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**Teachers' views on professional cooperation
in the light of teacher competences**

Thesis of doctoral (Ph.D) dissertation

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TOPICALITY OF THE SUBJECT, RESEARCH OBJECTIVES

The focus of my research is on teachers' perceptions of professional collaboration, focusing on the themes of professional development and learning, and teacher professionalism. In the knowledge society, teachers with excellent professional knowledge and competence are needed as the key to the education system. They are needed to meet changing expectations and to continuously renew the pedagogical knowledge base (*OECD*, 2017). Continuous professional development and regular professional learning can support teachers in meeting changing expectations. Hargreaves (2000) wrote about the prominent role of professional collaboration in his model of teacher professionalism. According to Hargreaves' study, teacher professionalism and professional learning have gone through four eras: the pre-professionalism era, the era of the autonomous teacher, the era of the collegiate professional, and the era of postmodern professionalism. Education systems have increasingly challenged teachers, experienced the need to teach in ways that differ from the experience of previous teachers, and increasingly required them to support each other, to devise joint solutions, to build on each other's knowledge, to interpret and respond to problems together (*Hargreaves*, 2000; *Scoular et al.*, 2020).

It was to address this problem that the era of collegial professionalism emerged in the 1980s. In the face of changing conditions, it became increasingly difficult for teachers to meet the challenges alone. To solve problems, teachers needed to work more collaboratively, for example through school teachers' associations, which could solve problems together through dialogue and professional solutions. This kind of cooperation goes beyond teachers talking to each other. Teachers' professional development is most effective when it is embedded in teaching. The school climate, the supportive attitude of the management and the teaching community are significant contributors (*Hargreaves*, 2000; *Vangrieken et al.*, 2017; *Boylan*, 2018).

In the more recent field of teacher research, research on teachers' thinking, professional collaboration is also of crucial importance (*Harris*, 2002 cited in *Lénárd et al.*, 2020) in the creation of a knowledge base (*Erickson et al.*, 2005 cited in *Lénárd et al.*, 2020), helps teachers to diversify their teaching activities, but also contributes to the promotion of knowledge sharing among teachers (*Garet et al.*, 2001 cited in *Lénárd et al.*, 2020). The most important stages in teacher research are the research on the teacher's personality and then on the teacher's activities, as well as on the teacher's thinking and decision-making. With the

emergence of cognitive psychology and then cognitive pedagogy, researchers have focused on the cognitive structures of novice and experienced teachers, and then on the differences between their thinking, including professional learning and its support (*Szivák, 1999*). The theme of professional collaboration between teachers is also increasingly common in recent educational literature. It is therefore important to use deeper forms of professional collaboration, to help each other, to take advantage of opportunities for collegial reflection and to attend each other's lessons regularly (*OECD, 2009*).

My research aimed to explore teachers' perceptions of professional collaboration. My research questions were: how important do teachers consider professional collaboration to be and how often do they take advantage of the opportunities it offers?

THEORETICAL BACKGROUND TO THE RESEARCH

The theoretical background to my research is presented in two sections. In the first stage, I investigated professional collaboration within a threefold framework of theoretical framework, professional development and learning, and teacher professionalism. Along the second dimension of the study, I explored the manifestations of professional collaboration based on individual and organisational factors influencing professional collaboration and group characteristics, following (*Vangrieken et al., 2015*).

The concept of professional collaboration between teachers has undergone several changes in recent decades (*Vangrieken et al., 2015*). In the 1980s, the need for the concept of interaction and professional relationships between teachers became more pronounced. Little (1990) spoke of different levels of collegial relationships, which differ in content and form. Another aspect of the collegial relationship is collegial reflection, which means that not only does the person doing the reflection analyse his/her own activity through self-reflection, but also reflects on the activity of the colleague teacher, which ultimately reflects back on the reflecting individual, who in turn reassesses and improves his/her practice (*Mrázik, 2021*). Kelchtermans (2006) has already focused more on the concept of collaboration and argues that the relationship of collegiality should be separated from the concept of collaboration. Vangrieken et al. (2015) provide an even more nuanced theoretical framework for professional collaboration and identify factors that influence its emergence. They identify different influencing factors of collaboration that are necessary for collaboration to take place. These factors include personal, organizational and group characteristics. Among the personal

factors mentioned were openness to cooperation, differences in attitudes among teachers, commitment to cooperation, and the presence of conflicts among individual teachers. Among the organisational factors, the school atmosphere, the supportive working environment, the extension of the teachers' activity system in terms of teaching and tools were mentioned. Group characteristics refer to the school community.

The term collaboration is used in the literature in the same way as the term collaboration. I have placed the concept of professional collaboration in a broader dimension. I have located professional collaboration in the context of professional development and professional learning in the national and international literature. Professional development is the set of learning situations and activities that aim to develop pedagogical competences (*Guskey, 2002* cited in *Czető, 2020*). In understanding professional development and learning, the focus is on which pedagogical situations are effective in changing teachers' knowledge and teaching activities (*Guskey, 2002, Darling - Hammond et al., 2017* cited in *Czető, 2020*). From this perspective, it is worth looking at the organizational factors that influence professional collaboration. A teacher's professional community is the school where his/her daily pedagogical activity takes place. The activity of a professional community, the professional collaboration that takes place in the community, is intrinsically linked to the pedagogical community, and external professionals are also involved in the collaboration (*Czető, 2020*). The professional collaboration of teachers is extremely beneficial for the educational institution, as the sharing of subject and pedagogical knowledge with colleagues has an impact on the optimal development of the school, whether spontaneously or in a formal framework (*Gordon-Győri, 2002*).

Skaalvik and Skaalvik (2015) found, based on the results of qualitative research among Norwegian teachers at different ages or life stages, that professional collaboration with colleagues appears among the sources of job satisfaction among teachers who collaborate across grade levels. Teacher attrition and teacher shortages are an international problem, and therefore teachers' job satisfaction deserves more attention (*Toropova et al., 2021*).

After the literature review, the next phase was the preparation of the research methodological steps. To formulate the hypotheses, I developed a category system from the literature. The interpretation of the category system revealed to me the relationship between the theoretical part of my research and the empirical study, directing my attention to the categories that appear most and least frequently in competences. On this basis, my hypotheses were grouped around the themes of assistance, counselling, professional cooperation in educational activities, professional cooperation within the institution and professional

cooperation outside the institution. Due to the complexity of the research question, I found it necessary to formulate sub-hypotheses in addition to the hypotheses, which allowed for a differentiated examination of the research question.

THE METHODOLOGICAL BACKGROUND TO THE RESEARCH

Hypotheses

H1: Beginning and experienced teachers have different opinions about the role of teachers as facilitators and advisors in professional relationships.

H1/1: There is a significant difference in the perception of the importance of the role of facilitators and advisors between novice and experienced teachers within the institution.

H1/2: There is a significant difference in the perception of the importance of the role of facilitator and counsellor between novice and experienced teachers within the institution.

H2 Beginning teachers use the opportunity of professional collaboration in teaching significantly more often than experienced teachers.

H3: Novice and experienced teachers have significantly different opinions about professional collaboration within the institution.

H3/1: There is a significant difference between the opinions of novice and experienced teachers on the importance of professional cooperation within the institution.

H3/2: There is a significant difference between novice and experienced teachers in their perception of the frequency of professional collaboration between teachers within the institution.

H4: The perceptions of novice teachers and experienced teachers on the frequency of professional collaboration outside the institution are similar.

H4/1: Novice and experienced teachers have similar perceptions of the importance of professional collaboration outside the institution.

H4/2: The frequency with which novice and experienced teachers make use of the possibility of cooperation outside the school is similar.

Sampling

Novice and experienced teachers were the sample (N=582). The item numbers of the two subsamples are: novice teachers (N=38) experienced teachers (N=544). This proportion matches the proportion of teachers belonging to each age group (*Hajdú et al.*, 2018).

Beginning teachers have up to five years of professional experience from the beginning of their career. By experienced educators I meant educators with more than five years of professional experience (*Berliner*, 1996 cited in *Falus*, 2004). For the sampling I used the non-random expert sampling procedure (*Csikós*, 2009).

The second phase of Creswell's interpretative sequential model, and the main method of my research, is qualitative analysis. Novice and experienced teachers constituted the sample (N=6). The two subsamples were: novice teacher (N=3) experienced teacher (N=3). Within the theoretical-theoretical strategic sampling, I chose the typical and atypical cases for my main method, which helped me to select the appropriate interviewees to answer the questions in my sub-method, the quantitative study (*Sántha*, 2006a). Based on the mixed methodology, I selected the participants for the qualitative study from the sample of the quantitative research.

Application of the Creswell interpretative sequential model

I chose the combined paradigm as the methodological background for my research (*Creswell*, 2012). The combined paradigm allowed me to examine the professional collaboration between teachers in the focus of my research from multiple perspectives. Within the Creswell model, I chose the interpretive sequential procedure. My sub-method is the

quantitative study, the results of which provide the basis for the main part of the research, my main method, the qualitative study (Sántha, 2015). In the first phase, my quantitative measurement tool was the questionnaire. In the second phase, I collected textual data through a qualitative tool using a photo interview. I was looking for deeper correlations between the opinions that emerged from the results of the quantitative survey. Finally, I concluded my research by drawing conclusions (Sántha, 2015).

RESULTS

Results of quantitative data analysis

Validation of the hypotheses

I continue my research by proving the hypotheses that underpinned the main method of my research, qualitative inquiry.

H1/1: I hypothesized that teachers will have different perceptions of the importance of collegial professional relationships within the institution in terms of the facilitative and advisory role between teachers. I aimed to test the hypothesis with four items. I found significant differences in two of the items, but two of the items did not show a sample-wide difference. **The data showed that my partial hypothesis was only partially confirmed.** In 50% of the cases, there is a significant difference in the perception of the importance of the helping and advisory role of novice and experienced teachers within the institution.

H1/2: There is a significant difference between novice and experienced teachers in the frequency with which they help and advise each other within the institution. The instrument measured the difference for four items. Three items showed a significant difference, one item showed no significant difference between the two subsamples. **For the sub-hypothesis, a significant difference could be detected in 75% of the cases, so my sub-hypothesis was supported.** There is a significant difference in the perception of the frequency of the helping and counselling role between teachers within the institution in the opinion of novice and experienced teachers. There are a total of eight items in my two sub-hypotheses, of which five items show a significant difference, 75% of the time. On this basis, I consider my first hypothesis to be confirmed.

H2: In my research, I wanted to prove that novice teachers make more frequent use of professional collaboration in their teaching activities. I hypothesized that there is a significant difference between the two subsamples. Eight items of the measurement instrument were related to the hypothesis. Of these, a significant difference was found in one case. For the other seven items, no significant difference between the subsamples could be detected. Beginning teachers do not make use of the possibility of professional cooperation more often than experienced teachers. **My second hypothesis was not confirmed, i.e. novice teachers make use of the possibility of professional collaboration in the course of their teaching activities as often as experienced teachers.**

H3/1: Fifteen items of the measurement instrument were related to the hypothesis. I hypothesized a significant difference in teachers' opinions about the importance of professional collaboration within the institution. Two of the fifteen items showed a significant difference. Overall, I found a significant difference in 13.3% of the cases. **Therefore my partial hypothesis was not confirmed.** There was no significant difference between novice and experienced teachers in their perception of the importance of professional collaboration within the institution.

H3/2: Four questions of the measurement instrument were related to the hypothesis. In three cases, a significant difference was found, which confirmed that novice and experienced teachers use professional collaboration differently within the institution. In one case, no significant difference was found between teachers. Overall, a significant difference was found in 75% of the cases. **My partial hypothesis was confirmed.** There is a significant difference in the perception of the frequency of professional collaboration between teachers within the institution between novice and experienced teachers.

There was a significant difference in 5 out of 19 items (importance, frequency), i.e. 25% of the cases. The opinions of novice and experienced teachers on professional cooperation within the institution are similar, despite the fact that there are noticeable differences in the practical implementation. **I have to reject my third hypothesis. There is no significant difference between novice and experienced teachers' views on collaboration within the institution.**

H4/1: In the measurement instrument, five items related to the importance of teachers' professional collaboration outside the institution. After performing a two-sample t-test, no significant difference was found between the two subsamples.

Both novice and experienced teachers were found to have similar perceptions of the importance of professional collaboration outside the institution. **The first sub-hypothesis of**

my fourth hypothesis was supported. Both novice and experienced teachers have similar perceptions of the importance of professional collaboration outside the institution.

H4/2: Nine items of the measurement instrument were related to the hypothesis. For the two subsamples, I measured whether there was a significant difference between novice and experienced teachers in the items on forms of professional collaboration outside the institution. I found a significant difference in two out of nine items. Overall, 77.7% of novice and 77.7% of experienced teachers use professional collaboration outside the institution with similar frequency. **The second sub-hypothesis of the fourth hypothesis was confirmed.** Novice and experienced teachers make use of collaboration outside the school with similar frequency. **The sub-hypotheses of my fourth hypothesis were confirmed, so it is clear that the novice and experienced teachers in the sample have similar views on professional collaboration outside the institution.**

Results of qualitative data analysis

Data analysis by category

The interviewees drew conclusions about the two teachers mostly from their facial expressions, in terms of their emotional state and the collegial relationship between the two teachers. The experienced teacher's facial expressions were associated with the concepts of **helpfulness, critical attitude** and a more **relaxed behaviour**. Critical attitudes came to the fore in the teachers' perceptions of the colleague's pedagogical work, educational and teaching ideas. A helping attitude appeared for both teachers. The interviewees described helping as a positive experience. A more relaxed attitude was displayed by the teacher with more experience, which interviewees felt may reflect confidence and an awareness of her abilities and the ability to respond to problems more easily when she had the right knowledge. **Fear** and anxiety were associated with the young teacher, as well as **dissatisfaction with their work**. The teachers read high levels of anxiety from his facial expressions. Negative feelings were associated with the discussion. The argument between the two teachers was considered to create **tension**, which could have negative outcomes and could later become a barrier to discussion between the two. In terms of **posture, restrained behaviour** was displayed by both teachers. The restrained behaviour was described as an accepted collegial relationship and one teacher perceived that there was no trusting relationship between them. They show an

assumed appropriate pattern of collegial relationship between teachers. For the gaze content item, **indifference** appeared with two code frequencies attributed to the experienced teacher. The interviewees found the environment to be a monotonous photograph with little colour.

I analysed the data according to personal and organisational factors influencing professional collaboration, group characteristics (*Vangrieken et al., 2015*) and systemic factors. I compared the results of the data analysis by category with the TALIS (2008, 2018) study, finding findings relevant to my research in three categories (colleague feedback, classroom visit, conference) (*OECD 2009, 2020*).

The first question of the interview concerned **the benefits of a teacher providing assistance to a colleague and the barriers to providing assistance**. The personal factors influencing professional cooperation are: the teacher providing professional support supports his/her colleague in the area where he/she believes he/she has the appropriate competences. The benefits for the teacher's attitudes include motivation, the teacher becomes the centre of attention, the assistance helps to reduce tension and increase self-confidence, and the development of a friendly relationship between the teacher who needs professional assistance and the colleague whom he or she feels closer to. Among the internal barriers to professional assistance, it should be noted that differences of opinion may make it difficult to provide assistance, and some colleagues may be reluctant to provide professional assistance. A further internal barrier is that teachers perceive assistance as an expectation or a burden. The organisational factors influencing professional cooperation are: the benefits of providing professional assistance are seen in terms of the teacher's knowledge, for example, easier access to knowledge, easier sharing of knowledge and experience. Another set of benefits is that it helps the teacher to integrate into the professional community, it contributes to easier communication with colleagues, it makes the teacher a useful part of the teaching staff and it helps the teacher to integrate into the school community. Professional communication becomes easier. Barriers to professional support for the professional community include lack of praise, lack of professional communication, lack of discussion of problems within the institution, discussion of professional issues in a restricted circle or outside the educational institution, and failure to ask for professional help. A systemic factor affecting professional cooperation could be described as the external constraint of teachers' lack of time.

The feedback on the teacher's work related to the teaching - educational, pedagogical work, performance. According to the TALIS (2008) study, teachers perceive feedback on their work as supportive, with personalised supportive feedback being the most noteworthy (*OECD, 2009*). Teachers thus attribute a positive role to reflections on their work.

The results of my research suggest that teachers' perception of critical reflections as a negative experience is an individual factor influencing professional collaboration. They often push their negative feelings to the background and vent their frustration in communication with other educators. An organisational factor is that they rarely receive positive feedback from their peers and rarely receive feedback from school management. Feedback from peers and school management is mostly constructive, influences the teacher's professional learning and development, promotes professional conversations, increases the teacher's sense of empathy and creates a positive school climate. Negative feedback on the teacher's work was rare, mostly reported only by novice teachers. The reflections are due to problems with the teaching-learning activities and teaching-learning methods. The reflections are not always appropriate. Negative feedback is usually reflected by teachers.

I also found organisational-level factors influencing professional collaboration in relation to sharing their own reflections. It is important for teachers to discuss difficulties in their professional work with colleagues. However, they rarely talk about their problems, and because their opinions may lead to negative feedback, they do not often communicate about teacher difficulties. Practical difficulties are the subject of student or classroom problems, and are discussed by teachers inside or outside the institution. Teachers consider it important to talk about their successes in discussions between themselves, but there is less frequent discussion on this topic and they would like more opportunities to discuss their shared successes. The problem that can arise when talking about recognition is that teachers interpret each other's successes differently. Recognition of each other's work is not emphasised in the pedagogical culture. Reflection on successes is rare among teachers, and discussion of positive experiences needs to be more prominent. For novice teachers, it is important to measure up to experienced colleagues. The group characteristics that influence professional cooperation are: professional communication about difficulties takes place in smaller communities of teachers or with colleagues of the same age group or with teachers of similar views. It is common for a teacher to join a group of colleagues who are communicating about educational difficulties, or to talk about their problems with their family. Appreciation of the teacher's work also emerges as a problem. Teachers feel that they need more recognition for their work. Under systemic factors, teachers mentioned that they have little time to discuss successes within the institution. They consider it important to have more opportunities to do so.

According to the TALIS (2008) study, Hungarian teachers are more satisfied with professional collaboration with their peers than teachers in other countries surveyed, including

in classroom visits (OECD, 2009). In my research, teachers identified several individual factors affecting professional collaboration in relation to classroom visits. Teachers are open to the idea of a **timetable visit**, and a proportion of them have a positive opinion of timetabling. Some teachers have a desire to prove themselves. However, for some colleagues, visiting lessons leads to frustration, and some teachers are reluctant to create tension in others by visiting their colleagues' lessons. There are a number of negative attitudes associated with classroom visits. Negative preconceptions, frustration at the presence of a colleague, and the need to conform to professional standards are all factors that can precede a lesson visit. The most common reasons for negative attitudes are that the lesson visitors observe the teacher or evaluate his/her teaching practice after the lesson. Teachers feel safe within the traditional framework of the lesson. Some colleagues do not require lesson visits, although they believe it is useful to review the learning-teaching process. As an organisational factor, teachers mentioned the impact of classroom visits on learning from each other, on their professional development, on learning positive patterns, on learning new teaching-learning strategies and on modifying elements of necessary pedagogical practice. Classroom visits presuppose good professional relationships between teachers. However, classroom visits are not part of pedagogical practice. According to the teachers, there is a need to increase the number of visits. A group characteristic that influences professional cooperation is that lessons are mostly attended by the school management and trainee teachers, while colleagues hardly ever attend. A systemic factor is that, in their opinion, the education system does not really allow for class attendance within the school's organisational framework.

The next question was about **the impact of feedback after the visit**. The individual factors influencing professional collaboration were that before the lesson visit some teachers were anxious about the evaluation, while others looked forward to the reflection. Teachers set high expectations for themselves, want to perform excellently or set an example for colleagues or teacher candidates. Teachers have higher expectations of the reflections of a teacher teaching the same subject. If the teacher does not consider the reflection to be well-founded, he or she asserts an interest in his or her opinion. Positive feedback has an impact on teachers' well-being and self-efficacy. Reflections can trigger anxiety and feelings of tension in the teacher, and in some cases the non-verbal signs of the evaluators can also affect the teacher. In terms of organisational factors influencing professional collaboration, teachers mentioned that reflections are positive in tone, with criticism rarely voiced. Positive feedback influences teachers' professional learning and development, making their teaching more

effective and correcting their pedagogical work as necessary. During the traineeship, the mentor's reflections contribute to correcting the teaching-learning process.

Teachers also expressed their views on teaching together in the classroom.

According to the teachers, there are some curricula on which a lesson could be built in this way. As an individual factor, they mentioned that they would experience positive patterns of cooperation because of the impact of co-teaching on pupils. Shared learning could lead to a change in attitudes among pupils in the area of collaborative tasks, such as joint homework and projects. According to one interviewee, a good example would be for the mentor to gradually hand over the classroom to the trainee. This would have the positive effect of reducing the teachers' workload by sharing the classroom tasks and allowing them to experience effective collaboration. There is also a lack of shared teaching in the pedagogical culture. In contrast to the possibility of co-teaching, the teacher's views reflect the problems of joint lesson planning and implementation. Teachers consider it more effective to organise lessons in a self-organised way, as they believe that they can implement their own ideas more effectively. Preparing two teachers for the same lesson requires extra work from the teacher. As regards systemic factors, teachers do not believe that the Hungarian education system provides this possibility, and that teachers do not receive a separate hourly rate or a reduction in the number of hours they are paid.

In general, **there are often discussions between teachers after class.** The individual factors influencing professional cooperation are: teachers do not shy away from discussions, teachers discuss professional issues with colleagues who share similar views or who are emotionally closer to them. Communication is good for teachers and reduces tension. Collaboration can be hindered if there is professional jealousy between teachers or if discussing problems can have negative consequences for the teacher. Teachers rarely discuss problems with management because they assume that discussions will have a negative impact on their perception. Organizational factors that influence professional collaboration include: some teachers need to discuss their negative or positive experiences and reflections with their colleagues. After the lesson, they discuss topics related to the teaching aids, special moments in the lesson, reflections in the lesson related to the teaching-learning activity, and private topics not related to the institution. Barriers to professional cooperation include teaching staff who rarely discuss their teaching experiences, do not reflect on each other's problems, or the teacher does not talk to colleagues because they have different views or the teacher is not competent to deal with the problem. Novice teachers tend to be left to solve problems on their own, as they assume that they have to solve problems on their own and therefore do not ask

for help. Teacher workload can also lead to a lack of discussion. The reflections of the experienced teacher influence the pedagogical work of the novice teacher.

The intrinsic motivation for creating **good practice** is that it is a form of reinforcement for the teacher when he or she is doing quality pedagogical work. The teacher considers it important to create value, to do exemplary work for the educational institutions. The individual factors influencing professional collaboration indicate that the conditions for achieving good practice are high creativity, knowledge restructuring, high level of competence (skills, knowledge, attitudes) and commitment to innovation. As regards organisational factors, the lack of positive feedback on the work was mentioned as one of the reasons for lack of interest in good practice. As a group characteristic, the task often becomes an expectation of the institution. Good practice contributes to professional development, develops teachers' competences and helps to shape pupils' personalities and transmit cultural values. However, the systemic factors influencing professional cooperation revealed a number of barriers to the creation of good practice by teachers, such as workload, lack of motivation and lack of knowledge of the concept of good practice. External constraints to the implementation of good practice included the extra work involved (organisation, implementation, documentation), the low prestige of the exercise and the fact that the teacher is not rewarded for the extra work.

The **professional debate** has an impact on teachers' opinions. I summarised the individual factors as follows: teachers consider it important to express their reflections, they speak out on controversial issues when given the opportunity. Within the institution, teachers seldom confront their arguments, there is low acceptance of debate, they consider it important to increase the frequency of debate and to learn the culture of debate in in-service training. Among the limitations of debate, it is worth mentioning that teachers do not always consider professional debate necessary in problematic cases. The lack of a culture of debate is also a problem. In general, teachers are compromise seekers, avoiding contentious situations or mediating between the two sides. The tone of the debate has a negative impact on the relationship between teachers and negative attitudes are associated with the concept of debate. Among the attitudinal limitations of debate, it is worth mentioning that it generates tension and has an emotional content. Organizational factors lead teachers to rethink their actions and views after the debate. Professional communication, appropriate tone of voice and the development of a culture of debate play an important role in the debate. Within the institution, the topics of debate are mostly related to the education of pupils. Some teachers receive positive feedback after speaking, and some express their views in larger forums. In general,

teachers rarely engage in professional debate. Among the systemic factors mentioned, there is little opportunity for debate within the institutional framework. Time constraints are also an important factor, and there is a lack of professional debate among teachers, as the sharing of reflections among themselves is also rare.

Interviewees also spoke about the usefulness of conferences on pedagogical issues.

According to the TALIS (2018) study, about one third of school leaders prefer CPD that supports professional collaboration (OECD, 2020). However, according to the TALIS (2008) study, Hungarian teachers in the study prefer CPD on professional issues, and professional collaboration is not a preferred CPD (OECD, 2009). Pedagogical conferences are attended by a narrow group of teachers. Among the constraints influencing individual factors, it is worth mentioning that teachers do not have a coherent idea of the usefulness of conferences or that the topic is not part of everyday pedagogical discourse. The organisational factors are: the usefulness for teachers of a conference in presenting new pedagogical research directions, in promoting the effectiveness of pedagogical practice, in supporting the development of theoretical knowledge, for example in the field of learner-centred teaching, or in helping teachers to explore the causal links between subject matter. A further benefit of conferences is that they provide an opportunity to develop professional contacts through participation. Among the conditions for attending the conference, they mentioned the presentations on topics of current interest, the pleasant environment, the presence of well-known pedagogical personalities, the presentations on the subject of the teacher and the presentation of topics closely related to their pedagogical practice. The importance of online conferences was also highlighted by interviewees. Teachers would find it useful to have forums where they could discuss their current problems. The group characteristics influencing professional collaboration were summarised as follows: a certain proportion of teachers attended conferences on secondment from the school, which did not always coincide with the teacher's interests. Among the obstacles to attending conferences, they mentioned the difficulty of planning a conference visit, and the fact that they only get permission from the school management in justified cases. In general, the teacher has to bear the financial costs of participation. Teachers perceive that by attending the conference they are also falling behind in their school duties. Similar results emerge from the TALIS (2008) study (OECD, 2009).

Individual factors influencing **professional cooperation between teachers outside the institution are**: few teachers keep in touch with teachers from higher education institutions, as they perceive themselves as lacking the necessary professional competences and therefore become frustrated by the contact, and the involvement of educational support

professionals is seen as important when the problem goes beyond the teacher's competences. As an organisational factor, interviewees reported that teachers generally keep in touch with teachers from other institutions. They consider professional cooperation with other institutions as important, as they learn about the reflections of teachers from other institutions, and it also helps their own institution's quality assurance to receive positive examples from outside. Teachers have little information about professional services and specialised pedagogical services. They consider that closer cooperation, regular counselling and professional support for teachers are important, mainly to solve different problems of pupils and to help them to solve problems more effectively.

SUMMARY, CONCLUSIONS, PROPOSALS

In my thesis I examined teachers' perceptions of professional collaboration in the light of teacher competences. In the course of my work as a teacher, I have found that professional collaboration between teachers is not at an adequate level, despite the fact that it is part of the teacher competences in the career model. The exploration of international literature has also highlighted the crucial role of professional collaboration in the teaching profession, the importance of which is increasingly valued by future teachers. This problem has led me to explore the issue in more depth.

The methodological background of my research was based on the Creswell model, including the sequential design procedure. Based on the research, my study was a two-phase study, in which my sub-method was the quantitative method, using a self-developed questionnaire as an instrument. I chose qualitative research methodology as my main method, for which I used a photo interview. Both methods separately met the criteria of validity and reliability, which I ensured by using different triangulation typologies. The Creswell model is well suited to educational research as it combines an excellent combination of quantitative and qualitative methodologies. It proved to be appropriate for my research, as it brought me closer to the factors that help and hinder professional collaboration between teachers by exploring different aspects of their opinions. The photo interview is a less used method in research exploring teachers' opinions. The visual elements helped to make explicit the perceptions about professional collaboration. Content analysis of the interview transcripts was carried out using Mayring's model, which is scarcely used in domestic pedagogical research (*Mayring, 2015*). I conducted my research using MAXQDA software, which allows for quick

and efficient research work due to its user-friendly interface. Throughout my thesis, I endeavoured to maintain focus, as the concepts included in the description of the standards of teacher competences were the focus of the research.

I have summarised the content of my research as follows: no significant differences were found between novice and experienced teachers in the use of professional collaboration between teachers. In general, experienced teachers perceive professional collaboration as more important and use it more often, and the concept of professional collaboration is more coherent in their viewpoints. However, in relation to teaching, novice teachers consider professional collaboration more important and use it more often. They collaborate more often with their mentor teachers during the traineeship and are more likely to turn to their colleagues for professional help after the traineeship has ended, although there was also a view among the novice teacher interviewees that they need to solve the pedagogical problem independently as this is expected by their colleagues. Professional collaboration is a competence in the teacher career model and is increasingly emphasised in education policy documents. Teachers are also facing increasingly complex problems in their work, which is why there is a need for a greater focus on competence in the initial, induction and in-service phases of the teacher career model.

In my research, I investigated the positive and inhibiting factors of teacher-to-teacher support, as support is an important part of teachers' perceptions of professional collaboration. I found that the most inhibiting factor for teachers was lack of time, due to administrative tasks and high hours, they have less time to help and support each other's pedagogical practice, despite the fact that they admit that professional assistance increases their professional motivation, self-confidence, helps them to integrate into the school community, among other things.

The research on professional feedback on teachers' work revealed that, despite teachers' need for it, they rarely receive negative or positive feedback from their colleagues and school management. The feedback received is generally positive, which constructively supports teachers' professional development and helps to create a positive school climate.

Teachers consider their reflections on their pedagogical difficulties as well as their successes to be important. The results of the research show that teachers rarely discuss their teaching and learning problems and achievements with their colleagues. They tend to discuss their problems with colleagues who share similar views or with teachers of the same age group.

In the area of professional cooperation in educational activities, teachers rarely attend each other's lessons, which are limited to mentor/mentee lessons and lessons attended by the school management a few times a year. This is less present in teaching practice, for reasons that include not wanting to embarrass their colleagues and frustration when other teachers observe their lessons. More often, they do not attend their colleagues' lessons due to lack of time. Post-lesson reflections have a positive impact on the teacher's teaching-learning activities and their revision, and the research has shown that post-lesson feedback has a positive impact on the teacher's well-being and professional development.

With regard to the use of common lessons, the research showed that teachers have little experience of this practice and that some teachers have already used it. Shared learning is not embedded in the pedagogical culture and the research showed that the majority of teachers prefer to teach in a traditional setting, as they are better able to implement their ideas in the classroom.

My research on professional debate revealed that teachers within the institution are most likely to initiate debate on professional issues related to the education of students. Basically, they avoid professional debate because they assume that it has a negative impact on the relationship between teachers and generates tension.

Novice teachers lack coherent knowledge of good practice in schools and get involved as necessary to help their colleagues in their pedagogical work. Teachers consider good practice to be useful for their professional development, it has an impact on the development of teachers' competences, it deepens professional cooperation between teachers. Nevertheless, teachers reported difficulties because of the extra work involved and the low positive feedback from colleagues and school management. The task becomes an expectation of the school after a while.

Professional cooperation in attending conferences is reflected in teachers' opinions, but not emphasised. Nevertheless, teachers identified a number of benefits of collaboration, such as the inclusion of positive pedagogical models and the opportunity to learn from other teachers' reflections.

In the case of professional cooperation outside the institution, teachers consider the involvement of professional organisations supporting pedagogical work as important and cooperate mostly when the problem goes beyond their professional competence. Experienced teachers have more experience of professional cooperation outside the institution, but it is not embedded in their knowledge system, so they have little information about the organisations and no clear information about how they work. I have formulated suggestions for further

possibilities for research for practitioners in the field of teacher research, I have detailed my suggestions for colleagues in teacher education and continuing education.

I am convinced that the complex issue of professional cooperation still offers many research opportunities for researchers in the field of education. Professional cooperation is an inescapable and increasingly important element of effective pedagogical work and contributes significantly to the lifelong professional development of teachers.

References

- Boylan, M. (2018). Enabling adaptive system leadership: Teachers leading professional development. *Educational management administration & leadership*, **1**. 86-106.
- Creswell, J. (2012): *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Pearson Education, Upper Saddle River, NJ.
- Czető Krisztina (2020): Eredményesség és szakmai fejlődés. A tanári eredményesség modelljei és az eredményes szakmai fejlődést és tanulást támogató tanulási helyzetek megközelítései. *Neveléstudomány*, **1**. 83-97.
- Csíkos Csaba (2009): *Mintavétel a kvantitatív pedagógiai kutatásban*. Gondolat Kiadó, Budapest.
- Falus Iván (2004): Pedagógussá válás folyamata. *Pedagógusképzés*, **3**. 359 – 374.
- Gordon - Győri János (2002): A tanárképzés és tanártovábbképzés japán modellje. *Magyar Pedagógia*, **4**. 491 – 515.
- Hajdú Tamás, Herman Zoltán, Horn Dániel és Varga Júlia (2018): A közoktatás indikátorrendszere 2017. MTA Közgazdaság- és Regionális Tudományi Kutatóközpont Közgazdaság-tudományi Intézet, Budapest.
- Hargreaves, A. (2000): Four ages of professionalism and professional learning. *Teachers and teaching*, **2**. 151-182.
- Kelchtermans G. (2006): Teacher collaboration and collegiality as workplace conditions. *Zeitschrift Für Pädagogik*, **2**. 220–237.
- Lénárd Sándor, Kovács Ivett, Tóth-Pjeczka Kata és Urbán Krisztián (2020): A pedagógusok folyamatos szakmai fejlődését befolyásoló szervezeti tényezők. *Neveléstudomány*, **1**. 46-61.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers college record*, **4**. 509-536.

- Mayring, Ph. (2015): *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. Beltz Verlag, Weinheim und Basel.
- Mrázik Julianna (2021): A kollegiális reflexió. In: Juhász Erika, Kozma Tamás és Tóth Péter (szerk.): *Társadalmi innováció és tanulás a digitális korban. Héra Évkönyvek*. Debreceni Egyetemi Kiadó, Debrecen – Budapest.
- OECD (2009) TALIS 2008: *Creating Effective Teaching and Learning Environments: First Results from TALIS*. Letöltés dátuma: 2020.05.17. Forrás: <http://www.oecd.org/education/school/43023606.pdf>
- OECD (2017): Education at a Glance. OECD Indicators. Letöltés dátuma: 2020. február 15. Forrás https://www.oecd-ilibrary.org/education/education-at-a-glance-2017_eag-2017-en
- OECD (2020) TALIS 2018 results (Volume II): Teachers and school leaders as valued professionals. *TALIS, OECD Publishing*, Paris. Letöltés dátuma: 2020.04.12. Forrás: <https://doi.org/10.1787/19cf08df-en>
- Sántha Kálmán (2015): *Trianguláció a pedagógiai kutatásban*. Eötvös József Könyvkiadó, Budapest.
- Sántha Kálmán (2006a): *A mintavétel a kvalitatív pedagógiai kutatásban*. Gondolat Kiadó, Budapest.
- Scoular, C., Duckworth, D., Heard, J., és Ramalingam, D. (2020). Collaboration: Definition and structure. *Australian Council for Educational Research*. Letöltés dátuma: 2020.08.01. Forrás: https://research.acer.edu.au/ar_misc/39
- Skaalvik, E. M., és Skaalvik, S. (2015): Job Satisfaction, Stress and Coping Strategies in the Teaching Profession-What Do Teachers Say? *International education studies*, **3**. 181-192.
- Szivák Judit (1999): A kezdő pedagógus. *Iskolakultúra*, **4**, 3-13.
- Toropova, A., Myrberg E. és Johansson S. (2021): Teacher job satisfaction: the importance of school working conditions and teacher characteristics. *Education Review*, **1**. 71-97.
- Vangrieken, K., Dochy, F., Raes, E., és Kyndt, E. (2015) Teacher collaboration: a systematic review. *Educational Research Review*, 17-40.
- Vangrieken K., Chloé M., Tlalit P., és Kyndt E. (2017): Teacher communities as a context for professional development: A systematic review. *Teaching and Teacher Education*, **61**. 47–59.