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## **Comparing ECEC in Nordic countries**

What is the Nordic Early Childhood Education and Care (ECEC) like? What similarities and differences there are in the everyday activities between Nordic countries? What is the content of ECEC in Nordic countries? What do the children in day care attend to? What is children's physical activity in different activities? How is children's involvement in their activities related to the ECEC context across Nordic countries? What do the educators really do in Nordic ECEC?

The fact is, we do not really know what happens in Nordic day care. There is no existing comparative research of the everyday practices and processes taking place in and between Nordic countries. How can we discuss Nordic ECEC if we do not have any solid knowledge on what is going on?

In this paper, a research for Nordic ECEC comparison is proposed. In Finland, we have developed tools for comparing ECEC practices between Finland and Taiwan. We have developed tools for observation, interview, child evaluation and learning environment evaluation that have been tested in two very different cultures. We have applied the research tools in a large scale comparison and the tools have turned out to be robust across cultures. The acquired data has proven to be comprehensive. We are making the next data collection with improved and refined tools in 2015. We invite our Nordic colleagues to join us in the research. This is a proposal for comparative research.

## **The methods for comparing ECEC in Nordic countries**

It is important that the data collection happens at the same time. The research instruments, their definitions and application need to be similar across countries. We propose that we make the data collection between January and May 2015 in Finland, Denmark, Iceland, Norway and Sweden. The observed items should include all kinds of day care activities including teaching, basic care eating situations and free and scaffolded play indoors and outdoors.

### **Observation**

A three-day observation instrument validation should be done in the autumn of 2014. During the first day, the observers from each country observe example videos from different everyday situations in day care. The observation instrument definitions and categories are discussed. The observers can make changes to the instrument definition to increase the reliability of the observation. The purpose of the validation is to get a unified observation tool for all the observers. On the second day, the observers test the instrument in a day care centre and the reliability of the observation is checked. On the third day, the problematic issues are discussed and unified.

There should be one researcher from each Nordic country. Each observer observes five groups in each country. The observation in one country takes one week for one observer. Totally there will be 25 groups observed by each observer in five countries altogether. The observation takes place in the capital of each country. The native researcher organizes a random selection of the observed groups. For simplicity, the groups will consist of 3-5-year-old children. The native researcher also acquires the permits from the parents and city and helps the visiting observer in orientating. Each month the observers spend a week in

different Nordic country to make the observations. At the end of each month, a video conference is organized to discuss the arising problems and maintaining unified observations.

The observation will be conducted between January and May 2015. The observations give a random sample of children's actions in the Nordic countries. The children will be observed at four minute intervals according to a systematic sampling. The observed items will include the general action in the day care centre, children's action, children's object of attention, children's nearest peer contact, children's physical activity, children's involvement (Laevers, 1995), the nearest educator's action and whether the nearest educator was concentration on the observed child or not. The observation instrument is available at [http://www.helsinki.fi/~reunamo/apu/observation\\_instrument.pdf](http://www.helsinki.fi/~reunamo/apu/observation_instrument.pdf).

When each observer observes 5 groups in five countries, there will be altogether 25 groups for one observer. For five observers there will be altogether 125 groups, 25 groups per country. The observers follow systematic sampling observing each child in turn in four minute intervals. The observation will take four hours daily, which results in 60 observations daily. Altogether there will be 7500 observations. If the groups are selected randomly, the amount of groups and observations will be enough for country comparison. When each observer observes all countries, the possible differences between observers do not jeopardize the comparison. For reliability, it is important that the observers do not change their criterion for observation in different groups and different countries.

### **Learning environment evaluation**

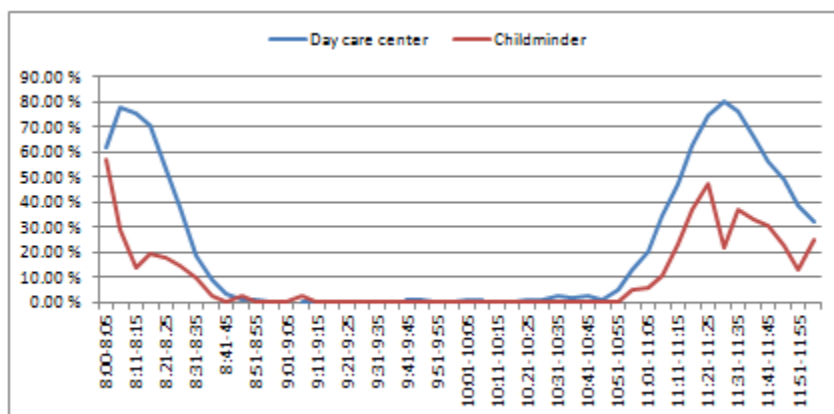
To complement the observation, each group will evaluate their learning environment. The evaluation is done by using a 57-item survey. The survey is based on a learning environment comparison between Finland and Taiwan conducted in 2010. The harmonious aspects, chaotic aspects, the motives and the possibilities of the learning environment are considered. The items include pedagogical preferences, the atmosphere of the group, the curriculum emphasis and the practices of everyday proceedings. The survey has descriptions which are evaluated on a Likert scale with five degrees. The learning environment evaluation survey is available at [http://www.helsinki.fi/~reunamo/apu/LE\\_eval12.pdf](http://www.helsinki.fi/~reunamo/apu/LE_eval12.pdf).

### **Statistical analysis**

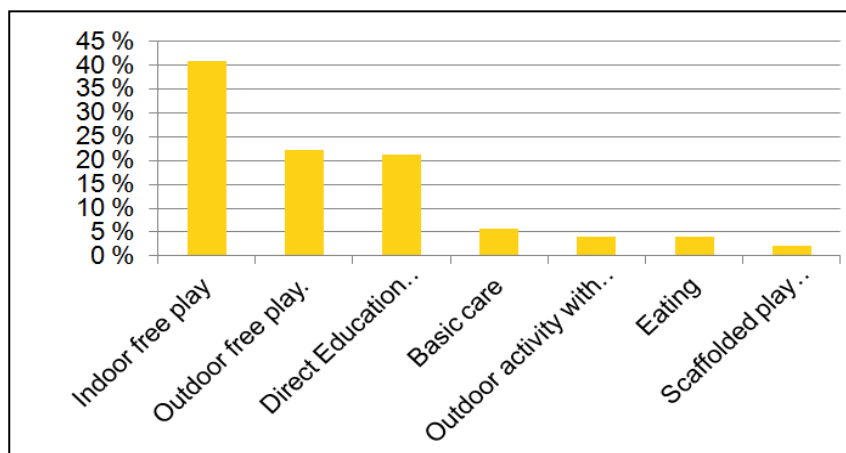
The observations will create a data file with 7500 observations of about 1500 children. For each observation, the learning environment evaluations will be merged with the observations. This will make it possible to study the practical consequences of pedagogical preferences. For example, it is possible to study the practical effects on children's actions in an evaluated chaotic learning environment. Or, for example, it is possible to study how the participatory elements of education are reflected on the activities and the country similarities and differences can be studied.

### **Anticipated results of the comparison**

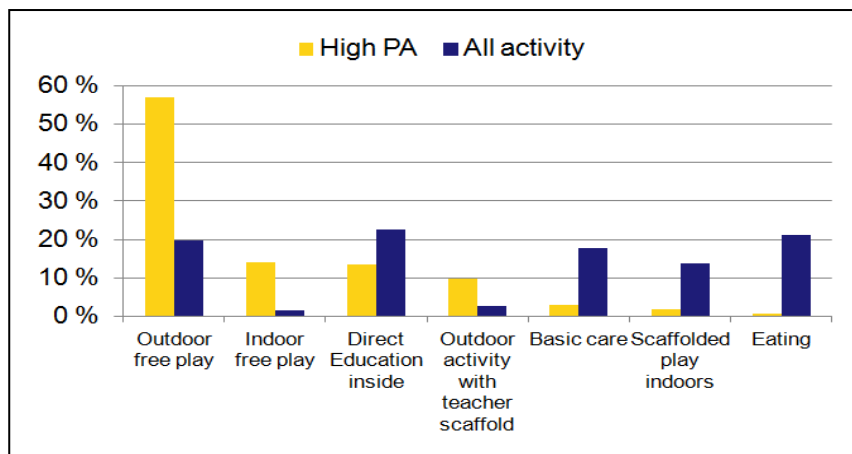
We can get detailed information about what children do and when they do it. For example, below is a figure that shows the amount of time children spent in eating situations in Finnish day care centres in average 45 minutes and with private childminders in their own homes 20 minutes. The observation analysis showed that in Finnish day care centres the eating situations included a lot of waiting and random activities, while with the childminders the eating situations included a lot of open interaction between children and the educator.



We can study children's involvement (Laevers, 1995) in different activities, with different objects of attention and in relation to educators' activities. Children's involvement is an indicator of a fruitful context for learning. For example, the figure below shows that children are most often highly involved during free play indoors.



We can study children's physical activity in different contexts. We can also see the relation of different learning environment qualities and children's physical activity. For example, the figure below shows how important free play outdoors is for children's physical activity. The figure also shows that outdoor activities with teacher scaffold are valuable but, unfortunately, they are very rare.



The observed different items produce a rich source of valuable information for comparison. The data also provides good opportunities for developing the ECEC work further. For examples on development tasks based on the Finland-Taiwan comparison, see <http://blogs.helsinki.fi/orientate/development-tasks/>.

### Estimated costs per country

For 2014 autumn there needs to be a three-day meeting of the observers for refining, agreeing and testing the reliability of the observation instrument (3000€).

The organizing of randomly selected observation groups, permissions for research from the parents, learning environment evaluations and organizing the visit of the observers from other Nordic countries (5000€).

Observation for one week in each Nordic country, totally five weeks observation (20000€).

Data preparation: Each researcher sends their data to one researcher, who merges each observer's data into the same data file. The learning environment data is also merged with the observation data. 600€.

The data will be ready for analysis and reporting in August 2015.

Altogether the estimated costs per country are **28600€** (without the costs of reporting).

If you are interested to participate in the comparative research, please contact me as soon as possible. I will prepare a detailed research plan and we can apply funding, for example, from the Nordic Council.

### Further reading

Orientation project blog: <http://blogs.helsinki.fi/orientate/>

The research results of the comparative research in Orientation project already published:

<http://blogs.helsinki.fi/orientate/products/the-scientific-products-of-the-apu-project/>

Developmental tasks and development models based on the comparative already completed:

<http://blogs.helsinki.fi/orientate/development-models/>