the initiative to advise or help each other she replied: "Well, in fact in a few cases I found that they react very quickly [to each other], in an interesting way, yes." When asked about the pupils' initiative to ask questions she said: "[children] asked questions very freely [initiatively] if they had something to ask." When pupils were asked in the interview about their perception of the possibilities of taking the initiative in the workshop they said:

Pupil 1: "In principle you may think for yourself about what you are going to do, but there is some kind of slight control toward a certain direction".
Pupil 2: "Everybody has to make a music instrument [a rattle] in the workshop, but you can make the rattle look like anything you want."
Pupil 3: "So, you were allowed to form into shape whatever you liked."
Pupil 4: "Except that everybody has to make the same thing, a tinkling stone. But you can choose the form [design] yourself."

The teacher reported no deconstructive or resistant behaviour, which can also be seen on the video. In fact, one of the pupils who normally resist almost everything did not do that during the workshop. Another pupil, who according to the teacher is slightly withdrawn in the class environment, interacted enthusiastically with a pupil next to him. The same pupil had actively followed what the girls working across the table were doing.

3.3.2 “Connections to real life in an authentic environment”

The aspect of authenticity and "learning of life" are mentioned as strengths of the model. This means skills, knowledge and resources, which the school may not have but which can be found in the surrounding village or in the children’s life outside school. With an analytical tool of boundary crossing events[6] we examined the data to find examples associated with these. The following aspects of crossing boundaries into "real life" are studied here in more detail:

- when there was a connection between ceramics and everyday life or the children’s earlier knowledge
- when the workshop leader utilized her studio environment for learning
- when the pupils learned about the profession of a ceramist
- when there are connections to one's own village or to the world outside the village

During the introduction, the workshop leader asked if the pupils had ceramics at home or somewhere else in their everyday living surroundings. The children responded to the question, naming places like the bathroom and kitchen, or artefacts like an oven or tiles. The ceramist activated the pupils to think about whether they knew any musical instrument of clay, referring with the question to the theme in their own workshop. A girl answered: “a whistler in the shape of a rooster [*kukkopilli*, a typical musical instrument in the Finnish culture].” The workshop leader continued to present musical instruments, which she had produced and which are on display in her studio environment. One of the children asked if it was difficult to make such instruments. The ceramist could explain to the pupils with authentic examples that the technique they had used in the workshop is one and potter wheeling another

[6] Grossen (2010)

technique, which she had used for making the other instruments. She used more authentic examples to show how pottery products could get different structure (surface and colour) if ash or wheat flour were used for creating special surface decoration during ceramics burning.

The teacher's cross-boundary events may be considered as connections to the objectives of the ceramics workshop when she posed specific questions to the workshop leader. She asked questions like, "how long are your working days, how is your working day, how long have you done this, do you like your work, is this a male or female-oriented profession." The ceramist answered, which also activated the children to ask their own questions. One of the questions was: "Are you doing this for your living?" This excerpt may show the very basic objectives of learning in the model: this is a ceramist's real, everyday life. The workshop leader continued describing her work in the shop in Helsinki where she sells her own products. When talking about customers, one pupil referred to village tourists in the summertime.

The pupils talked about other craft workers in the Fiskars village; this is one objective in the model. There were discussions about a goldsmith and a carpenter who were working in the same building as the ceramist. The children mentioned if their parents were working in the village as artists or craft workers. The discussion continued to parents who were working outside the village, which reflected the principal's interview: "I hope our children [pupils] learn about life and different kind of things in their lives." During the workshop activity, the children made references to the outside world. The instruments made in the workshop had connections to their lives. A tinkling stone as a musical instrument was principally the same for everybody, but the pupils could use their own creativity and experience to design the outward appearance of their instruments. They became dice, a mushroom, a puppy, a ladybird, a volcano, real or fairy tale figures, decorative ball, a present box and a rabbit. At the end of the workshop, when the main activity was over, the children were allowed to make free choice products. During this session more connections were made to the children's own world: Lego bricks, artifacts inspired by Harry Potter, dragons, euro-coins.

Pupils and their products in the documented workshop. Photo: Fiskars Model project.

3.3.3 Teachers and workshop leaders as learners

The principal Ethel Mattila saw the workshops as an opportunity for teachers to explore and learn new materials and techniques together with the pupils. The teacher started to make her own musical instrument in the ceramics workshop. The pupils were asked in the interview if they had any comment to make about seeing the teacher as learner as well. The children had the following discussion:

"Pupil 1: She was making a rattle [as we did].

Instructor: Was it odd that the teacher did it together with you?

Pupil: No.

Instructor: So the [your] teacher acts in a similar way also in the classroom?

Pupil 2: Yes.

Pupil 3: She comes along to play [She is engaged in all the actions we are]"

The teacher concluded that during the workshops she could get an insight into how children view the learning situation and the overall group interaction. In general, this gives the teacher such information on pupil learning that could be used in the formative assessment. Ethel Mattila described that she had learned to work in the shared expertise process (see Kumpulainen & al. 2010). She expressed it in this way: " … myself, I am not so good in handicraft teaching. I have thought that pupils whose teacher is more skilled than I are in a better position than my pupils. Now they get good advice in these workshops … " She went on to say that "teachers do not need to have all the knowledge and skills; a teacher may also delegate teaching to other experts; sharing one's pedagogical expertise with another's expertise is complementary: you give your own input and as a result everyone profits from the process."

Special teacher training courses in the studios had been organized as part of the project. In the interview, the ceramist mentioned the possibility of being a learner herself: one could learn a lot from children. The principal told about a dancing workshop leader in fall 2010. She had described teaching pupils in the workshop as one of her best learning experiences.

4 Impact and effectiveness of the Fiskars Model

Summary of Section 4

Pupil perspective

- ✓ Six-year learning path for a pupil in primary school: all grades are included
- ✓ The learning method is learning by doing from professional to pupils in workplaces, in studios, working by hand
- ✓ All children participate in activities democratically
- ✓ There are six core workshops – art and handicraft workshops – which take place at least once a year
- ✓ There are additional workshops connected mainly to cultural activities, and one natural science workshop (2010)
- ✓ The objective of the workshop is to learn local (the Fiskars village) and national (Finnish culture) cultural identity and compare it to other cultures in the world
- ✓ The model gives special input to school subjects like visual art, crafts and history, and cross-curricular themes in the National Finnish Curricula 2004
- ✓ Learning in the model is seen as "learning of life" to enrich and widen the national curriculum

Teacher perspective

- ✓ Activity is regular
- ✓ Activity is curriculum-based, documented in the local curriculum
- ✓ Pre-planned by the project and school staff
- ✓ Pre-agreed and prepared on the school level for teachers to put into practice
- ✓ The model is accepted by the whole staff
- ✓ Teachers' competence increases in different workshops
- ✓ Teachers' work motivation increases
- ✓ Commitment of school leadership is important

Community perspective

- ✓ School is not an isolated institute in the village when part of the teaching is done by artists and artisans living and working in the village
- ✓ Learning in the workshop complements school learning
- ✓ Children's cultural identity related to their own village increases

The impacts and effectiveness of the Fiskars Model is described as perceived by the different project actors, facilitators and pupils. According to the documents the model is constantly being developed. Evaluation and measuring of this kind of learning is very difficult, perhaps even impossible, which the developers of the model are aware of.

Since 2007 the project actors have collected feedback from teachers, pupils, and workshop leaders for further developing the model. All the gathered evaluation data is in process of analyzing, and will be published in the Fiskars Model project publication that comes out in spring 2011. In conjunction with this, Illman informed us that during spring 2011 an evaluation of project evaluation methods will be done.

According to the principal Ethel Mattila, the overall interest of the school staff in the activities of the Fiskars Model is relatively high. She believes that the level of commitment is related to teacher competence, i.e., the more experienced teachers are, the more confident they are in their abilities to master their work. Staff commitment could also be seen as a result of the model being integrated into the school strategy and everyday operations. As Mattila pointed out: "this is school activity according to the curriculum, and everybody participates – it is not question of individual choices." As an indicator of this, Mattila emphasized that teachers who apply for a job at the Fiskars School are usually teachers who have a personal interest in this kind of activity, and are also aware that the school is elaborating this model.

Utilization of the model is made relatively easy for an individual teacher in two respects: first, the content and goals of the workshops are directly linked to the curricula, and second, the artist is in charge of planning and executing the workshops. In addition, for every workshop, the teachers are given written descriptions on how the workshops support and relate to different subjects of the curriculum, its goals, contents and methods, Johanna Illman pointed out. The teachers of the Fiskars primary school have also written a report on how each workshop can be further integrated into the teaching at school through various pre- and post activities and workshop preparations.

According to the pupils' interview they were aware of the annual workshops. They knew that the material and workshop locations vary. Pupils were asked in the interview if they felt they had learned, or if they could describe what they had learned in the workshops. During the four years in primary school, the observed 4th grade class had visited five art workshops and workshop studios and one workshop at school. The

general answer to the question about learning seemed to be clear: one learns in workshops, and particularly those skills, which cannot be learned at school. Meanwhile, pupils could not define workshop learning as clearly as learning of school subjects. One issue which still needs developing was brought out in all the interviews. Pupils were not always aware of which school subject the workshop activity was connected to. Promoting the connection between subject knowledge and one's "real life" could further enhance the value of the model. The awareness of pupils to which school subject the workshop activity is connected was not according to pupils' interviews so clear. The teacher expressed the subjects clearly. The pupils regarded workshop activity as normal part of school work. Promoting the connection between knowledge learned in subjects and in 'one's real life' may raise even the value of the model.

The pupils expressed their overall interest in this line of action many times during the interviews. This interest contributes to pupil motivation, and as Ethel Mattila pointed out, facilitates achieving learning objectives. Ethel Mattila also brought out that children's active vocabulary in the bilingual (Finnish-Swedish) community of Raseborg is more limited than average among Finnish children, and that the model has contributed positively to the children's language development and improved their active vocabulary, i.e., words actively used in speech.

The only negative comment on the documented workshop was related to the physical environment. The pupils had to stand by the table when listening to the introduction and during the main activity, almost two hours, in addition to a 20 minute walk. The children experienced this as slightly exhausting, and suggested chairs for the workshop. This would mean, however, that the chairs would take up room, and not as many pupils could participate. Compared to the children's positive emotional feedback on their feelings about learning and the experience in general, the negative feedback was quite minimal.

A quotation by a workshop leader in Haikarainen's master's thesis gives an example of the long term impact of the model: "When a pupil leaves the Fiskars school, we know that everyone has been involved [for example] in paper making. As an art paper maker, I can be very proud. I have been able to disseminate the information [about this work]. All children who leave the school after six years have an idea of occupations in the fields of handicraft and art." Haikarainen sees the model as helpful for increasing knowledge of different professions. The model may also have an impact on the cross-curricular theme *Growth as a person*, as well as *Educational and vocational guidance* in the lower secondary school.

Ultimately, the so-called 21st century skills are reflected in the Fiskars Model, with more teamwork, collaboration, learner engagement and interaction between all actors. Creativity is closely connected to art and handicraft activities in both professional and school work. New materials and new techniques in the workshops challenge pupils, but also teachers and workshop leaders, to solve different kinds of problems creatively and innovatively.

The whole village as a learning environment.

As mentioned earlier, measuring learning in this kind of model is challenging. At least one class uses a portfolio evaluation. Generally the pupil's evaluation procedures and criteria emphasize individual progress and learning processes. Pupils evaluated their own work and the teacher observed their behaviour and intensity of focus during the workshops. Also, after the workshops pupils presented their work to the rest of the class, who in turn commented and gave feedback. This kind of reciprocity and self and peer assessment helps to develop a sense of community among pupils.

When talking about transferring the model, Mattila pointed out that this kind of flexibility in teaching and use of workshops is easier in small rural schools where structures and hierarchies are minimal. But, according to her, it is nevertheless a question of will, commitment and school leadership. The project coordinator Johanna Illman, too, pointed out that the transferability of the model depends on the genuine interest, and dedication of the school staff: To embrace the knowledge, and expertise of the professionals outside the school, and to open up the school to its nearby surroundings, the teachers need the "right attitude". Implementation of a model such as the Fiskars model takes a lot of time, too, the project coordinator Johanna Illman said. She concluded by saying that transferring a model of any kind from one context to another is like "learning to knit or starting a business: you have to go through the learning process by yourself. It is not enough that someone explains it to you or gives you good advice."

Johanna Illman gave some concrete examples for teachers when planning to incorporate the Fiskars Model, and its activities into their own school. She said the teachers could start by mapping the school's nearby surroundings, and the areas of the curriculum they want to address to by reflecting on the following questions: What places and people are located near the school? How are these places and people related to the school curricula? What can be learned through interacting with these places and people? How can these places or people enrich the learning and teaching at school? Are there any organizations or institutions that would be willing to share their knowledge and provide experiences free of charge as part of their work?

It has taken four years to build the Fiskars Model. In May 2010, the magazine of Trade Union of Education published a second article about the Fiskars Mode (see also p. 6). The whole article can be seen at the address below. Unfortunately the article is in Finnish, but the pictures may speak louder than words:

http://www.opettaja.fi/pls/portal/docs/PAGE/OPETTAJALEHTI_EPAPER_PG/2010_18/page22.htm.

Fiskars village . Photo: Fiskars Info, Fiskars Ltd.

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