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The factors determining the learning and continuous professional development of mentors

Thesis of the PhD dissertation

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The context of the research

In the fast-changing postmodern knowledge-based societies of the 21st century, the effectiveness of the school (system) and student learning, and in connection with that, the role of educators are becoming increasingly important: teachers do matter, and educators' knowledge is highly valued (Coolahan, 2007; OECD, 1996; UNESCO, 1997). All of this has directed attention to teacher training and in-service training, to the continuous learning and professional development of teachers throughout their professional lives and to its effectiveness both in Hungary and internationally. One of the most important trends in teacher education since the turn of the millennium has been the shift towards practice-oriented training programs (European Commission, 2010; Rapos & Kopp, 2015). Based on the data in the literature, all of this is of fundamental importance in establishing and supporting the successful career start and early career development of young teachers. In these processes, mentors are key players, who, as experienced and excellent educators, support teacher educators and candidates as well as educators entering the field in the initial stages of gaining work experience. However, in order to perform their mentoring tasks effectively, mentors need to conduct mentoring studies, as pedagogical practice does not and cannot prepare them adequately, or in all respects.

The importance of the study

The international and domestic literature on mentoring shows that the use of properly trained and prepared mentors is useful both from the individual point of view of the beginning teacher and at the level of the public education system as a whole. However, neither teacher training nor everyday school pedagogical practice prepares for mentoring, so mentors need to prepare for it (Krull, 2004; Fransson & Gustafsson, 2008; Wood & Stanulis, 2009; M. Nádasi, 2010; Adhikari, 2016; Kotschy et al., 2016). In terms of mentoring, the literature emphasizes the support of the learning of beginning teachers, with a focus on the learning of the mentees (Falus, 2004, 2010a; Krull, 2004; European Commission, 2010; Korthagen, 2010; M. Nádasi et al., 2010-11, Stéger, 2010; AIR, 2015; Fáyné et al., 2015; Kotschy et al., 2016). Much less attention has been paid to the support of mentors, and to the exploration of their learning paths on the professional way that leads to becoming a mentor through mentoring studies and internships. The few research studies in this area has focused on the formal learning of mentors and on mentor training programs, while the informal and non-formal learning of mentors has hardly been studied at all, so we cannot yet assess the importance of these forms of learning in the professional development of mentors. To get to know the mentoring activities of mentors,

we need to explore the system-level, organizational and individual factors which determine the professional development and learning of mentors (supporting their learning), and as a result, the evolution of their mentoring identities. Although the learning of mentors may seem less significant, it is in fact of fundamental importance in the educational policy and scholarly discourse that has been instrumental in the international arena since the turn of the millennium.

In my dissertation I examine the professional development and learning of mentors and the systemic, organizational and individual-personal factors that influence these. In doing so, I make a special effort to examine the role of formal (that in the framework of professional examination of mentoring, and the interpretation of the mentoring role mediated by it) and related informal and non-formal learning paths in the continuous professional development of mentors.

My research points out what knowledge elements in-service training wants to equip mentoring students with, and what are the elements that they acquire in other ways or during their mentoring practice. The patterns that can be recognized this way can help the development of mentor training programs and the learning and continuous support of mentors' individual learning paths. In this way they can contribute to mentors' learning and work, thus making support for career starters more effective. The aim of the research is also to understand the current development of the interpretation of the mentoring role in Hungary: what kind of mentoring is mediated by the trainers, how this role interpretation develops in the organizational context and in the pedagogical practice of mentors and in their individual-personal role interpretation.

The research is filling a gap, and is fundamental in the brief time that has passed since the introduction of mentoring, because:

- (1) only in this moment is it possible to get to know the role interpretation of mentors in Hungarian public education mentoring and the system-level, organizational and individual-personal factors affecting it, and this knowledge can serve as a basis for later longitudinal studies;
- (2) the transformation of teacher education has led to a significant appreciation of the role of mentors (the main actor of the one-year individual internship is the mentor!), so pedagogical research must place great emphasis on the activities and role interpretation of mentors;

- (3) the views of mentors on professional development and learning and their professional careers can serve as a model for both mentored students and trainees, thus they can greatly influence the professional paths of future teachers;
- (4) so far no research has been carried out in Hungary that would have undertaken the analysis of the professional life of mentors and their informal and non-formal learning, and in the course of my research I did not discover any such in the international space either;
- (5) the applications of master educators provide an opportunity for large-scale researches that can provide important edifications at the national and international level regarding the learning paths, role interpretation and development of the professional identity of the mentors.

Analytical exploration of the mentoring literature

In understanding the phenomenon of mentoring in the dissertation, I follow the logic of well-known human ecological models (see, e.g., Sachs, 2007; Creemers & Kyriakides, 2015; Rapos et al., 2020). Thus, the analytical literature describing the process of mentoring (and as a result, the learning of mentors) is processed, presented and interpreted in relation to the systemic (international and national), organizational and individual-personal levels that determine it. Examining these three distinct, but constantly interacting levels provides an opportunity to learn about the role of each level, actor and factor in mentoring as well as in learning within the mentoring framework.

Capturing, learning about and presenting mentoring (as a phenomenon and a learning process - including the learning of mentors) is a difficult task because mentoring is a complex multi-element system that is developed at each level (system, organizational and individual-personal level), and factors at all levels, as well as actors (public and higher education institutions, etc.) with their own specific set of tools. These systems, actors at the organizational and individual levels are themselves subsystems, that interact continuously.

Each level affects mentoring and the learning of mentees and mentors differently: while the system level is reponsible for setting and regulating the framework for mentoring, the organizational level for providing the learning environment for mentoring, and the individual-personal level (mentor and mentee) for filling the framework with actual content. The role of each level, actor and factor is differentiated, and also differs according to which stage of starting the career is affected by the mentoring. The roles and tasks of each level in mentoring are presented in Table 1, which also summarizes the results of my research on the topic.

System-level 1.	Determining the purpose of mentoring, and in accordance with		
International (e.g. EU)	that, the scope of mentees and their learning needs (What		
	learning needs does mentoring serve?)		
	Policy development, support		
	Research		
	Support		
System-level 2.	Determining the purpose of mentoring, and in accordance with		
National level ¹	that, the scope of mentees and their learning needs (What		
Subsystems:	learning needs does mentoring serve?)		
Public Education	The regulation of mentoring frameworks follows from the above:		
Higher Education /	(e.g. is it mandatory?), and its content regulation: the scope, task,		
Teacher training	role of the actors (steak-holders), the areas of mentoring, time		
(creating a legal	frames (duration and intensity), results		
environment for	Legal regulation of mentor training adapted to the above (if any)		
mentoring)	(actors, tasks, etc.)		
	Encouraging res	search	
Organizational level	Public	Providing mentoring as a learning environment	
(responsible for all tasks	educational	(these are closely related to the institution's own	
delegated to it by the	institution	goal system, organizational culture, structure,	
system)		preparation of the organization for mentoring,	
		etc.)	
		Specific organizational tasks: appointment of	
		mentors, time frames, provision of venues,	
		support, organization, monitoring, evaluation	
		support, organization, monitoring, evaluation	
	Higher	If the teacher training (higher education)	
	education	institution is involved: definition of tasks,	
	institution	goals, provision of professionals, cooperation,	
	(teacher and	liaison, monitoring, evaluation, etc. ²	
	mentor	Dianning organizing and conducting greater	
	training)	Planning, organizing and conducting mentor training	
		uannig	

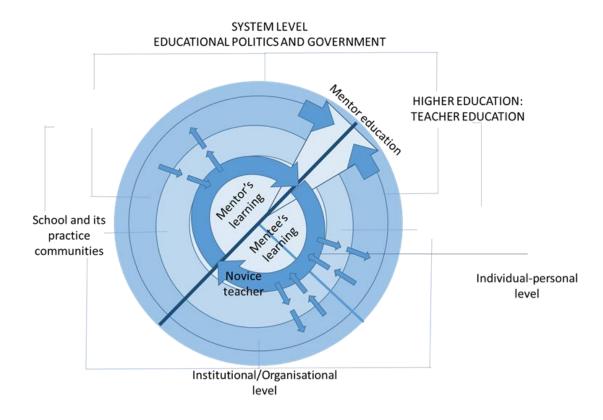
¹ The national level can also be seen as a subsystem of the international level (for example, in the case of the European Union and its Member States).

² Primarily for teacher candidates and students.

Individual-	It is influenced by the readiness of the mentor and the mentee as
personal level	an input
	Its process is characterized by its own, individually set (but
	aligned with the general / higher levels) goals, the learning
	activities to achieve them (e.g. class visits, classes, discussions,
	reflective, planning, organizational tasks, research, etc.), their
	evaluation and documentation

1. Table: The role of the levels of the educational system in mentoring and learning in the framework of mentoring (Own editing)

The essence of mentoring is the individual-personal level support and learning that takes place within its framework, the main actors of which are the mentees and the mentors. The learning of the mentee and the mentor is partly individual and partly joint knowledge creation, which serves the development of both parties' teaching (as well as the mentor's mentoring), but can also affect the learning of the individual actors at the organizational level (and possibly at the systemic level).



1. Figure: Systems, factors and actors that determine mentoring and mentor learning

Mentoring practices in the international arena are implemented in different induction programs at many points. In general, however, mentoring...

- ...is a special (also the most common, and often the only) form of induction, its "main strategy" (Norman & Feiman-Nemser, 2005), which...
- ...with the help of experienced (and often qualified) teachers as mentors, provides professional, professional social and emotional / personal support to mentees in the school as the real field of pedagogical work (mostly teachers at an early stage of their career development: teacher students or trainees)...
- ...in order to ensure and promote their professional learning through different types and methods of teacher learning, thereby developing their teacher competencies (Ingersoll & Smith, 2004, 2011; Wood & Stanulis, 2009; European Commission, 2010, 2014; Long et al., 2012; Adhikari, 2016; Niklasson, 2018, etc.).

Mentoring models bring personal/emotional and professional/professional-social support to the foreground. Within the latter approach, trainee competency-based and reflective models represent different directions. Individual mentoring models rarely appear quite clearly, their characteristic features are mostly mixed with each other. "Each – of the different models of mentoring – with its roots in major conceptions of learning, considers the goals of mentoring, the role of mentors, mentors' expertise and mentor training." (European Commission, 2010, p. 42.), however, as they are linked to different theories and visions of professional learning and development, its aspects are emphasized in different ways and to different degrees.

The Handbook of Snoek et al. (European Commission, 2010) had the greatest impact on the European interpretation and development – in many countries even creation – of mentoring, which

- emphasizes the professional, professional socialization and personal-emotional aspects of mentoring,
- and captures the induction process in a mutually reinforcing unit of mentoring, expert, peer support, and reflective–self-reflective processes.

Despite the common theoretical foundations, the practice(s) of mentoring, including the expectations of mentors in their knowledge and learning, are influenced by several factors in European countries. The practice and the related expectations have an impact on the formal

(mentor training) and informal learning, professional development, gaining experience, role interpretation, and the development of their mentoring identity.

Individual-personal level of learning and professional development of mentors³

The system- and organizational level frameworks outlined above are of great importance for the success of mentoring, but the decisive factors are the learning and cooperation of the mentor and the mentee on an individual-personal level. In my study, focusing on the development of mentors, I emphasize the development of cognitive factors, but I also consider the non-cognitive factors of learning, and I link mentoring as a quantitative change with identity development as a qualitative change. Mentor learning is teacher learning, so it is characterized by the general (systemic, organizational and individual level) characteristics of teacher learning, especially in that it aims to increase the effectiveness of pedagogical work, to support student learning, but can only be truly effective if it is associated with stable positive reinforcement of (teacher and mentoring) identity (cf. Day, 2011 - quoted by Halász, 2015).

I interpret the learning of mentors as basically teacher learning and as a special direction thereof. In my approach, based on the studied literature, I consider as a starting point (1) modern learning theory approaches (constructivist-socioconstructivist, experiential / situational learning theories and models - Lave & Wenger, 1991; Wenger, 1998; Vygotsky, 2000; Villasim, 2002; Nahalka, 2002; ; Lipton & Oakes, 2008; Desimon, 2009; Evans, 2014; Rapos & Kopp, 2015). I see mentor learning as a context-embedded process, an individual / personal professional learning and development (Opfer & Pedder, 2011; Desimon, 2009; Kopp, 2020; Lénárd et al., 2020; Rapos, 2016; Rapos et al., 2020). I attribute great importance to formal learning paths in mentor learning, but I consider it important to recognize the importance of non-formal and informal learning (Clarke & Hollingsworth, 2002; Evans, 2014; Rapos et al., 2020). In my work exploring the literature, I focus on the views that are of great importance in the learning of mentors, as well as reflectivity (Kimmel, 2006, 2007; Szivák, 2014), selfregulation (Molnár, 2002), and on the role of workplace situation, as well as formal, informal and non-formal elements and factors (Halász, 2008; Kyndt, 2016). (2) I interpret the professional development and learning of mentors as essentially a change of identity (Bullough, 2005; Swennen, 2010).

³ The studies, that we conducted in the framework of MOTEL research under the guidance of Nóra Rapos (Rapos et al., 2019, 2020), were of great help to me in writing this chapter. I would like to take this opportunity to thank my research leader and co-authors.

To capture individual-personal learning in mentoring (as discussed above), I use two models: (1) Malderez's (1996) iceberg diagram (source: Malderez & Bodóczky, 1999) and (2) Biggs' (1993) higher education learning model (adapted for teacher training by Rapos et al. (2015, pp. 225-6)), which I expanded according to the specialties of learning in the mentoring process.

The deep layers of the professional personality (views, beliefs, professional identity, mission, and vocation) determine the competencies of educators (and through that their behavior, actions, activities), states Falus (2010b, 2011), based on the onion model of Korthagen (2004). The development of each of these levels may be aimed at the learning of teachers (in this case mentors), as it has an impact on the development of the other levels. This development is a complex process, that is intentionally embodied in a simplified form in competencies in the case of learning objectives, but is in fact aimed at the development of the whole personality, ultimately the identity (Bullough, 2005, cf. Nagy, 2009). In my dissertation, I aim to get to know this path: just as I moved from larger to smaller (international, national, and then organizational) systems while exploring the literature, and at the end I got to know the individual-personal aspects of mentor learning, I would like to do the same in the empirical research in understanding the learning paths of mentors, where I essentially move from the system-level definition of mentoring competencies to interpreting competencies at the level of training institutions (as organizations), and then at the level of mentors as learners. At this individual-personal level, I intend to get an idea of what learning paths the mentors take, how they develop their competencies during their professional-personal life path, and how they build their mentoring identity.

The aim of the research

My doctoral research aims at the learning of mentors and its goal is to describe the role interpretations and individual-personal professional development models of mentors embedded in the system and organizational environment (accordingly, the research questions are interpreted at these three levels, systemic, organizational and individual). Accordingly, the research consists of three distinct, but closely intertwined parts:

1. Getting to know the system of expectations related to the task and role system of the mentors and the related knowledge, based on the relevant domestic and international literature. (This also helps me understand the concept of the mentor even more thoroughly.)

- 2. A review and analysis of Hungarian mentor training programs as a formal framework for mentor learning.
- 3. To get to know the learning paths of mentors based on the analysis of the narratives of Hungarian master profile teachers. In doing so, I make a special effort to examine the role of both formal and informal and non-formal learning pathways in the continuous professional development of mentors.

The table below provides an overview of the research, with a detailed presentation of the research units within the framework of three consecutive research reports.

The research Learning and continuous professional development of mentors		
1 st research unit		
Aim of research	To get acquainted with the system of expectations related to the knowledge of mentors based on relevant domestic and international literature. Defining the concept of mentor. Examining the professionalisation of the mentoring profession in order to create a context for examining the formal and non-formal learning of mentors.	
Research question	 Who do the resources consider to be mentors? What knowledge does the system expect from the mentor? What role interpretation does the system convey to mentors? What are the implications of the system-level expectations and defined frameworks on mentoring as a specific area of the teaching profession, and for the development of the identity of mentors as professionals with specific responsibilities and knowledge? 	
Research methods	Document analysis	
Data sources	 Krull (2004): Kezdő tanárok és tanárjelöltek gyakorlatának támogatása: a mentorok szerepe, kiválasztása és képzése European Commission (2010): Developing coherent and systemwide induction programmes for beginning teachers: a handbook for policymakers European Commission (2013): Supporting Teacher Educators for better learning outcomes European Commission (2014): Initial teacher education in Europe: an overview of policy issues Domestic literature: Ajánlás (2009): Ajánlás a tanári mesterszak összefüggő szakmai gyakorlati félévének tartalmára és Javaslatok (2009): Javaslatok a tanárképzés utolsó, gyakorlati félévével kapcsolatos szakmai és gyakorlati kérdésekről M. Nádasi et al. (2010-2011): A mentorfelkészítés rendszere, próbája, a mentorképzés szakterületi előkészítése I-III. 	

	• Molnár et al. (2015): A mentortanárképzés tartalmi továbbfejlesztése, gyakorlati vonulatának megtervezése és bevezetése. Koncepció		
	• Kotschy et al. (2016): Mentorok tevékenységének támogatása. Segédanyag a köznevelési intézményekben dolgozó		
	 pedagógusgyakornokok mentorainak Útmutató (2016/2019): A mesterpedagógusok minősítésének 		
	útmutatója		
2 nd research unit			
Aim of research	To point out how uniform and / or different the formal training system		
	of mentor training is through the content analysis of the Hungarian mentor training. To point out the reasons for the peculiarities, and their expected consequences in the professional learning of mentors.		
Research question	What learning outcomes does mentoring in Hungary formulate,		
	what knowledge contents does it convey to mentors as students?		
	• What mentoring role interpretation can be identified in the		
	Hungarian mentoring system and the related role interpretations?		
Research methods	Document analysis		
	Descriptive statistical analysis		
Data sources	• FRI database – course descriptions		
	 FELVI database – training program descriptions 		
	• Institutional documents of the training program published on the		
	website of the institutions (information sheets, training networks, course		
	descriptions)		
3 rd research unit			
Aim of research	Getting to know the learning paths of mentors based on the analysis of		
	the narratives of master teachers with a Hungarian mentor profile. In		
	doing so, I make a special effort to examine the role of both formal,		
	informal and non-formal learning paths in the continuous professional		
D 1 '	development of mentors.		
Research question	• What learning paths and what typical patterns thereof can be		
	identified in Hungary among mentor profile master educators based on		
Research methods	the testimony of their narratives?		
Research methods	Narrative analysis Descriptive and mathematical statistical analysis		
Data sources	Documents submitted by master pedagogue aspirants (from MEK		
Data sources	research)		
	Professional career (biography)		
	 General plan (general plan for the implementation of the master's 		
	program)		
	• Sub-plan (detailed plan for the implementation of the master's		
	program in the first two years of the program)		
	2. Table: Pavious of the research		

2. Table: Review of the research

The research, whose theoretical framework is provided by grounded theory (Glaser & Strauss, 1967; Gelencsér, 2003; Charmaz, 2008; Kucsera, 2008; Mitev, 2012; Sallay, 2015; Corbin & Strauss, 2015), basically follows a qualitative methodology and uses qualitative

methods (document analysis, narrative analysis - Golnhofer & Szabolcs, 2005; Mezőfi, 2015; Szabolcs, 2001; 2016) (Falus, 2004b; Szabolcs, 2001; Tashakkori & Teddlie, 2010). However, the coding of the data thus obtained provides an opportunity to quantify the data and to analyze them by descriptive statistical methods. This is undoubtedly a quantitative approximation, which, however, would be a mistake to abandon due to the size of the sample (number of items of narratives collected under the MEK) and the conclusions that can be drawn from the analysis. In this way, my research can be classified as research using the "mixed method".

Presentation of research results along the research questions

1st research unit:

Who do the resources consider to be mentors?

In the international space and in the system of Hungarian public education (that is closely fitting in many respects), mentors are the actors of teacher education who support the development of student teachers, teacher candidates, (and) beginning teachers / trainees in their professional and personal spheres as experienced and excellent teachers (1) in the initial teacher education during teaching internships, and then (2) in the subsequent internship at school as in a real-world workplace as well as in the field of their professional socialization, and (3) help the professional development of their experienced colleagues and institutional bodies. In the rest of the dissertation, I interpret the concept of mentor in accordance with this definition, building on this to analyze the learning and professional development of mentors.

What knowledge does the system expect from the mentor?

The literature clearly favors the special training of mentors. Mention of some mentoring tasks and knowledge elements is general, while others may be related to resources generated internationally, or domestically at a particular time or in a professional community.

According to the literature, in terms of the knowledge, learning and preparation level of mentors, it is beyond dispute, that to perform their tasks effectively, mentors need

- experience gained in institutional pedagogical practice,
- an institutional background to be able to work and obtain this experience,
- as well as a a certain level of professional mastery.

The Hungarian literature tries to capture the mentoring competencies in a more detailed and concrete form, the content elements and wording of which can be closely related to the pedagogical competencies.

Domestic sources interpret the development of pedagogical competencies above all as a process and activity that helps and supports professional development and learning and / or professional socialization. Personal support is less emphasized than that, and basically aims at the formation of the professional identity of the beginning teacher (Molnár et al., 2015; Kotschy et al., 2016). This trend does not coincide with trends in the international literature (see, e.g., Ricci & Zetlin, 2013; Liu, 2014; Adhikari, 2016). Thus, while Hungarian mentors should primarily develop their competencies to support professional development (especially methodology, planning, evaluation related to lesson management and processes, including reflectivity, which is strongly present in Hungary), more emphasis is placed on communication, cooperation and autonomy in the international arena.

What role analysis does the system convey to mentors?

Recent international sources argue for the recognition of the role of mentors as teacher educators, and for the development of their identity, while in domestic sources this direction has not appeared, although it is not without precedent (Falus & Estefánné, 2015).

What are the implications of system-level expectations and specific frameworks for mentoring as a specific area of the teaching profession, and for the evolution of the identity of mentors as professionals with corresponding responsibilities and knowledge?

In Hungary (1) the transformation of mentors into a special professional group among teachers, and (2) the transformation of the mentor into its own profession (although it will probably never be a full-fledged profession) has already begun. There are several signs of the professionalization of the mentoring function, such as the development of professionalization: the separation of the profession / function, and the criteria for / enabling the separation of the profession, as well as the formation and recording of training contents and competencies.

The results of the research suggest that learning goals that strongly characterize supportive occupations should be given a prominent role in the learning of mentors, but that they appear less or not at all in the learning of teachers. Outstanding among these are the commitment to the adult learner, the client-centered approach, the horizontal learning, and the

acceptance of a peer-to-peer relationship, which also means accepting that the mentor does not directly teach the mentee but supports his or her learning.

2nd research unit

What learning outcomes does mentoring in Hungary formulate, what knowledge contents does it convey to mentors as students?

Standardization can be observed at the level of both job descriptions and training programs. The professional descriptions are characterized by the formulation of learner- and learning-centered learning interpretation, and of training output requirements, as well as the existence of two different directions: leadership-human resource management and mentoring-centered model.

Common elements of the training programs: support for the development of teacher competencies, theory / practice of mentoring, methodology of mentoring and evaluation / feedback. The focus of the training programs is on the acquisition of knowledge and experience in mentoring by mentor students, the training is strongly practice-oriented, and the training contents in each institution have significantly different credit values.

What mentoring role interpretation can be identified in the Hungarian mentoring system and the related role interpretations?

The interpretations of the mediated mentoring role are linked to the professional development / trainee – competency-based model of the mentor at the level of both job descriptions and training programs, complemented by elements of the reflective and humanistic / emotional development model. Conveyes mentoring identities are more of an expert than of a teacher educator.

3rd research unit

What learning paths and what typical patterns thereof can be identified in Hungary among mentor profile master educators, based on the testimony of their narratives?

Stage 1 (quantitative): Learning and professional development of mentor teachers based on secondary analysis of MEK research data

Based on the comparison of the whole sample and the mentor subsample of the MEK research, we can say that the sample can be considered homogeneous in many ways (cf. Pesti & Szivák, 2020). The 1-3% difference between the two samples in most areas is small, almost negligible. Mentors show almost the same activity as masters in most areas of professional development, while much higher in knowledge sharing – but lower in evaluation. The following

areas, activities and results related to mentoring appeared in a significantly higher proportion in the application materials of mentor teachers:

- (specialist) methodological and pedagogical competences,
- planning and conducting classes / lessons,
- collaboration with colleagues, and learning from each other,
- activities aimed to improve teacher education / training, and
- consensus and cohesion within the board of educators (cf. Sallai, 2015).

Stage 2.: Learning paths of mentor educators - in light of the results of my qualitative research

In the case of master mentors, a number of individual-personal and institutional motivational factors could be identified, both in terms of the role and responsibilities of the mentor, and the assumption of the necessary learning and professional development. Among these,

- the need for professional excellence, and
- accepting the importance of professional development and learning

stand out.

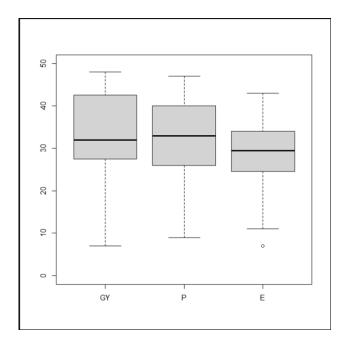
Mentors' learning was mostly motivated by

- the institutional needs and requirements conveyed by the system,
- satisfying personal needs and desires,
- a strong commitment to mentoring, and
- meeting the needs of mentees and striving for credibility.

During the second phase of the coding subgroups emerged from within the group of mentors, which were as follows:

- mentors working in practice institutions (n = 32)
- mentors (working in non-practice institutions) who have regularly received students from teacher training for a longer period of time (n = 45)
- mentors (working in non-practice institutions) who do not, or only rarely, occasionally participate in the training of pedagogical students (n = 40).

Comparison of the three groups by analysis of variance again confirmed the homogeneity of the sample with minor differences (see the results of the study in Figure 2).



2. Figure: Comparison the groups of master teachers

According to the analysis, the pedagogical competencies of mentors were similarly developed, and they generally achieved very high or not at all outstanding scores in the same areas. Learning paths for the development of competencies also show that individual competencies developed mostly not independently, but in relation to each other. The development of individual competencies can take place in significantly different learning pathways and acts, and in many combinations of these, which significantly balance each other during the 25-30-40 years of the professional path. Hence, a competence that may be underdeveloped on one path may reach high development on the other. The same educational policy context also influences to point in the direction of similarity, i.e. the influence of the systemic level, which, due to its highly centralized nature, smoothed many differences between the institutions and their teachers, which are very different in many respects.

Activities of mentors and competencies of mentees to be developed during mentoring

- are mainly built around classroom-based, occupational activities, a few of these are
 - the lesson and its
 - planning,
 - giving,
 - evaluation,
 - o application of professional methodological procedures,

- holding demonstration classes and sessions (on behalf of the mentor, where the mentee is observing class)
- and observing (mentor's observing during mentee classes for assessment, counseling, possibly learning).
- Therefore it is likely, that the also often mentioned discussions, counseling, reflective (both mentor and mentee) and organizing activities are mainly related to classroom work,
- or possibly for institutional (to a slightly lower extent) professional socialization, which together are another important area of mentoring. (In the latter area, the mentoring activity of teachers mentoring in different types of institutions differs.)

Both the quantitative and qualitative phases of the research showed that master mentors form a homogeneous group in many respects. However, an in-depth study and linear representation⁴ of professional life paths has highlighted some specific differences:

- Mentors and lead educators working in practice institutions receive continuous support for their development from their training institution (continuous training, development, further development and research work together with the faculty teacher, provision of other learning and development opportunities). The continuous possibility of mentoring and mentor learning, and the intensive contact and cooperation with higher education teacher training and teacher educators contribute to the formation, strengthening and developing the mentoring and teacher education identity. The nature of the practice institution and the status of a senior pedagogue (vezetőpedagógus) give a constant direction to the mentoring, dampens and soothes the ad hoc effects and processes coming from the system.
- These opportunities are only partially or limitedly available to mentor educators from regularly participating (but not practice) institutions in mentoring teacher students and candidates, and are almost non-existent for mentors not or only occasionally involved in higher education teacher education. They have to acquire this knowledge from other sources. Their mentoring development is aided and hindered at the same time by the fact that they have to participate in a number of non-mentoring institutional tasks. In their case, the "shock-absorbing" effect presented above does not occur on behalf of the institution. Through the synthesizing processes of reflection the learning activities are nevertheless interpreted as stages of a continuous and unbroken, albeit diversified path of professional learning and development, and help to even out differences in the level of outcomes in many respects between different groups of educators.

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⁴ See its example in the Annex.

Summary

The model of mentoring accepted and mediated by the Hungarian systemic level is a supportive / trainee-competence-based model, which is supplemented with elements of a reflective and humanistic / emotional development model. This interpretation is markedly conveyed by professional descriptions for mentor training institutions, and by training programs (contents, emphases) for mentor trainers and mentors. Furthermore, this is carried forward by the majority of mentors in their plans for mentoring activities and supporting the professional development of the mentee. In these descriptions the aspects of supporting professional and professional socialization development dominate, personal-emotional support (difficulties in starting a career) are pushed into the background, or more often they do not appear at all. The mentoring identity conveyed in this way is more of an expert than of a teacher educator.

For most mentors, in addition to the mentor identity, a strong pedagogical identity has built, or seems to be built. In the development of this for a mentor, an important role is played by

- the time spent in mentoring, and in connection with that the frequency / intensity of mentoring,
- mentoring experience, studies, formal and informal learning, and
- commitment (experiencing the importance and usefulness of mentoring as a result of
 one's own activities, mentoring successes, positive feedback, developing and
 experiencing a sense of mentoring).