Identification of a Child’s Creative Potential: Test, Observation, or Dialogue? Main Themes of the Discourse

Abstract

The subject of the article is the diagnosis of children's creativity in its two varieties: diagnosis of creative potential and diagnosis of effectiveness, generally based on psychometric measurement. The author briefly characterizes both types of diagnoses, and then goes on to criticize their shortcomings and limitations, which are still the subject of dispute among their supporters. Finally, he proposes to appease these disputes by developing an integrated diagnosis model that combines the study of all aspects of creativity: products, people, the process of creation, and the creative environment, with the use of dialogue and through analyzing children's narratives. Giving voice to the creative child and the systematic collection and analysis of his or her various achievements in the form of a portfolio is the essence of this model of diagnosis, which is to fulfill an important prognostic and developmental function.

Keywords: child's creativity, diagnosis of creative potential, integrated diagnosis, portfolio method.

Identyfikacja potencjału twórczego dziecka: test, obserwacja czy dialog? Główne wątki dyskursu

Abstrakt

Tematem artykułu jest diagnoza twórczości dzieci w jej dwóch odmianach: diagnozie potencjału twórczego i diagnozie efektywności, opartych na ogólnie psychometrycznym. Autor charakteryzuje krótko oba typy tych diagnoz, a następnie przechodzi do krytyki ich wad i ograniczeń, które ciągle stanowią przedmiot sporu

* University of Lodz.
Received: 1.02.2023; accepted: 23.03.2023.

https://doi.org/10.18778/2450-4491.17.04
ich zwolenników i stały element dyskursu naukowego. Proponuje załagodzenie tych sporów poprzez rozwijanie modelu diagnozy zintegrowanej, łączącej w sobie badanie wszystkich aspektów twórczości: wytworów, osób procesu tworzenia i środowiska twórczego, z wykorzystaniem dialogu i narracji dziecięcej. Oddanie głosu tworzącemu dziecku i systematyczne gromadzenie oraz analiza jego różnorodnych dokonań w postaci portfolio jest istotą tego modelu diagnozy, która ma spełnić ważną funkcję prognostyczno-rozwojową.

Słowa kluczowe: twórczość dziecka, diagnoza potencjału twórczego, diagnoza zintegrowana, metoda portfolio.

Assessment is the key that unlocks the creative potential so many students have learned to suppress in school, are unaware they possess
Katie White (2019: 3).

Introduction

There is no end to disputes about the diagnosis and – more broadly – the identification of a child’s creative potential, the methods of diagnosing and its limitations, as well as the assessment and prognosis of development, or even the question of whether it makes sense to pursue early diagnoses of children’s creative potential which is, after all, subject to constant and dynamic transformations. It would be impossible to address every issue related to this discussion in such a short article, especially since the discussion has advanced to a serious academic discourse, much to the content of pedagogues of creativity. The aim of this article is to briefly outline the main topics and points of contention within this discourse, following the intention of the editors of this volume of NOWIS which is to “focus on the child” and the world it experiences, and not only on the child as an object of – in this case – diagnostic tests. In the conclusion, the author presents his own concept of an integrated diagnosis that can ease the dispute and solve the problems that have arisen so far.

However, we must begin with a basic question: what are we diagnosing?

Potential or effective creativity?

There is no consensus on what we are really diagnosing (studying, identifying, recognizing) in children aged 3-10: their creativity and potential abilities that might materialize in the future, if we provide appropriate assistance, or effective creativity (actual, real) that manifests itself in the products of children’s creativity here and now? If we agree with the first approach – we study the creative potential of children – then as a consequence, we base our diagnosis mostly on techniques that
resemble creativity tests with a greater or lesser prognostic (predictive) value. It is therefore questionable to use observation, interviews, or the analysis of children’s narratives for that purpose, or to evaluate the products of their creativity. Instead, what we are diagnosing is the so-called psychometric creativity of children (Kubicka 2000). Following Ravenna Helson (1999), we can call it a diagnosis of creative potential. Not only the researcher, but also the teacher focuses here not on the child’s creative productivity (what and how does it create?), but on characterizing its creative abilities and mental conditions related to creativity, and thus on those creative potentials, motivations and activities that have a chance to develop in the future. It therefore offers a prognostic and developmental diagnosis, characterizing the likelihood of the future realization of the identified creative potentials. As I have already mentioned, psychometric techniques are primarily employed for that purpose, known as creativity tests. Dorota Kubicka (2000, 2003) distinguishes three main currents in psychometric studies of the creative activities of children which perceive creativity as:

- divergent thinking,
- associative thinking,
- metaphorical thinking.

She also discusses examples from each approach. These are, among others, divergent tests, referring to the tradition of J. P. Guilford, still very popular in research studies and school diagnoses, the Torrance Test of Creative Thinking, which also studied children’s creativity in action, ideational fluency tests (e.g. Mark Runco), association tests and creating verbal and pictorial metaphors. Another classification of creativity tests, used also for the study of children’s potential, is highlighted by Todd Kettler and his co-authors (Kettler, Lamb, Mullet 2018), who explicitly assume that “creativity tests are best thought of as measures of creative potential, rather than measures of creativity” (Kettler, Lamb, Mullet 2018: 51). They divided them into: divergent thinking assessments, self-report questionnaires, expert evaluation of products. Every instrument for measuring creativity can be studied from four perspectives — influenced by the four-aspect paradigm of interpreting creativity:

- creative process perspective, i.e. the Torrance Test, Guilford’s Creativity Test for Children;
- creative product perspective, i.e. Teresa Amabile’s Consensual Assessment Technique (CAT);
- creative press perspective, ecological perspective (environmental conditions), i.e. Amabile’s and co-authors’ Assessing the Climate for Creativity Test, Isaksen’s and Ekval’s Situational Outlook Questionnaire (SOQ);
- creative person perspective, i.e. Creative Achievement Questionnaire, Creative Behavior Inventory (CBI), The Kaufman Domains of Creative Scale.

Each perspective has its specific advantages and limitations for studying the creativity of children. Some cannot be used to diagnose children (e.g. self-report questionnaires, creative personality questionnaire). Interestingly, the authors (Kettler,
Lamb & Mullet 2018: 62) consider as useful in education the positive disintegration test (the Overexcitability Questionnaire II) created by Michael Piechowski on the basis of Kazimierz Dabrowski’s theory of positive disintegration (1979).

The inventiveness of scholars in producing new creativity tests knows no limits, and each year new tests are being announced, seemingly offering greater accuracy and reliability (for overview, see: Cropley, Cropley 2009, Johnson, Fishkin 1999, Qian, Plucker 2017, Said-Metwaly et al. 2017, Plucker; Makel, Qian 2021, Szmidt 2013). Jacek Gralewski (2022) has written perceptively and broadly about the difficulties of diagnosing creative potentials by teachers and parents as well as members of the psychopedagogical counseling staff.

The child creates – the researcher collects and analyzes

Psychometric studies of the creative abilities of children, as well as adults, sparkle a lot of controversy and criticism; I have written about it numerous times (Szmidt 2003, 2009, 2016, 2019). Again, it is not possible to present every aspect of this debate, although some are worthy of mention. Dorotha Faulkner and Elizabeth Cotes (2010) argue that too often the creative abilities of children are studied through the assessment of the final product of that creativity or through short creativity tests, an approach that ignores the creative process that is so crucial in this. As a result, we do not pay sufficient attention to what the child says during the process, what it imagines and tries to achieve. We are therefore not diagnosing children’s creative activities but only their products. However, the creative process in itself has significant educational and developmental values and should not be passed over in any developed diagnosis. Olivia Saracho (2012) argues that it is a mistake, since children’s creativity fully reveals itself when they are dancing, singing, playing, engaging in theatrical plays – that is, in movement! The diagnostical perspective characterized here is referred to as “an orientation towards product” by pedagogues of creativity. Dorota Kubicka (2003) and Jacek Gralewski (2022) develop a similar critique of this orientation. The study of the products of children’s creative activity was and still is the most often employed diagnostic procedure (Kubicka 2003, White 2019), both in test-based diagnosis as well as in diagnoses based on the analysis of the products of their creative activity. What is analyzed and assessed are various linguistic products (stories, metaphors, riddles etc.), works of art, drama scenes etc. The criteria of creativity are both the specific qualities of the products, i.e. originality, uniqueness, expressiveness, elaboration and the development of the topic, aesthetic values, but also the features of the creative process: fluidity, flexibility, dynamism, fantasizing, synthesizing etc. Recipients’ reactions to the products of children’s creativity were also studied. The use of these complex criteria was a result of the criticism of one-off creativity tests, as well as the desire to employ a more complementary evaluating system, which would prioritize factors from different spheres of creativity – cognitive, motivational, and related activity-oriented. Thus, the reduction of the understanding
of children’s creativity to one or more factors was avoided (e.g. divergent thinking, association thinking or problem-solving abilities), but not the accusation that such an orientation on product does not eliminate other absences in the recognition and assessment of children’s creativity. The discussion focused on the following issues:

- The criteria for selecting the product for diagnosis – which products of creativity should be selected for the research study, according to which criteria, and from which domains? (those in which the child is gifted in, or others?). Products created in the past or present, in kindergarten and school, or at home or in a cultural institution?
- The criteria for selecting experts for assessing the products – who should be evaluating children’s products? Professional artists or teachers? Parents or peers? Persons trained or without any initial diagnostic preparation? It is a problem shared also by the most popular creativity assessment test – Teresa Amabile’s CAT (1996). Similar problems were also encountered by Polish authors who studied children’s metaphorical abilities and analogical thinking: Elżbieta Płóciennik (2010) and Monika Just (2013).
- The criteria for material traces – how to study children’s activity in those domains of creativity in which there are no direct material traces of the creative process – objects that could be analyzed and assessed (e.g. sense of humor, social problem-solving, games and play).

Both types of diagnoses based on the study of the products of creativity – creative potential and effective creativity – are criticized mainly for that fact that when drawing conclusions about the course of creative processes based on their results, they do not properly diagnose the development of children’s creativity (Kubicka 2003: 27). And this type of diagnosis is the most important one from the perspective of psychopedagogy. Why do diagnoses based solely on the study of the products of creativity do not fulfill their prognostic function? Here are the most important reasons according to Kubicka, as well as other authors (see also: Faulkner and Coates 2011, Sawyer 2012):

- A diagnosis of present-day products provides information about the possibilities of a child only in a given moment, nothing more.

  Whey studying children, we are however more interested in what we can expect of them in the future than what they can do presently. In other words, analyzing products does not offer us any insight into the child’s potential for development, which means not what the child already knows but what it is able to learn (Kubicka 2003: 27).

- A child’s development is not stuck in place – a child experiences a process of dynamic changes and therefore these processes should be the object of study, and not the products of the activity alone.

- “Children attach more importance to the activity in which they transform or produce something than to the product itself, therefore, during the acti-
...vity, they may display skills that cannot be recognized in the final product” (Kubicka 2003: 27).

Empirical example

In a research study conducted under my supervision, Olga Staniszewska (2014), a student of kindergarten and primary school pedagogy, diagnosed children’s abilities in a group task – they were supposed to make a creative toy. The aim for each two-person team was to construct, from available recycled materials, a creative toy that children in the same age would want to play with. The instruction stated: “In a moment I’ll be giving you materials from which you will be constructing your own creative toy. I would like each toy to be unique and one of its kind. When working on it, please remember that every idea is good. Additionally, think about its use and a name for the toy.” Each team received an identical set of materials consisting of: an empty cardboard shoe box, an empty water bottle, plastic corks, newspapers, a black plastic bag, disposable plastic cups, scotch tape, scissors.

Illustration 1. Creative toy “Robot”

The assignment was motivating for members of each group who approached it with great enthusiasm. They proposed various ideas, some of which were rejected, they demonstrated manually what can be done with the materials and what such a toy would look like, they discussed it, and they changed initial concept. The crea-
tive process also allowed a few team leaders to emerge. The young researcher writes (Staniszewska 2014: 45):

None of the children were discouraged by long-term work, everyone was concentrated on the task and willing to search for new solutions and ideas. During the exercise children asked a lot of questions. They wanted me to accept their projects and asked how they could use the available materials. Some groups were interested in adding new elements to the initial set they had received.

As a result, more or less original toys (see: illustration 1) were created, which were then presented to other students through the act of explaining the rules of playing with it and the nuances of its construction – each one became part of a class exhibition and was compared to others. How surprised was the researcher when the children, having finished the presentation, threw the toys aside and stopped playing with them or even stopped paying them any attention.

This research study demonstrated that the creative process – activity – was far more interesting for the children than its result. This confirms Dorota Kubicka’s observation mentioned above, who concludes: “Research focused on activities offer more possibilities for educational impact: for the shaping of the structure of activities can be influenced to a greater extent than the final product itself or the child’s abilities” (Kubicka 2003: 27). This view is supported by Olivia Saracho (2012: 127): “The creativity of young children requires concentrating on the process rather than on the product.”

The child creates – the researcher collects products, analyzes them, listens to what the child is saying, and tries to predict its development

Taking into consideration the critiques and defenses – recapitulated here very briefly – of the diagnosis of children’s creative potential and the diagnosis of effective creativity as well as the demands of scholars, I would like to conclude by presenting a proposal on how to reconcile the conflicting parties. I call it “a diagnosis of children’s integrated creativity,” since it connects all of the significant approaches to the study and assessment of children’s creative activity and its products. But most importantly, it focuses on the prognostic (developmental) function.

In order to avoid the weaknesses of the diagnosis of a child’s creative potential that is limited to psychometric tests, and the limitations imposed by only studying the results of such activities (products), the repertoire of employed research approaches should be broadened to include the following diagnostic techniques:

– Observation of the child’s creative activities (process) – occasional and systematic, which will focus on the child’s activities, their modifications and adopted strategies, the aims of the child and their transformations, the creation of initial ideas
on how to solve problems (assignments) and their elaboration. In this part of the research study, the main questions is: what is the child doing, and how?

- Analysis and assessment of the child’s authentic products – created both in school (kindergarten) classrooms and at home or in other places, which are both works of art (pictures, collages, drawings, literary forms etc.) and solutions of practical problems related to playing, spending free time, practicing sports etc. The question of this diagnosis is: what are the characteristics of the child’s products and what is their creative level (originality, uniqueness, aesthetics, novelty)?
- Dialogue with the child and analysis of their narrative about what he or she is creating, the reasons and aims for creating it. An important part of the diagnostic process is initiating a child’s narration about what and why he or she is creating, how the idea evolves, which goals are pursued and why not others, what motivates and encourages them to pursue creative work, and what is annoying and disturbing?
- Recognizing strong and weak aspects (resources) of the social environment (family, school, peer group, cultural), in which the child is growing up and experiencing acculturation. The question of this social (environmental) diagnosis, which is often employed by social pedagogues, is: what are the environmental stimulators and inhibitors for a favorable development of a child’s creativity?

The use of the authentic assessment method (portfolio) is especially important in an integrated diagnosis. How to create it is a topic for a separate article. A lot of advice can be found in Donald Treffinger’s and his collaborators’ work (2013), who propose that a teacher-researcher creates a Creative Strengths Profile for each child – a tool useful for identifying various ways of manifesting creativity in different assignments, in different situations, in different environments (Treffinger, Schoonover, Selby 2013: 136–145). Focused on a child’s strengths, it can enable both to collect and document its achievements (diagnostic function), as well as assist in deciding – together with parents – on future goals for the development of a child and self-evaluation (prognostic function). An important part of such a profile is a portfolio, understood as a diagnostic method and assistance in creating, as well as, substantively, as a form of documenting a child’s creative activity. It requires a systematic observation of the student’s creative activities and collecting, in a longer period (i.e. the entire school year), the best examples of a child’s achievements (art, projects, literary essays etc.), in order to analyze and evaluate them using selected criteria for assessing creativity. These criteria are expressed in the following questions:

- is the increasing originality of the student’s activities and works visible over time?
- is there an increase in the variety of employed creative measures (words, colors, metaphors etc.), their diversity and complexity?
- is there progress in terms of diligence and aesthetics in how the creative products are finalized?
Final remarks

The model of a child’s integrated diagnosis, presented here in general terms, seems to represent Weber’s ideal type, which can be difficult to realize in research and didactic practice by an individual researcher or teacher. But we should strive to achieve this ideal! It reconciles the conflicting parties in the discussion on which diagnostic approach to a child’s creativity is more useful and heuristically productive. It also fulfills a golden rule that has been long present in scholarship on creativity which states that if we want to perceptively and correctly characterize, and later explain and plan, the development of creativity of a person, including a child, we have to study both its products, creative processes, the conditions of creative approach and character, as well as external conditions for the development of abilities. It is useful to give voice to the person being studied, including the child, and listen to what he or she might have to say about their own creativity. Referring to the subheadings of this article, we can metaphorically say that in past research studies, the child would create, and the researchers would then collect and analyze the products of that creativity. Today, after the narrative turn and after having...
“given the child its voice back” (Wisniewska-Kin 2009, 2013; Zwiernik 2015, 2019), the child creates, while the researchers collect the products, analyze and assess their value, but also encourage the child to talk about it, closely listening, and in the end, carefully predicting the development of his or her creativity. It is important to remember that in education, as Jacek Gralewski (2022: 259) notes, a diagnosis serves an important function in assisting, not only recognizing, the developmental potential of children.

I would also hope that such an understanding of an integrated diagnosis is a fulfilment of Dorota Klus-Stańska’s postulate (2019: 29) that we should more boldly and widely conduct research studies with children, instead of on children.

Bibliography


White K. (2019) *Unlocked. Assessment as the Key to Everyday Creativity in the Classroom*, Bloomington, Solution Tree Press.


About the Author

Krzysztof J. Szmidt is a professor of social sciences at the University of Lodz, head of the Department of Artistic Education and Pedagogy of Creativity. Member of the Art Pedagogy Section of the Pedagogical Sciences Committee of the Polish Academy of Sciences. Author of many scientific and educational works in the field of creativity and cultural education, including the first academic textbook in Poland, Pedagogy of Creativity (2007; 2013). Co-author of textbooks for the lessons of creativity Order and Adventure, Elements and the “iconic” integrated education project Adventure with the class (WSiP). Author of the original concept of help in creating-creativity training (Explorations – Combinations – Transformations), supervisor of creativity training of the Polish Creativity Association, author of innovative textbooks for creativity training. Nobel Prize winner Olga Tokarczuk was a participant in his creative training. The tutor of the Primary School “Pracownia” in Łódź, which implements the model of a creative school. His recent publications include: Educational conditions for the development of creativity (Wyd. UŁ, Łódź 2017), ABC of creativity. Continuations (Difin, Warsaw 2019; the first volume, ABC of creativity, was published in 2010), Questioning Thinking. Theory and education (co-author: E. Płóciennik, Wyd. UŁ, Łódź 2020). The creator and scientific director of the “Education for Wisdom” book series (Wyd. UŁ), and a promoter of positive pedagogy.


To cite this article