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ENIKŐ BÚS

DEVELOPMENT OF PROSPECTIVE TEACHERS' PROFESSIONAL SELF-PERCEPTION THROUGH AN ACTIVE LEARNING COURSE

Summary of the PhD dissertation

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SUBJECT OF THE DISSERTATION

During the last few decades, humanity has realized the comprehensive influence of education and that the quality of education is equal to the quality of the nation's economics. The quality of education is influenced by two things: the dedicated of GPD, and the quality of human resource working in the education, namely the quality of teachers (e.g. *Sági*, 2012). Based on the introductory text of TALIS surveys, teaching and teachers are the key to achieve successful students. However, a problematic phenomenon, the teacher shortage has appeared all over the world during the recent years. Negative self-selection is present on every stage of the profession, starting from applying to a training to the attrition of teaching profession. The reasons can be sought in the career motivation of prospective teachers, which is such a multifactorial system, which certain elements cannot be directly influenced by researchers – for example teachers' salary or social esteem – while others, like students' professional self-perception, can be changed through teacher training.

In the dissertation I present those hardships that lead to teacher shortages, and I also present the possible solutions based on international literature. Such an option is the implementation of research-based teacher education and the implementation of active learning forms, more specifically the problem-based learning. As a researcher, it's my task to explore the career motivation of the young Hungarian prospective teachers and to publish the results for further use. As an instructor, I aimed to utilize those results and to implement a problem-based development course that contributes to increase the research methodology, didactic repertoire and professional self-perception of the participants in teacher training. By increasing students' professional self-perception, the career motivation of prospective teachers is expected to increase and the number of dropouts is expected to decrease.

THEORETICAL BACKGROUND

It has been nearly two decades that learning has been declared as the basis of economic development by the European Union (e.g. *Lundwall*, 2000; *Olliver*, 1999; *White Paper*, 1995; *Cochinaux & de Woot*, 1995). The main characteristic of the learning society is the individual who is responsible for his/her own learning process, in which teachers and teacher education is playing a key role. Teachers' work in this environment is more important than ever; pedagogical work should serve the quality development of learning, equal learning opportunities for diverse learners and the combat for social exclusion (*Niemi*, 2012). As part of life-long learning, the professional development of teachers means that teachers can systematically reflect on their own work, conduct a classroom research, incorporate the results into their own teaching practice, evaluate the effectiveness of their own teaching strategies and accordingly modify them, and to identify their own developmental needs (*European Commission*, 2011; *Niemi*, 2012).

Accordingly, efforts and research aimed to develop research-based educational culture had been launched in several countries (*Csapó*, 2015; *Niemi & Jakku-Sihvonen*, 2006; 2011). Some of them – like Finnish teacher education – put emphasis on the transfer of pedagogical research methodology. According to the guiding principles, the authentic experience of research facilitates the understanding of relationship between theoretical and practical knowledge (*Bús*, 2015a; *Niemi & Nevgi*, 2014), therefore teachers will recognize and manage more easily the upcoming difficulties during their work (*Niemi*, 2013). Prospective teachers are actively involved in the activities of research methodology courses, from finding literature to the pursuit of an independent research, thus acquiring the researcher's attitude (*Niemi*, 2011).

Dutch and Finnish teacher education also encourage the incorporation of inductive teaching and learning methods besides research methodology (*Maurer & Neuhold*, 2012). These methods, unlike conventional teaching methods, use a reverse-logic while acquiring the curriculum and provide scientific problems to help students to gain the desired learning goals (*Bús*, 2013a). Each inductive method can be applied in different disciplines due to their nature, like inquiry-based learning is favored by natural sciences, while problem-based learning is mostly adapted by humanities and social sciences, like teacher education. The learning process is trigged by an authentic, real life problem during problem-based learning (*Boud & Feletti*, 1991; *Hung, Jonassen & Liu*, 2008) and its aim is to gain deep understanding of the learning material, to facilitate the latter recall and application of knowledge (*Albanese & Mitchell*, 1993). The elements of inductive learning is only applied in a small amount among Hungarian teachers (*Bús*, 2015b), therefore prospective teachers should meet them during their training as early as possible, especially as it is increasing the professional self-perception of prospective teachers' when it is combined with research methodology (*Niemi & Nevgi*, 2014).

However, those methods built into the training itself are not enough to keep young people in the training and on the track, so international studies have turned towards mapping prospective teachers' career motivation. Young people entering higher education start the training with different qualities, including different mastery and career motivation as well. With the knowledge about different motivational patterns, teacher training institutes will be able to shape the training in such way, that is maintaining students' motivation to the greatest possible extent, thus reducing the amount of academic dropouts and abandonment (*Duque, Duque & Suriñach*, 2013; *Infante & Marin*, 2008; *Watt, Richardson, Klusmann, Kunter, Beyer, Trautwein & Baumer*, 2012). According to the career motivation literature introduced in this thesis, the factors influencing prospective teachers during their career choice are very diverse, and most of them cannot be shaped directly by teacher education, but it can shape their professional self-perception through developing teaching competencies, like by the expansion of their methodological repertoire (*Niemi & Nevgi*, 2014).

The information about prospective teachers' mastery motivation and procrastination habits can also be useful for the training institutes. Mastery motivation is such a psychological power, which encourages individuals to try to solve challenging tasks and to persist during the problem-solving process (*Morgan, Harmon, & Maslin-Cole*, 1990; *Józsa*, 2002; 2007). Mastery

motivation and mastery-oriented learning strategies in adulthood can be connected to educational and employment performance (*Burlison, Murphy & Dwyer*, 2009; *Spence & Helmreich*, 1983). Its counterpole is the academic delay (procrastination), which is one of the reasons for interrupting academic studies. Procrastination is such a behavior, in which the individual postpones the commencement or completion of a task, or to delay the entire task until the time pressure becomes uncomfortable (*Lay*, 1986). Academic procrastination may lead to quality deterioration or complete failure of a task's execution (*Muramatsu*, *Kunimune* és *Niimura*, 2011), and sometimes to school dropouts.

AIMS OF THE RESEARCH

One of the aims of my research was to investigate the career motivation of Hungarian prospective teachers, to examine the changes in career motivation under the influence of the ongoing training, and to examine mastery motivation and procrastination habits of prospective teachers. With the knowledge of career motivation structures, mastery motivation and procrastination habits of Hungarian prospective teachers, the second aim of my research is to increase students' professional self-perception through a problem-based course that is aiming to prepare the participants for a research-based teaching attitude. When developing the course, we combined the international practices, namely the teaching practice, active learning forms and pedagogical research methodology.

The course introduces in the thesis was thought by five educators in seven groups, and we have experimentally combined research-based teacher education with problem-based learning in two groups. The theoretical topics introduced during the first part of the course were presented as scientific problems in accordance to the Seven Steps of Maastricht University (*Maurer & Neuhold*, 2012), so teacher candidates could get to know this inductive learning form in practice. Seeing the positive impact of active learning on the professional self-perception of Finnish prospective teachers (*Niemi* és *Nevgi*, 2014), we expected to get similar results from our two experimental groups too. Besides all, as Dewey and his followers believe that this method can be transferred to many situations (*Giles* és *Eyler*, 1994), the transferability of the method is also examined in the candidates' own teaching episodes.

METHOD

Sample

Our examinations were carried out among first-year and upper-grade Hungarian prospective teachers. The examination of first-year prospective teachers' career motivation and mastery motivation was carried out in 2016 September, when the skills of freshly graduated students accepted to higher education were measured for the second time at the University of Szeged (*Molnár* és *Csapó*, 2017; *Kinyó*, 2017; *Korom*, 2017; *Bús*, 2017). There were 454 prospective teachers who completed both questionnaire.

The examination of upper-grade prospective teachers was carried out in 2015 May, when the 2-5th-year prospective teachers of two Hungarian universities (N_u = 98; 59%) and two Hungarian colleges (N_c = 68; 41%) were involved. The institutes were chosen by the number of participants at their teacher training program, so the students of the two-two largest Hungarian institutes could participate in the voluntary survey. Due to the voluntary nature of the survey, the sampling was random.

The compulsory course called *The methods of pedagogical research and the application of scientific results at school* was thought by five educators in seven groups (N=137), of which two groups were using problem-based learning (N_{pbl}=42). Students were centrally assigned to the educators, and received no information about the experimental groups using problem-based learning. This makes it possible to compare static groups without pre-testing (*Kontra*, 2011). All participants of the problem-based groups and 28 students of the other groups has agreed to record and analyze their second teaching episodes.

Instruments

To measure the prospective teachers' career motivation we have used the Hungarian version of an instrument that has been tested on international context as well (Factors Influencing Teaching Choice – FIT-Choice – Survey, *Watt & Richardson*, 2007). The 56 item instrument measures the prospective teachers' career motivation and opinion about the profession in 9 factors (and all together 18 subscales), so their self-perception, inner career value, their opinion of the profession as a fallback career, the personal and social utility value of the profession, the social influences, the profession's task demand and task return and the candidates' satisfaction with their career choice.

To measure mastery motivation we have used the Hungarian version of the Dimensions of Adult Mastery Motivation Questionnaire (DAMMQ; *Doherty-Bigara* és *Gilmore*, 2015), which measures the level of domain-free mastery motivation in five factors. The 24 items of the questionnaire measures task persistence, preference for challenges, task-related please, task absorption and self-efficacy through self-report. The procrastination habits of prospective

teachers were measure by a validated instrument that intends to measure extreme procrastination with 20 items (General Procrastination Scale (GPS), Student Version; *Lay*, 1986; Hungarian version: *Takács*, 2010).

To analyze the recorded teaching episodes made during *The methods of pedagogical research and the application of scientific results at school* course, I used the Teacher Practices Observation Record (TPOR; *Brown*, 1968; Hungarian version: *Falus*, 2004). TPOR is such a systematic instrument, which measures the teacher's teaching practices: it assesses the extent of the observed teachers' classroom behavior corresponds to Dewey's educational practice, experimentalism. Based on a common theoretical framework, the instrument allows us to compare the observed teachers along seven factors: the nature of the situation, the nature of the problem, principles, facts, assessment, differentiation, motivating and examination.

Procedure

During our online questionnaire studies, prospective teachers had to response on Liker-scales. The responses were volunteer and anonym, but we do have some background data, like gender, age, type of institution, specialization, etc. While first-year students had a given time to complete the questionnaires (60 minute), upper-grade students had no time restriction.

At the beginning of the compulsory course's semester, each student completed a diagnostic test about pedagogical research methodology, and they kept writing individual reflective workdiaries during the semester that included their observation records and lesson plans too. Their second teaching episodes were recorded at the end of the semester (which were analyzed according to the TPOR instrument), and students had completed a two-part satisfaction questionnaire. From the various types of data (qualitative and quantitative) we can deduce the efficiency of the course through parallel triangulation between methods and it enables the horizontal reinforcement of efficiency. During parsing methods I have chosen such data analysis methods that are able to identify the causal processes between dependent and independent variables (*Sántha*, 2015), therefore the present analysis does not include the results of the diagnostic test (because it's content does not explain the casual system), nor the reflective work logs (certain workdiaries were not available).

RESULTS OF OUR RESEARCH

The examination of first-year prospective teachers' career motivation

When examining the career motivation of first year students entering teacher education, I found that students enrolling in teacher training are most motivated by the social utility values of the teaching profession, namely the shaping of next generation's future. Self-perception, that is, how much they think they are capable of becoming a good teacher, is in second place, while the interest in teaching profession is ranked third. Social influences, that is, prior learning and teaching experiences, and the opinion of friends, family members are ranked fourth. The answers given by the Hungarian sample do not deviate significantly from the international sample, thus the first hypothesis of the dissertation is justified.

The factor analysis carried out on career motivation results identified a new aggregate variable that includes the factors of self-perception, inner career value, social utility value and the satisfaction with career choice. This latent variable was named as *teacher's personality*, and with this variable I could group candidates according to their career motivations. The cluster analysis identified five significantly different group of students, so I could identify who needs motivation-support the most during the studies, and who needs support in only one area.

According to the results, students in the 1st subsample are the most risked of attrition, so besides the increase of inner motivation, the usefulness of teaching track and other career options in the field of education need to be highlighted. At the three intermediate subsamples there is a lower need to increase inner motivation, but the significance, usefulness and transferability of the teaching path should be emphasized as well, so it is worthwhile focusing on these two areas during the teacher training. Teacher candidates belonging to the 5th subsample have outstanding career motivation, and in this case the aim is to maintain the interest.

The connection of career motivation and mastery motivation

I aimed to measure if there is any significant difference among first-year prospective teachers' mastery motivation, if there is a significant connection or exploratory force between the subscales of career motivation and mastery motivation, and if there is any significant difference among the student clusters that were identified along career motivation.

I have found a significant difference among first-year students' mastery motivation, that divides students into two main subsamples. The students with low career motivation (1-3. clusters) can be characterized with low mastery motivation, while students belonging to the highly motivated clusters of career motivation (4-5. clusters) typically have higher mastery motivation too; therefore it is worth to pay special attention to prospective teachers belonging to 1-3. clusters during the training in order to reduce dropout rates.

According to the results, individual's belief in his or her own abilities influences the student's professional self-perception and the beliefs about the job security and transferability. Students who are confident in their abilities are more likely to believe that they have the characteristics of a good teacher than those who are insecure. In case of teacher candidates with high mastery motivation, the joy felt while solving a task is explained by the social utility value and the high level of expertise required by the teaching profession. These teacher candidates are happy to solve a challenging task because they feel that it is socially useful, and it requires such a special skills that can only be learned during teacher training.

The less a student feels to be able to be a teacher, the better he feels while completing a challenging task, but the more he thinks of teaching as a fallback career, the less rewarding feeling is felt. The latter group of students might think about solving a challenging task that it is an unnecessary effort. Those who have applied for teacher training as a result of external motivation, that is for the advice of a friend or relative, are less pleased when they solve a difficult task, as they were not motivated by any internal trigger during the process. Thus, even though it was not the purpose of any questionnaires to filter the students during the recruitment process, it can still provide useful information for the recruiting teacher training institutes.

The examination of upper-grade prospective teacher's career motivation

While examining the career motivation of upper-grade students I found that the order of motivating factors is slightly rearranged under the influence of training: the inner value of the chosen profession is emphasized, so students are increasingly interested in teaching, while the social utility value of teaching profession is slightly behind. There was no significant difference between the grades, therefore no significant increase or decrease is occurring during the training. In case of upper-grade students a weakening correlation was found between career motivation factors and the explained variance of the model also decreased, so the effect of the new variable – the training – is felt.

The connection of prospective teachers' career motivation and procrastination habits

The aim of the research was to examine what background variables have an influence on prospective teachers' procrastination habits, and if there is a connection between career beliefs and the presence of procrastination. The most important question was the connection between procrastination and professional self-perception, since the latter is such a motivational factor that could be influenced directly through teacher training, but the results did not show any significant connection.

15.5% of the sample can be considered as extremely procrastinating type. According to the results, the procrastination-related behavior is already established when students enter higher education, their behavior do not show any substantive changes during the academic training. Students studying in a state-funded seat are more likely to delay their academic tasks,

while students who pay tuition fee are less likely to delay tasks due to the financial pressure; although the extra financial benefits (scholarship, parental support) are not influential. 15.98% of the total sample studies education only because he did not get into his first or second choice program, and they think of teaching as a fallback career.

The international findings are not proved to be true for the Hungarian sample, namely that students with lower self-perception would procrastinate more. Out of the 9 career motivational factors only one shows connection with procrastination habits (task return of the profession), but teacher training cannot have a direct influence on that.

The evaluation of video records and course evaluation survey

With the help of the TPOR instrument (*Brown*, 1968) I have analyzed and quantified the recorded teaching episodes. The statistical analysis carried out on the quantified results shows a significant difference between the total scores of the two samples, which means that those students who were thought through problem-based learning have used more experimentalist elements in their teaching episodes than their peers in other groups. This has proved one of the assumptions: learning with problem-based learning has an impact on the teaching methods used by prospective teachers.

Each student has completed a two-part course evaluation survey at the end of the course, asking their opinion about the course and the skills developed by the course. My colleague, *Bank* (2017) has created four categories of the first part of the survey that consisted of 30 closed questions, and I have examined if there is a difference between the two subsamples along these factors. Although I have not found any significant difference at any factor, the research methodology knowledge acquired during the course is in connection with the development of critical thinking in the case of problem-based group according to the results of correlation analyzes. Both samples have similar opinion about the complexity of teaching profession, and since there is no difference here either, we can state that their opinion about the profession is free of the learning-teaching method applied during the course. The students of the problem-based groups considered the gained knowledge about pedagogical teaching methods and research methods considerably better, and since the learning material was the same in every group, therefore this effect can be attributed to problem-based learning as it was the only difference between the two subsamples.

On the second part of the course evaluation survey students could give open answers to our questions. The answers we received were analyzed by content analysis and categorized into three main topics. While there was no substantial difference between the samples in the case of development of social learning skills and researching teacher skills, the development of the methodological elements were mentioned more times by students studying with problem-based learning. With regard to their textual responses, it can be stated that the interest and professional self-perception increased, therefore the goal of the course and the dissertation was accomplished.

REFERENCES
(WITHOUT SELF CITATIONS)

Albanese, M. A. és Mitchell, S. (1993): Problem-based learning: A review of literature on its outcomes and implementation issues. *Academic Medicine, 68*. 52-81.

Bound, D. és Feletti G. (szerk.) (1991): *The challange of problem-based learning.* St. Martin's Press, New York.

Brown, B. B. (1968): *Systematic observations: Relating theory and practice in the classroom.* University of Florida, Gainesville

Burlison, J.D., Murphy, C.S., és Dwyer, W.O. (2009): Evaluation of the Motivated Strategies for Learning Questionnaire for predicting academic performance in college students of varying scholastic aptitude. *College Student Journal, 43*, 1313–1323.

Cochinaux, P. és de Woot, P. (1995): *Moving towards a learning society.* A CRE – ERT forum report on European education. Geneve: CRE and Brussels: ERT.

Csapó Benő (2015): A kutatásalapú tanárképzés. *Iskolakultúra*, 2015/11. 3–26.

Doherti-Bigara, J. és Gilmore, L. (2015): Development of the Dimensions of Adult Mastery Motivation Questionnaire. *The Australian Educational and Developmental Psychologist, 32*. 2. 142–157.

Duque, L. C., Duque, J. C., és Suri-ach, J. (2013). Learning outcomes and dropout intentions: An analytical model for Spanish universities. Educational Studies, 39(3), 261–284.

European Commission (2011): *Policy approaches to defining and describing teacher competences.* Thamtic Working Group 'Teacher Professional Development'. Report of a peer learning activity in Naas, Ireland, 2-6 October 2011. Brussels: Directorate-General for Education and Culture.

Falus Iván (szerk., 2004): *Bevezetés a pedagógiai kutatás módszereibe.* Műszaki Kiadó, Budapest.

Hung, W., Jonassen, D. H., és Liu, R. (2004): Problem-based learning. In: Jonassen, D. H. (2004): *Handbook of Reserach on Educational Communications and Technology,* Lawrence Erlbaum Associates, Mahwah. 485-506. 2012. november 29-i megtekintés, http://faculty.ksu.edu.sa/Alhassan/Hand%20book%20on%20research%20in%20educational%20communication/ER5849x_C038.fm.pdf

Giles, D. E. Jr. és Eyler, J. (1994): The theoretical roots of service-learning in John Dewey: Toward a theory of service-learning. *Service Learning, General*. **1**, *1. sz.*, 77–85.

Infante, E., és Marin, M. (2008). Psychosocial profile of unsuccessful university student: Personality and motivational factors revisited. In A. M. Columbus (Ed.), Advances in psychology research, Vol. 56 (pp. 135–149). Hauppauge, NY: NovaScience.

Józsa Krisztián (2002): Az elsajátítási motiváció pedagógiai jelentősége. *Magyar Pedagógia*, **102.** 1. sz. 79–104.

Józsa Krisztián (2007): *Az elsajátítási motiváció.* Műszaki Kiadó, Budapest.

Kinyó László (2017): A 2016-os felsőoktatási kompetenciamérés eredményei történelemből egy kutatóegyetem különböző karain. In: D. Molnár Éva és Vígh Tibor (szerk.): *XV. Pedagógiai Értékelési Konferencia. Program és absztraktkötet.* Szegedi Tudományegyetem, Szeged. 20. o.

Kontra József (2011): *A pedagógiai kutatások módszertana. Egyetemi jegyzet.* Kaposvári Egyetem, Kaposvár.

Korom Erzsébet (2017): A felsőoktatási tanulmányi alkalmasság mérésének természettudományi eredményei 2016-ban. In: D. Molnár Éva és Vígh Tibor (szerk.): *XV. Pedagógiai Értékelési Konferencia. Program és absztraktkötet.* Szegedi Tudományegyetem, Szeged. 20. o.

Lay, C. H. (1986): At last my research article on procrastination. *Journal of Research in Personality, 20,* 474–495.

Lundwall, B. A. (2000): Europe and the learning economy – on the need for reintegrating strategies of firms, social partners and policy makers. *Dept of Business Studies*, Aalborg University.

Maurer, H. és Neuhold C. (2012): Problems everywhere? Strengths and challanges of a problem-based learning approach in European Studies. Előadás: 2012 APSA Teaching and Learning Conference. Washington, 2012. február 17-19.

Molnár Gyöngyvér és Csapó Benő (2017): A felsőoktatási tanulmányi alkalmasság vizsgálata: elmélet, megvalósítás, főbb eredmények. In: D. Molnár Éva és Vígh Tibor (szerk.): *XV. Pedagógiai Értékelési Konferencia. Program és absztraktkötet.* Szegedi Tudományegyetem, Szeged. 20. o.

Morgan, G.A., Harmon, R.J., és Maslin-Cole, C.A. (1990): Mastery motivation: Definition and measurement. *Early Education and Development, 1*, 318–339.

Muramatsu, K., Kunimune, H. and Niimura, M. (2011): An analysis for the causes of the academic procrastination behaviour. Knowledge-Based and Intelligent Information and Engineering Systems Lecture Notes in Computer Science Volume 6883, 2011, pp 529–538

Niemi, H. (2012): Educating student teachers to become high quality professionals – a Finnish case. *Center for Educational Policy Studies Journal*, **1.** 1. sz. 43–66.

Niemi, H. (2013): The Finnish teacher education. Teachers for equity and professional autonomy. *Revista Española de Educación Comparada,* **22.** 117–138

Niemi, H. és Jakku-Sihvonen, R. (2006): Research-based teacher education. In: Jakku-sihvonen, R. és Niemi, H. (szerk.): *Research-based teacher education in Finland – reflections by Finnish teacher educators*. Finnish Educational Research Association, Turku. 31–50.

Niemi, H. és Jakku-Sihvonen, R. (2011): Teacher education in Finland. In: Valenciczuljan, M. és Vogrinc, J. (szerk.): *European dimensions of teacher education: Similarities and differences*. University of Ljubljana és The National School of Leadership in Education, Szlovénia. 33–51.

Niemi H. és Nevgi A. (2014): Research studies and active learning promoting professional competences in Finnish teacher education. *Teaching and Teacher Education*. **43.** 131–142.

Olliver, P. (szerk., 1999): *Monitoring change in education. Lifelong and continuing education. What is a learning society.* Aldershot: Ashgate, Arena.

Sági Matild (szerk., 2012): *Erők és eredők. A pedagógusok munkerő-piaci helyzete és szakmai továbbfejlődése – nemzetközi kitekintés és hazai gyakorlat*. OFI, Budapest.

Sántha Kálmán (2015): *Trianguláció a pedagógiai kutatásban*. Eötvös József Könyvkiadó, Budapest.

Spence, J.T., és Helmreich, R.L. (1983): Achievement-related motives and behaviours. In J.T. Spence (Ed.), *Achievement and achievementmotives: Psychological and sociological approaches.* San Francisco: Freeman. 10–74.

Takács Ildikó (2010): *A halogatás jellemzői a felsőoktatásban. A halogató magatartás és a személyiség jellemzőinek vizsgálata a felsőoktatásban*. Habilitációs dolgozat. Kézirat. ELTE Pedagógiai és Pszichológiai Kar, Budapest.

Watt, H. M. G. és Richardson, P. W. (2007): Motivational factors influencing teaching as a career choice: development and validation of the FIT-Choice Scale. *The Journal of Experimental Education*, **75.** 3. sz. 167–202.

Watt, H. M. G., Richardson, P. W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U. és Baumert, J. (2012): Motivations for choosing teaching as a career: An international comparison using the FIT-Choice scale. *Teaching and Teacher Education*, **28.** 791–805.

White Paper on education and training (1995). Brussels, Commission of the European Communities.

PUBLICATIONS OF THE PHD CANDIDATE

Bús Enikő (2013a): A probléma-alapú tanítás/tanulás alkalmazása humán tantárgyak területén. Iskolakultúra, 23. 11. sz. 34-43.

Bús Enikő (2013b): A probléma-alapú tanulás alkalmazása humán tantárgyak területén. Előadás: XI. Pedagógiai Értékelési Konferencia, Szeged, 2013. április 11-13.

Bús Enikő (2014): Problémaközpontúság és tanítási módszerek vizsgálata általános és középiskolás pedagógusok körében. Előadás: XIV. Országos Neveléstudományi Konferencia, Debrecen, 2014. november 6-8.

Bús Enikő (2015a): Tanárképzés Finnországban. Iskolakultúra, 25. 11. sz. 17-28.

Bús Enikő (2015b): Problémaközpontúság és tanítási módszerek vizsgálata általános és középiskolai pedagógusok körében. In: Tóth Zoltán (szerk.): Új kutatások a neveléstudományokban 2014. Debrecen, MTA Pedagógiai Bizottsága, 59-67.

Bús Enikő (2015c): Tanárjelöltek tanítással kapcsolatos motivációja és fejlesztésének egy lehetséges eszköze. Előadás: XV. Országos Neveléstudományi Konferencia, Budapest, 2015. november 19-21.

Bús Enikő (2015d): Adat, mérés, fejlesztés – nemzetközi példák az oktatási adatok felhasználására. Educatio, 24. 3. sz. 134-136.

Bús Enikő (2015e): Examination of teaching methods and problem-centered attitude among Hungarian primary and secondary school teachers. Előadás: JURE 2015: Towards a reflective society: Synergies between learning, teaching and research. Limassol, Cyprus, 2015. augusztus 23-34.

Bús Enikő (2016): A comparison between Finnish and Hungarian quality of teacher education. Előadás: XIV. Pedagógiai Értékelési Konferencia, Szeged, 2016. április 21-23.

Bús Enikő (2017a): The connection of career motivation and mastery motivation among students in teacher training. Előadás: JURE 2017: Education in the light of multiple perspectives: towards intertwining personalised and collaborative learning. Tampere, Finnország, 2017. augusztus 27-28. 92.

Bús Enikő (2017b): Harmadéves tanárjelöltek pedagógiai experimentalizmusának vizsgálata egy probléma-alapú kurzus hatására. Előadás: XV. Pedagógiai Értékelési Konferencia, Szeged, 2017. április 6-8.

Bús Enikő (2017c): Előéves egyetemisták elsajátítási motivációjának vizsgálata. Előadás: XV. Pedagógiai Értékelési Konferencia, Szeged, 2017. április 6-8.

Csapó Benő, Bodorkós László és Bús Enikő (2015): A tanárképző központok működési standardjainak és akkreditációs szempontjainak kialakítása. In: Horváth H. Attila és Jakab György (szerk.): A tanárképzés jövőjéről. 3. kötet. Budapest, OFI. 29-42.

Gilmore, L., Islam, S., Younesian, S., Bús E. és Józsa, K. (2017): Mastery motivation of university students in Australia, Hungary, Bangladesh and Iran. Hungarian Educational Research Journal, 7. 2. sz. 179-191.