## e-mentor

DWUMIESIĘCZNIK SZKOŁY GŁÓWNEJ HANDLOWEJ W WARSZAWIE WSPÓŁWYDAWCA: FUNDACJA PROMOCJI JAKREDYTACJ KIERUNKÓW EKONOMICZNYCH



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# Children's drawings and their analysis as a method supporting understanding of concepts in workshops at children's universities

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The article presents one of the most popular projection techniques — a drawing analysis — as a tool supporting the activity of participants in the workshop classes at children's university. In particular, the indicated method can be used for doing the tasks devoted to social and economic phenomena, in which children often participate and which are not always understandable to them. It should also be emphasized that drawing is a natural form of expression employed by children. Considered in terms of development possibilities, the way of drawing and the content, the drawing can be applied either in preliminary phase when it allows the recognition of children's familiarity with certain concepts, or at the final stage in which the presented issues are visualized by children in the form of a drawing.

#### Introduction

Drawing is one of the most important manifestations of a child's creativity. It becomes more advanced and sophisticated along with the grow of motor skills during subsequent stages of development. It most frequently presents the real- or fairy-tale – abstract world that usually surrounds a child, resulting from their imagination. In a kindergarten, at school or during additional classes, children prepare artworks on a specific topic. The evaluation of aesthetic values of drawings is common. However, it should be emphasized that the interpretation of children's products can also be made on a different plane. Moreover, the inclusion of drawing in the workshop classes with children is not reserved only for psychologists and therapists. This article aims to present the way of exploiting the projection method, which is a drawing analysis, during educational workshops.

The starting point for designing the concept of a workshop technique based on a drawing analysis will be a review of the subject literature devoted to:

- projection techniques, in particular, a drawing analysis;
- psychological and sociological analysis of a drawing;
- using drawing in the methodology of cognition of child's perspective.

### Projection is an ambiguous concept in ps

**Projection techniques – the definition,** 

Projection is an ambiguous concept in psychology. One of the ways of interpreting this term is to understand it as a defensive mechanism through one's assignment to other people the motives or traits which are not accepted in oneself (Fraczek, 1964, pp. 181–217). Projection is also defined as an impingement of internal, subjective states of a subject on external reality and its interpretation in accordance with them (among others, Heitzman, 2009, p. 246).

There are different types of projections: classic, attributive, autistic and rationalizing (Lewicki, 1969, p. 100; Rembowski, 1975, p. 291). The classic projection is a well-known defense mechanism outlined by Sigmund Freud. It is based on assigning to other people one's traits or behaviors not accepted in oneself. In turn, the attributive projection refers not only to negative characteristics – it can apply to one's all own features attributed to other people. The autistic projection involves the modification of observations due to one's individual needs. The rationalization projection consists of justifying one's behavior by assigning it to other people.

It should be emphasized that the projection mechanism constituting the basis of the projection methods is discussed not only on the ground of psychology. In addition to diagnosis and psychological therapy, projection techniques are also used in qualitative research aimed at deep analysis of a studied phenomenon, including hidden attitudes. The indicated methods make it possible to get to know and understand the preferences and opinions of the respondents based on what they say (or draw) about other people, things or situations. In this way the respondents create projections constituting the basic human defense mechanism thanks to which an ego defends itself against unwanted or suppressed drives and desires, assigning them to others.

The projection techniques are often used to diversify the course of an interview, which helps to break down barriers, increase the activity of the respondents and supports their freedom of speech. They are used primarily when:

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- a respondent may feel embarrassed and ashamed by the necessity to express real reactions and views:
- topics refer to sensitive issues;
- there is a risk that the respondents will respond in a tendentious way to satisfy the author of the study;
- respondents may be wrongly convinced of their rational behavior in a given situation, not realizing the unconscious attitude that is the cause of their conduct;
- respondents may have problems resulting from the lack of adequate knowledge and vocabulary resources to express their views and emotions (this is the case, for example, during the interviews with children).

There are four basic groups of projection techniques (Braun-Gałkowska, 2016, p. 18):

- Visual methods presenting some visual stimulus in the form of a picture or the inkblots. In the case of a picture, the person could be asked for its interpretation, for telling a story about it (for example, TAT, CAT). As regards the inkblots the associations brought to one's mind after seeing them are interpreted (for example, the Rorschach Inkblot Test).
- Verbal methods in which the stimulus is constituted by sentences or stories to be interpreted in any way (for example, the Fairy Tale Test FTT).
- Play methods, especially exploited when working with children. They are based on the use of puppets, toys, animals and on encouraging children to take roles (for example, the Scenotest by Gerhild von Staabs).
- Graphic methods that require making a drawing

   for example, finishing a picture already started (the Wartegg Test) or preparing the own drawing on a given topic.

However, in marketing research, four other groups of projection techniques can be distinguished (Światowy, 2016, p. 192). They are focusing on:

- associations, for example: with words, with a person, an animal, an object, music, or smell. Photographs, personification and the like are often used to evoke stimuli;
- supplements, like the completion of sentences, short stories or conversations, development of supplementary and projection questions;
- constructions, for instance: an expo, a brand party, old photography, personality and gratification sorts, collages;
- psychodrama type expressions, directed fantasy, farewell speech, drawing.

Drawing, which is a non-verbal, pictorial form of expression, mainly used in marketing research conducted among children, deserves special attention. A person doing the research and the instruction given to the participants play a particular role: the tutor should emphasize that drawing is to be treated as a form of fun whereas the aesthetic aspects and the talent of the author will not be evaluated.

#### **Drawing analysis**

The diagnosis enabled by the projection methods is meaningful, but requires specialist knowledge, especially when the indicated techniques are used in psychological diagnosis. This kind of interpretation is therefore reserved exclusively for psychologists, pedagogues and psychiatrists, however, the categories of symbols they use, based on associations, may also be useful in other contexts (Braun-Gałkowska, 2016, pp. 24–27).

The symbolism of space. It specifies mutual relations between the drawn objects and the characters in terms of the distance between them, the way of arranging the space in the drawing, the interaction between the depicted objects and the characters, and their sizes. Also, the placement of the picture on a piece of paper may be symbolic – whether it is on the left or the right side, at the top or at the bottom of the paper.

The symbolism of colors. The colors used in the drawing speak about emotions and to some extent they can be interpreted using the meanings assigned in the Lüscher Color Test. Also, the number of colors used for illustration should be taken into account in the analysis.

The symbolism of a human body. The completeness of a drawn character, the number of details, the size of characters and the proportions compared to other people in the drawing are the critical elements to be interpreted. However, it should be emphasized, that the manner in which a character is illustrated indicates the level of development and intelligence primarily – the interpretation should, therefore, be made taking into account the stage of a child's development.

The symbolism of animals. Using an animal in a drawing can express an author's identification with this animal, especially if the author does not want to attribute the animal's characteristics directly to himself/herself (for example, courage, strength, and timidity).

The symbolism of objects. The objects in a drawing may result from a given topic or may appear unexpectedly. These can be, for example, items used to express aggression or those related to peaceful activities, inanimate or animate elements (for example, trees, plants) and landscape fragments.

A starting point for a proper interpretation of children's drawing works is knowing the picture development stages. It is also important to conduct an accompanying interview in which the child explains the individual elements shown in the picture. It may turn out that, for example, a drawn cat is simply a domestic animal and not an unexpected element that appeared as the result of the projection.

### The stages of a drawing development

Following what Stanislaw Popek suggested (2010, p. 191, quoting: M. Verworn, 1917), the division of the development of children's drawing into the ideoplastic and physioplastic phases was adopted in the literature on the subject. The indicated stages are closely related to the psychophysical development of

a child. The ideoplastic phase lasts until around eleven years of age and is characterized by dynamic growth. Stefan Szuman (1990, p. 9), on the basis of a long-term study of children's drawings, distinguished three main stages of a drawing development:

- 1) A stage of scribbling, that is, the formation of the schema.
- 2) A stage of a schema (ideoplastic phase). Drawing according to the so-called simplified scheme.
- 3) A stage of an enriched schema (development towards physioplastic phase).

Other authors, such as Georg Kerchensteiner (1905), Cyril Burt (1947), June K. McFee (1961), Viktor Lowenfeld (1964) and David H. Feldman (1980) proposed slightly different names for individual stages. C. Burt, for example, distinguished 4 phases in the stage of scribbling (purposeless, purposeful, reconstructive, localized), and the ideoplastic period was divided by him into the stages of line and descriptive symbolism. In turn, V. Lowenfeld indicated chaotic, controlled and named scribbling. While analyzing the proposals of various authors, some features characteristic of the subsequent stages can be identifed (Chmielnicka-Plaskota, 2014, p. 20). The scribbling stage, during which a scheme develops, appears in children around the age of three. First drawings are created mechanically and largely correspond to the entire arm movements without the eye control. In this phase of development, a child holds a pencil or a crayon with the whole fist. It successively helps itself with fingers and its hand, then with its elbow. After the period of random scribbling, the so-called controlled scrawling develops. At this time, the child achieves considerable control over the hand movement and the drawing movement. The movement becomes delicate and more accurate. Over time, the child gains control over the drawing movement and draws the imagined items, for example, dashes, zigzags, points, dots. A significant moment in the scribbling phase is the transition to drawing circles or polygons. The ability to draw these figures enables the child to draw objects. In this way, it closes the connected shapes or objects in a visible and understandable way for both the recipient and itself. Stefan Szuman claimed that the development of speech precedes child's drawing development. A child in the third year of life, looking for basic elements of drawing, usually speaks quite well (1990, p. 15). While learning to draw, the child firstly draws the features of the subject he or she is already familiar with. The child does not draw an object in the way it appears in reality. These are poor, schematic and not very expressive sketches. First human figures called 'cephalopods' appear in the scribbling phase.

The drawings displaying cephalopods are typical for the youngest children. In the period of the scheme, falling into the pre-school age, they prevail in artworks; with a child's development, drawing becomes more complex, and – after drawing the torso and hands – the cephalopods change into a simplified human scheme. More and more thematic pictures appear, and the content is dominated by a human form, a house, and vehicles. The drawing is closely related to a child's thinking based on perception. The child most willingly draws the figures and objects he or she spotted, so they are closely linked to its observations.

On the other hand, children in pre-school age whose perception is not limited to the real world often use colors that – as it may seem – do not reflect real images (Lasota, 2016). Around the age of 4 and 5, the ability to plan the space on the surface on the sheet of the paper develops. Disproportions are also characteristic for children at this age (preferred items or characters are bigger than those avoided).

School-aged children, from around the age of 6, begin to include more and more details in their drawings, improve proportions and express the space relations using belt systems. S. Szuman (1990, p. 41) described this stage as a 'phase of enriched schemes.'

After the ideoplastic period, around the age of eleven, the second phase – physioplastic – develops. During this period, the stages of emotional and intellectual realism are distinguished (Popek, 1999, pp. 253–254). The child becomes critical of its own creations, and its drawings reflect the naturalistic perception of the world.

Regardless of the children artistic creation phase, their drawings are a source of knowledge on children's personality, feelings, and experiences. The research shows that besides the possibility to obtain information about the inner sphere and the life of a child, undertaking creative activity by implementing various art techniques influences child's intellectual and emotional development. Children on the borderline of intellectual disability and children with a slight disability achieve the scheme stage in their work, not entering the higher level of artistic development – physioplastic phase (Tyniowski, 1986, p. 81).

Françoise Minkowska (1950, quoting: Braun-Gałkowska, 2016, p. 50) distinguished two types of drawing: sensory (emotional) and rational. Emotional drawing is characteristic of spontaneous people who value the relationships and closeness of social bonds among the family members. The lines in their drawings are curved, rounded, dynamic, and the actions of the characters are captured. The rational type of a drawing expresses in straight and rigid lines. The presented figures are stationary and static. Such drawings are made by people inhibited by internal censorship and subjected to the rules.

### The use of a drawing analysis during workshops at children's university — the workshops proposal

During the classes conducted at children's universities, social topics are often raised, as part of the tasks related to civic education. The knowledge and the way of understanding abstract concepts related, for example, to ethics, civic responsibility and a description of social phenomena are often the combination

of attitudes of parents or other caregivers, school knowledge and information obtained from peers and from the media. It means, therefore, that the way in which these terms are interpreted is individual and is based on a child's specific experience. Frequently, young participants of children's universities correctly understand a phenomenon, but they cannot accurately describe it. In that case, the methods based on a child's creativity could be recommended. Drawing is one of such techniques as it helps to visualize children's associations with a chosen concept.

Children's drawings are an 'entrance gate' facilitating access to their views and experiences. The analysis of their work and paying attention to the narratives and interpretations made by children themselves constitute a valuable source of information which – along with the involvement in the artistic process – a young author eagerly shares (Clark, 2005, pp. 489–505).

A common way to include children's artistic creativity in the didactic work at children's universities are workshops during which they are asked to draw a previously discussed concept or to illustrate the lectures and presentations they already listened to. It means, therefore, that children visualize the phenomenon defined by a tutor in their individual, characteristic only for them, way. Art contests organized by the Children's University at the Maria Curie-Sklodowska University in Lublin may serve as an example of such activity.

The children participate first in the meeting after which they are encouraged to create an artistic work illustrating the topic being discussed (among others: 'The creation of the world according to Tales or Pythagoras' implemented in 2012 or 'Maria in the laboratory in 2017'). At the Children's University, operating at the Cracow University of Economics children are encouraged to submit pictures that are artistic summaries of the lectures and then the works are printed in a special supplement to the university's magazine, 'Kurier UEK.'

It is also possible to start the discussion on the selected topic by asking children to illustrate the concept or the issue first and then talk about their interpretations. Such an approach is more individualized and allows better recognition of knowledge the children already have as well as adjusting the content of the class to that knowledge.

It is worth to be stressed that the students of children's universities usually attend different schools; therefore, the described reversed approach can also be an opportunity to find differences in the perception of individual concepts and in consequence to systematize prior knowledge just at the very beginning of the joint work. The initial drawings may also help to identify those aspects of the discussed issue which require special attention; and in a case when some symbolic elements (originating, for instance, from fairy tales) appear in many children's works, it may suggest the examples to be used during the workshops.

The ideas mentioned above aim to exemplify how the drawing method may support classes at the children's universities either as a means of concluding the discussion and verifying the proper understanding of the presented issues or checking participants' initial knowledge and their views. It is also possible to analyze the language of artistic expression (concerning the applied means of expression, creative values or content analysis). However, it should be remembered that the drawing analysis may refer only to the level of knowledge or understanding of the topic discussed, not to the assessment of a child's development and its relationship with the environment. This type of diagnosis should be reserved for specialists in the field of psychology and pedagogy.

The drawing method – due to its attributes – can also be successfully used as a tool for qualitative research conducted among students of children's universities. However, it should be emphasized that in such a case it is necessary to obtain legal guardians' consent for children's participation in the research project and to provide full and understandable instructions as well as information on the further use of children's works. Many researchers (including Bland, 2018, p. 343) have successfully applied the discussed tool as a primary method of qualitative research conducted among primary school students.

The Polish-American project on applying the drawing method for the work with children was developed by the team of the researchers: Professor Jacqueline Johnson from the University of Minnesota Morris, Professor Anna Karwinska and Doctor Katarzyna Sanak-Kosmowska from the Cracow University of Economics. The research was carried out in March and April 2018. The project involved students from elementary schools in Minnesota and Cracow. In total, 67 Polish and 70 American children took part in the research. As part of the study, the children were asked to prepare two drawing works: 'This is America' and 'My country, my homeland' or 'My city.' In the first stage of the research, the children worked independently, creating their artworks. In the second stage, during the individual structuralized interviews, the children described their drawings, explaining the meaning of each visual element of their piece of art. It should be emphasized that due to the lack of a set interpretation framework of the given tasks, project participants have created various works – from realistic to abstract. After finishing the drawings, they were eager to talk about them, explaining what and why they decided to draw. It can, therefore, be assumed that the information obtained in this way is more comprehensive than acquired through declarative methods. The method of competent judges was used to analyze the results. First, a drawing evaluation form was developed, specifying, among others, the undertaken subject (assigned to the selected category, for example landscape, people, politics, symbols), the number of elements depicted in the drawing, the number of people included in the picture, the work layout (horizontal or vertical orientation) and the number of colors used. It is expected that the results of the analysis of the drawings – those made by Polish and American children – will bring the information



about similarities and differences in the interpretation of the surrounding world by both groups of the research participants. The results will be published in 2019 on the project website as well as in the selected scientific journals on social and civic education.

### **Conclusion**

The analysis of the drawing, the methodology of which is linked to the projection techniques, is widely used research and diagnostic tool, successfully applied by specialists in the field of psychology, sociology, and marketing. It seems, however, that their application may be broader – both as part of the workshop work and a research tool during the classes at children's universities. The latter may refer, for instance, to the understanding of social phenomena introduced in the class. There are two possible scenarios for the use of drawing works. Firstly, it can be a method of consolidating and checking whether the concept has been adequately understood by the class participants – then it is worth asking the audience to illustrate the chosen phenomenon or issue. Secondly, a drawing work followed by the interview with a child provides the opportunity to learn about and discuss the way children perceive the world around them. It allows obtaining valuable qualitative data and thus avoiding the necessity to employ declarative research.

Using the drawing and its interpretation is a subjective method because it refers to a personal way of perceiving the world by an author. Its analysis requires professional knowledge about creativity, the stages of child development and intuition. Applying this method in practice, also as a part of classes for the youngest, should go hand in hand with proper substantive preparation and great mindfulness.

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#### Abstract

Drawing is for a child a form of play and a way of free expression. At the same time, it is an opportunity to develop imagination, creativity, and knowledge about the surrounding world. For psychologists and therapists, a child's drawing, as part of the projection methods used, is a source of knowledge about its emotions, personality, and situation. Also, the marketing specialists make use of projection techniques, including projection drawings, for instance, to study the behaviors of youngest consumers.

The article aims to present the way of using the projection method, such as a drawing analysis during the educational workshops and for qualitative research conducted among the youngest.

In the first part of the article, the subject literature on projection techniques, in particular on a drawing analysis is reviewed. In the further part, the stages of a child's drawing development along with their characteristics are presented. The last section illustrates the proposals for the use of a projection drawing as part of the workshop work with children and an example of such activities are given. It should be emphasized that the use of projection methods requires educators to possess knowledge, sensitivity, and caution in the interpretation. Children's drawings differ concerning their artistic talents, age, stage of development and symbols used. The proper understanding of the last sphere is a very complex process.

Key words: a child's drawing; a drawing development; projection methods; social education; civic education

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### **Tinkergarten**

Tinkergarten is the American initiative which provides education for the youngest in the most natural classrooms – in city parks and forests. Anyone who cares about teaching in nature can become a leader. The appropriate training, as well as the teaching materials, are provided by the organizers.







The Tinkergarten official website and blog are used to ensure the proper contact between the class leaders and parents and to support the exchange of learning activities and any ideas among the community members.

The approach 'learning by playing' is applied during the classes – in the pictures children 'cook' the soup using spices they have brought, make decorations from what they have collected around them and learn how to recognize the trees by their leaves. Pictures were taken during the class in Atlanta in autumn 2018 with a leader Erica Williams.

Source: Editor's own materials.