Gabriella Kállai LOOK, THAT'S HOW I DO IT! TRY IT! – TEAMWORK SUPPORT WITH ONLINE TOOLS

Abstract

In Hungary, children and pupils with special educational needs are those who, on the basis of a diagnostic assessment by a committee of educational experts, are entitled to additional support for their development. Today, they are often placed in inclusive or integrative kindergartens and schools, where they learn with other children and are assisted in their development by a special needs teacher. Several studies have looked at the role of special needs teachers in inclusive education. Other approaches emphasise collaboration between professionals, and some forms of collaboration are seen as teamwork. Although these collaborations are necessary to achieve the best possible developmental outcomes, they are difficult to achieve for a number of reasons. This paper presents an action research project in which teamwork, i.e. case discussion, solution finding and knowledge transfer, took the form of online collaboration. The methodological framework was participatory action research. Although this form of collaboration was created out of necessity in the institution, the positive feedback and results from the participants show the need for activities and collective learning adapted to the knowledge level and needs of teachers, which help them to deal with everyday tasks and problems with more confidence and self-efficacy.

Keywords: teamwork; participatory action research; special education needs

Introduction

Provision for children with special educational needs in the Hungarian public education system can take several forms. The most important decision situation is to determine whether the child should be educated in a segregated institution, i.e. with other children with special educational needs, in which case he/she will be mainly taught by special education teachers or special education assistants. The other possible option is for the child to learn in an integrated way, in mainstraim schools, i.e. mainly with children who are developing normally. In this case, the child with special needs will be taught by teachers who are not qualified in special education, although they may have acquired this knowledge as part of their training or in further training. In inclusion settings (kindergarten schools and schools), special assistance for children is provided in the context of socalled habilitation-rehabilitation sessions, carried out by special needs teachers. The special needs teacher may be a specialist employed by the educational establishment or may be a so-called travelling special needs teacher from the Unified Institute for Special Needs Education (UIME). In the absence of such a specialist, the institution may employ a special needs teacher with the appropriate professional qualifications on a contract basis. As regards the functioning of the care system, it is important to note that non-private care is available (and indeed compulsory for children) to children who are declared to have special educational needs on the basis of an assessment by a special educational needs committee.

In order for co-education to be as effective as possible, the creation of a supportive environment is key to the development of children and pupils. This includes ongoing consultation between the special needs teacher and parents, teachers and teaching assistants, in order to better understand the needs of the children and to be able to set and implement development goals, including adapting the curriculum to the children and using differentiated teaching methods. These collaborations can be seen as teamwork, considering all actors as part of the team, including parents as well as the educational system. In this paper, we first introduce the concept of teamwork and its interpretation in special education, which served as a theoretical framework for our study through participatory action research. In our research, we present a form of teamwork that was created under duress, but which, based on the experiences of the participants, can be applied in a wider context, not only in the field of special education. Our research summarises the first cycle of participatory action research.

Literature Review: Teamwork in special needs education

The concept of team is used by several disciplines and different aspects of the concept are highlighted to better understand it. From a psychological point of view, the interaction between members, the knowledge about each other and the fact that members see themselves as a group are important. From an organisational sociology perspective, an important feature is the shared set of norms, the common objective and the different roles assigned to each other by the members. When thinking about the team as a working group, it is important to stress that the group is formed to carry out a specific task, and that the system of relationships within the group is determined primarily by the tasks to be performed

In Meredith Belbin's book on teamwork, Sándor Klein (1998) briefly describes the concept of a team as follows: "*a team is a group whose effectiveness depends to a significant extent on the cooperation of its members.*" (p. 8) In this sense, teamwork can be seen as being based on the establishment and functioning of appropriate cooperation, but other factors are also necessary to talk about teamwork. Belbin also considers it essential to define the goal that the team will be formed to achieve, i.e. to define what the team's task will be. In addition, to be effective, it is important to assess what professionals are needed to bring in and what tools and resources are required.

The possibilities of using teamwork in the field of special education were explored by Kullmann (2015). In her publication, she reviews the literature and highlights the dynamic, interdependent and mutually cooperative activities of the members as a general characteristic, i.e. not only focusing on the aspects of special education (Agency for Healthcare Research and Quality, cited in Kullmann, 2015). In addition, clear role and task assignment within the team, complementary skills of the members and, in this context, strong communication skills, cooperation and the ability to manage conflicts appropriately are also requirements. This also implies that team members must be able to give up

part of their autonomy in order to achieve a common goal. These specificities also point to the fact that the proper functioning of teamwork also depends on the flexible adaptation of its members and that it is fraught with pitfalls. The potential obstacles to teamwork are not discussed here.

If we look at teamwork from the point of view of special needs education, we can say that the members of this profession can be active in many different fields, and that their work can be seen at all stages of human life, from birth to death, since the special needs teacher's role is also one of support and accompaniment. In terms of the nature of the work, the profession of special needs teacher is represented in diagnostic and therapeutic work, but also in rehabilitation, prevention, counselling and coordination activities involving cooperation with other people and professions.

Kullmann (2015) outlines three models for rehabilitation work:

"1. Multidisciplinary team: the team members individually carry out the assessment of the patient/client's condition and the therapeutic and educational activities.

2. interdisciplinary team: joint problem identification and solving, frequent mutual consultation, preparation of an agreed objective and plan with the client and his/her family. Joint rehabilitation goals integrated into the activities of all professionals.

3. transdisciplinary team: team members work closely together with the person concerned, parents, etc., to achieve a common goal, crossing their strict competence boundaries. The assessment of the situation is carried out jointly, their experiences are analysed together. The roles in the therapeutic activity are determined by the needs arising from the current situation. The team members learn together in a collaborative process, involving the people concerned and the parents. The role of therapist is sometimes taken over by the parent. Typically used in infancy and early childhood." (p. 180-181)

It is important to note that in Hungary, the need for special needs education increased when changes in legislation allowed for the increasing co-education of children and pupils with special educational needs (Mile, 2015, Kállai-Mile, 2020), with statistics showing that the proportion of children and pupils with special needs has increased from around ten percent to over 70 percent in the last twenty years. In response to this need, the Unified Methodological Centre for Special Needs Education (EGYMI) and the Travelling Network of Special Needs Education were established, whose task is to create an inclusive environment, i.e. to provide care for children and pupils, to expand and develop teachers' knowledge of disabilities and special educational needs, and to support their work. These services are based on cooperation between the special needs teacher, the parent and the teacher. The work of itinerant teachers includes training teachers, providing ongoing advice, planning the specific activities of the integrating institution, and promoting and maintaining cooperation between the parent and the institution.

Teamwork is also an opportunity for members to learn from each other to achieve a common goal. This does not mean that each member acquires the same depth of knowledge as the other professionals involved, but rather that it provides an opportunity to learn about the perspectives of other professions and professionals, and to understand

the causes and reasons for certain phenomena. At first glance, the members of teams promoting integration in kindergartens and schools do not appear to be equal partners, but it is worth highlighting the fact that the special needs teacher has knowledge of how to implement co-education, while the teacher is familiar with the characteristics of the institution or group in question, so that together they can develop the best solution for the children and pupils concerned.

Social learning theories have been used as the theoretical framework for understanding team learning in the experiment currently being presented.

On the one hand, Bandura's social cognitive theory (1986, 1997) is relevant for us from two aspects: it describes the extent to which we consider ourselves capable of effectively solving our problems through the concept of self-efficacy. Research on teachers' self-efficacy has become a popular topic today (Kóródi et al., 2020), with research indicating that higher self-efficacy is positively related to children/students' achievement (Perera and John, 2020). Self-efficacy is not a fixed personality trait, it can be influenced by different factors, i.e. experience and practice can strengthen our sense of competence (Hoy and Spero, 2005). Another important feature of Bandura's work for us is that he points to the interdependence of behaviour according to the principle of mutual determination, i.e. he argues that it is the interaction of behaviour, personal factors and environmental factors that shape our functioning, and that complex cognitive processes regulate our learning, through which we acquire the behaviour (Horváth, 2004). In practice, this means that learning can take place by observing the behaviour of others, by imitation (model following) and by shaping (reward and punishment), in addition to direct education.

On the other hand, we have also drawn on Vigotsky's theory of social learning (1978). According to this theory, meaningful learning takes place in an interactive environment, i.e. it requires interaction between the participants. Since it is a learning theory, Vigotsky's insight is that in the process, the more knowledgeable party supports the other person (or persons) to achieve the learning goal. In this theory, the learner is at the centre of the learning process, interacting with other learners in addition to the instructor. This theory also includes the concept of the proximal zone of development, which for us should be highlighted as including what the learner can or cannot do without the support of a competent other. For us, this theoretical framework is also important because in the experiment we are about to present, a very similar process took place: team members interacted with each other while gradually acquiring knowledge that helped them to venture into new, unknown areas in addition to the ones they had known before.

This aspect of teamwork, i.e. the sharing of knowledge by one team member with the other team members, can be seen as a mentoring activity, even though the teacher is not called a mentor and the other team members are not called the mentored. Based on these findings, we can accept that interaction-driven peer learning and collaboration results in high quality support relationships, with members also learning from each other's experiences and ideas, with Ragins (2016) and Connolly (2017) reaching a similar conclusion in their research. In relation to the relationship between mentoring and teamwork, we argue that knowledge sharing, peer learning or learning from one person is not a necessary fea-

ture of teamwork, but may occur in interdisciplinary teams and is more common in transdisciplinary teams. On the other hand, the aim of mentoring is to support the mentee in one or more areas, and by definition the focus is on the individual development of the mentee.

After an overview of the theoretical framework, the next part of our paper will present the main results of a participatory action research. The action research took place in a kindergarten where the travelling SEN teacher responsible for the care of children with special educational needs developed teamwork with kindergarten teachers and assistants who were responsible for the children's education on a daily basis. As the task of all participants is to create an appropriate and inclusive environment for the children, and for this task special needs education knowledge is indispensable, it is also emphasised here that the cooperation is an expectation in the relevant legislation (SEN guidelines, Public Education Act). However, this area is not regulated in detail, so the legislator leaves implementation to the parties involved. As a consequence, although the task itself is reflected in the job descriptions of special needs teachers (Mile, 2016), implementation is shaped by institutional and individual options, and practical implementation can be very diverse.

In the present case, in addition to face-to-face meetings, the itinerant paraeducator has attempted to provide consultation opportunities for kindergarten teachers and assistants in the online space. The implementation of this and the way to get there is presented in the next section.

Methodology

Our research was conducted within the paradigm of participatory action research, i.e. we sought to link theory and practice and to find practical solutions to problems. This means that instead of traditional, academic research, where in most cases the interaction between researcher and researched takes place in a single moment (Málovics, 2018), we were both part of the research and subject of the research, i.e. we participated in a dual role as researchers, with the continuous cooperation of the participants: On the one hand, as a travelling teacher educator, with the intention of improving the practice, looking for solutions to the issues raised, and on the other hand, as a researcher, observing and analysing the events from an external, observer's perspective (Csillag, 2016 cited in Zank, 2020). However, in doing so, the intense engagement and involvement in the process compromises researcher objectivity (or intersubjectivity), while participatory action research does not consider social research as value-neutral (Málovics, 2018). Although the application of this paradigm is still little known in Hungary, according to international literature, neither self-observation nor the use of participatory action research in pedagogical work is alien to the development of pedagogical practice. Participatory action research does not represent a standardised process, but it is important to underline that these processes are developed through group work, with action and reflection phases following each other, as a cyclical process. The methods and methodological rules of participatory

action research can be diverse: social science methods (questionnaire, interview, participant observation, etc.) are well suited but not exclusive: 'the primary test of the quality of the knowledge generated is its practical operability (Málovics, 2018, p1154).

The central question of our research is how we can work as a team for the effective development of children with special educational needs, what forms of cooperation and opportunities are available to us.

This micro-research can be interpreted as a pedagogical experiment that involves both rapid problem solving and service development (Csíkos, 2020), but we are guided by a cyclical approach in our research model. Now we share with the reader the experiences of the first cycle.

In the present case, we have described the processes retrospectively, relying on qualitative tools (interviews, reports). The sample, i.e. the site of the research, is a single institution (kindergarten) where teamwork in hybrid spaces has been introduced on an experimental basis. Although in our participatory action research we primarily developed the teamwork based on our own experiences, i.e. those of the team members, and also made sure that the direction of development was continuously in line with the needs of the team members, we also conducted interviews with the team members at the end of the school year. This method allows us, as researchers, to carry out an in-depth analysis of the experiences of the team members. In addition to the interviews with the team members, observations were also carried out. The observations focused primarily on children's behaviour within the group and changes in this behaviour, but also covered changes in the behaviour of the kindergarten staff towards particular children and changes in communication about children. These experiences were considered to be the primary focus, and the conclusions drawn were a reflection on the action taken.

Location of the research

The municipal kindergarten where the action research is carried out is located in a district of the capital. It is located on the border between a residential area and a family house zone, with six groups of mixed age. Seven percent of the 124 children attending have special educational needs, which is twice the national average for kindergartens (KIR 2022/23). They have more than 20 years of experience in co-education, mainly with children diagnosed with other mental development disorders and autism spectrum disorders.

Kindergarten staff

Among the participants, five worked as kindergarten teachers and five as assistants in kindergarten groups with children with special educational needs (the number varied between one and three per group during the school year under study). Two of the assistants were qualified as special needs teaching assistants and three as teaching assistants without specialisation. It is a maintenance principle in the kindergarten that each group should have at least one person with a pedagogical assistant qualification in addition to the kindergarten teachers to support the children concerned. The aim is to create a stable developmental environment, but there is a problem of turnover during the school year: one kindergarten teacher had to be replaced due to long-term illness and two of the assistants left and had to be replaced in order to function properly. Although the necessary staffing conditions were met during the school year, several teachers have indicated that they will change and will no longer work at the kindergarten from September or later. The low salaries of assistants do not make it easier to find and keep the right people in the right jobs.

Participants - kindergarten, teams

For the research, interviews were conducted with kindergarten teachers, pedagogical assistants or teaching assistants who were in contact with the special education needs teacher, i.e. the special needs teacher was providing habilitation-rehabilitation sessions for children with special educational needs in the group in the context of travelling special needs education during the school year. They also took part in the teams for the development of the children.

In total, this involved ten people in four teams. In special needs education, as in the health model, teams are set up for the development of a particular child and their composition varies depending on the professionals involved. It would be reasonable to argue that in the present case, too, individual teams were formed, but there was no possibility of involving external staff, and although the kindergarten and the special needs teacher were in constant contact with the parents, they were not involved in the professional work, and the professional teams were formed following the kindergarten group structure. Some groups had two children, others only one. The kindergarten staff (kindergarten teachers, teaching assistants) were assigned to the group. In addition to the children in the group, they were aware of the children with special educational needs in other groups and knew them to some extent, but were not involved in their development. An argument in favour of teams forming along the lines of groups is that the discussions often focused on the development and progress of both children, which does not mean that the development goals and plans of both children and their implementation are the same, but rather that it was a question of differentiating and understanding the difference, for example, that the method used for one child is not necessary for the other or should be implemented in a different way. The resulting teams followed the interdisciplinary model. Collaboration, consultation, task sharing and reporting were traditional in the teams, but the development of one child made it necessary to choose a different format. This team became the participatory action research team.

Special needs teacher

The special needs teacher works part-time as a travelling special needs teacher, is not employed by the kindergarten school, but is a member of staff of a single special needs methodological centre. She has four years of professional experience in this field, but also has other co-professional experience which she can use to build relationships with parents and staff in educational establishments. Although half of her time is specifically dedicated to child development, the remainder is spent travelling between institutions, doing the administration, preparing equipment, planning lessons and liaising with adult stakeholders. In her view, the latter is the most difficult task, because practical experience shows that it is difficult to find a time slot that is suitable for coordination. Fortunately, life in kindergarten schools is not as tied up as life in schools. But as there are two sessions a week for the development of the six children, and the sessions have to be completed by lunchtime, it is necessary to work in very quick shifts. The kindergarten teachers and assistants can only be contacted briefly to discuss the most urgent, topical problems. On the other hand, the kindergarten staff are not always receptive when it would be convenient for the teacher: they may be ill, substitute, go for training, etc., and even when they are there, they have work to do in the group, so the coordination is done while they are attending to the children.

Results: The cyclical process - first cycle

In this short chapter, we show step by step how the team arrived at the right communication channel for them:

Identification of the problem: There was a boy with special educational needs whose family came from abroad and whose parents did not speak Hungarian. The parents could communicate in English, but the child did not speak English or Hungarian. There were a lot of tasks to be done with him, which had to be constantly coordinated.

Action: All members of the team were open to consultation and close cooperation, but due to their busy schedules, they could not find a time to meet and discuss the actual and necessary steps of the development.

Reflection: all members of the team agreed that it was necessary to find some way to carry out the discussions. The expectation was that such a session should be easily accessible and accessible to all, so that those who could not join the discussion in real time could be informed. At this point, a solution was proposed to create reminders, but participants rejected this because they felt that email was time-consuming and that too much effort was needed to write and send them, and to read and interpret them. Along these criteria, the group members used a brainstorming session to explore the online options available to them.

Redesigning the action: the solution was finally to create a messenger group, to which the group administrator added everyone who worked with a particular child in the kindergarten. The chat allows for group calls for discussions, but also for text messages and sharing of documents (pictures, videos, pdf files, etc.). The advantage is that all participants have the app on their mobile devices, so there is no need to install it and learn how to use it; it is possible to immediately detect when someone asks a question, shares information or reflects on something. It's easy to follow information, but at the same time, it doesn't expect everyone to join the conversation at the same time, everyone can stay informed and communicate when it's most convenient for them.

Experiences (reflections)

The chat group to support teamwork was reported as useful and successful by all. The careful and measured communication that characterised the group at the beginning

quickly changed and became more direct. The topics and content of the conversations also changed and evolved, with participants becoming more and more courageous in reporting problems and tasks that they faced in their everyday lives.

SEN teacher said: "At the beginning we communicated in writing. Everyone wrote down their current problem. I gave them advice, made tools and brought them to the kindergarten. I could make them completely ready-made, but I also had them laminate, cut out and velcro the cards. Then they started sending photos of the child using a tool or tackling a new challenge. The pictures were accompanied by small descriptions and reflections. The photos were then turned into films, not only for me but also for the parents. There was always another challenge. We also tried group discussions, but we were less successful, because in the afternoons and evenings we couldn't give ourselves free time in the same way, and those who didn't have time felt they were missing out."

The SEN teacher said that it was very important to build trust between her and the group members. She also considered it important to strengthen the professional self-image and self-efficacy of the kindergarten staff because of their different competences and the fact that they crossed them periodically:

"The messenger worked very well. I know I'm just giving the message, but in everyday life they are there, they have to cope, they have to overcome difficulties. That's why every time they post a picture or a video, I can't stop praising them. And I never forgot to praise them when I met them in person. It is very important that they have a sense of achievement, that they dare to take the initiative, that they have ideas. I don't want them to depend on me, but I also want them to indicate when we really need to apply professionally correct solutions."

Overall, from a special needs teacher's point of view, the chat group has been a significant support to the professional work.

As already mentioned, the kindergarten teachers and teaching assistants participated in the chat with varying degrees of intensity: some only read and at most indicated with reaction buttons, while others were more active. Nevertheless, they were equally successful in using the tools in the classroom, which was necessary because, although there was a division of tasks between the members, they had to take over from time to time (for this child, the meal and the nap after lunch were critical) and there were general rules of behaviour that all educators had to expect equally from the children (no queuing, no destructive activities, use of appropriate volume, etc.). The kindergarten staff already had experience of educating children with special educational needs and these experiences provided a good basis for their work, but the tools and procedures to be used were not entirely clear and adaptation to the child needed to be facilitated. The experiences gained also made them aware of the importance of asking for help in a given situation. "I don't know what to do with him, he doesn't speak Hungarian, he's obviously not interested in storytelling or talking. Should I learn his language? I don't have the capacity." The teaching of Hungarian as a foreign language has brought a new opportunity to the life of the kindergarten group: through continuous experimentation, we have managed to develop and expand the Hungarian vocabulary of the little boy. The children were also involved in the process: naming and practising objects provided many opportunities for playing together. "It was an important sign that the teacher took photos of what she taught the child and we

were able to practise it in the group, and of course he learned other words easily. I had information, and I gave it too."

The assistant commented, "I don't know, it was so obvious to me that we would chat. Then it turned out that not everyone thought it was easy. But it was good to have someone to talk to, because he's very cute, but sometimes it's very difficult to work with him."

Overall, looking back on the whole year, one of the kindergarten teachers summed up the experience this way. "Now, in June, we know that next year he will go to another school, and we cry together because he is leaving us. Because all in all it was very difficult, but it was also very productive work."

Living the experience - planning the next cycle of participatory action research

At the end of the first cycle of micro-research, it is legitimate to ask in which direction the teamwork supported by the chat group can be taken forward and developed further, and whether it is worth thinking about other online activities. The team will determine the future direction of research and experimentation, but the teacher has already started planning her own activities. I'm going to set a fixed time slot when we can meet orally, either in groups or individually. But I've also thought about it further: I'll have a group where I'll invite everyone we work with in a given school year and run it like a club. One session every two weeks, where we talk about children with special educational needs and look for solutions to the difficulties they face. I can also imagine inviting parents, which would be very much needed.

Limitations

The first phase of our participatory action research presented here describes the innovative use of ICT tools by only one little group. This may call into question the generalisability of the results, as it has not been tested in more groups, but the small to large successes in practice show that the tool can support effective teamwork more widely.

Conclusion

In our research, we have attempted to apply participatory action research to the field of education. Although action research is still underused among research methods in our country, its focus on practice allows it to form a bridge between science and practice, and the steps, experiences and results of the cyclical process of participatory action research can be used in other settings as case studies. This method can be particularly important in the education of children and pupils with special educational needs. The first phase of the action research presented in this study, which was planned for two years, was a joint action and teamwork supported by online tools and was created by necessity. Although communication through infocommunication channels is already common practice among teachers and parents, the creation and use of chat groups for exchanging experiences, sharing knowledge and conducting teamwork is not yet widespread in our experience. It has the advantage of providing a wide range of information sharing possibilities: in addition to written text messages, you can also send verbal messages, attach photos and

videos, video models, and share other types of files. In addition, it is a very important feature that it allows for online live meetings. its use in teamwork allows members to communicate in a diverse and fast way, while written messages are non-volatile and can be viewed at any time. The nature of the tool makes communication more informal and democratic, but this depends on the ability of the participants to cooperate. It provides a space for learning from each other, encouraging each other, reporting on successful or unsuccessful actions. It is an opportunity to reflect on others and to develop self-reflective skills, which will feed back into professional work and is expected to increase a sense of self-efficacy. This is one of the keys to the proper development of children. On the other hand, teamwork supported by chat channels is likely to be successfully applied in other areas of pedagogical work, helping horizontal learning, and supplementing or replacing the face-to-face meeting.

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