

Fostering the Development of Metacognitive Capacities of Preschool Children

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Abstract

Training children for independent learning, i.e., to realise the concept of lifelong learning includes fostering the development of their metacognitive capacities. These refer to the child's ability to think critically, to consider how they think, and to become familiar with their cognitive processes and learning strategies. In order to achieve such a process, it is necessary to develop certain organisational structures that include a high-quality spatial-material and social environment of the preschool. The preschool teacher, i.e., the quality of his/her educational interventions has a special influence on the development of metacognitive capacities of children. The paper presents ethnographic research conducted in preschools with children aged four to six years in order to establish possibilities for fostering the development of metacognitive capacities of preschool children and the conditions that facilitate this process.

The study aimed to discover the conditions in which the metacognitive capacities of preschool children develop, i.e., the entirety of the context that has an impact on their development. The study included two preschools with three, i.e., four educational groups, that is, six or eight preschool teachers, two pedagogues, and one expert associate from the University. The study was conducted in 2021. The results of the study indicate that the fostering of the development of metacognitive capacities of preschool children is influenced by the overall physical environment of the preschool, the quality of the social environment of the preschool with the use of ethnographic records available to children, the general atmosphere and the level of democracy in a particular educational group, the educator's skill of "listening to children", the intervention of preschool teachers aimed at encouraging children to self-evaluate, and the reflectivity of the preschool teachers. In order to stimulate the development of

meta-cognitive capacities, systematic professional development of preschool teachers, aimed at strengthening their research and reflective competencies, is necessary.

Key words: *ethnographic research; preschool teacher interventions; the preschool context; reflectivity.*

Introduction

The modern paradigm of learning and teaching children of early age moves away from the direct teaching of children in favour of learning through research, discovery, problem solving, and the like. This approach to learning, which relies heavily on Piaget's Constructivism theory (Pound, 2011) and Vygotsky's Socio-Constructivism (Pound, 2011), requires the creation of a stimulating, i.e., pedagogically thought-out learning environment and thoughtful, indirect support from preschool teachers. To provide such a form of support, preschool teachers should have various skills at their disposal, but above all, they should understand the children and the meaning of their activities. This means that the training of preschool teachers to successfully organise a learning environment and ensure quality support to the learning process of children includes the development of tools necessary for a good understanding of children and their activities. This includes understanding the different forms of symbolic expression of the child, i.e., their symbolic languages (Malaguzzi, 1998). The preschool teacher should also understand the prior knowledge and development possibilities of each child individually. Indirect support to learning includes the kind of conversation that encourages children to explore, question, and discuss the problems they face. This is because the role of teachers should focus more on encouraging children to think and solve the problems they are dealing with and less on memorizing the facts. Quality support of preschool teachers also implies respect for the particularities of each child and avoiding the unification of activities in the educational process as well as unified standards in assessing children's achievements.

The task of preschool teachers is aimed at training children for independent learning, i.e., for the realisation of the concept of lifelong learning. For this reason, it also includes fostering the development of children's metacognitive capacities. The term 'metacognition', as Flavell (1976) points out, involves the consciousness and ability of a particular person not only to think critically but also to be able to think about their thinking, i.e., treat these processes reflectively. This will allow them to take control of these processes, which is the basis of independent learning. "Thinking about thinking" or "second-level cognition", as Amin and Sukestiyarno (2015) explain, implies the ability to self-reflect on one's cognitive processes, which is authentic and unique to each person. Metacognition includes knowledge of how to think, infer, and put what has been learned into practice (Downing, 2009). Metacognitive capacities include self-regulation and self-assessment skills, monitoring and planning different learning strategies, and determining whether these learning strategies are effective in solving problems (Veenman, 2006).

Lewis (2018) states that metacognitive strategies are conceptualised as an interrelated set of competencies for learning and thinking and include various skills of active learning, critical thinking, reflexive judgement, and the like.

This means that children who have well-developed meta-cognitive skills and abilities are more successful at problem solving, decision making, and critical thinking, all of which improve their learning abilities.

Metacognition is an important aspect of a child's learning, as metacognitive skills and strategies enable children to better organise their thought processes and perfect their thought skills in problem solving (Joseph, 2010).

Quality shaping of the educational process includes helping children to think more explicitly about their thinking and learning, as this can significantly affect their educational progress (Higgins, 2014).

Some authors, however, question the age at which these processes could or should be initiated. In this regard, Larkin and Flannery Quinn (2015) and Lewis (2018) argue that children can demonstrate metacognitive awareness and behaviour as early as preschool age (more specifically, between the ages of four and six). Whether at preschool or school age, a metacognitive educational process is needed to foster the development of children's metacognitive capacities in the learning process (Amin, Sukestiyarno, 2015). In early education, the metacognitive educational process represents much more than the direct educational interventions of preschool teachers, i.e., it includes certain organisational structures of preschools that foster the development of children's metacognitive capacity. Learning is always contextualised, that is, strongly determined by the entirety of the context in which it occurs. Therefore, it is necessary to take into account different contextual factors, i.e., the organisational structures of preschools, so that their interconnectedness and influence on children's learning are in the function of fostering the development of children's metacognitive capacities.

Methodology

The subject of our study is the possibilities of fostering children's metacognitive capacities in preschools and the conditions under which they can develop. We opted for qualitative research in order to be able to closely observe the different contextual and organisational prerequisites in which the activities of children and preschool teachers take place, as well as the development of the activities themselves. It was important for us to look at these activities from a close, insider perspective, precisely in the context in which they happen naturally and in the way they happen naturally. This is the reason why we opted for the **ethnographic approach** (Stenhouse, 1988). At its core, ethnography contains ethnographic participation, disguised or undisguised, in everyday human activities for a single, usually a long period (Angorsino, 2005; Tedlock, 2005). According to Hammersley and Atkinson (2019), it allows the collection of all available data related to the research problem.

During the research, we collected empirical data, i.e., various ethnographic records including photo and video material, the children's two-and three-dimensional works,

various notes, and other narrative forms. These are different testimonies about the processes that took place in the work with children, which enable analysis, reflection, and construction of a common understanding. Different ethnographic records were analysed at joint meetings with preschool teachers, pedagogues, and an external expert associate, and all participants were encouraged to present different interpretations and understandings of the records. They were discussed and, through discussion sessions, we have tried to build a better understanding. Since this was a qualitative study, we considered subjective interpretations and interpretations to be of special value because they enriched our discussions and contributed to the multitude of different perspectives. In discussions with the preschool teachers, members of the preschools' support staff, and children, we have tried to collect as much different data as possible in order to help us create a more complete picture of the educational process. During the discussions, using different ethnographic records, we tried to discover different views and perspectives of all participants in the study. We have attempted to contextualise the subject of our study, i.e., to understand the mutual relations and influences of the constituent parts of the context of preschools (spatial, social, organisational) that we thought had an impact on the possibilities of fostering and developing the metacognitive capacities of children. Such an approach was considered appropriate in order to understand "multiple realities" as clearly as possible, i.e., to discover the meaning that the subjects of the educational process attach to certain activities. In other words, we were trying to find their *sociocultural significance* (Cohen et al., 2007).

The study was conducted in 2021. The study included two preschools with three, i.e., four educational groups, that is, six or eight preschool teachers, two pedagogues, and one expert associate from the University. The number of children varied both because of the irregular arrival at the preschool and because of the voluntary participation of children in the activities, which we insisted on. Preschools differ from one another not only in size but also in the degree of development of educational practice, which was also important to us in the research sense. However, some aspects of quality in one preschool were more developed than others, while in another preschool, others were more developed. Furthermore, the situation was different within each group of preschools. However, we did not intend to draw universal conclusions, but to understand the conditions in which the metacognitive capacities of children in preschools are developed. In discussions with preschool teachers, we have also repeatedly pointed out that the collected records are not used for the function of "normalising" the educational process, but for the function of observing and understanding children, i.e., as a tool to evaluate the process of their thinking about learning, which is also covered by Lenz Taguchi (Pettersson, 2014). Our study aimed to discover the conditions in which the metacognitive capacities of preschool children develop, i.e., *the entirety of the context* that has an impact on their development. Each week, members of the preschool team held meetings to jointly study and interpret the collected materials. Twice a month,

the preschool team was joined by an associate from the University. In certain stages of research, this was proven necessary as in the educational process, crucial moments for the study were taking place, so these meetings were held more frequently.

Results and discussion

Focusing on the holistic features of the ethnographic approach allowed us to observe, record, and discuss various prerequisites (physical, social, and organisational structures) of preschools, which we assumed could have an impact on the ability to foster the development of the metacognitive capacities of children in preschools. We examined how the space of the preschools was organised, with special emphasis on the quality and pedagogical thoughtfulness of the materials offered for the children's learning. We also observed how the social environment of the preschools was shaped, where we were most interested in the interactions of children with one another and the interactions of children with the preschool teachers. We monitored the preschool teachers' communication with the children, how they interpreted what the children have done and said, how they discovered what the children were thinking, how they solved problems, and the like. We also monitored the extent to which the preschool teachers were willing to respect the interests, the different perspectives of the children, and the different understandings they had expressed during the activities. Most of all, we were interested in how qualified the preschool teachers were to incorporate all these insights into the shaping of the educational process. In particular, we followed the links between the children's actions and thoughts and their discussions with other children, as well as with the educational interventions of educators.

Finally, we monitored all of this in order to determine the connection between these structures and the actions of educators with the development of the children's metacognitive capacities. We have paid the greatest attention to those interventions of preschool teachers by which they directly encouraged the children to **enter the meta-zone**. These are the interventions of the preschool teachers aimed at discovering what the child is thinking, how they articulate their thinking and understanding, how they understand the understanding and thinking of other children, how they change their thinking, how they understand the connection of their own learning experiences with the development of new knowledge and understanding, and the like.

Table 1 presents examples of questions based on which the analysis of documentation was undertaken in joint reflections with preschool teachers, with regard to the possibility of fostering the development of metacognitive capacities of children according to the following criteria: self-organised activities of children, interventions of preschool teachers in children's activities, and encouraging children to self-evaluate (individual and group). Examples of questions were collected during the study itself and represent a form of ethnographic records.

Table 1

Criteria of documentation analysis in joint reflections with preschool teachers with regard to the possibilities of fostering the development of children's metacognitive capacities

Criterion 1: analysis of self-organised activities of children

- *What exactly did the children do and what did it mean for them? What were they trying to accomplish?*
- *Which aspect of the problem (or topic) are the children most interested in?*
- *How do they understand the problem (or topic) they are dealing with?*
- *What do they know about the topic and how do they think about it? What are they misunderstanding or understanding incompletely?*
- *How do some children's opinions differ?*
- *How do they discuss areas of disagreement?*
- *What are they misunderstanding or understanding incompletely?*
- *Do children have the opportunity to document their activities?*
- *What can be discussed with children (regarding the topic or problem)?*

Criterion 2: analysis of the interventions of preschool teachers in the activities of children

- *Did I encourage the children to recall their previous activities?*
- *Did I encourage the children to think and identify the problems they have encountered?*
- *Did I encourage the children to express their opinions?*
- *Did I encourage the children to present different perspectives and possible solutions?*
- *Did I encourage the children to listen to one another?*
- *Did I offer the children opportunities to become better acquainted with the activities (and ways of thinking) of other children?*
- *Did I encourage the children to think and identify the sources of the problems they encountered in the activity?*
- *Did I encourage the children to think about their thinking?*
- *Did I encourage the children to compare different approaches to solving problems?*
- *Did I encourage the children to recall previous activities and ways of thinking?*
- *Did I give the children room for different interpretations?*

Criterion 3: Analysis of encouraging the children to self-evaluate (individual)

- *How do you interpret this phenomenon?*
- *What makes you think that?*
- *How can you start solving this task/problem?*
- *How are you supposed to think to solve it?*
- *How did the way you thought during the activity change?*
- *What way of thinking helped you (or would help you) solve the task?*
- *What have you learned or discovered so far?*
- *How did you learn or discover it?*
- *Were you thinking the right way?*
- *If not, how did you realise that you were (not) thinking the right way?*
- *How is that different from what you thought or said before?*
- *How else can we look at this phenomenon/problem?*

Criterion 4: Analysis of encouraging the children to self-evaluate (group)

- What did you want to achieve?
- How and what did you collaborate on?
- What did you agree on?
- What did you disagree on?
- How did you talk about things you disagreed on?
- How do your friends look at this phenomenon/problem?
- What is your opinion on that?
- What do your friends think?
- How is your opinion different from others?
- Can you expand your idea by considering another idea?

1 The overall physical environment of the preschool has a significant positive impact on the opportunities to foster the development of children's metacognitive capacities.

During the study, we noticed that the ability to foster the development of children's metacognitive capacities is influenced by the quality of the preschool space, especially the existence, availability, and pedagogical forethought of learning materials that children can use guided by their interests and their previous knowledge and understandings. We noticed that a sufficient amount and the pedagogical forethought of the material "invites" children to self-organise their activities, which are mainly research-like, i.e., revealing and expressive. In such conditions, their intellectual and emotional engagement is, as a rule, greater than the activities imposed on them (to a greater or lesser extent) by the preschool teacher. In the conditions of free choice of materials and self-organisation of their activities, the prospect of stimulating their metacognitive capacities is much higher than in activities that are uninteresting to them, insufficiently concrete, purposeless for them, and directly managed by the preschool teacher. We also noticed that the quality of the spatial-material environment in a particular educational group corresponds with the decrease in direct teaching of children by preschool teachers. The more stimulating the environment, the less the preschool teachers need direct teaching in favour of encouraging research-based and discovery-based learning. From this, we concluded that by shaping a stimulating spatial and material environment, the preschool teacher indirectly encourages the intellectual, emotional, and social engagement of children and enables those forms of their learning that have their basis in research and discovery. Such an organization of the educational process opens the space for the preschool teacher to stimulate the children's metacognitive capacities.

2 The social environment of preschools has a positive influence on the possibilities of fostering the development of children's metacognitive capacities, along with the use of ethnographic records available to children.

The quality and development of educational activities in terms of their impact on the development of metacognitive capacities of children is determined by the social environment of preschools. This is especially true for preschools or groups in which

children of different chronological ages are provided opportunities for socialising because in such interactions children allow each other to transition to the so-called Zone of *Proximal Development* described by Vygotsky (Wood, 1995). We were convinced that different ethnographic records concerning the activities that are in progress, but also concerning the activities that took place earlier (photographs, drawings, written notes, and other forms of expression of children) have a special value. The readiness of preschool teachers to provide them with such availability differs from one preschool to another. At the preschools where it is provided, children are often encouraged to discuss and exchange experiences and different understandings of the activities in which they acted as co-protagonists.

We have noticed that the practice of using ethnographic records strengthens the frequency and quality of social interactions of children because it enables them to remember their activities and ways of thinking, to get acquainted with the ways of thinking of other children and how their thinking and understanding are gradually changing and developing. In this regard, we have followed and found that the opportunities of using ethnographic records in various activities also facilitate the learning process for children, thus opening up new opportunities for the preschool teacher to foster the development of children's metacognitive capacities.

3 The general atmosphere and the level of democracy in a particular educational group have a positive influence on the possibilities of fostering the development of children's metacognitive capacities.

The examination of various ethnographic records, especially the video material, showed us that the quality of children's activities is largely determined by the level of democracy of the educational group. It corresponds with the possibility of influencing children's choice of content, ways of participation, and the length of the activity. In other words, it provides the child with the opportunity of competent participation, i.e., equal participation in the process of shaping their learning and gradually taking responsibility for that process. The level of democracy of practice varies between different preschools and groups. However, those groups in which a satisfactory level of a democratic atmosphere was achieved provided the children significantly more intensively the opportunity to acquire and enjoy the status of critical co-researchers in dialogue with the educator (Beard and Wilson, 2006) who equally participate in shaping the process of their learning. During the research, we noticed that the perspective of shaping the practice of preschool teachers aimed at fostering the development of children's metacognitive capacities is largely determined by the preschool teacher's willingness to give up domination over children in favour of communication that is respectful, reciprocal, and bilateral. The process of abandoning the historically dominant educational approach in which an adult establishes firm control over the learning process of children, intending to achieve externally defined goals for which they bear exclusive responsibility, is lengthy and rather uncertain, which we have repeatedly witnessed during the research. Such an atmosphere and practice do not

arise spontaneously, but through working on the recognition and gradual removal of structures that collide with the participation rights of children and the possibilities of their influence on preschool events and the formation of the educational process. However, such a democratic climate is an important prerequisite for the development of practice necessary for the development of children's metacognitive capacity, as well as their self-regulating learning (Whitebread & Coltman, 2007). Given this, the opportunities for fostering the metacognitive capacities of children in individual preschool groups differ and vary.

4 We noticed that fostering the development of children's metacognitive capacities requires a highly individualised educational process, i.e., the readiness of preschool teachers to abandon any form of uniformity.

While analysing ethnographic records, we noticed that during various research activities they presented their doubts, questions, and uncertainties related to what they were researching and, in a certain way, articulated how they thought, as well as the course of their thinking. Furthermore, during various expressive activities, they presented their current thinking and understanding of the phenomena they dealt with. Children's research and expressive activities often take place alternately, presenting the preschool teacher with the opportunity for deeper observation and a better understanding of children. These opportunities are easier for certain preschool teachers and more difficult for others to recognise and use with different levels of success.

During the study, it has been shown that the skills of preschool teachers to harmonise their interventions with the different requirements of certain situations and the logical development sequence of the initiated activities of children varied greatly. We noticed a great disparity in the understanding of research and expressive potential of children by preschool teachers, which resulted in different qualities of their responses to these activities. Some preschool teachers require a long time to move away from the traditional and outdated teaching of children regarding how something is presented (drawing, painting, making, building, etc.), which can encourage sameness and uniformity of children's activities that are neither desirable nor pedagogically justified. In addition, such practices seriously reduce the opportunities to foster the development of children's metacognitive capacity.

5 The ability to foster the development of children's metacognitive capacities is particularly influenced by the preschool teacher's skill of "listening to children".

During the study, we found that in order to achieve the practice of preschool teachers aimed at fostering the development of children's metacognitive capacities, their willingness to master the techniques of "listening to children" (Malaguzzi, 1998; Edwards et al., 1998; Giudici & Rinaldi, 2002) is required. The ability of preschool teachers to "listen to children", i.e., careful observation and quality interpretation and understanding of their activities, represents, in a certain way, the foundation of practice in the focus of fostering the development of children's metacognitive capacities. During the study, it was discovered that the creation of a "listening context", described in detail

in the famous Reggio conception (Malaguzzi, 1998; Edwards et al., 1998; Giudici & Rinaldi, 2002), is an indispensable prerequisite for the development of practice in which fostering the development of children's metacognitive capacities is possible because it directly corresponds to the level of the preschool teacher's understanding of children. Different testimonies of children, which they express through different forms of representation, enable the preschool teacher to better understand the existing knowledge, understanding, and perspectives of children, but also how these pieces of knowledge, understandings, and perspectives of children change. Using these insights, the preschool teacher can design educational interventions that foster the development of children's metacognitive capacities. If the preschool teacher does not understand them or understands them incompletely, the opportunities for fostering the development of children's metacognitive capacities are significantly reduced. We discussed the different levels of understanding of children's perspectives, as well as the implications of these differences on the opportunities of developing children's metacognitive capacities, during the joint reflection sessions with preschool teachers. In doing so, we encouraged discussion among the preschool teachers, believing in the power of these discussions in the process of their professional training. However, different preschool teachers expressed different levels of willingness to change their practice in this sense.

6 Interventions by preschool teachers aimed at encouraging children to self-evaluate can contribute to the development of children's metacognitive capacities

Certain forms of direct interventions by preschool teachers, through which they encourage children to self-evaluate, may contribute to the development of their metacognitive capacities. We have repeatedly observed such examples during the joint analyses of the collected material. We have noticed that such interventions are characteristic of more experienced preschool teachers, given that these are very subtle procedures, which happen "on the go", and are discreetly woven into the daily educational activities of children. From this, we concluded that the prerequisite for such interventions of preschool teachers, besides their professional knowledge, is their readiness to cope with unpredictable educational situations, i.e., being trained to "expect the unexpected" in the development of the educational process. This refers to the actions of preschool teachers by which they encourage children to analyse, i.e., self-evaluate their activities, the way they think in those activities, and the way they develop their thinking. At our joint meetings, we emphasized the focus and readiness of preschool teachers to lead children into the "meta-zone" during various educational activities as a special value. In fact, it has been shown that such actions facilitate the development of children's metacognitive capacities. In particular, this refers to the actions that show how children gradually take responsibility for their learning process and for managing it.

7 The reflectivity of preschool teachers significantly determines the ability to foster the development of children's metacognitive capacities

During the study, we observed how preschool teachers interpret children's activities and the ways in which children think and understand certain problems in many

different, sometimes even opposite ways. The preschool teachers expressed particularly great differences in the way of interpretation by interpreting their participation, i.e., describing their interventions in their educational work with children. Some preschool teachers interpreted the same activities and efforts of children as ignorance, failure, or errors that needed to be corrected, while others interpreted them as praiseworthy attempts of the children to solve the problem they faced, and therefore, they should be supported, praised, etc. Of course, different interpretations are the result of differences in their level of knowledge and competencies, but also the value systems that preschool teachers advocate in the educational process. After long monitoring of these processes, we found that the perspective of the development of new competencies of the preschool teachers in this sense is largely determined by their willingness to question and discuss their views, understandings, and perspectives with their colleagues, i.e., their reflectivity. Therefore, we concluded that a higher level of reflexivity in preschool teachers significantly increases their readiness for *fostering the development of children's metacognitive capacities*. The level of the preschool teacher's reflectivity is subject to change, i.e., it can be developed through certain forms of professional development aimed at developing research skills and reflexive abilities.

Conclusion

Creating the appropriate conditions for fostering the development of children's metacognitive capacities is an important educational role of preschool teachers. Nevertheless, to realise such a role, preschool teachers need to know not only the relevant theory and the current quality of their educational practice, but also develop their reflectivity. In order to achieve a quality educational practice that fosters the development of children's metacognitive capacities, preschool teachers should take into account the quality of the spatial-material and social environment of the preschools and continuously work on the development of this quality. Learning is always contextualised, that is, strongly determined by the entirety of the context in which it occurs. Therefore, the creation of conditions for fostering the development of children's metacognitive capacities includes the continuity of the development of various organizational structures of preschools. In addition, preschool teachers should be able to carefully observe, document, and, together with other experts, interpret the various activities of children in the learning environment, in order to be able to better understand them and provide an appropriate response to them. A good understanding of children's activities, for which research skills and reflective competencies of preschool teachers are required, is the basis for the design of the preschool environment, as well as the design of appropriate educational interventions that lead to fostering the development of children's metacognitive capacities. The levels of readiness of preschool teachers to form such environments and provide such educational interventions in different preschool groups are quite different, but they are subject to change. In order to achieve all of the above, systematic professional development of preschool teachers, aimed at

strengthening their research skills and reflective competencies, is necessary. This is a continuous process of development that cannot be replaced by attending seminars, workshops, and similar one-time or partial forms of training.

A major limitation to the development of these competencies and processes is the fact that a significant percentage of preschool teachers do not have the opportunity to participate in the systematic and continuous form of professional development necessary to build these skills and develop the practice based on them. This significantly reduces the possibility of establishing the needed conditions for the development of children's metacognitive capacities. Furthermore, having too many children per educational group is a significant burden for preschool teachers in a certain number of groups, which adversely affects the creation of the environment necessary for the individualisation of the educational process. A certain percentage of preschool teachers managed to overcome this problem with additional engagement, but this is neither a rule nor a sustainable solution.

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Mogućnosti poticanja razvoja metakognitivnih kapaciteta djece u vrtiću

Sažetak

Ospozobljavanje djece za samostalno učenje, tj. za ostvarivanje koncepta cjeloživotnoga učenja uključuje poticanje razvoja njihovih metakognitivnih kapaciteta. Oni se odnose na sposobnost djeteta da kritički razmišlja, da razmišlja o vlastitom razmišljanju te da upoznaje vlastite kognitivne procese i strategiju učenja. Za ostvarivanje takvoga procesa potrebno je razvijati određene organizacijske strukture koje uključuju kvalitetno prostorno-materijalno i socijalno okružje vrtića. Poseban utjecaj na razvoj metakognitivnih kapaciteta djece ima odgajatelj, tj. kvaliteta njegovih odgojno-obrazovnih intervencija. U radu se prikazuje etnografsko istraživanje provedeno u vrtiću s djecom u dobi od četiri do šest godina kako bi se ustanovile mogućnosti poticanja razvoja metakognitivnih kapaciteta djece u vrtiću i uvjete koji tom procesu pogoduju.

Cilj istraživanja bio je otkriti uvjete u kojima se metakognitivni kapaciteti djece u vrtiću razvijaju, tj. cjelinu konteksta koja na njihov razvoj ima utjecaj. U istraživanje su bila uključena dva vrtića, s 3 odnosno 4 odgojno-obrazovne skupine, tj. 6 odnosno 8 odgajatelja, dva pedagoga i stručnoga suradnika s fakulteta. Istraživanje je provedeno tijekom 2021. godine. Rezultati istraživanja ukazuju da na poticanje razvoja metakognitivnih kapaciteta djece u vrtiću ima cjelokupno fizičko okružje vrtića, kvalitetno socijalno okružje vrtića uz korištenje etnografskih zapisa koji su dostupni djeci, opće ozračje i razina demokratičnosti u određenoj odgojno-obrazovnoj skupini, odgajateljevo umijeće „slušanja djece“ intervencije odgajatelja usmjerene na poticanje djece na samoevaluaciju i refleksivnost odgajatelja. Za poticanje razvoja metakognitivnih kapaciteta nužno je sustavno profesionalno usavršavanje odgajatelja usmjereno na jačanje njegovih istraživačkih i refleksivnih kompetencija.

Ključne riječi: etnografsko istraživanje; intervencije odgajatelja; kontekst vrtića; refleksivnost.

Uvod

Suvremena paradigma učenja i poučavanja djece rane dobi odmiče se od izravnoga poučavanja djece u korist učenja istraživanjem, otkrivanjem, rješavanjem problema i slično. Taj pristup učenju, koji se uvelike oslanja na Piagetov konstruktivizam (Pound,

2011) i Vygotskyjev sociokonstruktivizam (Pound, 2011), iziskuje stvaranje poticajnog, tj. pedagoški promišljenoga okružja za učenje i promišljenu, indirektnu podršku odgajatelja. Za pružanje takvog oblika podrške, odgajatelj bi trebao raspolagati različitim umijećima, ali prije svega, trebao bi dobro razumjeti djecu i smisao njihovih aktivnosti. To znači da osposobljavanje odgajatelja za uspješno organiziranje okružja za učenje i osiguranje kvalitetne podrške procesu učenja djece, uključuje razvoj alata potrebnih za dobro razumijevanje djece i njihovih aktivnosti. To uključuje i razumijevanje različitih oblika djetetova simboličnoga izražavanja, tj. njihovih simboličkih jezika (Malaguzzi, 1998). Odgajatelj bi također trebao razumjeti predznanja i razvojne mogućnosti svakog djeteta ponaosob. Indirektna podrška učenju uključuje i takvu vrstu razgovora s djecom koja potiče na istraživanje, propitivanje i raspravu o problemu s kojima se susreću. Jer, uloga odgojitelja trebala bi se više usmjeravati na poticanje djece da razmišljaju te rješavaju probleme kojima se bave, a manje na memoriranje činjenica. Kvalitetna podrška odgajatelja također podrazumijeva i uvažavanje različitosti svakog djeteta te izbjegavanje unificiranja aktivnosti u odgojno-obrazovnom procesu kao i unificiranih standarda u procjeni postignuća djece.

Zadatak odgajatelja usmjeren je na osposobljavanje djece za samostalno učenje, tj. za ostvarivanje koncepta cjeloživotnoga učenja. Iz tog razloga, ona uključuje i poticanje razvoja metakognitivnih kapaciteta djece. Pojam 'metakognicija', ističe Flavell (1976), uključuje svijest i sposobnost određene osobe ne samo da kritički razmišlja, nego i da je u stanju razmišljati o vlastitom razmišljanju, tj. na refleksivan način se odnositi prema tim procesima. To će joj omogućiti da preuzme kontrolu nad tim procesima što je podloga samostalnoga učenja. „Razmišljanje o razmišljanju“ ili „spoznaja druge razine“, objašnjavaju Amin i Sukestiyarno (2015), podrazumijeva sposobnost samorefleksije vlastitih kognitivnih procesa, a ona je za svaku osobu autentična i jedinstvena. Metakognicija uključuje znanje o tome kako razmišljati, kako zaključivati i kako naučeno primjenjivati u praksi (Downing, 2009). Metakognitivni kapaciteti uključuju vještine samoregulacije i samoprocjene, zatim praćenja i planiranja različitih strategija učenja te utvrđivanje jesu li te strategije učenja učinkovite u rješavanju problema (Veenman, 2006).

Lewis (2018) navodi da se metakognitivne strategije konceptualiziraju kao međusobno povezani skup kompetencija za učenje i razmišljanje te uključuju različite vještine aktivnoga učenja, kritičkoga razmišljanja, refleksivnoga prosuđivanja i slično.

To znači da su djeca koja imaju dobro razvijene metakognitivne vještine i sposobnosti uspješnija u rješavanju problema, donošenju odluka i kritičkom razmišljanju, a sve to poboljšava njihove sposobnosti učenja.

Metakognicija je važan aspekt djetetova učenja jer metakognitivne vještine i strategije omogućuju djeci da bolje organiziraju svoje misaone procese i usavršavaju svoje misaone vještine u rješavanju problema (Joseph, 2010).

Kvalitetno oblikovanje odgojno-obrazovnoga procesa uključuje pomoći djeci da eksplicitnije razmišljaju o vlastitom razmišljanju i učenju jer to može značajno utjecati na njihov obrazovni napredak (Higgins, 2014).

Neki autori pak problematiziraju dob djece u kojoj bi se s poticanjem tih procesa moglo ili trebalo započeti. U tom smislu, Larkin i Flannery Quinn (2015) te Lewis (2018) tvrde da su djeca u stanju demonstrirati metakognitivnu svijest i ponašanje već u predškolskoj dobi (konkretnije, između 4. i 6. godine života). Bilo da je riječ o predškolskoj ili školskoj dobi, za poticanje razvoja metakognitivnih kapaciteta djece u procesu učenja, potreban je metakognitivni odgojno-obrazovni proces (Amin, Sukestiyarno, 2015). U ranom odgoju i obrazovanju metakognitivni odgojno-obrazovni proces predstavlja mnogo više od izravnih odgojno-obrazovnih intervencija odgajatelja, tj. uključuje postojanje određenih organizacijskih struktura vrtića koje razvoju metakapaciteta djece. Jer, učenje djece uvjek je kontekstualizirano, tj. snažno određeno cjelinom konteksta u kojemu se događa. Stoga valja voditi računa o različitim kontekstualnim čimbenicima, tj. organizacijskim strukturama vrtića kako bi njihova međusobna povezanost i utjecaj na učenje djece bili u funkciji poticanja razvoja metakognitivnih kapaciteta djece.

Metodologija

Predmet našega istraživanja su mogućnosti poticanja metakognitivnih kapaciteta djece u vrtiću i uvjete pod kojima se oni mogu razvijati. Opredijelili smo se za kvalitativno istraživanje kako bismo mogli iz blizine promatrati različite kontekstualne i organizacijske preduvjete u kojima se događaju aktivnosti djece i odgajatelja te razvoj samih aktivnosti. Važno nam je bilo te aktivnosti promatrati iz neposredne blizine, insajderski, upravo u onome kontekstu u kojemu se prirodno događaju i način na koji se prirodno događaju. Stoga su njihova nastajanja razlog izbog kojeg smo se opredijelili upravo za **etnografski pristup** (Stenhouse, 1988). Etnografija u svojoj suštini sadrži etnografsko sudjelovanje, prikrivenoga ili neprikrivenoga oblika u svakodnevnim ljudskim aktivnostima u jednom, obično duljem, razdoblju (Angorsino, 2005; Tedlock, 2005). Ona, ističu Hammersley i Atkinson (2019), omogućuju prikupljanje svih dostupnih podataka koji se odnose na problem istraživanja.

Tijekom istraživanja prikupljali smo empirijske podatke, tj. različite etnografske zapise koji su uključivali foto i videozapise, dječje dvodimenzionalne i trodimenzionalne uratke, razne bilješke i druge narativne forme. Riječ je o različitim svjedočanstvima o procesima koji su se u radu s djecom odvijali, a koji omogućuju analizu, refleksiju i konstruiranje zajedničkoga razumijevanja. Različiti etnografski zapisi analizirali su se na zajedničkim sastancima s odgajateljima, pedagogom i vanjskim stručnim suradnikom te poticali sve sudionike na iznošenje različitih tumačenja i razumijevanja. O njima se diskutiralo i kroz raspravu, nastojalo se izgraditi što kvalitetnije razumijevanje. Kako je riječ o kvalitativnom istraživanju, subjektivne interpretacije i tumačenja smatrali smo posebnom vrijednošću jer su obogaćivala rasprave i pridonosila bogatstvu različitih perspektiva. U raspravama s odgajateljima, članovima stručnoga tima vrtića i djecom, nastojali smo prikupiti što veći broj različitih podataka za koje smo držali da bi nam mogli pomoći u kreiranju cjelovitije slike odgojno-obrazovnoga procesa. Tijekom rasprava, uz korištenje različitih etnografskih zapisa, nastojali smo otkriti

različita stajališta, odnosno perspektive svih sudionika istraživanja. Predmet našega istraživanja nastojali smo kontekstualizirati, odnosno razumjeti međusobne odnose i utjecaje sastavnih dijelova konteksta vrtića (prostorni, socijalni, organizacijski) za koje smo držali da imaju utjecaj na mogućnosti poticanja i razvoja metakognitivnih kapaciteta djece. Takav pristup smatrali smo prikladnim kako bismo što jasnije razumjeli „višestruke realnosti“, tj. otkrili smisao koji subjekti odgojno-obrazovnoga procesa pridaju određenim aktivnostima. Drugim riječima, pokušavali smo otkriti njihovo **sociokulturno značenje** (Cohen i dr. 2007).

Istraživanje je provedeno tijekom 2021. godine. U istraživanje su bila uključena dva vrtića, s 3 odnosno 4 odgojno-obrazovne skupine, tj. 6 odnosno 8 odgajatelja, dva pedagoga i stručnoga suradnika s fakulteta. Broj djece je varirao kako zbog neredovitoga dolaska u vrtić, tako i zbog dobrovoljnosti sudjelovanja djece u aktivnostima, na kojoj smo inzistirali. Vrtići se međusobno razlikuju ne smo po veličini nego i po stupnju razvoja odgojno-obrazovne prakse, što nam je bilo i u istraživačkom smislu važno. No, pojedini aspekti kvalitete u jednom vrtiću bili su razvijeniji nego ostali, dok su u drugom bili razvijeniji drugi. Također, situacija se razlikovala i unutar pojedinih skupina svakoga vrtića. No, nismo ni imali namjeru izvoditi univerzalne zaključke nego razumjeti uvjete u kojima se metakognitivni kapaciteti djece u vrtiću razvijaju. I u raspravama s odgajateljima, višekratno smo isticali kako prikupljene zapise ne koristimo u funkciji „normalizacije“ odgojno-obrazovnoga procesa nego u funkciji promatranja i razumijevanja djece, tj. kao alata evaluacije procesa njihova razmišljanja učenja, o čemu piše i Lenz Taguchi (Pettersson, 2014). Cilj nam je bio otkriti uvjete u kojima se metakognitivni kapaciteti djece u vrtiću razvijaju, tj. **cjelinu konteksta** koja na njihov razvoj ima utjecaj. Svaki tjedan, članovi tima vrtića održavali su sastanke kako bi zajednički proučavali i interpretirali prikupljene materijale. Dva puta mjesечно, sastancima vrtičkoga tima priključivao se i suradnik s Fakulteta. U nekim etapama istraživanja, kad se to pokazalo potrebnim jer su se u odgojno-obrazovnom procesu događale za istraživanje posebno važne stvari, ti su se sastanci održavali i češće.

Rezultati i rasprava

Usmjerenošć na holističke značajke etnografskoga pristupa omogućavale su nam da promatramo, bilježimo i raspravljamo o različitim preduvjetima (fizičkim, socijalnim, organizacijskim strukturama) vrtića, za koje smo pretpostavljali da mogu imati utjecaj na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece u vrtiću. Promatrali smo način na koji je organiziran prostor vrtića, s posebnim naglaskom na kvalitetu i pedagošku promišljenost ponuđenih materijala za učenje djece. Promatrali smo i kako je oblikovano socijalno okružje vrtića, pri čemu su nas najviše zanimalo interakcije djece međusobno i interakcije djece s odgajateljem. Pratili smo kako odgajatelj s djecom komunicira, kako interpretira ono što djeca rade i govore, kako otkriva što djeca razmišljaju, kako rješavaju probleme i slično. Pratili smo i koliko je odgajatelj spreman uvažavati interes, različite perspektive djece i različita razumijevanja koja izražavaju tijekom aktivnosti. Najviše od svega zanimalo nas je koliko je odgajatelj sposobljen

da sve te uvide ugrađuje u oblikovanje odgojno-obrazovnoga procesa. Posebno smo pratili povezanosti akcija i razmišljanja djece i njihovih rasprava s drugom djecom te s odgojno-obrazovnim intervencijama odgajatelja.

Napokon, sve to smo pratili kako bismo utvrdili povezanost tih struktura i djelovanja odgajatelja s razvojem metakognitivnih kapaciteta djece. Najveću smo pak pozornost posvetili onim intervencijama odgajatelja kojima ih on izravno potiče na **ulazak u metazonu**. Riječ je o intervencijama odgajatelja usmjerenim na otkrivanje onoga što dijete razmišlja, kako artikulira vlastito mišljenje i razumijevanje, kako razumije razumijevanja i razmišljanje druge djece, kako mijenja vlastito razmišljanje, kako razumije povezanost vlastitih iskustava učenja s razvojem novih znanja i razumijevanja i slično.

U Tablici 1 nalaze se primjeri pitanja na osnovi kojih se poduzimala analiza dokumentacije u zajedničkim refleksijama s odgajateljima s obzirom na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece i to prema kriterijima: samoorganizirane aktivnosti djece, intervencije odgajatelja u aktivnostima djece te poticanje djece na samoevaluaciju, (individualno i grupno). Primjeri pitanja prikupljeni su tijekom samoga istraživanja, stoga predstavljaju oblik etnografskih zapisa.

Tablica 1.

Kriteriji analize dokumentacije u zajedničkim refleksijama s odgajateljima s obzirom na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece

Kriterij 1: Analiza samoorganiziranih aktivnosti djece

- *Što su djeca točno radila i što je to za njih značilo? Što su pokušavala postići?*
- *Koji aspekt problema (ili teme) djecu najviše zanima?*
- *Kako razumiju problem (ili temu) kojima se bave?*
- *Što o temi trenutačno znaju i kako razmišljaju?*
- *U čemu se mišljenje pojedinog djeteta razilazi?*
- *Kako razgovaraju o područjima neslaganja?*
- *Što razumiju pogrešno ili nepotpuno?*
- *Imaju li djeca priliku dokumentirati aktivnosti?*
- *O čemu bi se s djecom (u svezi s temom, problemom) moglo razgovarati?*

Kriterij 2: Analiza intervencija odgajatelja u aktivnostima djece

- *Jesam li djecu poticao da se prisjetе svojih prethodnih aktivnosti?*
- *Jesam li djecu poticao na razmišljanje i utvrđivanje problema s kojim su se susreli?*
- *Jesam li djecu poticao na iznošenje vlastitog mišljenja?*
- *Jesam li djecu poticao na iznošenje različitih perspektiva i mogućih rješenja?*
- *Jesam li djecu poticao na međusobno slušanje?*
- *Jesam li djeci nudio mogućnost da se bolje upoznaju s aktivnostima (i načinima razmišljanja) ostale djece?*
- *Jesam li djecu poticao na razmišljanje i otkrivanje uzroka problema s kojim su se u aktivnosti susreli?*
- *Jesam li djecu poticao na razmišljanje o vlastitom razmišljanju?*
- *Jesam li djecu poticao na uspoređivanje različitih pristupa rješavanju problema?*
- *Jesam li djecu poticao da se prisjeti prethodnih aktivnosti i načina razmišljanja?*
- *Jesam li djeci otvarao prostor za različita tumačenja?*

Kriterij 3: Analiza poticanja djece na samoevaluaciju (individualno)

- *Kako ti ovu pojavu tumačиш?*
- *Zašto tako misliš?*
- *Kako bi mogao započeti rješavanje zadatka, odnosno problema?*
- *Kako bi trebao razmišljati da bi ga uspio riješiti?*
- *Kako se način na koji si razmišljaо tijekom aktivnosti mijenjao?*
- *Koji način razmišljanja ti je (ili bi ti) pomogao u rješavanju zadatka?*
- *Što si do sada otkrio ili naučio?*
- *Kako si to otkrio ili naučio?*
- *Jesi li razmišljaо na ispravan način?*
- *Ako ne, kako si ustanovio da (ne) razmišljaš ispravno?*
- *Kako se to razlikuje od onoga što si prethodno mislio ili rekao?*
- *Kako bi se na tu pojavu (problem) još moglo gledati?*

Kriterij 4: Analiza poticanja djece na samoevaluaciju (grupno)

- *Što si/ste željeli postići?*
- *Kako i u svezi s čim ste surađivali?*
- *Oko čega ste se slagali?*
- *Oko čega se niste slagali?*
- *Kako ste razgovarali o onome u čemu se niste slagali?*
- *Kako na tu pojavu (problem) gledaju tvoji prijatelji?*
- *Kakvo je tvoje mišljenje o tome?*
- *Kakvo je mišljenje tvojih prijatelja?*
- *U čemu se tvoje mišljenje razlikuje od drugih?*
- *Možeš li svoju ideju proširiti tako da uzmeš u obzir i neku drugu ideju?*

1. Na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece značajan pozitivan utjecaj ima cjelokupno fizičko okružje vrtića

Tijekom istraživanja uočili smo kako na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece utječe kvaliteta prostora vrtića, a posebno postojanje, dostupnost i pedagoška promišljenost materijala za učenje kojima se djeca mogu koristiti rukovođena svojim interesima te postojećim znanjima i razumijevanjima. Uočili smo da dostačna količina i pedagoška promišljenost materijala, djecu „poziva“ na samoorganizaciju vlastitih aktivnosti koje su u uglavnom istraživačke, tj. otkrivačke i ekspresivne. U takvim uvjetima, njihov intelektualni i emocionalni angažman u pravilu je veći od aktivnosti koje su im (u većoj ili manjoj mjeri) nametnuli odgajatelji. A u uvjetima slobodnoga izbora materijala i samoorganizacije vlastitih aktivnosti, perspektiva poticanja njihovih metakognitivnih kapaciteta znatno je veća nego u aktivnostima koje su im nezanimljive, nedostatno konkretnе, koje za njih nisu svrhovite i kojima izravno rukovodi odgajatelj. Također, uočili smo i da kvaliteta prostorno-materijalnoga okružja u određenoj odgojno-obrazovnoj skupini korespondira sa smanjenim izravnim poučavanje djece od strane odgajatelja. Što je okružje stimulativnije, to je potreba odgajatelja za izravnim poučavanjem djece manja u korist poticanja istraživačkoga i otkrivačkoga učenja djece. Iz toga smo zaključili da oblikovanjem poticajnoga prostorno-materijalnoga okružja

odgajatelj na neizravan način potiče intelektualni, emocionalni i socijalni angažman djece i omogućuje one forme njihova učenja koje svoje uporište imaju u istraživanju i otkrivanju. Takva organizacija odgojno-obrazovnoga procesa, odgajatelju otvara prostor za poticanje metakognitivnih kapaciteta djece.

2. Na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece pozitivan utjecaj ima socijalno okružje vrtića uz korištenje etnografskih zapisa koji su dostupni djeci

Kvalitetu i razvoj odgojno-obrazovnih aktivnosti u smislu njihova djelovanja na razvoj metakognitivnih kapaciteta djece određuje socijalno okružje vrtića. To se posebno odnosi na vrtić ili skupine u kojima su osigurane prilike druženja djece različite kronološke dob jer u takvim interakcijama, djeca jedna drugoj omogućuju prijelaz u tzv. *zonu slijedećega razvoja* koju je opisao Vygotsky (Wood, 1995). Uvjerili smo se da posebnu vrijednost imaju i različiti etnografski zapisi o aktivnostima koje su u tijeku, ali i o aktivnostima koje su se odvijale ranije (fotografije, crteži, pisane bilješke i drugi oblici ekspresije djece). Spremnost odgajatelja da im takvu dostupnost osigura, u različitim skupinama vrtića se razlikuje. No, ondje gdje im ona jest osigurana, djecu učestalo potiče na raspravu i razmjenu iskustava, doživljaja i različitih razumijevanja aktivnosti kojih su bili suprotagonisti.

Uočili smo da praksa korištenja etnografski zapisa osnažuje učestalost i kvalitetu socijalnih interakcija djece jer ih omogućuje da se prisjećaju vlastitih aktivnosti, ali i načina razmišljanja, da se upoznaju s načinima razmišljanja druge djece te s načinima na koji se njihova razmišljanja i razumijevanja postupno mijenjaju i razvijaju. U tom smislu, pratili smo i ustavili da prilike korištenja etnografskih zapisa u raznovrsnim aktivnostima i samoj djeci olakšavaju proces učenja, čime odgajatelju otvaraju nove mogućnosti poticanja razvoja metakognitivnih kapaciteta djece.

3. Na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece pozitivan utjecaj ima opće ozrače te razina demokratičnosti u određenoj odgojno-obrazovnoj skupini

Uvid u različite etnografske zapise, a posebno videomaterijal, ukazivao nam je na to da kvalitetu aktivnosti djece uvelike određuje razina demokratičnosti odgojno-obrazovne skupine. Ona korespondira s mogućnošću utjecanja djece na odabir sadržaja, načine sudjelovanja i duljinu trajanja aktivnosti. Drugim riječima, ona djetetu osigurava priliku kompetentnoga participiranja, tj. ravnopravnoga sudjelovanja u procesu oblikovanju vlastitoga procesa učenja i postupnoga preuzimanja odgovornosti za taj proces. U različitim vrtićima i skupinama razina demokratičnosti praksi varira. No, one skupine u kojima je bila ostvarena zadovoljavajuća razina demokratičnoga ozračja, djeci su znatno intenzivnije pružale mogućnost stjecanja i uživanja statusa kritičkih suistraživača u dijalogu s odgajateljem (Beard i Wilson, 2006) koji ravnopravno sudjeluju u oblikovanju procesa vlastitoga učenja. Tijekom istraživanja uočili smo da perspektivu oblikovanja prakse odgajatelja usmjerene na poticanja razvoja metakognitivnih kapaciteta djece u velikoj mjeri određuje njegova spremnost da se

odrekne dominacije nad djecom u korist komunikacije koja je uvažavajuća, recipročna i dvosmjerna. Proces napuštanja povijesno dominantnoga odgojno-obrazovnoga pristupa u kojem odrasla osoba uspostavlja čvrstu kontrolu nad procesom učenja djece, s ciljem ostvarenja izvana zacrtanih ciljeva za koje ona sama snose ekskluzivnu odgovornost, dug je i prilično neizvjestan u što smo se tijekom istraživanja višekratno uvjerili. Takvo ozračje i praksa ne nastaju spontano nego radom na prepoznavanju i postupnom otklanjanju struktura koje kolidiraju s participacijskim pravima djece i mogućnostima njihova utjecaja na vrtička zbivanja i oblikovanje odgojno-obrazovnoga procesa. No, takvo je demokratično ozračje važna pretpostavka razvoja prakse potrebne za razvoj metakognitivnih kapaciteta djece kao i njihova samoregulirajućega učenja (Whitebread i Coltman, 2007). S obzirom na to, prilike metakognitivnih kapaciteta djece u pojedinim se skupinama vrtića razlikuju i variraju.

4. Uočili smo da poticanje razvoja metakognitivnih kapaciteta djece zahtjeva visoko individualizirani odgojno-obrazovni proces, tj. spremnost odgajatelja na odustajanje od bilo kojega oblika unificiranosti i uniformnosti

Analizirajući etnografske zapise uočili smo kako tijekom različitih istraživačkih aktivnosti iznose svoje dvojbe, pitanja i nejasnoće povezane s onim što istražuju i na izvjestan način, artikuliraju načine na koje razmišljaju kao i tijek vlastitih razmišljanja. Isto tako, u različitim ekspresivnim aktivnostima prikazuju svoja trenutačna razmišljanja i razumijevanja fenomena kojima se bave. Istraživačke i ekspresivne aktivnosti djece često se odvijaju naizmjenično, predstavljajući odgajatelju priliku dubljega promatranja i boljega razumijevanja djece. Te prilike određeni odgajatelji lakše, a drugi teže prepoznaju i s različitim uspjehom koriste.

Tijekom istraživanja pokazalo se da umijeća odgajatelja da svoje intervencije usklađuju s različitim zahtjevima određenih situacija i logičnim slijedom razvoja započetih aktivnosti djece, jako variraju. Uočili smo veliku neu jednačenost odgajatelja glede razumijevanja istraživačkih i ekspresivnih potencijala djece što je rezultiralo i različitim kvalitetama njegovih odgovora na te aktivnosti. Nekim odgajateljima potrebno je mnogo vremena kako bi se odmaknuli od tradicionalnoga i zastarjelog poučavanja djece kako se nešto prikazuje (crtanje, slikanje, izrađuje, gradi i sl.) što može poticati unificiranost i uniformnost aktivnosti djece koja nije poželjna niti pedagoški opravdana. A uz to, takva praksa ozbiljno smanjuje prilike poticanja razvoja metakognitivnih kapaciteta djece.

5. Na mogućnosti poticanja razvoja metakognitivnih kapaciteta djece posebno veliki utjecaj ima imaju odgajateljeva umijeća „slušanja djece“

Tijekom istraživanja ustanovili smo da je za ostvarivanje prakse odgajatelja usmjerene na poticanja razvoja metakognitivnih kapaciteta djece potrebna njegova spremnost na ovladavanje tehnikama „slušanja djece“ (Malaguzzi, 1998; Edwards et.al., 1998; Giudici i Rinaldi, 2002). O sposobljenost odgajatelja za „slušanje djece“, tj. pažljivo promatranje i kvalitetno interpretiranje i razumijevanje njihovih aktivnosti, na određeni je način i temelj ostvarivanja prakse u fokusu, koja je poticajna za razvoj metakognitivnih kapaciteta djece. Tijekom istraživanja uvjerili smo se da je stvaranje

„konteksta slušanja”, koji je detaljno opisan u poznatoj Reggio koncepciji (Malaguzzi, 1998; Edwards i sur., 1998; Giudici i Rinaldi, 2002) nezaobilazan preduvjet razvoja prakse u kojoj je poticanja razvoja metakognitivnih kapaciteta djece moguće jer ono izravno korespondira s razinom odgajateljeva razumijevanja djece. Različiti iskazi djece, koje ona izražavaju kroz različite oblike reprezentacije, odgajatelju omogućuju bolje razumijevanju postojećih znanja, razumijevanja i perspektiva djece, ali i načina na koji se ta znanja, razumijevanja i perspektive mijenjaju. Na tim uvidima, odgajatelj može oblikovati odgojno-obrazovne intervencije koje potiču razvoj metakognitivnih kapaciteta djece. Ako ih pak ne razumije ili ih razumije nepotpuno, prilike poticanja metakognitivnih kapaciteta djece značajno su smanjene. O različitim razinama razumijevanja perspektiva djece, kao i o implikacijama tih razlika na prilike razvoja metakognitivnih kapaciteta djece, na zajedničkim refleksijama s odgajateljima višekratno smo raspravljali. Pri tome smo poticali raspravu među odgajateljima, vjerujući u snagu tih rasprava u procesu njihova profesionalnoga učenja. Ipak, različiti su odgajatelji iskazali različitu spremnost da svoju praksu u tome smislu mijenjaju.

6. Intervencije odgajatelja usmjerenе na poticanje djece na samoevaluaciju mogu doprinositi razvoju metakognitivnih kapaciteta djece

Određeni oblici izravnih intervencija odgajatelja, kojima on potiče djecu na samoevaluaciju, mogu doprinositi razvoju njihovih metakognitivnih kapaciteta. Takve smo primjere višekratno uočavali tijekom zajedničkih analiza prikupljenoga materijala. Uočili smo da su takve intervencije karakteristične za iskusnije odgajatelje s obzirom na to da je riječ o postupcima koji su vrlo suptilni i koji se događaju „u hodu“, diskretno utkani u svakodnevne odgojno-obrazovne aktivnosti djece. Iz toga smo zaključili da je preduvjet takvih intervencija odgajatelja, uz njegova profesionalna znanja, njegova spremnost za snalaženje u nepredvidivim odgojno-obrazovnim situacijama, tj. izvježbanost za „očekivanje neočekivanoga“ u razvoju odgojno-obrazovnoga procesa. Riječ je o onim postupcima odgajatelja kojima on potiče djecu na analizu, tj. samoevaluaciju vlastitih aktivnosti i načina na koji u tim aktivnostima razmišljaju i načina na koji vlastito razmišljanje razvijaju. Usmjerenost i spremnost odgajatelja da djecu tijekom različitih odgojno-obrazovnih aktivnosti uvodi u „metazonu“, na zajedničkim sastancima isticali smo kao posebnu vrijednost. Naime, uvjerili smo se da takvi postupci djeci olakšavaju razvoj metakognitivnih kapaciteta. Osobito je riječ o onim primjerima koji svjedoče o tome kako djeca postupno preuzimaju odgovornosti za proces vlastitoga *učenja i za upravljanje time procesom*.

7. Refleksivnost odgajatelja značajno određuju mogućnosti poticanja razvoja metakognitivnih kapaciteta djece

Tijekom istraživanja uočili smo kako odgajatelji aktivnosti djece te načine na koji djeca razmišljaju i razumiju određene probleme, interpretiranju na mnogo različitim, ponekad i posve suprotstavljenih načina. Osobito velike razlike u načinu interpretacije odgajatelji iskazuju tumačeći svoje sudjelovanje, tj. opisujući vlastite

intervencije u odgojno-obrazovnom radu s djecom. Iste aktivnosti i nastojanja djece neki odgajatelji tumače kao neznanje, neuspjeh ili pogrešku koju treba korigirati, a drugi ih kao hvalevrijedan pokušaj djeteta da riješi problem s kojim se suočilo pa ga treba podržati, pohvaliti i sl. Naravno, različite interpretacije rezultat su razlika u razini znanja, kompetencija, ali i sustava vrijednosti koje odgajatelji u odgojno-obrazovnom procesu zagovaraju. Nakon duljega praćenja tih procesa utvrđili smo da perspektivu razvoja novih kompetencija odgajatelja u ovome smislu, u najvećoj mjeri određuje njegova spremnost na propitivanje i diskusiju o vlastitim stajalištima, razumijevanjima i perspektivama s kolegama, tj. njegova refleksivnost. Stoga smo zaključili da refleksivnost odgajatelja značajno povećava njegovu spremnost za *poticanje razvoja metakognitivnih kapaciteta djece*. Razina refleksivnosti odgajatelja i podložna je promjenama, tj. može se razvijati kroz određene oblike profesionalnoga usavršavanja usmjerenih na razvoj istraživačkih i refleksivnih sposobnosti.

Zaključak

Stvaranje primjerenih uvjeta za poticanje razvoja metakognitivnih kapaciteta djece spada u važne odgojno-obrazovne uloge odgajatelja. No, za ostvarivanje takve uloge odgajatelj treba poznavati ne samo relevantnu teoriju i aktualnu kvalitetu vlastite odgojno-obrazovne prakse već i razvijati vlastitu refleksivnost. Za ostvarivanje kvalitetne odgojno-obrazovne prakse koja omogućuje poticanje razvoja metakognitivnih kapaciteta djece, odgajatelj treba voditi računa o kvaliteti prostorno-materijalnoga i socijalnoga okružja vrtića i na razvoju te kvalitete kontinuirano raditi. Jer, učenje djece uvijek je kontekstualizirano određeno cjelinom konteksta u kojem se događa. Stoga stvaranje uvjeta za poticanje razvoja metakognitivnih kapaciteta djece, uključuje i kontinuitet razvoja različitih organizacijskih struktura vrtića. Isto tako, odgajatelj treba moći pažljivo promatrati, dokumentirati, zajedno s drugim stručnjacima interpretirati raznovrsne aktivnosti djece u okružju za učenje, kako bi ih mogao što bolje razumjeti i na njih pružiti primjereni odgovor. Dobro razumijevanje aktivnosti djece, za koje su potrebne istraživačke i refleksivne kompetencije odgajatelja, predstavlja podlogu oblikovanja okružja vrtića, kao i oblikovanja primjerenih odgojno-obrazovnih intervencija koje vode poticanju razvoja metakognitivnih kapaciteta djece. Spremnost odgajatelja da oblikuje takvo okružje i osigurava takve odgojno-obrazovne intervencije u različitim se skupinama vrtića prilično razlikuju, ali su podložne promjenama. Za ostvarenje svega navedenog nužno je sustavno profesionalno usavršavanje odgajatelja usmjereno na jačanje njegovih istraživačkih i refleksivnih kompetencija. Riječ je o kontinuiranom procesu razvoja koji nije moguće zamijeniti pohađanjem seminara, radionica i sličnih jednokratnih ili parcijalnih oblika usavršavanja.

Veliko ograničenje razvoju tih kompetencija i procesa predstavlja činjenica da značajan postotak odgajatelja nema priliku sudjelovati u sustavnom i kontinuiranom obliku profesionalnog usavršavanja potrebnog za izgradnju navedenih umijeća i razvoj prakse koja se na njima temelji. To znatno smanjuje mogućnosti uspostavljanja

uvjeta za razvoj metakognitivnih kapaciteta djece. Nadalje, preveliki broj djece u odgojno-obrazovnim skupinama, koji opterećuje odgajatelje u određenom broju skupina, nepovoljno djeluje na stvaranje okružja potrebnoga za individualizaciju odgojno-obrazovnoga procesa. Određeni postotak odgajatelja ovaj problem uspijeva nadvladati dodatnim angažmanom ,no to nije pravilo i ne predstavlja održivo rješenje.