

Appendix B Observed items, forms and instructions

Instructions for observation:

- A list is made of the children in the observed group. In the list is also the number of each child (e.g. 12).
- An observer does not observe their own group of children. Two randomly chosen observers observe each other's groups. To get to know the names of the children and the group the two observers change places for one day (if necessary for two days). In Finland there are altogether seven randomly selected days for the observation between January and June 2010. In Taiwan there is altogether 8 observations between December 2009 and July 2010.
- The children are observed systemically in the order determined by the list. If a child is missing the next child in the list is observed. Children who are absent or arrive later will be included in the observation when they arrive. If it is impossible to observe the whole group, e.g. half of the group is at the park and the other half is at the day care center, the observer observes the biggest group available. To prevent systematical bias the observer starts each day with a different (random) child in the list.
- The observation is done between 8.00-12.00 hours (in Taiwan the schedule may vary) at five minutes intervals: the actual observation lasts only one minute and happens at the same time of interval each time. The additional four minutes is for coding and preparing for the next observation., There are altogether 49 observations in one day. If the observer needs to go to the restroom etc., the observation continues after the pause as usual. The absent observations are just left empty in the observation data form.
- After practicing the observer may find it possible to do the observation accurately even at four minutes intervals. The four minute interval is encouraged as it allows for more observations, however, if the observer finds it difficult, he/she should go back to five minute intervals.
- If the child changes action during the observation, the m is used to determine the child's action. If it is still impossible to determine child's action the action can for example be coded as other action (b10) or if the child does not have a nearest contact for coding, the space is left empty.
- The observer has a book in which the observer has three papers enclosed: the list of children with their numbers, the list of observed items and the observation form. The coding is done separately from the observation and the observer does not look at the children while coding.
- The observer does not seek interaction or eye contact with the children but answers to their questions if necessary. For example: What are you doing here? "I study the work here". What are you writing? "I write codes." Why? "I'll do research for the day care center." Experience shows that children very soon ignore the observer.
- It should not be emphasized that the children are observed and the observed child should not be aware of being observed. The observer need not to be close to the child, it is enough that the observer understands the situation. The observer can move around as needed.

Time (e.g. 08.16)

Child's number

A. The general activity frame of the child (what the child needs to do)

1. Direct Education inside. (Planned action by adult or action that the adult participates and guides by bringing an educational element to it, teaching, instruction, group get-together, story telling, performance)
2. Scaffolded play indoors. (Teacher scaffolds children's play to enrich children's own processes)
3. Indoor free play . (The child can choose what, for how long and with whom to play)
4. Outdoor activity with teacher scaffold (e.g. play, trip, teaching).
5. Outdoor free play. (Often in the kindergarten yard or park.)
6. Basic care. (Dressing/undressing, toilet, hygiene, rest, also waiting)
7. Eating. (Breakfast and lunch. Also the waiting for the food, the service of the food and other action before, during and after eating.)

B. The main action of the child (what the child does)

1. Orientation. (E.g. walking around, observing others without participating, searching or waiting)
2. Hanging about together with others. (E.g. chatting and/or walking with others, chatting at the climbing frame.)
- 3 Play or exploring with toys, materials and physical setting (e.g. at the sandbox, swinging, with paper)
4. Role play or imaginary play (using a toy or having a role to play)
5. Reading, watching video, watching performance etc.
6. Rule play. (E.g. ball games, chess, games with fixed rules, competition)
7. Task or seatwork (homework, pen and paper exercise, practice dressing , memorizing nursery rhyme, refining a skill, work)
8. Action not allowed (e.g., not following orders, teasing, disruptive to others).
9. Acting according to the general frame, which does not include the above behaviours (B1-B8). (E.g. child eats at eating situation, dresses at dressing situation)
10. Other action. (Action that does not fit in other categories, confusion, a lot of changes, no structure, difficult to pinpoint).

C The child's main object of attention

1. Non-social object. (E.g. focus on toys, sand, cars, blocks, water, or self.)
2. Adult. (E.g. follows adult's narrative, discusses with adult. If the child also gave attention to children in the situation, the code is C5 for The whole situation.)
3. A child. (Child's attention is focused on another child. The focus can include toys etc. or any non-social object in the child's hand.)
4. A group of children. (Attention is focused on 2 or more children. The focus can include toys etc. or any non-social object in the child's hand)
5. The whole situation. (The situation has so many elements that one object of attention could not be defined. E.g. children, adults, materials and different kinds of actions, usually a dynamic situation.)

D Closest social peer contact (if one can be found)

Write down the Code Number of the child that the observed child is most involved with.

If the closest contact is a child from another class, code Δ

If nearest contact cannot be found, enter X .

E. The physical activity level of children

1. Low (sitting, using pen, eating etc.)
2. Intermediate (walking, whole body movements)
3. High (includes at least some running, romping, physical exertion etc.)

F. Child's involvement

1. Simple, stereotypic, repetitive, passive, no energy, no cognitive demand
2. Frequently interrupted activity and engagement
3. Mainly continuous activity, easily distracted, mental engagement is lacking.
4. Continuous activity with intense moments, child not easily distracted.
5. Sustained intense activity, concentration, creativity, mental engagement, and persistence

G The average distance between the child and the nearest adult educator in meters.

H. The nearest adult's main action

1. No child contact e.g. arranges things, discusses with another adult.
2. Observes children (can be arranging and organizing things at the same time).
3. Interaction with one child only.
4. Interacts with a group of children (with open-ended results created during interaction).
5. Teaching (teacher already has a pre-defined goal, and knows what should be learned,).
6. Undefined situation (cannot separate elements of the adult's main action in a dynamic situation).

I. An adult focuses on the child at least some time of the observation

- 1 Yes, at least a few seconds concentration on the child
- 2 No focusing, or just sweeping gaze/gazes.