Varhaiskasvatuksen Tiedelehti
Journal of Early Childhood Education Research
Vol. 6, Issue 1 2017, 136–147

No toy, no joy? – Some reflections on the potential of toy-free week to promote children's creativity and active learning

Grażyna Kiliańska-Przybyło[a] & Beata Górkiewicz[b]

[a] *University of Silesia, Sosnowiec, corresponding author, e-mail:* grazyna.kilianska-przybylo@us.edu.pl
[b] *Public Kindergarten, Katowice*

ABSTRACT: The article presents the results of the project entitled 'Toy-free week' in which children, (aged 5-6) were engaged in constructing their own toys from various materials, including waste materials. These toys were later used in group-work activities or individual free play. Play is an indispensable element for children's learning and growing up. However, encouraging children to design their own toys from available materials allows them to identify their creative abilities and it fosters creativity development. The aim of the project was to examine how children would react to the idea of toy-free week and cope with a lack of ready-made toys. Besides, involving children in preparation of their own toys was supposed to raise their awareness about other possibilities of playing. In addition, toy preparation and construction was believed to facilitate their independence and responsibility for what they were doing. The article aims at describing the procedure of the project, discussing its benefits and drawbacks as well as answering to what an extent toy free education is welcomed by children.

Keywords: *toy-free education, creativity, child, pre-school, early education, play*

Short papers

 ISSN 2323-7414; ISSN-L 2323-7414 online

Introduction

Play has a lot of functions for children's development, one of which is promoting learning and social-emotional growth (Brzezińska et al., 2011a; Brzezińska et al., 2011b; Justus Sluss, 2014; Pelligrini, 2009; Sirinterlikci & Sirinterlikci, 2009). Play is a natural behaviour or environment for children. However, a question often raised concerns the ways of maximizing the quality of play and toys. Research shows that environment with its character and intentionality can make or break our creativity and productivity (Davies et al., 2013; Runco, 2014). Toys, if overused, can lead to addiction or consumerism. If not used appropriately they can have a negative impact on children's cognitive and emotional development. Another problem relates to designing adequate, age-relevant toys and finding a good balance between passive playing and active self-inquiry. In other words, the challenge is to think of such conditions so as to develop creative thinking and promote children's creativity through play (Justus Sluss, 2014; Mayesky, 2015; Mehta & Zhu, 2015; Russ, 2003).

First, we present some central features concerning creativity and ideas of toy-free education to lay the groundwork for piloting a toy-free week in one kindergarten. That is followed by a description of implementation of the project and presentation of the experiences of the project.

Creativity

Creativity in educational process has intrigued researchers for years (e.g. Amabile, 1996; Batey, 2012; Csikszentmihalyi, 1996; Lefrancois, 1982; Gardner, 2011; Kilianska-Przybylo, 2012; Mayesky, 2015; Richards, 2013; Runco, 2014; Ryan, 2015; Sternberg, 2006). Jeffrey and Craft (2004, p. 77) introduce a broad distinction between teaching creatively and teaching for creativity (italics as in original) as elements indispensable in creative teaching. Teaching creatively is understood by them as ‘using imaginative approaches to make learning more interesting and effective’, whereas teaching for creativity means implementing procedures 'to develop young people’s own creative thinking or behaviour' (Jeffrey & Craft 2004, p. 77). Similarly, Sternberg (2006) says that one can teach students to think more creatively. At the same time, Sternberg (2006) recognizes the supportive role of environment in fostering students' creativity. According to him, one could have all of the internal resources needed to think creatively, but without some environmental support (such as a forum for proposing those ideas), the creativity that a person has within him or her might never be displayed (Sternberg, 2006, p. 89).

Creativity is essential in education as it can improve academic attainment (Richards, 2013). However, as noted by many (Jeffrey & Craft, 2004; Richards, 2013), creativity with its dimensions, brings about a number of benefits, e.g. the ability to solve problems in

original and valuable ways that are relevant to goals seeing new meanings and relationships in things and making connections having original and imaginative thoughts and ideas about something, and using the imagination and past experience to create new learning possibilities.

Mehta and Zhu (2015, p. 767) define creativity as a problem solving activity and generation of new and novel ideas. They list different possible meanings of creativity. For them, creativity may be referred to as:

- creative performance
- creative process
- product adaptation - i.e. using a previously adopted product in a novel (e.g. original and innovative) and appropriate (e. g. effective and practical) manner, and
- context of product usage.

One more understanding of creativity needs to be mentioned. Bateson (2015) differentiates between creativity and innovation. The former refers to coming up with a new idea whereas the latter means changing the way things are done. Bateson (2015) points out that creativity is displayed when an individual develops a novel form of behaviour or a novel idea, regardless of its practical uptake and subsequent application. The project described in the following sections focuses on the notion of creativity.

Creativity plays an essential role in the process of learning. Jeffrey and Craft (2004, p. 81) claim that by encouraging innovative contributions teaching and learning becomes relevant and owned by learner himself/herself. In this sense, the control over the process is passed back to the learner. Creativity understood as a problem solving promotes active learning. This, in turn, enables learners to engage multiple senses (e.g., hearing, seeing, and feeling), interact with other people and materials. It also facilitates the development of higher-level thinking skills and good communication skills particularly if the task involves teamwork (Sirinterlikci & Sirinterlikci 2009, p. 15).

Creativity is measurable. One of the most common ways to do it is to implement different kinds of divergent tests such as: uses of objects test, consequences tests, number tests or association test to mention just a few (Bateson, 2015; Child, 2007; Sternberg, 1988; Sternberg, 2006). The outcomes are later interpreted according to three dimensions namely: fluency, flexibility or originality. Fluency refers to the number of unique ideas that are generated when a person is asked about uses for a particular object. Flexibility refers to the capacity to switch between approaches; someone who generates ideas within one category will be perceived as less flexible than someone who generates ideas from multiple categories. Originality refers to the novelty of an idea without relying on routine or habitual thought. It is possible, therefore, for somebody to be fluent without being original or original without being fluent.

According to Gillebaart and others (2013, p. 280) as a feature, creativity is influenced by a number of variables, e.g. affect, motivation, motive to know, learned behaviour, and approach/avoidance behaviour. The authors also reported that creative instructions, e.g. mentioning creativity in creativity tasks, might increase creative performance. Another example refers to motivational orientation, namely mentioning rewards for creative thinking has some impact on extrinsic motivation and it increases creative performance (ibid.). Similarly, creative thought may be useful as it facilitates understanding and learning of novel information (Gillebaart et al., 2013, p. 280).

Toy-free education

The idea of toy-free education, however inspiring and thought-provoking, is not new. Rudolf Steiner, the founder of Waldorf education, suggested that children's playthings should be largely unformed in order to stimulate a child's imagination. Imagination is the basis of creativity and true feelings. For that reason Waldorf approach includes a lot of imaginative, artistic, and physical work. Students are provided with natural material and are supposed to do a lot of handwork (Lange de Souza 2012, p. 55). Waldorf toys are often simple and open-ended, without a lot of detail (Baldwin, 2010). This enables children to activate their creative potential and transform the objects freely. (Baldwin, 2010). Interestingly, in Waldorf curriculum artistic activities are treated with the same seriousness as academic work (Lange de Souza, 2012, p. 55). Waldorf education follows the idea of optimizing the development of children's feelings and imagination. It gradually releases creativity and true feelings (Lange de Souza, 2012, p. 52). One of the most important elements of Waldorf's philosophy is to protect childhood, i.e. prevent children from being overly exposed to mass culture and to the materialistic/consumerists mentality (Lange de Souza, 2012, p. 55).

Another example of toy- free education comes from Schubert and Strick (2007), who report the results of the project on toy- free kindergartens, introduced in Germany in the 90's. The main objective of the project was to deprive children of ready- made toys for a period of 4 months to minimize toy addiction and trigger children's creativity potential. Similar projects of three-month absence of toys were also introduced in Austria and Switzerland. Among the benefits, the authors list the development of children's adaptive skills, improving social and language skills.

The project: Toy-free week

Participants and objectives

The project presented here was conducted in one of the public kindergartens in Katowice (Poland). The group consisted of 25 children, aged 5–6. The project proper lasted one week, however, it was preceded by a preparatory stage, including awareness-raising tasks (children and their parents were informed about the purpose as well as the objectives of the projects, and asked to contribute by bringing all the suitable materials. Children were also engaged in the organization of the project, they were involved in packing up and removing toys from the classroom for the period of the project.

The objectives of the project were as follows:

1. to expose children to toy-free environment, that will be welcomed by and activating for the children;
2. to raise children's awareness about alternative possibilities of playing and spending their free time;
3. to provide opportunities for releasing creative potential in children by engaging them in the process of constructing their own toys.

In addition, as the project concerned a number of craft activities and group-work tasks, it also aimed at achieving the following objectives:

4. to develop children's manual skills, including paperwork, craft, working with scissors,
5. to build children's cooperative and social skills.

Procedure

Throughout the project children participated in numerous tasks and group activities arranged thematically. The list of topics includes the following:

- 1st day (session 1): "My favourite toy", introduction to the project, awareness raising training and group discussion. Later, children were constructing their own favourite toys and prepared oral stories in which they described them.
- 2nd day (session 2): "Sailing and ship racing" (building ships and boats of various types).
- 3rd day (session3): "Feast at the castle" (constructing cardboard castles, preparing musical instruments).
- 4th day (session 4): "My dream house" (building cardboard houses and furnishing them).
- 5th day (session5): "Theatre" (preparing theatrical props and acting out theatrical performance).

Materials that children had at their disposal include various waste materials that were collected prior to the project (caps, sticks, cardboards, plastic bottles, bubble wraps, boxes of different sizes, cloths and textiles to mention just a few).

Apart from group projects initiated by the teacher (constructing ships, castles, houses, theatrical decorations), children were engaged in an individual work, which was to a certain extent motivated by the theme of the sessions. For example, children constructed their own puppets and mascots essential for the theatre performance (session 5) or they prepared crowns and elements of princesses' or knights' garments (session 3). After the session concerning their dream house (session 4), children worked on house furnishing and prepared pieces of furniture that reflected their own ideas and tastes, such as tables, TV screens or house equipment.

A variety of activities implemented during the project (i.e. individual play, group play and whole group play) enabled children to display initiative and use a range of self-management and social skills. Sometimes individual work resulted from children's will and their personal interest in the theme discussed. In this case, individual work served as an extension of the group activities. For example, session 2 was devoted to ships, which was followed by an individual free play during which children constructed various vehicles (e.g. cars out of rolls from toilet paper). In some situations, group activities inspired children to do their own unique things during their free play. For example, some children built their own music instruments, others – played 'at a shop' scene and prepared shop counters as well as some things to sell (bags, food items, etc.). Individual work also stemmed from children's needs to prepare things that they perceived as handy and essential for their free play.

Data collection and analysis

Data collection procedures involved observation sheets and a teacher journal. Observation sheets were completed by the teacher throughout the week. Each thematic session started with the teacher introducing the topic to the whole group and informing children about the content of the session and its outcomes. This part usually lasted for 30 minutes. It was followed by an individual work or pair-/teamwork and play-time, depending on the topic of the session, which lasted 2–3 hours. It was children's decision to divide their time to work (constructing their toys) or play (using the constructed toys for entertainment and joy). During that stage the teacher monitored children's work and observed their behaviour paying special attention to children's reactions, interaction, behaviour and their play performance. She noted different types of interaction patterns as well as ways or situations in which children used their toys.

In teacher journal, the teacher wrote her reflections and comments about the project on a daily basis. She also described the most memorable events during the toy-free week and expressed her feelings about the project. Observations made by the teacher and verbal comments collected from children were supplemented with photographic documentation. After every session, the teacher took photos of the toys constructed by children to record what had been done and to enhance the process of evaluation.

The whole project finished with a group discussion with children that included oral feedback and evaluation of the tasks. Children expressed their comments and opinions about the activities conducted during toy-free week.

The data analysis consisted of examining qualitative data obtained by means of observation and teacher journal and identifying some emergent categories. It aimed at evaluating how the objectives of the project were met, and indicating directions for further research.

Results

Children's reactions and involvement

One of the objectives was to expose the children to toy-free environment, examine how they welcomed the idea of toy-free week and observe their play behaviour. The project started with preparing conducive and toy-free environment. Together with their teacher, children packed up all the traditional (ready-made toys) and put them into the store room.

When the kindergarten teachers announced the project, the initial reactions of the parents and children indicated astonishment and curiosity, a mix of interest and disbelief (which can be reflected by the question: how would it go?). Such attitudes were gradually replaced by engagement, commitment, self-initiative and fun both on the part of parents and children. As far as parents are concerned, they displayed willingness to collect and bring a lot of useful things, long after the project ended. They also eagerly observed the toys designed by their children, and were willing to inquire about the progress of the project. Offering feedback was also common. Some of the parents reported that the project inspired them to continue it at home and create some toys together with their child and other members of the family.

As far as children's reactions towards the whole project are concerned, it can be said that they generally welcomed the very idea of a toy-free week, however, not all of them to the same extent. There were 25 children in the group, and 7 of them (28%) were extremely responsive and creative as they designed 3–4 toys every day. Thirteen children (52%) displayed moderate involvement and willingness to design their own toys. As a result, they prepared one toy every day and devoted the rest of their time to improving or

refining their own toys. They did what they were told and occasionally showed some initiative. The third group of 5 children (20%), were not much interested in the project. They constructed few toys throughout the week.

Awareness about alternative possibilities

Another objective of the project concerned raising children's awareness about alternative possibilities of playing and spending their free time. Pre-schoolers were asked to design and construct their favourite toy at home and bring it to the kindergarten. Children and their parents were informed that they could use the waste, ecological materials only. Out of 25 children, one third failed to do the task.

The objects that children constructed were then displayed so that children could express their liking, provide comments about the most original toy and offer verbal feedback to each other. Looking at the toys produced by their peers often evoked curiosity and generated surprise in children. It also gave them a chance to observe a wide range of toys constructed from waste materials, which raised their awareness about diverse solutions and alternative possibilities of completing the task.

In addition, the toys were rated by the teacher in her journal for cleverness, humor, originality, and task appropriateness. The examples of toys that were ranked high in all categories include the following: penguins made of plastic bottles, a snowman made of socks and an animal made of a sock. These were also the examples that were frequently pointed out by children as original and interesting. Toys ranked average in all categories by the teacher are the following: a car made of cardboards, a plane made of wood and a ball made of paper.

Creative potential

The project also intended to provide opportunities for releasing creative potential in children. Definitely, activities introduced during the ”Toy Free Week” required children to respond creatively as they were challenging for children, they promoted original thinking and encouraged personal involvement (for characteristics of creative tasks, see Dörnyei 2001). It can be said that children displayed genuine interest in the activities, which was observable in their initiative to start their own plays (often cooperative) and design their own toys. As a group, children prepared ships, castles, houses and theatre paraphernalia. Except for the last example, the toys were of different size, some of them big enough to handle as many as 3-4 children (houses or ships). Originality of thinking was also noticeable in the type of toys used by children for their free play. Some examples include the following: helmets, crowns of various shapes and sizes, swords, horses (symbolic representation of horses), head covers of different sizes (e.g. dwarf's hoods), shields, paper dresses.

The toys constructed by children reflected children's current interests, hobbies and preferences. For example, all of the children were given the same instructions to construct a ship (session 2), however the shape and the ornamentation of the vehicles were dependent on the individual preferences and indicated individual unique character of their constructors. Some of the children added details such as flags or logos to differentiate their vehicles from others.

Other outcomes

The project was an occasion to promote *out-of-class learning* with children getting inspiration in the near environment, including home environment and discussing things with their parents and caretakers. Thus, the project extended children's learning and engaged parents into the process of their children's education.

The *role of the parents* was crucial for the project and it varied at different stages. At the preparatory stage the parents show curiosity, initiative, involvement, and positive attitude. In general, parents displayed curiosity and inquired a lot about the nature of the project and its practicalities. They were positive and they welcomed the idea of toy free week, and brought various, sometimes extraordinary materials.

At the project stage the parents provided support and engagement. They displayed interest in children's work, If necessary, they offered verbal support to their children. Quite often activities done during the project served as a trigger for *parent-child talk/discussion* and experience sharing about favourite toys, pastime activities, simple and out-of-nothing toys or games (e.g. paper swords). In this sense parents supported children's creativity and personal initiative.

One benefit concerned *manual education and practice*; children developed the skills necessary to work with paper. This included cutting out, gluing, fixing, drawing, colouring, etc.

As a number of activities involved group work or team work, we may say that children developed *cooperative and social skills*. It was children's decision to find a group or team they would like to work with. Children themselves allocated the responsibilities and tasks within the groups or teams. Teacher monitored the group work, occasionally giving cues or providing support especially with tasks that required physical strength or precision (e.g. cutting cardboard into pieces or using an adhesive tape). The cooperation was smooth and children performed the assigned tasks. No incidents concerning misbehaviour were reported throughout the week.

In addition, during free play children exchanged ideas, voluntarily joined others, formed pairs or small groups and spent time together playing. Children quite frequently got

inspiration from one another. If they liked the idea of the play, they followed it and prepared necessary items. For example, once children noticed one of them was pretending to be a knight riding a horse made of a stick and paper, some of them quickly joined in. A similar example relates to crowns made of a piece of paper and a plastic bottle, which was quickly copied by other children.

For the teacher, this toy-free week was a sort of critical incident, a kind of a memorable and awareness arising experience. On the practical level, it was a challenge, which required a lot of preparation and education (i.e. informing both children and parents, raising their awareness about the idea of the project). However, on the content-specific level, it was a valuable and thought- provoking experience offering a lot of benefits and observational remarks. It also resulted in a positive feedback from the parents who brought the necessary materials long after the project had finished. This also adds up to the overall value of the project.

Conclusions

Play is a natural behaviour or environment for children, and as such provides a natural context for observation and assessment. Responding to the question posed in the title, we need to disagree or reformulate the answer in the following ways: "no toy, more intensive joy"; "no toy, varied joy". The paraphrases stem from different sources of joy that children experience in toy free education, namely the act of construction of their own toys (their imagination, freedom and toy use creativity) and the play itself. In general, children showed openness towards the idea of the toy-free week. In the group feedback session that followed the project, the positive comments prevailed. One of them is presented below.

> Boy: *A toy free week is better because you can play with what you want and you can do what you want.* [pol. Tydzień bez zabawek jest lepszy, bo można bawić się w co się chce i robić co się chce].

The intended objectives of the project were achieved; however the project needs to be treated as a pilot study for a longer and more intensive research. At this stage it would be too early to pose any definite conclusions, as the project needs to be continued or replicated several times. The project should be also extended in time so as to offer more reliable data and minimize the effect of novelty that may have some impact on the overall evaluation of the project. Positive feedback from both the children and parents is very promising and can be treated as an encouragement to repeat the project with slight modifications concerning the thematic content as well as means of collecting data. The longer period of the project implementation would also give insights into how

organizationally and methodologically demanding the project is. And finally, if the project was to be replicated regularly over certain period of time, it would allow one to observe how creativity evolves in time and to what an extent.

References

Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Boulder, CO: Westview Press.

Baldwin, S. (2010). *What are Waldorf's toys?* Retrieved on November 10th, 2016 from http://blog.bellalunatoys.com/2010/waldorf-toys.html.

Bateson, P. (2015). Playfulness and creativity. *Current Biology, 25*(1),R12–R16.

Batey, M. (2012). The measurement of creativity: From definitional consensus to the introduction of a new heuristic framework. *Creativity Research Journal, 24*(1), 55–65.

Brzezińska, A.I., Bątkowski, M., Kaczmarska, D., Włodarczyk, A., & Zamęcka, N. (2011a). O roli zabawy w przygotowaniu dziecka do dorosłego życia. *Wychowanie w Przedszkolu 10,* 5-13.

Brzezińska, A.I., Bątkowski, M., Kaczmarska, D., Włodarczyk, A., & Zamęcka, N. (2011b). O zabawce. *Wychowanie w Przedszkolu 11,* 5–12.

Chełminiak, A., & Wysocka, J. (2009). Innowacja pedagogiczna „Przedszkole bez zabawek". *Meritum* , *1*(12),70–77.

Child, D. (2007). *Psychology and the teacher.* New York: Continuum International Publishing Group.

Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. New York: HarperCollins.

Czaja-Antoszek, Izabela. (2015). *Projekt „Przedszkole bez zabawek" Pomysły na twórczą i samodzielną zabawę*. Płyta CD, , Poznań: Oficyna MM Wydawnictwo Prawnicze Sp. z o. o .

Davies, D.,Jindal-Snape, D., Collier, C., Digby, R., Hay, P., & Howe, A. (2013). Creative learning environments in education - A systematic literature review. *Thinking Skills and Creativity 8,* 80–91

Dörnyei, Z. (2001). Motivational strategies in the language classroom. Cambridge: Cambridge University Press.

Dunin-Wąsowicz, M. (1975). *O zabawce w ręku dziecka.* Warszawa: Wydawnictwo „Watra".

Gardner, Howard. (2011). *Creating minds. An anatomy of creativity seen through the lives of Freud, Eistein, Picasso, Stravinsky, Eliot, Graham, and Gandhi.* New York: Basic Books.

Gillebaart, M., Förster, J., Rotteveel, M., & Jehle, A. C. M. (2013). Unravelling effects of novelty on creativity. *Creativity Research Journal 25*(3), 280–285.

Jeffrey, B., & Craft, A. (2004). Teaching creatively and teaching for creativity: distinctions and relationships. *Educational Studies, Vol. 30, No. 1*, pp. 77- 87.

Justus Sluss, D. (2014). *Supporting play in early childhood: Environment, curriculum, assessment.* Stamford, CT: Cengage Learning.

Kiliańska-Przybyło, G. (2012). Are creative EFL teachers born or can they be grown? – some reflections and implications for teacher training. *International Online Journal of Educational Sciences, 4*(1).

Lange de Souza, D. (2012). Learning and human development in Waldorf pedagogy and curriculum. *Encounter: education for meaning and social justice, 25*(4), 50–62.

Lefrancois, G. R. (1982). *Psychology for teaching.* Belmont, CA: Wadsworth Publishing Company.

Mayesky, M. (2015). *Creative activities for young children (*11th edition). Stamford, CT: Cengage Learning.

Mehta, R. & Zhu, M. (2015). Creating when you have less: The impact of resource scarcity on product use creativity. *Journal of Consumer Research, 42,* 767–782.

Pelligrini, A. D. (2009). *The Role of Play in Human Development*. Oxford: Oxford University Press.

Romanowska, Iwona, Izabela & Maciorowska, Agnieszka. (2013). Czy w przedszkolu bez abawek - można się nudzić?. *Miesięczniku Kuratorium Oświaty w Białymstoku- Podlaskie Wieści Oświatowe- 2 (149).*

Richards, Jack. C. (2013). Creativity in language teaching. Plenary address given at the Summer Institute for English Teacher Creativity and Discovery, City University of Hongkong.

Runco, M. A. (2014). *Creativity: theories and themes: research, development, and practice.* London: Elsevier.

Russ, S. W. (2003). Play and creativity: Developmental issues. *Scandinavian Journal of Educational Research,* 47, 291–303.

Ryan, A. (2015). *Creativity. The ultimate teenage guide.* London: Rowman and Littlefield.

Schubert, E. & Strick, R. (2007). Toy-free kindergarten A Project to prevent addiction for children and with children. München: Aktion Jugendschutz, Landesarbeitsstelle Bayern e.V. Retrieved on August 20th, 2016 from http://spielzeugfreierkindergarten.de/pdf/englisch.pdf

Singer, D. G. & Singer, J. L. (2005). *Imagination and play in the electronic age.* London: Harvard University Press.

Sirinterlikci, A., Zane, L., & Sirinterlikci, A. L. (2009). Active learning through toy design and development. *Journal of Technology Studies, 35*(2), 14–22.

Sliwka, A. (2008). *Innovating to learn, learning to innovate.* Paris: Centre for Educational Research and Innovation

Sternberg, R.J. (ed). (1988). *The nature of creativity.* Cambridge: Cambridge University Press

Sternberg, R. J. (2006). The nature of creativity. *Creativity Research Journal, 18*, 87–98.

** This article belongs to **short scientific papers** (max 3500 words & references) that may focus on a theoretical study or methodological issues around a certain phenomenon with research interest. Short descriptions of own empirical study and development work may also be included in this category. Short scientific papers aim to provoke reflection and discussion. Instead of the blind peer review process the published short papers are assessed and accepted by the editors of JECER.*