The repertory grid is a technique used in psychological and behavioral studies to elicit individuals' personal constructs. This pilot study examined the feasibility of using this technique with young children in early childhood education settings with regard to visual art education, based on the view that listening to, and appreciating children's opinions and criteria about their own work and that of others is essential to understanding why children's work is the way it is. Repertory Grid offers a more structural basis for conversation and feedback in art education than does an open interview. Participating in the pilot study were two 5-year-olds. One feedback conversation was held with each child separately, as well as one unusable conversation with both children together, to elicit their constructs. During the conversations, 5 art works (elements) were selected from about 10 the child had made at home or at art school within the preceding 6 months. Constructs (product quality or action) were elicited from the child and were used to compose a grid in which all elements were allotted to constructs, using graded scales. Findings of the study indicated that the time needed for intensive conversation with young children is at most 20 minutes, breaks are needed to support and maintain motivation, the role of children's linguistic ability is crucial, and extra incentives may be needed to maintain interest. (Contains 12 references.) (KB)
Abstract

REPERTORY GRID TECHNIQUE IN EARLY CHILDHOOD AS A TOOL FOR REFLECTIVE CONVERSATIONS IN ARTS EDUCATION

Repertory Grid is a technique mostly used in psychological and behavioural designs in order to elicit individual’s personal constructs. The question is, is the technique transferable to use with small children in educational situations? Listening to, and appreciating children’s opinions and criteria about their own works and others are essential in understanding why the works are the way they are. Compared to open interview Repertory Grid offers a more structural basis for conversation and feedback in art education when different aspects of a work and work-process will be discussed using the expressions of a child.

In this paper I will focus on analysing the results of a pilot that aimed at studying the feasibility of Repertory Grid in feedback situations of early childhood visual art education. By this technique I will try to make children’s implicit thoughts explicit. The study presents a preliminary modification of Repertory Grid technique and leads for wider investigation in my doctoral dissertation.
Introduction

Repertory Grid is a technique mostly used in psychological and behavioural designs in order to elicit individuals’ personal constructs. The question I am interested in is this: is the technique transferable to use with small children in educational situations? My assumption is that compared to the open interview Repertory Grid may offer a more structural basis for conversation and feedback situations in arts education when different aspects of a work and work-process are discussed and elicited using the child’s own language. By this technique I will try to make children’s implicit thoughts explicit. Listening and appreciating children’s opinions and criteria about their own works and others is essential in understanding why the works are the way they are.

In this context I shall not use the term assessment, firstly, to avoid negative impact and the general picture of teacher centred activity. Secondly, with small children the approach to assessment is more a feedback and conversation situation than an evaluative activity. In addition, feedback should be more formative instead of summative. The former refers, according to Hargreaves et al. (1996), to a longer-term, more fine-grained evaluation of the work process by which the product evolved, and the latter to the overall evaluation of a piece of work which has been undertaken over a period of time, taking into account the final product (Hargreaves, Galton & Robinson 1996). Both of these are actually complementary aspects.

Reflective conversation as a form of feedback offers more child-centred action. In addition, the use of the Repertory Grid technique in reflective conversation makes the situation more constructive and purposeful. And at a later stage it may offer elements for continuous action concerned with improving the child’s learning. (see figure 1). Based on these facts I will try the feasibility of the Repertory Grid technique not only as a tool for research but also as a continuous tool to use in educational situations in visual arts and crafts.

Some problems and key points in reflective conversation with children

In this paper I shall focus on problems of a pilot which aims at studying the feasibility of the Repertory Grid technique in feedback situations in young children’s visual art education. The target group consists of two five year-olds, Natalia and Sofia. I had one feedback conversation with both of them separately in order to elicit elements and constructs. Both conversations were taped. I also had one conversation with both of them together, but unfortunately it did not prove to be workable. Real life situations usually involve more than one child, so this unsuccessful experiment will need further development.
In conversation situations we discussed about the works that the children had made either at home or at art school during the last six months. Five art works (elements) from about ten were selected and named according to the child’s own choice. During the discussion period constructs were elicited, in total 8 from both children. During the conversation I asked the child about the last elicited construct (like ‘sad’) and how it is related with other works (elements) by posing questions like “Does this work also look sad?”, or “If it isn’t sad, what is it then?”, or “Could you put these works in some order according to sadness?”, or with the construct ‘it was nice to do’ I asked “Was it also nice to do this work?” and so on. Consequently, after the conversation I had already created some kind of grid. I also noticed that with young children it is better not to use too many graded scales. I have used a scale of 3 grades. With Natalia I also tried to form a grid where all elements were allotted to constructs using a 5-point scale to obtain more refined results. (See figures 2 and 3).

At the end of the conversation with Natalia I asked her to draw a picture about something she had in her mind at that particular moment. The drawing ‘Natalia and the sun’ became one of the elements and all constructs were related to that element. I encouraged her to express her thoughts while drawing the picture, but she was concentrating very hard on her work and was mainly quiet. So no new constructs were generated. When I started a conversation with Sofia she immediately asked if she could draw something. Her drawing ‘Snow White’ stimulated her to talk while we also discussed about the other selected works in the same way as with Natalia. Finally, 6 elements and 8 constructs were obtained from both of them.

When defining constructs they can be grouped into two types: product (quality) and action. Answering questions like “Could you find some similarities in two of these works?”, or “Is there an important way in which two of the works differ from the third?”, or “How does the third one differ from the other two?” demands from a child the ability to express some artistic aspects (like colour, shape, figure, technique) or attributes (such as happy). These types of constructs describe the quality of a work. The other type of construct is action (e.g. ‘it was nice to make it’). The purpose is to find different descriptions of the ways what and how a child is thinking or feeling during the process of drawing or making something. In feedback situations both of these aspects are essential. There is also one additional aspect to take into the consideration, namely the child’s imagination and fantasy. A child might discover stories or features about the works which are not realistic in the eyes of an adult.

During the first conversations I found how difficult it is to discuss with a small child in order to elicit (but not provide) constructs (Cohen & Manion 1989, 339). The problem is how to avoid leading questions (Breakwell 1990, Jakobsen 1993, Kvale 1997). A child’s vocabulary or knowledge of certain concepts is limited, which easily leads to the situation where some terms have to be explained. Explaining the concepts
in a way that it does not reveal the answer is sometimes complicated. Furthermore, children have a tendency to answer "I don't know" for, among others, the following reasons: the child is not interested in answering the question; the child does not understand the concepts or form of the question; the child does not want to admit that s/he knows something; the child thinks that the questioner is expecting her/him to be ignorant of something; the child is shy or embarrassed to say more; or simply, the child does not in fact know (Breakwell 1990, Jakobsen 1993). Most child interviewers point out that questions should be clear, and metaphors and comparisons should be avoided. The Repertory Grid technique, however, is in fact based on comparisons and also relies on linguistic ability.

By this as it may, children are usually lively storytellers about their own works, and are even more willing and able to tell stories beyond the subject itself. If a child loses the subject, the questioner should direct the conversation back to the matter, but this must be done discreetly to avoid reducing the child to silence (Breakwell 1990). Above all, a researcher or questioner should have a good knowledge of the developmental and cognitive levels of a certain age of child and about her/his earlier experiences. (Breakwell 1990, Jakobsen 1993)

Reflective conversation with a child is an interaction situation (Kirmanen 1999). It is a social action which requires special skills from a questioner or researcher and the willingness to attend to the world of a child (Breakwell 1990, Jakobsen 1993, Kirmanen 1999). A questioner should be capable of understanding the mental processes of a child and to stimulate and persuade her/him to talk about works and working processes during the study. Sometimes children may become hesitant in the new situation and some kind of motivation is needed. At the beginning of my conversations with Natalia and Sofia I said "I would like to know how is it to be 5-6 years old because we adults know so little about children's lives. Would you like to help me in this?" This usually motivates children and they feel proud to be considered important people (Kirmanen 1999). At the end of situations I also gave them small presents.

To succeed in a conversation situation it is essential to create a relaxed atmosphere between questioner/teacher and children. It is vital to give children a feeling that you understand and appreciate them, and that you are really interested in children's works and opinions. (Kirmanen 1999)

**What do children think about their works?**

In the following discussion I shall review my study in the light of the results of Analice Dutra Pillar's (1998) study of children, aged 2 to 6, and their thoughts about the drawing process. Pillar (1998) points out that questioner or teachers do not
usually know how children conceive of their drawing processes. They believe that children’s drawings are related to graphic alterations of drawing instead of being related to constructive aspects. In any case, Pillar indicates through her research that children conceive of drawing as an object in which action and thoughts are related. The work demonstrates the theoretical concepts by which the child rebuilds the object of knowledge, when s/he understands it. (Pillar 1998, 82).

If the child does not provide the meaning of her/his image, we cannot fully understand it. We can see a girl, a tree, or the sun, without knowing what this particular tree or composition may mean to the child. So we only know what adults think about the child’s drawing, not the children’s own theories, as Pillar (1998) points out. Children of 5 almost always have a story to tell about their drawings or craft works. There may be only a few lines on the paper, but there is a full story behind it.

_Natalia told me about a drawing called ‘The train’. She talked about herself and her mother standing on the platform. The sun is shining. They had just missed the train, but luckily the next one is already coming._

The story is based on her own experience during a trip to Holland a few years earlier. She probably remembered it because it was remarkable happening for her, and presumably her mother had also told the story many times to others.

According to Pillar (1998), children consider that it is necessary to think before drawing, implying that drawing should be considered a cognitive object. Based on her study she groups children’s drawing processes and children’s conceptions in relation to the drawing stages of the subjects and to their conceptions at each level:
1) Non-symbolic Motor Activity,
2) Symbolic Activity,
3) Golden Age of Drawing, and
4) Graphic Conventions of Drawing.

The Non-symbolic Motor Activity stage describes the initial scribble of lines made by smaller children or babies. Children at subsequent phases consider that these lines are not drawings, because they do not have any recognisable forms. Later on they think that smaller children lack the ability create drawings or recognisable shapes because they cannot think which is necessary to draw properly. (Pillar 1998)

Children at the Symbolic Activity stage consider that a drawing is different from the real object represented, and it is natural to find similarities between the drawing and its referent. Drawing is learned through observing objects, watching how other people draw, ‘copying’ representation strategies from other people, recalling drawing strategies used before, thinking, and drawing. The changes (erasures or additions)
made to a drawing are intended to make it more beautiful, more representative and more realistic only in the eyes of child, because the drawing is a creative mirror of the child’s view of the world. (Pillar 1998). In my study Sofia explained that some of the creations in her drawings, like Snow White and the Princess, depict herself. She compared herself to Snow White and said that both she and Snow White had the same kind of hair. Natalia created her works at art classes where some works are based on fairy tales, like ‘The train’ and ‘A cat and a tree’. Ideas for these works were obtained from fairy tales, but in fact she was describing her own experiences.

Children at the Golden Age of Drawing stage consider that drawing imitates the real world, and is the search for a form similar to an object. Children learn how to draw through observation of objects, observing how other people draw, and through the own drawing activity. A drawn object, as Pillar (1998) points out, is a symbol, only that, nothing more. Natalia drew a train and herself with her mother on the platform, and this depicts a realistic story from her own life. The work called ‘Natalia and the sun’ also depicts reality as it is. ‘Sofia as a school girl’ also gives a realistic picture of Sofia’s world, but it also exhibits imagination, namely the expectation of going to school. When Sofia draws Snow White, her favourite character at the moment, she knows exactly how she looks like, what kind of clothes she wears, and what kind of colours are associated with her. She knows all this from the Snow White video. Children have a tendency to repeat techniques, ways of drawing, and motifs used earlier, as Natalia mentioned, “I always do it that way”.

Pillar (1998) remarks that none of her subjects have reached the Graphic Conventions of Drawing phase, but they have demonstrated, from the Symbolic Activity phase on, some interest in issues related to the Graphic Conventions of Drawing, such as depth, super-position, opacity, distance, and proportions of objects. (Pillar 1998). These kinds of findings are known in many researches and I see the same in my study. For small children it is difficult to understand how to draw for example distance or depth. They do it in their own way, like depicting an object which is closer by drawing it bigger or with a stronger line and colour. The depictions also show that the most important person is the biggest and most visible one. In their drawings Natalia and Sofia paid attention to techniques and colours, rather than to forms or scale. They are able to recognise the techniques that they themselves used.

According to her results Pillar (1998) posits that:
- Children have conceptions about the drawing process;
- Such conceptions alter as children get to know the ‘language’ of drawing;
- Children conceive drawing as an object where action and thought are related.
In my study I see many similarities with Pillar’s (1998) results. Children are able to conceptualise and they give meaning to their works by thinking and verbalising their thoughts. Sofia also adds one more aspect of thinking. She tells that the character is thinking, like Snow White is thinking of her dwarfs or the Princess is thinking of her home and the Prince.

The findings of my pilot study are as follows:
- with small children, the time to be given for intensive conversation is at most 20 minutes
- breaks are needed to support and maintain motivation
- the role of linguistic ability is crucial
- extra incentives may be needed to maintain interest

It is essential for the next step to put more effort into designing an appropriate research situation. It should be considered whether all works (elements) should be made by the same technique or by the same kind of combination of techniques. Further, the selection of elements has to be thought out carefully: should it be the researcher, or should it be the work of the subject? With young children it is better not to use too many graded scales. Maybe the scale of two grades is enough. In addition it may be useful to concentrate on different types of constructions, product and action, one at a time. Good linguistic ability might be of benefit to some children when starting to use this technique, but on the other hand the technique itself could also enable some children to canalise and express their thoughts more clearly. It can also increase children’s vocabulary and conceptual abilities.
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Figure 1. A theoretical framework of assessment approaches in arts education (Karppinen & Puurula 2000).
### Display Natalia, Domain: paintings

**Context:** reflective conversation in art education, 6 elements, 9 constructs

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### FOCUS Natalia, Domain: paintings

**Context:** reflective conversation in art education, 6 elements, 8 constructs

- A troll
- Trees in a storm
- The train
- A cat and a tree
- Leaves on a transparency
- Natalia and the sun
- The train
- A cat and a tree
- Trees in a storm

### PrinCom, Domain: paintings, User: Natalia

- Context: reflective conversation in art education, 6 elements, 8 constructs

- Trees in a storm X
- Subject created by a teacher or based on a fairy tale, painted,
- A cat and a tree X
- Similar colours
- Nice to make
- Nice
- Similar by technique
- Happy
- The train X
- Natalia and the sun
- Leaves on a transparency
- Night
- Cheerful to make
- Mean
- Different by technique
- Frighten
- A troll
- Different colours
- Drawn
- Subject describes her own experiences
References:


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