New Aspects in European Teacher Education

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## **Jean Murray** Trends in Teacher Education Across Europe: An Initial Analysis

### Introduction

This paper identifies three of the broad trends in teacher education across Europe, with some inevitably limited attempts to consider the resulting issues. This work is at an early stage of development so the reader may find some of the ideas presented here to be broad and general; it is a deliberate decision to present the work at this stage, even though I am aware of the considerable complexities underlying broad trends in policy and practice, particularly when these are transnational. I briefly outline these complexities at the beginning of this paper and intend to return to explore them further in later work. Other decisions made are around the focus and structure of the paper with the overall focus being on pre-service or Initial Teacher Education (ITE) rather than Continuous Professional Development (CPD) for serving teachers. This decision does not imply, of course, that pre-service is always more important than CPD; while pre-service programmes act as the foundation stones for teacher development, good CPD opportunities provide the continuity and progression of learning across the career-course, which are essential for career satisfaction and development. The chosen focus here then rather reflects pragmatic choices around what is possible in a presentation of this length. The paper, like the presentation on which it is based, first considers the background factors in policy analysis before moving to identify and discuss the trends in European teacher education. This choice of just three trends amongst the many patterns found in policy documents on teacher education across Europe is, of course, in the end, a personal one.

First, some words about the inevitable limitations of this kind of analysis which focuses on policy trends and public discourses at the macro levels of teacher education. As Stephen Ball (1994, 16) points out, policies are only ever

"representations which are encoded in complex ways (via (...) interpretations and re-interpretations) and decoded in complex ways (via actors, interpretation and meanings in relation to their history, experiences, skills, resources and context)."

Furthermore, as Thomas Popkewitz (1987, ix), identifies these policies and the "public

*discourses*" they may represent often serve to "*dull sensitivity to the complexities that underlie the practices of teacher education* (...).(*by*) *a filtering out of historical, social and political assumptions*". What these two quotations – and many similar ideas serve to indicate then is that under the broad patterns of convergence and divergence at the levels of transnational policies are the realities of teacher education as it is interpreted by national, regional and institutional policy makers and then 'lived' by student teachers, serving teachers and mentors in the schools, teacher education institutes and universities in which they work.

Considering teacher education policies means also taking into account the broad social, cultural, political and economic changes currently taking place across Europe. It is clear that the economic crisis of 2008 onwards had profound political and social effects. As the European Commission report in 2015 stated,

"Public budgets in all Member States are under great pressure. The global economic downturn and declining revenue in many Member States in recent years have aggravated this problem and put greater pressure on education and training budgets, as countries try to balance their public finances. Fiscal constraints have led to cut-backs in public funding for some phases of education." (European Commission, 2015, 2)

But here I am thinking not only of economics but also of the increasing social, cultural and linguistic diversity across Europe, the increasing levels of social inequality in some member states and the ways in which EU countries are dealing with the fall-out from conflict and social unrest, particularly the current refugee crisis fuelled by the Syrian civil war. The fast pace of technological changes is now clearly leading to changes in our social behaviour and the ways in which we understand the world, view knowledge production and participate in knowledge dissemination. Intensifying globalisation and international competitiveness have had profound consequences for the European Union and all its transnational structures, as well as for each of its member states. All of these changes impact on national and transnational government policies including health, social welfare and employment as well as education.

Thinking specifically in terms of education, globalisation pressures have contributed to the growth of neo-liberal regimes of performativity and audit in our universities and teacher education institutes and the growing 'marketisation' of Higher Education. Many of our institutions are now graded in national or international hierarchies and league tables in which research is prioritised over teaching. In schools results from PISA and other international attainment indicators drive high senses of government anxieties about educational – and hence economic – competitiveness and sometimes result in attempts to reform schooling, change teaching methods and introduce austere testing regimes. As part of the agenda for reforming schools, many governments across the world see teacher education as a lever for achieving change in schooling and in teacher professionalism.

### Trend 1: Improving Teaching through Reforming Pre-Service

The convergence of these factors means that many European countries are taking actions to improve the quality and status of teaching, by this positioning of ITE as a policy lever for changing the schooling system and for raising the quality of teaching but there are definite divergences in how this is being achieved. For example, there is a known trend across most of Europe towards requiring higher levels of qualifications for Initial Teacher Education (European Commission, 2015). Introducing higher levels of qualifications has included moves to requiring Masters level for the majority of teachers in countries such as Hungary, Portugal, Norway and Ireland. These changes take place in Higher Education contexts still experiencing the long term impact of the Bologna Process which initiated structural, conceptual and institutional changes for teacher education, including the re-modelling of existing degree and post-graduate programmes, institutional mergers or collaborations and institutional 'upgrading' often to university status.

Yet against this focus on higher levels of qualification in many countries, we are also seeing a worrying growth of alternative routes into teaching. Ireland has seen the growth of on-line courses provided by an organisation called Hibernia. Many countries have experienced the rapid spread of programmes - based originally on the Teach for America scheme - which recruit only those with 'good' under-graduate degrees onto fast track schemes for teaching and educational leadership. European countries as diverse as Estonia, Norway, Bulgaria and Austria now have such 'Teach for ...' schemes. In England, which has a history of these alternative routes dating back to the late 1980s, there is now a wide variety of Employment Based Initial Teacher Training (EBITT) schemes; for example Teach First (again, like Teach for America) and Troops into Teaching (for ex- members of the armed forces). Many of these alternative routes - across Europe – certainly provide high quality learning for student teachers, but some other routes are untested and the quality of learning is not always guaranteed, particularly when essentially experimental routes are expanded at scale.

In England there is also an 'assessment only' route by which intending teachers can apply for qualification through assessment against the eight current teacher Standards (Beauchamp et al., 2013) without completing an academic educational programme of any sort as part of their training. More worrying still, some types of schools are now permitted to recruit and employ untrained teachers, if they wish, although the majority of state-funded schools still have to employ trained teachers. In this context, alternative providers of pre-service work have proliferated.

The absence of any kind of pre-service programmes in some parts of England and some other European countries is particularly lamentable and divergent from pan-European norms. Analysis of TALIS data in the European Commission report of 2015 shows that more than nine out of ten teachers in Europe have completed Initial Teacher Education (91.2 %). The same analysis shows that at EU level, teachers feel better prepared for the different aspects of their job if they have completed a pre-service programme. A large majority of these teachers (80%) say that their studies included what many experts – including the Commission itself (European Commission, 2015) - would consider to be the three essential elements of research-informed content, pedagogy and practice. These components of pre-service can also be variously summarised as the 'content' of teaching (subject knowledge), its 'pedagogy' (understanding of teaching and learning) and 'practice' (classroom-based training) or, alternatively, as pedagogical competences, subject-matter knowledge and subject didactics, practice and the development of students' capacities for reflective practice and on-the-job research.

#### **Trend 2: The Practical Turn**

Analysing the structures and components of pre-service programmes brings me to the second major trend in teacher education across Europe which I wish to identify. This is a 'turn to the practical' (Hoyle, quoted in Furlong & Lawn, 2011) and a (re-) emphasising of the importance of learning in schools. The European Commission report of 2015, for example, identifies

"a trend towards remodelling Initial Teacher Education for student teachers to learn in school settings so that they can get into real classrooms early in the programme, spend more time there and receive stronger support in the process." (European Commission 2015, 4) This statement mirrors international trends to increase the amount of practical training and learning in schools, including - but not limited to - traditional school-based practice or the practicum, within programmes, but across Europe there are inevitable divergences in what this trend means and how it is being achieved. In England, for example, the 'turn to the practical' has, over the last thirty years, brought about a distinct change in the epistemologies of pre-service programmes. Here recent governments - of all political persuasions – have worked to change the control and locus of teacher education from higher education to schools, around a predominantly practical, relevant and school-led curriculum framework. There is often an accompanying, unquestioning belief that gaining more experience in schools by extending the practicum will automatically lead to better quality learning for pre-service teachers.

But just across the border in Scotland, a more measured approach in turning to the practical can be found. The highly influential Donaldson Report in 2011 stated, for example, that,

"Simply advocating more time in the classroom as a means of preparing teachers for their role is (...) not the answer to creating better teachers (...) The nature and quality of that practical experience must be carefully planned and evaluated and used to develop understanding of how learning can best be promoted in sometimes very complex and challenging circumstances." (Donaldson, 2011, 4-5)

In other parts of the report, the practicum was also clearly linked to research as a 'site for experimentation in "*well researched innovation*" by "*research aware teachers*" (p.102) and providing "*the opportunity to use practice to explore theory and examine relevant research evidence*" (p.90). This emphasis on the practicum as a site for *research-informed* practice mirrors the teaching methods used in the Finnish system (Sahlberg, 2011). In other systems too, the 'turn to the practical' has meant a growing emphasis on *practice-relevant research* or the implementation of models of *clinical practice* (Burn and Mutton, 2013). In these and similar models, the challenges of teacher practice are analysed using the lenses provided by both communal reflection-on-practice and relevant research findings, with these integrated processes guided by teacher educators, based either in schools or universities and teacher education institutes.

These differences in the implementation of the 'turn to the practical' may be seen as inevitable given the variety in the architectures of teacher education across Europe and the deep cultural and educational values which underpin them. Just in considering the practicum the starting points for implementing this trend show that the amount of time currently devoted to practical training (the practicum) in schools varies widely between European countries. For example, for student teachers on under-graduate degree ITE courses for primary (elementary) schooling ranges from 40 hours in Latvia to 630 hours in Italy and 900 hours in Austria (European Commission 2012). Student teachers on a post-graduate course of 36 weeks in England spend two thirds of their time (840 hours or 24 weeks) in schools. And turning to the practical often involves elements beyond the practicum where practical preparation for teaching and important learning may take place in either schools or teacher education institutes. In the appendix to this paper, I include some research focuses which I think will be important for tracking how turning to the practical is implemented across EU Member States; also in that appendix are some questions and points about the implementation of the practicum, based on personal experience and research and my recent book with Olwen McNamara and Marion Jones, *Workplace Learning in Teacher Education*.

#### **Trend 3: Focusing on Teacher Educators and Mentors**

One of the most important elements for consideration, especially if student teachers are to spend more time in schools and to experience better quality learning in those locations, is that they should receive stronger support in the process. The European Commission report *Supporting Teacher Educators for Better Learning* (2013), for the first time in the pan-European policy agenda positioned teacher educators themselves as a major factor in achieving improvements in teacher education and consequently, schooling. The definition of the occupational group given in the report is inclusive, seeing teacher educators as all those who "guide teaching staff at all stages in their careers, model good practice, and undertake the key research that develops our understanding of teaching and learning" (p.2). The report therefore extends the traditional occupational group of teacher educators based in teacher education institutes to include mentors in schools. The report asks for national definitions of the competences needed by all these educators.

"Countries which have not already done so need to define explicitly what competences are required by any professional involved in the initial or continuous education of teachers, in whichever institutional setting they may work." (European Commission 2013, 7) In the report such definitions of 'competence-based criteria' are seen as providing the basis for selection and recruitment procedures and the subsequent crafting of "*specific professional development opportunities*" (p.6). The competences which teacher educators are said to need reflect their multi-faceted and complex roles (Davey, 2013, 79). They include those related to knowledge of: the first order field of schooling; the second order field of teacher education (Murray, 2002); research (or 'knowledge development' as it is termed in the report); the educational systems in which they work; leadership skills; and more general abilities to integrate knowledge. A further area is the need for 'transversal competences' which enable teacher educators to work across and between schools and teacher education institutes. This competence is seen as central as it supports the required 'active collaboration' (European Commission, 2013, 2) between all those educating teachers, in whichever setting they work - a collaboration which is acknowledged as essential for high quality teacher education.

Member states have, of course, responded to this trend in differing ways: in Norway, for example, a national programme for providing mentor learning programmes at Masters levels and then for awarding professional recognition has been established (Smith and Ulvik, 2015). In Hungary, local programmes to strengthen mentoring provision are well underway including work at Eszterházy Károly University College of Applied Sciences in Eger (Falus et al., 2015). In the Netherlands, Belgium (Flanders) and Austria, professional initiatives designed to enhance and recognise the work and competences of teacher educators in teacher education institutes and universities are well underway. These initiatives often include emphases on enhancing the 'transversal competences' of these educators in working across Higher Education and schools. In the Netherlands and England there is clear recognition of the important of school-based teacher educators' work in new roles which extend well beyond conventional models of mentoring.

Across all these national initiatives emerging, there is a consensus that all teacher educators are important but that mentors in schools, in particular, need to be more carefully selected, educated, supported and, finally, professionally recognised. The 2015 European Commission report also suggest that additional remuneration is needed for mentoring work. That the support offered by all teacher educators should match the individual learning needs of student teachers, with skills in formative and summative assessment, observation and feedback well developed, is undisputed. And it is now clear that there are new learning, roles and forms of professional learning and recognition emerging in the teaching teachers, with the potential to develop to improve both pre-service and CPD provision.

### Conclusions

This paper has identified and focused on three main trends in pre-service teacher education across Europe: the actions which many member states are taking to improve the quality and status of teaching by using pre-service as a policy lever for change and quality enhancement in schools; the 'turn to the practical' with provision being 'remodelled' to enable student teachers to learn more in school settings; and the enhanced attention paid to those who teach teachers, both the traditional occupational group of teacher educators based in teacher education institutes or universities and the mentors based in schools.

For each of these broad trends, the paper has identified some convergences and some distinct divergence in implementation. So, for example, the analysis shows convergence in reforming teacher education but distinct divergences in how this is being achieved with many European countries moving to higher levels of qualifications (often Masters level) but other countries seeing a proliferation of alternative routes or even the removal of any requirements at all for formal pre-service qualifications. The trend towards increasing the amount of school-based learning is found across Europe but there are distinct divergences in how this is being implemented and what it means in terms of change to the structures of pre-service programmes and consequently to teacher knowledge. The importance of those who teach teachers and the need to pay attention to the quality of their work is also a pan-European trend but national responses to this have, again, been divergent.

Yet the dominant direction of these trends – better qualified teachers who have followed higher level pre-service programmes, more emphasis on the practicum and more attention to the educators of teachers – sounds very good in principle and, if well implemented, will surely result in a stronger pan-European teaching force for the decades to come. There are, however, some caveats here: they are occurring in the fast changing educational contexts of a Europe still scarred by the economic downturn of the last decade and now experiencing unprecedented social and technological change. As the European Commission report of 2015 states, in some countries responses to the economic crisis have had a negative impact on the status of teaching and there are resulting problems with teacher recruitment and retention. And, as identified earlier in this paper, under the broad patterns of convergence and divergence - nationally and transnationally - are the complex realities of teacher education as experienced by student teachers and teacher educators in the schools or teacher education institutes / universities in which they work. These 'lived realities' are often much slower to change than analysis of broad policy trends might suggest.

In these complex circumstances, it is important to maintain visions of teaching as an art, informed and developed by research across the career-course, and to acknowledge the profound contributions which teachers make to the common (public) good and to developing social cohesion. If these are our visions of teachers and teaching then we need to ask the following questions about the trends identified above: are all governments within the European community willing and able to make the necessary investments - financially and ideologically - to ensure that teaching remains an attractive and viable profession which recruits and retains the best qualified, committed and able workforce possible? In terms of pre-service education programmes, how can we balance the necessary emphases on relevant educational research with growing emphasis on the practicum within Masters and degree level qualification structures? Are school teachers and teacher educators alike willing to make the necessary professional changes and commitments to support students on a practicum which provides both experiential and research-informed learning? Can each member state ensure that student teachers are taught and guided by the best quality teacher educators and mentors in both university and school-based elements of their programmes, given that this initiative too involves considerable financial investment and professional commitment? If we can get the answers to such questions 'right' then there is huge potential for strengthening teacher education across Europe, thus improving the status of teaching as a profession and subsequently developing better learning opportunities for the children in all our schools.

## References

Ball, S. J. (1994). *Education reform: A critical and post-structural approach*, Buckingham: Open University Press.

Beauchamp, G., Clarke, L., Hulme, M. and Murray, J. (2013). Policy and practice within the United Kingdom (Research and Teacher Education: The BERA-RSA Inquiry, London: BERA.

Retrieved from:

https://www.bera.ac.uk/wp-content/uploads/2013/12/BERA-Paper-1-UK-Policy-and-Practice.pdf

Burn, K. and Mutton, T. (2013). *Review of 'research-informed clinical practice' in initial teacher education. Research and teacher education: The BERA-RSA Inquiry*. Retrieved from: <u>https://www.bera.ac.uk/wp-con-tent/uploads/2014/02/BERA-Paper-4-Research-informed-clinical-practice.pdf</u>

Davey, R. (2013). The Professional Identity of Teacher Educators: Career on the cusp? London: Routledge.

Donaldson, G. (2011). *Teaching Scotland's future: A report of the review of teacher education in Scotland*, Edinburgh: Scottish Government.

European Commission (2012). Supporting the teaching professions for better learning outcomes. Commission Staff Working Document SWD (2012) 374. Strasbourg: European Commission.

European Commission (2013). Supporting teacher educators for better learning outcomes. Brussels: European Commission.

European Commission (2015). *Strengthening Teaching in Europe: new evidence from teachers compiled by Eurydice and CRELL, June 2015.* <u>http://ec.europa.eu/education/library/policy/teaching-profession-prac-</u> <u>tices\_en.pdf. Accessed August 2015</u>.

Falus, I., Foris, K. and Hütter, E. (2015). *Supporting and Evaluating Beginning Teachers: A Hungarian Pilot Project.* Presentation at the European Educational Research Association Conference, Budapest, September 2015.

Furlong, J. and Lawn, M. (Eds.) (2010). Disciplines of education: their roles in the future of education research, London: Routledge.

McNamara, O., Murray, J., and Jones, M. (Eds.) (2013). Workplace Learning in Teacher Education. Dordrecht: Springer.

Murray, J. (2002). Between the Chalkface and the Ivory Towers? A study of the professionalism of teacher educators working on primary Initial Teacher Education courses in the English education system. *Collected Original Resources in Education (CORE)* 26 (3) 1-529

Popkewitz, T. (Eds.) (1987). Critical studies in teacher education: its folklore, theory and practice, London: Falmer.

Sahlberg, P. (2011). *Finnish lessons: What can the world learn from educational change in Finland?* New York: Teachers College Press.

Smith, K. and Ulvik, M. (2015). An Emerging Understanding of Mentors' Knowledge Base in Tillema, H., van der Westhuizen, G. and Smith, K. (Eds.) *Mentoring for Learning: Climbing the Mountain*. Dordrecht: Springer

## Appendix

#### Questions for considering and strengthening learning in the practicum :

Based on Olwen McNamara, Jean Murray and Marion Jones (Eds.). (2013). Workplace Learning in Teacher Education, Springer, with particular reference to chapters1 and 17.

Where is the practicum placed in the programme?

How long is it?

What does the practicum 'curriculum' look like?

What does it involve in terms of activities for the student teacher?

(How) does it relate to previous learning in the TEI?

What kinds of teacher knowledge are valued during the practicum?

Who teaches / mentors / supports the student?

Who is in charge of the practicum?

Who assesses its outcomes?

# The 'practicum' curriculum is essentially about workplace learning; it therefore needs to:

be carefully planned and implemented;

be created by effective partnerships between teacher education institutes and schools;

involve clear responsibilities, roles and resources;

be the product of careful planning of the practical classroom elements;

have clear links within pre-service programmes;

ensure that links between practice and research are clarified.

## In implementing this curriculum and assessing its mentors and school-based teacher educators therefore need to:

make appropriate use of observation, feedback, reflection and collaboration; use both formative and summative assessment for student teachers; ensure mentoring and other support matches the individual learning needs;

evaluate provision against learning outcomes;

ensure that they have appropriate professional development support for their work.

## Hannu L. T. Heikkinen

## Bridging Informal and Formal Learning in Professional Development

### Introduction

The importance of lifelong learning in teachers' professional development has become increasingly topical issue globally. In teaching, especially the transition from education to occupation seems to be more challenging compared to other fields. It is evident that under the rapidly changing circumstances teachers' professional knowledge has to be constantly renewed, and especially in the phase of transition from teacher education to working life, new approaches are needed. In the modern world, the role of teacher has been challenged in many ways. We may say that even some of the fundamental presuppositions of knowledge construction and learning have changed due to the rapid expansion of information and communication technologies in our everyday life and the practices of working life, which in turn have an effect to learning processes in schools and universities.

Many different kinds of systems have been introduced in Europe in order to promote the professional learning and well-being of newly qualified teachers, with varying success (e.g. Tynjälä & Heikkinen, 2011). We may ask, however, if the growing concern about attrition of new teachers is essentially an educational concern. It seems that much of the debate of teacher induction and mentoring has been motivated by interests that are pre-set somewhere outside the educational field, such as politics, production or economic life. On this basis, I introduce the idea of *induction and mentoring in the educational sense*, beginning by drawing on the recent discussions on lifelong and lifewide learning to introduce the counter-directional trends of *informalization* and *formalization* of learning in modern working life.

In its most profound sense, the idea of lifelong learning has its roots in the philosophical ideas of *paideia* in Ancient Greek philosophy and *Bildung* in German human philosophy *Geisteswissenschaft* (Heikkinen, 2015; Swachten, 2015). These notions frame the examination of *education* versus *schooling* (Kemmis, 2014). In terms of teacher education in its pure sense, the aim is to support professional learning and well-being at work by promoting teachers' autonomous professional agency. But if we want to promote the autonomous agency of new teachers, we find ourselves in a dilemma: how to act as a person (a teacher educator) so as to make another person (a student teacher or a new teacher) autonomous. But this is not quite enough; the ultimate aim of a teacher educator is to help the prospective teacher to make their pupils autonomous and critical thinkers. This is what I call the *second order paradox of teacher education* (Heikkinen, Tynjälä & Kiviniemi, 2011).

#### Formalization and informalization in professional learning

In contemporary research and policies on adult education, the concepts of *lifewide* and *lifelong* learning have been widely used and sometimes regarded as synonyms. However, there is an important conceptual distinction between the two. The concept of lifelong refers to the time-span of learning; the learning process continues throughout the lifetime of the learner. Lifewide learning, in contrast, means that learning takes place broadly in different settings, such as work, human resource development processes, during free time, in family life, or hobbies. (European Commission, 2001; Merriam, Caffarella & Baumgartner, 2007, 29–30; Tynjälä & Heikkinen, 2011).

In the daily activities and practices of teacher education and professional development, it is sometimes difficult to distinguish between the above types of learning. For example, in many occupations active information retrieval is essential. The internet, social media and the various portable devices to make use of them, such as smart phones and tablets, have also become increasingly crucial tools for professional development. Formal education also frequently applies methods that resemble informal learning. For instance, training events that include pair or group discussion enable people to better link their everyday or work-life experiences to the phenomena being addressed. It is also increasingly common to integrate work-based learning, projects, and portfolio work into formal education. Social media has also changed the forms of learning and contributed to the blurring of formal learning boundaries. For example, it is common for university course participants or workers in the workplace to form a group on Facebook, WhatsApp or other social media platforms. This communication, while often highly casual, typically involves a broad exchange of ideas relevant to work or course work. With such discussion groups it is often quite difficult to distinguish what is learning that complies with the course curriculum, and what is something else.

The role of formal learning has changed both in schools and in contemporary working life. We have witnessed a trend in formal learning towards a kind of informalization of learning, i.e., a move towards more non-formal and informal learning. The lines between informal, formal and non-formal learning have been blurred.

The informalization of learning is a reflection of a contemporary pedagogical trend, constructivism. The idea of constructivism is based on the metaphor of knowledge construction, which is done by the learner and scaffolded by the teacher. The basic assumption is that knowledge is not transferred from one person to another, but that the learners construct their knowledge on the basis of their prior views, knowledge, and experiences. In terms of mentoring, the constructivist approach is a marked departure from traditional mentoring, which has been described as the transfer of (tacit) knowledge from a more experienced person to another. This traditional understanding of mentoring is clearly rooted in a different understanding of learning that is contradictory to a constructivist understanding.

However, the lines between formal, informal and non-formal learning are also being blurred for another reason – coming from an altogether opposite direction. In parallel with the discussion of the informalization of learning, there has been another discussion of the *formalization* of learning. This discussion is related to the notion of *recognition of prior learning*, which has been promoted in formal education, especially in the vocational education sector. A practical reason for this in vocational education is that it would simply be a waste of resources for both the learner and the school to invest time in training skills or knowledge that they already possess. It is better to offer opportunities to demonstrate and build on what they have already learned in their work and everyday lives. Skill demonstrations and portfolios are used for this purpose. Thus, two opposite processes seem to be at play within professional learning, and they are sometimes difficult to distinguish from each other. As a consequence of these interconnected processes, formal, informal, and non-formal learning converge.



Figure 1. The dialectics of formalization and informalization of learning (Heikkinen et al., 2012; Heikkinen 2015).

Whereas in traditional approaches it has been typical to distinguish between formal in-service training and informal job-embedded learning, in the modern approaches it is recognized that formal forms of learning are integrated with informal learning. In informal learning, the learning experiences which often are implicit are explicated to a conscious and conceptual level. The greater understanding of common challenges helps the teachers to face new situations and develop new solutions.

### Induction and mentoring in the educational sense

Induction and mentoring are not the same everywhere. Mentoring practices are rooted in the general practices, or *metapractices* (Kemmis & Grootenboer, 2008), that take place in schools and educational systems in various national settings. Drawing on the theory of practice, we may say that different countries have different *ecosystems of practice*, or *practice architectures*, which form the preconditions for the activities and actions that are possible or desirable in the given social setting (Kemmis & Heikkinen, 2012). These different national arrangements and practice traditions prefigure (enable and constrain) the actual daily practices in schools and educational institutions.

An important precondition for the various mentoring practices is the question of whether education is understood as a value and aim in itself, or as something that serves other external aims and purposes. At a general level, we may make a distinction between *education* in its pure meaning, and *schooling*, which is something narrower than education. This distinction between *education* and *schooling* has an important effect on the practices of teacher induction and mentoring (Heikkinen, Moate & Lerkkanen, 2014; Kemmis, 2014).

Education in its most profound sense is something that enables self-cultivation and aspirations for the good life of individuals and society. "Education is (...) an initiation into the kinds of practices that foster the good life for each person and the good for humankind." (Kemmis, 2014, 15). It is a process of identity work that is not limited by pre-set targets or standards, but engages people in discussion of the values and aims of (good) human life. Education is about actualizing the unique potential in every human being in society; it is a process of individual and collective self-formation; it is personal as well as collective identity work (Kemmis, 2014, Swachten in this volume). Education takes place not only in schools or classrooms, i.e. formal settings, but also in *non-formal* settings, such as the human resource development processes of workplaces, and informal settings, such as the everyday life of a family or a community. Schooling, in contrast, is a practice that takes place in the formal settings of educational institutions. It is taken for granted that schooling is intended to be educational, but it sometimes actually turns out to be the opposite. Schooling can also be non-educational, even anti-educational, if it does not promote people's aspiration for self-cultivation (Kemmis, 2014, 45).

Schooling, instead, is rooted in instrumental thinking; a means-ends rationality according to which schools are understood primarily as servants of pre-set aims, targets or values that have been discussed and decided outside of education. In this paradigm, teachers and schools have been commonly viewed as servants of something other, such as the nation state, where the teacher's task is to build national identity and to serve the administration of society. This civil servant metaphor has gradually been replaced with neoliberal metaphors; teachers are no longer regarded as servants of the state, but of production and the economy. In contemporary Western (and nowadays global) discourse on education, economic imperatives play a central role. Teachers are expected to produce workers, consumers, (inner) entrepreneurs, active economic agents and actors who adapt to market trends. Both of these servant metaphors share a common feature: teachers serve an external party that exploits teachers, education, and upbringing as a medium. This thinking has been globalized through the New Public Management doctrine, which uses market forces to hold the public sector accountable and the satisfaction of preferences as the measure of accountability (Kemmis, 2014; Lapsley, 2009).

Since the emergence of nation states in the modern age, education has been used as an instrument for reproducing national values, collective identities and even patriotism (McDonough & Cornier, 2013). But education is also seen as a servant of larger collective identities, such as Europe. Concerns regarding the emergence of a so-called *European dimension* of education have become heightened in the wake of recent European Commission white papers and other EU policy documents that reveal an EU vision for education that is shaped by economic targets and aims; the European Union wants to be the most competitive knowledge-based economy in the world by the year 2020 (European Commission, 2010). In line with this objective, performance in education should be improved.

Consequently, much effort has been invested in developing vocational education and training. Contemporary aspirations for lifewide and lifelong learning are also rooted in the interest of developing labour skills; 'students' have been reconceptualized as 'lifewide consumers of education' (Siivonen, 2010). Interestingly, the social impact of education has also often been reduced to the concept of 'human capital', the primary purpose of which is to enable economic growth (Schultz, 1971). In short, economic discourse has colonized education discourse in many ways. This can also be seen beyond the contemporary discussions of mentoring and teacher induction.

All in all, the emphasis on schooling instead of education has come about through a neoliberal development in education which in practical terms has led to a considerable shift in focus towards the pursuit of economic objectives. As Stephen Kemmis (2014) puts it, the instrumental view pays little attention to what makes human beings human or what the good life might be. In the neoliberal discourses about accountability and effectiveness, there is little discussion of the aims or values of education. It has actually been claimed that education has been reduced to another element of production; "producing people who are little more than the bearers of useful skills of production, good consumers, and good providers and clients of commercial and administrative services." (Kemmis, 2014, 47). Drawing on this, we may examine also the practices of teacher education, induction and professional development of teachers in terms of schooling versus education. Induction of new teachers in the schooling sense has much to do with formal organization and administration, arrangements and institutions, agreements and qualifications, directives and formal standards as well as support systems, such as reduction of teaching load or organization of support. Mentoring in the schooling sense focuses mainly on the tools, methods and instruments of mentoring rather than its aims and values. Consequently, this may also mean that mentoring in the schooling sense is motivated by external aims and values, which can also make it non-educational or even anti-educational. The global tendencies towards accountability, standardization and neoliberalism underpin schooling instead of *education* in mentoring practices as well as other practices in schools.

Teacher retention rate and educational system effectiveness are often measured purely in terms of their impact on the economy. Teacher attrition, especially during early career years, is a serious problem in many western societies, with problems in the induction phase leading to increasing numbers of young teachers leaving the profession. In the US, for example, it has been estimated that up to 50% of teachers leave within the first five years (Ingersoll, 2003). The economic impact of this problem seems to be the central motive behind various attempts to introduce extensive induction programmes for new teachers (e.g. Bickmore & Bickmore, 2010; Devos, 2010; Howe, 2006; Lambson, 2010; Marvel et al., 2007; Nasser-Abu Alhija & Fresko, 2010; Scheopner, 2010).

The *education* element of teacher induction, in contrast, involves teachers and other educational professionals in reflection and discussion about the values and aims of (teacher) education, i.e. human and professional growth. Mentoring in the educational sense is rooted in communication and interaction between teachers and oth-

er educational professionals. Induction and mentoring in an educational sense has much to do with the aspiration for the good life and happiness, identity construction and everyday social relations.

Induction and mentoring in the educational sense also means communication and dialogue between more and less experienced workers. There is a major difference here between traditional mentoring and the modern approaches. Traditionally, mentoring has been understood as the transmission of (explicit or tacit) knowledge from a more experienced worker to a less experienced one. Modern approaches, in contrast, are based on the idea that the relationship between the mentor and the mentee is reciprocal and both parties have something to offer. Mentors do not 'transfer' the correct view or knowledge but rather construct meanings and interpretations together with others. A dialogic relationship is based on the assumption that the other is recognized as an equal, which enables reciprocal exchange of ideas and joint construction of knowledge, from which both parties learn. In a mentoring dialogue, both parties participate in verbalizing their conceptions and experiences. In international research literature, the interactive and communicative character of mentoring is highlighted through such expressions as co-mentoring, mutual mentoring, collaborative mentoring, peer collaboration, critical constructivist mentoring, dialogic mentoring, peer mentoring and peer group mentoring (Bokeno & Vernon, 2000; Heikkinen et al., 2012; Musanti, 2004; Le Cornu, 2005). This change in the basic beliefs of knowledge and learning can be understood also in terms of the general shift from the traditional metaphor of *transfer of knowledge* into the more modern metaphor of construction of knowledge which is illustrated in the figure 2 below.



Figure 2. The traditional and modern concepts of learning through mentoring.

The communicative character of mentoring in the educational sense may also be conceptualized through Jürgen Habermas' theory of communicative action (1984). Mentoring in the educational sense can be understood as communicative action, whereas mentoring in the schooling sense is rather strategic action. In strategic action, other persons are regarded as objects of speech, whereas in communicative action others are regarded as equal subjects of communication whose interests and opinions are taken into account genuinely and authentically. Communicative action is a process where two or more individuals interact and coordinate their action based upon agreed interpretations of the situation and, more generally, of the values and aims that are valued in society and thus form the background and motivation for social practices. Communicative action respects the right of all participants to express themselves in everyday interaction between the parties regarding the virtues and values of the good life. Strategic action, in contrast, is instrumental action toward other people; purely goal-oriented behaviour where other persons are not equal subjects of human interaction but rather recipients of the message. In strategic action, the concern is to find methods and means to promote aims that are predetermined, either democratically through communicative action in society or in some non-democratic or authoritarian manner. Strategic action is typical of interaction between persons whose positions and relations are determined within social systems, whereas communicative action takes place in the *lifeworld* of society (Habermas, 1984, 18–95). Mentoring in the

schooling sense clearly represents the *system* of mentoring and *strategic action* in human relations, whereas mentoring in the educational sense represents the *lifeworld* dimension of mentoring, which promotes *communicative action* toward others and reflection on the basic values and ends of mentoring.

#### The dilemmas and paradoxes of teacher autonomy

The abovementioned understanding of *education* in its pure form – not that of *schooling* – means that in mentoring practices the aims and values of teachers' work are problematized and critically reflected upon, and not taken as givens embedded in the traditions of education and society. From this point of view, the main purpose of education is to emancipate from irrationality and immaturity; to empower people to use their own reason, as the enlightenment philosopher Immanuel Kant (1803/1964) put it (see also Hamilton, 1999). It follows, therefore, that mentoring meetings should include an aspect of critical reflection. Mentoring in the educational sense is based on a collective aspiration for good life and happiness, and promotes the identity construction of teachers and other educational professionals as individuals and educational communities.

Professional autonomy is both a prerequisite and an aim of the practices of induction and mentoring in the educational sense. High professionals are autonomous agents whose decisions are not made by following orders from somewhere outside the professional field, but are based on mutual understanding of right and wrong, achieved through collective will-formation among the professionals. In other words, professional autonomy is guided by professional ethics.

Professional autonomy is thus social in nature. It is achieved within a social process of collective will-formation, not through individual will-formation. In this respect, there seems to be some confusion regarding the concept of autonomy, which is sometimes misunderstood as individualism. It has been suggested, for example, that teachers in Finland are too autonomous. I would argue that they are not too autonomous in the truest sense of the word, but some teachers may well be too individualistic.

So as to justify my statement, I have to go back to the etymological origins of the word autonomy. The word stems from the Ancient Greek words *auto* and *nomos*, meaning *self* and *law* or *rules*, respectively. Literally speaking, the word means operating 'according to laws that one has made for oneself'. But this simple translation does not reveal the social aspect of autonomy; originally the word referred to social

rather than individual practices. In Ancient Greece, this expression was used for a town-state (*polis*) that instituted its own laws. In such an autonomous *polis*, laws were discussed and established by its own citizens. If, however, the town was ruled by laws that had been constituted by another *polis*, in which case the town or village was described as *hetero nomos*, literally meaning that someone else (another *polis*) has instituted the laws. This is the origin of the word *heteronomy*, the opposite of *autonomy*. The original use of the word autonomous implies *interaction and collective will-formation in a social sphere*, whereas individualism refers to action based on the will of a particular individual (Heikkinen, Tynjälä & Kiviniemi, 2011). In terms of the aforementioned theory of communicative action (Habermas, 1984), we may say that in its original meaning autonomy is rooted in communicative action between participants in society.

Professional autonomy requires capacities and skills for critical thinking. A useful distinction can be drawn here between *critical thinking in the strong sense* and *in the weak sense*, which adds another dimension to the concept of autonomy. Critical thinking in the weak sense is an attitude based on egocentric and biased beliefs; being critical towards others without reflecting or questioning one's own presumptions, actions or behaviour. This is what we often mean when we say that someone is a critical person who readily points out flaws, weaknesses and shortcomings in the world around them, but not so readily in themselves. Critical thinking in the strong sense, instead, starts from self-criticism, where one's own assumptions and beliefs are reflected on, re-examined and questioned. (Paul, 1994.)

Applying this idea, we can draw an important distinction between autonomy in the strong sense and in the weak sense. The autonomy of a professional community in a weak sense means that the community takes a self-centred view of the broader society, which means that collective will-formation takes place only within a limited community and does not take into account the broader social context. Such a professional community focuses on promoting the private interests of the members of the profession. This manifests in strategic action towards others, lobbying and persuading other parties to accept the demands of the professionals. This kind of professional autonomy is typically represented by labour unions.

Professional autonomy in the strong sense is rooted in discussion of the values of the profession and its role in society as a whole. One might say that the will-formation process is based on rather general and public interests and, ultimately, the good of

society or humanity. Professional autonomy is realized through communicative action, which is oriented towards mutual understanding and unforced consensus between all possible parties concerned. The main distinctions between individualism and autonomy in the weak sense and in the strong sense are indicated in the table below.

|                                                         | AUTONOMY                                                          |                                                                                       |
|---------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| INDIVIDUALISM                                           | WEAK AUTONOMY                                                     | STRONG AUTONOMY                                                                       |
| personal, individual<br>will-formation                  | social will-formation within<br>a limited community               | collective will-formation                                                             |
| promotion of personal interests                         | promotion of collective<br>interests of the community<br>lobbying | promotion of generalized interests                                                    |
| the good of the individual                              | the good of the professional community                            | the good of society and humanity                                                      |
| strategic action: oriented to success of the individual | strategic action: oriented to success of the profession           | communicative action: oriented<br>to mutual understanding and un-<br>forced consensus |

Table 1. Individualism and autonomy in the weak sense and in the strong sense (Heikkinen, 2014 and 2015).

But how to promote autonomy through education? How can we act as a person (a teacher educator) so as to make another person (a student teacher or a new teacher) autonomous? Here we meet a classic problem, *the pedagogical paradox*, first formulated by philosopher Immanuel Kant in his lectures on pedagogy (1803/1964, 718): *"How to cultivate freedom through coercion?"* The essence of the pedagogical paradox is that we face the problem of assuming the existence of something for which education is the precondition. How it is reasonable to assume that in order for education to be possible the individual must be free, and simultaneously, in order for the individual to become free education is necessary? How can one become something that one already is? In general terms the pedagogical paradox arises when a teacher declares that education should foster autonomy in the sense of a free essence, but on the authority of the teacher. The paradox precipitates a clash between a person's internal regulation (*Selbstbestimmung*) and external regulation (*Fremdbestimmung*). Following the Kantian ideas of Enlightenment, education in general should aim

at *maturity (Mündigkeit)* and autonomy, which means that everyone should be able to use their own reason: 'Enlightenment is man's emergence from his self-imposed immaturity. Immaturity is the inability to use one's understanding without guidance from another (Kant, 1784/2011).

Following this Kantian idea, teacher educators actually face not only the traditional pedagogical paradox, but an also an even more complex pedagogical dilemma: their task is to educate teachers and also inherently the pupils of the prospective teachers. The pedagogical paradox for teacher educators thus becomes a *second order paradox,* as their purpose is not only to promote the autonomy of the upcoming-teachers but also the autonomy of the upcoming-teachers' future students. Philosophically, this is an intellectual dilemma that cannot be solved through rational thinking. In everyday life, however, we have to do our best to find a way forward.

### **References:**

Bickmore, D. & Bickmore, S. (2010). A multifaceted approach to teacher induction. *Teaching and Teacher Education*, *26*, 1006–1014.

Bokeno, R. M., & Vernon, W.G. (2000). Dialogic mentoring. *Management Communication Quarterly*, 14, 237–270.

Fuller, A., Munro, A., & Rainbird, H. (Eds.). (2004). Workplace learning in context. Routledge.

European Commission (2001). *Making a European Area of Lifelong Learning a Reality*. Communication from the Commission. COM (2001) 678 final. Brussels: Commission of the European Communities.

European Commission (2010). *Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policymakers*. European Commission Staff Working Document SEC (2010) 538 final. Brussels: Commission of the European Communities.

Habermas, J. (1984). Theory of Communicative Action Volume One: Reason and the Rationalization of Society. Boston, Mass.: Beacon Press

Hamilton, D. (1999). The pedagogic paradox (or why no didactics in England?). Pedagogy, Culture & Society, 7 (1), 135-152.

Heikkinen, H. (2014). Drawing a line between autonomy and individualism: Practices of teacher induction and continuing professional development of teachers in Finland. An invited visiting lecture presented in Department of Education, University of Oxford, October 28<sup>th</sup> 2014.

Heikkinen, H. (2015). Learning at Work and Around the Coffee Mugs: Induction and Mentoring in the Educational Sense. In: H. Heikkinen, L. Swachten & H. Akyol (Eds.) Bridge over troubled water. New perspectives on teacher induction. Ankara: Pegem Akademi, 95-118.

Heikkinen, H., Jokinen, H. & Tynjälä, P. (2012). Teacher education and development as lifelong and lifewide learning. In H. Heikkinen, H. Jokinen & P. Tynjälä (Eds.), *Peer-Group Mentoring for Teacher Development* (3–30). Milton Park: Routledge.

Heikkinen, H., Tynjälä, P. & Kiviniemi, U. (2011). Integrative Pedagogy in Practicum: Meeting the Second Order Paradox of Teacher Education. In M. Mattsson, T.V. Eilertsen and D. Rorrison (Eds.), *A Practicum Turn in Teacher Education* (pp.91–112). Rotterdam: Sense.

Heikkinen, H., Moate, J. & Lerkkanen, M.-K. (2014). Education with a big E. In H. Heikkinen, J. Moate & M.-K. Lerkkanen (Eds.) *Enabling Education. Proceedings of the Annual Conference of the Finnish Educational Research Association FERA 2013.* Jyväskylä: Finnish Association for Educational Research 66.

Ingersoll, R. (2003). *Is there really a teacher shortage*? A report co-sponsored by the Center for the Study of Teaching and Policy and the Center for Policy Research in Education. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Kant, I. (1784 / 2011). An Answer to the Question: What is Enlightenment? Retrieved from: <u>http://www.english.upenn.edu/~mgamer/Etexts/kant.html</u>

Kant, I. (1803/1964). Über Pädagogik. In I. Kant, Schriften zur Anthropologie, Geschichtsphilosophie, Politik und Pädagogik (pp.711-761). Frankfurt: Suhrkamp.

Kemmis, S. (2014). Education, educational research and the good for humankind. In H. Heikkinen, J. Moate & M.-K. Lerkkanen (Eds.) *Enabling Education. Proceedings of the Annual Conference of the Finnish Educational Research Association FERA 2013.* Jyväskylä: Finnish Association for Educational Research 66.

Kemmis, S. & Grootenboer, P. (2008). Situating praxis in practice: Practice architectures and the cultural, social and material conditions for practice. In S. Kemmis & T. Smith (Eds.) *Enabling practice. Challenges for education*. Rotterdam: Sense.

Kemmis, S. & Heikkinen, H. (2012). Future perspectives: Peer-Group Mentoring and international practices for teacher development. In H. Heikkinen, H. Jokinen & P. Tynjälä (Eds.) *Peer-Group Mentoring for Teacher Development* (pp.144–170). Milton Park: Routledge.

Kemmis, S., Heikkinen, H., Aspfors, J., Fransson, G. & Edwards-Groves, C. (2014). Mentoring as Contested Practice: Support, Supervision and Collaborative Self-development. *Teaching and Teacher Education* 43, 154–164.

Lambson, D. (2010). Novice teachers learning through participation in a teacher study group. *Teaching and Teacher Education 26*, 1660–1668.

Lapsley, I. (2009). New Public Management: The Cruellest Invention of the Human Spirit? *Abacus*, 45, 1–21.

Le Maistre, C., & Paré, A. (2006). A typology of knowledge demonstrated by beginning professionals. In P. Tynjälä, J. Välimaa & G. Boulton Lewis (toim.) *Higher education and work: Collaborations, confrontations and challenges* (pp. 103–113). Amsterdam: Elsevier.

Marvel, J., Lyter, D.M., Peltola, P., Stirizek, G.A. & Morton, B.A. (2007). *Teacher attrition and mobility: Results from the 2004–2005 Teacher Follow-Up Survey*. Washington, DC: Government Printing Office.

McDonough, K. & Cornier, A.-A. (2013). Beyond patriotic education: Locating the place of nationalism in the public school curriculum. *Social Justice*, *8*, 135–150.

Musanti, S. (2004). Balancing mentoring and collaboration. Curriculum and Teaching Dialogue, 6, 13-23.

Nasser-Abu Alhija, F. & Fresko, B. (2010). Socialization of new teachers: Does induction matter? *Teaching and Teacher Education 26*, 1592–1597.

Paul, R. (1994). Teaching critical thinking in the strong sense. In K. S. Walters (Eds.) *Re-Thinking Reason: New Perspectives in Critical Thinking* (pp.181–198). Albany: SUNY Press.

Scheopner, A.J. (2010). Irreconcilable differences: Teacher attrition in public and catholic schools. *Educational Research Review* 5, 261–277.

Schultz, T. (1971). Investment in Human Capital. The Role of Education and of Research. New York: Macmillan.

Siivonen, P. (2010). From a "student" to a lifelong "consumer" of education? Constructions of educability in adult students' narrative life histories. Jyväskylä: FERA.

Swachten, L. (2015). Being and becoming in teaching. Towards an ethics for self-cultivation in times of crisis and control. In: H. Heikkinen, L. Swachten & H. Akyol (Eds.) Bridge over troubled water. New perspectives on teacher induction. Ankara: Pegem Akademi, 22 - 94.

Tynjälä, P. & Heikkinen, H. (2011). Beginning teachers' transition from pre-service education to working life. *Zeitschrift für Erziehungswissenschaft*, *14*, 11–34.

Tynjälä, P. (2008). Perspectives into learning at the workplace. Educational Research Review 3, 130-154.

## **Peter Earley and Sara Bubb**

## Schools as Learning Communities: Effective Professional Development

## Abstract

This paper draws upon recent research and literature to discuss what is known about effective professional development. It begins with a discussion of terminology and offers a definition of professional development before investigating in more detail what constitutes effective professional development. This links to a discussion about the nature of learning communities and how professional development is led within such communities. Finally, we consider the changing nature of provision and approaches to teacher development and learning with a greater focus on school-based provision with a practitioner emphasis.

**Key words:** Learning-centred communities; leadership for learning; effective professional development and learning.

## Introduction

This presentation given at the Eger Conference in September 2015 discusses what is known about effective professional development by drawing upon recent research and literature. It begins with a discussion of terminology and provides a definition of professional development before investigating in more detail what constitutes effective professional development. This links to a brief discussion about the nature of learning-centered communities and how professional development is led within such communities. Finally, we consider the changing nature of provision and approaches to teacher development and learning with a greater focus on school-based provision with a more practitioner emphasis.

## Definitions and terminology

Language in the field of 'staff development' is a fundamental source of confusion even in English. For example the following terms are sometimes used interchangeably and at other times they carry specific meanings: Early professional development (EPD) Induction Continuing professional development (CPD) Professional learning or Continuing professional development and learning (CPDL) Training and development In-service education and training (INSET) Learning communities, schools, organisations.

Partly because of this confusion and lack of clarity about what is meant by staff development we developed the following definition which we published in our 2007 book on leading and managing continuing professional development. We said it was:

an on-going process encompassing all formal and informal learning experiences that enable all staff in schools, individually and with others, to think about what they are doing, enhance their knowledge and skills and improve ways of working so that pupil learning and wellbeing is enhanced as a result. It should achieve a balance between individual, group, school and national needs; encourage a commitment to professional and personal growth; and increase self-esteem, resilience, self-confidence, job satisfaction and enthusiasm for working with children and colleagues. (Bubb & Earley, 2007, 4)

In our 2010 book 'Helping Staff Develop' we revisited this definition and attempted to unpack it by considering its various features. We make reference to nine features which together go to make up our definition of staff development. They are:

1. Staff development is an on-going process

The process is what is important: development is something that is within the person all the time, not something done to or provided for them.

2. It encompasses all formal and informal learning experiences

We develop in many ways: through the planned and formal activities as well as the learning through experience, to say nothing of the thoughts that occur while watching a film or which pop into your head in the shower.

3. It enables all staff in schools, individually and with others, to <u>think about</u> what they are doing

*Thinking about what you're doing is crucial. As Socrates said, 'I cannot teach anybody anything, I can only make them think.'*  4. It enhances knowledge and skills.

You've got plenty of knowledge and skills and now you're going to get yet more.

5. It *improves ways of working* so that pupil learning and well-being is enhanced

The goal of all development should be that ultimately things are better for the children and young people.

6. It achieves a balance between individual, group, school and national needs

We need to develop and help others to so that the benefits are multiplied.

7. It encourages a <u>commitment</u> to growth

*As Benjamin Britten said, 'Learning is like rowing against the tide. Once you stop doing it, you drift back'.* 

8. It increases resilience, self-confidence and job satisfaction

Working with children and young people can be tough, especially on the emotions so we need to look after and develop our resilience, confidence – and enjoyment of our work.

9. It gives staff <u>renewed enthusiasm</u> for working with children and with colleagues.

(Bubb and Earley, 2010, 2)

#### Learning centred communities

The types of schools in which teachers work are crucial to their development. Many years ago the American Judith Warren Little said: "*Imagine that you could become a better teacher just by virtue of being on the staff of a particular school – just that fact alone*" (Little, 1990). This sentiment was also developed by Susan Rosenholz writing about the same time in the US when she referred to 'Learning impoverished' and 'Learning enriched' schools (Rosenholz, 1989). In her seminal research she saw the latter schools as learning-centred communities where everyone sees themselves as a learner. They also appreciate that professional learning goes on as part of their work – the workplace is a learning workshop. Teachers share their work and collaboratively seek to develop innovative practice since staff believe these to be valuable and productive ways to improve students' learning experiences. They also seize learning opportunities at other sites and events such as conferences, seminars and courses outside the school. Leaders in a learning-centred community promote a strong sense of shared vision for the future; they lead the learning, by being seen to be learning with everyone else; and they share and distribute leadership and empower others.

They also promote collaboration and collegial ways of working and continuous improvement is built into the fabric of the school. In Rosenholtz's (1989) terms they are 'learning enriched' rather than 'learning impoverished' schools. An adapted version of her typology of schools is shown below:

#### 'Learning impoverished'

- teacher isolation
- teachers compete with each other
- lack of positive feedback
- pulling in different directions
- avoidance of risk-taking
- a sense of powerlessness
- made to do professional development (PD)
- PD treated negatively

#### 'Learning enriched'

- collaboration and sharing
- continuous teacher talk about practice
- a common focus
- a sense of efficacy
- belief in life-long learning
- looking out as well as in
- focus on improving things for pupils
- feedback is welcomed
- safe to take risks and try out new things teachers share values

(from Bubb and Earley, 2007, 18)

Interestingly, and much more recently our colleagues at London have analysed the OECD TALIS data for England and note the following:

"Teachers with less experience tend to have lower self-efficacy (...) self-efficacy tends to be higher when teachers report good relations with others in the school. This includes cooperation and collaboration with colleagues, supportive feedback which is associated with positive changes in behaviour – such as the amount or type of CPD – and also good relations with students in the school (...) (although) we cannot be sure about the direction of causality here". (Micklewright et al, DfE TALIS report, 2014, 190)
Of course professional development (PD) can take a wide variety of forms and vary in terms of expense and effectiveness. It does not only consist of going on courses, conferences and workshops. The following, although not exhaustive, gives an idea of the very wide range of professional development opportunities schools make use of: Observation, Being observed, Learning walks, Professional learning conversations, Study groups and Lesson study, Reading, Coaching/mentoring, Pupils' views, Joint practice development, Teamwork (e.g. planning), Video, Action research and professional inquiry, Networks, New roles, On-line communities, Working with specialists, Disseminating learning and Training others.

Again data from TALIS suggest that teachers in England report higher than average participation in courses and workshops (75%) and in-service training in outside organisations (22%), but lower than average participation in more in-depth activities, such as research or formal qualifications – and less time spent overall on profession-al development.

We are beginning to have a better idea of what forms and types of PD offer greatest value. The process of teachers working together or collaboratively and learning from each other has become much more commonplace in England over the last few years as it has been seen to be more effective. Collaborative PD is seen as powerful. As Sebba (2013) has noted:

Traditional approaches to Continuous Professional Development (CPD) are largely based on transferring knowledge or 'best practices' from an expert presenter to his or her audience. Research shows that this is rarely effective. By contrast, Joint Practice Development (JPD) is a process by which individuals, schools or other organisations learn from one another.

Joint Practice Development has three key characteristics; it:

- involves interaction and mutual development related to practice
- recognises that each partner in the interaction has something to offer and, as such, is based on the assumption of mutually beneficial learning
- is research-informed, often involving collaborative inquiry.

Although not a term coined by him, David Hargreaves has promoted its use in England and notes that joint practice development is:

- a joint activity in which two or more people interact and influence one another (beyond 'sharing good practice')
- an activity that focuses on teachers' professional practice, i.e. what they do, not merely what they know
- a development of the practice, not simply a transfer of it from one person or place to another, and so a form of school improvement.

(Hargreaves, 2012, 9)

Another relatively new form of collaborative teacher development deemed to be effective is Research Lesson study. This helps teachers to:

- develop and innovate new practice in order to solve classroom problems
- provides a framework for the collaborative study of the basic unit of teaching and learning the lesson
- engineer the way the lesson is framed and talked about.

Also con tinuing to gain popularity as a form of professional development is coaching and mentoring; most commonly, coaching involves the 'coach' watching the 'learner' teach but the strongest evidence comes from Showers and Joyce (1996), who report the greatest benefit when the 'coach' is the person teaching and the observer, the one being 'coached', since the observer is expected to learn more from watching a colleague teach. In general, they state, coaching should be perceived as a collaborative activity between teachers, not a one-way expert critique.

These examples of collaborative professional development or joint practice development have been found to be very beneficial forms of PD but what else do we know about effective professional development?

## Effective professional development

We know that development activities are likely to be more effective if participants do most of the following:

- choose them to fit in with their life and work
- want to do them, see their relevance, know the intended outcomes
- are involved in evaluating impact
- feel that their existing expertise is taken into account
- like the teaching & learning strategies used
- can apply what they have learned
- are open to learning beyond that intended

(Bubb and Earley, 2010, 91)

Research into outstanding staff development practices shows that they were likely to be most effective when there was a strong ethos in the school. Leaders fostered, and all staff felt a sense of entitlement to and responsibility for their own development, closely linked to benefits for pupils. At the case study schools we studied with strong staff development staff turnover was low and morale was high, staff development was led and managed by experienced senior staff who were well-informed and gave it much time, linking it strategically to school improvement in efficient and cost-effective ways.

In a review of the literature conducted for England's National College in 2012, nine strong claims were made about effective professional development that leads to great pedagogy. It was found that such professional development:

- starts with the end in mind
- challenges thinking as part of changing practice
- is based on assessment of individual and school needs
- involves connecting work-based learning and external stimulation
- ensures learning opportunities are varied, rich and sustainable
- uses action research and enquiry as key tools
- is strongly enhanced through collaborative learning and joint practice development
- is enhanced by creating professional learning communities within and between schools
- requires leadership to create the necessary conditions

(Stoll, Harris and Handscomb, 2012)

Earlier research conducted by Earley and Porritt in 2009 in England identified nine factors that underpinned the most successful PD projects and strongly influenced effective practice. These were:

- Establishing clarity of purpose at the outset in PD activity
- Specifying a focus and goal for PD activity aligned to clear timescales
- Including a focus on pupil outcomes in PD activity
- Participants' ownership of PD activity
- Engagement with a variety of PD opportunities
- Time for reflection and feedback
- Collaborative approaches to PD
- Developing strategic leadership of PD
- Understanding how to evaluate the impact of PD.

The above were determining factors in PD activity having an impact on colleagues' thinking and practice, the learning of pupils and organisational improvement. Having this impact is the hallmark of effective PD. A key finding of the research was that PD activity, to be effective, needed to be underpinned by the nine factors identified above, irrespective of the PD activity, the participants, the context or the setting. This means that any developmental activity (attending a course, lesson observation, joint planning or being coached, etc.) will be more effective and have a greater impact if these nine factors underpin the strategic approach to PD activity in the organisation.

It has been argued that PD is only effective when it makes a tangible difference to the attitudes, thinking and practice of colleagues and has the potential to make a difference for the organisation and for pupils. The key question, therefore, is to know whether PD has made a difference and the ways in which it has brought about improvement. The last of the nine factors – 'understanding how to evaluate the impact of PD' – was crucial but many schools still struggle with this.

There are many models and theories about PD and its evaluation. Kirkpatrick's (1959) pioneering work on impact evaluation identified impact on four levels: reactions; learning; behaviour; and outcomes. Thomas Guskey (2000) developed this thinking for education and introduced a significant focus on evaluating PD through 'learning outcomes' for young people. Guskey's well-known model sees impact from PD as being achieved at five potential levels:

- participants' reactions,
- participants' learning,
- organisation support and change,
- participants' use of new knowledge and skills, and
- student learning outcomes.

Bubb and Earley (2010) build on Guskey's (2002) five evaluation levels to offer a model of 12 different levels of impact from any development activity, the first of which is establishing a baseline or knowing where you are. Other impact levels are: setting goals (knowing what you want to achieve); plan (planning the best way); the PD experience (initial satisfaction); learning (knowledge, skills, attitudes acquired or enhanced); organisational support (how the school helps or hinders the person using their new learning in their job); putting new learning into practice (degree and quality of change following from the PD activity); pupils' learning outcomes (impact on experience, attainment and achievement of pupils); other adults in school (sharing learning with other adults and the impact on them); other pupils in school (impact on experience, attainment and achievement of other pupils); adults in other schools (sharing learning with adults in other schools and the impact on them); and pupils in other schools (impact on experience, attainment and achievement and achievement of other pupils).

Frost and Durrant (2003), have made a helpful distinction between three sorts of impact on staff: classroom practice, personal capacity and interpersonal capacity. They also discuss the impact of PD on children in terms of distinguishing factors such as their enjoyment in learning, attitudes, participation, pride in and organisation of work, response to questions and tasks, performance and progress and their engagement in a wider range of learning activities.

Robinsons' meta-analysis (2009) showed that 'promoting and participating in teacher learning and development' is the single most important dimension of the leadership

of schools. From a meta-analysis of 23 international studies the key factors associated with effective school leadership were derived. Statistical data were used to establish effect sizes (ES) for five dimensions of leadership in terms of their impact on student learning. The results were striking, with leadership related to teacher development having by far the greatest impact on students. Acting as learning-centred leaders was crucial for as she notes 'the more leaders focus their relationships, their work and their learning on the core business of teaching and learning the greater their influence on student outcomes' (Robinson, 2011). Developing teachers makes the biggest contribution to student learning outcomes and school leaders' actions are crucial for creating that 'learning enriched atmosphere' within school for both pupils and adults.

Promoting and participating in teacher learning and development (0.84) Establishing goals and expectations (0.42) Planning, co-ordinating and evaluating teaching and the curriculum (0.42) Resourcing strategically (0.31) Ensuring an orderly and supportive environment (0.27) The figures in brackets are 'effect sizes'. Effect sizes are measured on a scale of 0-1 where anything below 0.2 shows a weak or no effect, and anything greater than 0.6 reveals a significant impact.

Figure 1: Five dimensions of effective school leadership (Robinson, 2011)

## Conclusion

In summary, the changing professional development landscape in England over the last five years or so involves:

- collaboration within and across school/s
- coaching and mentoring
- research and inquiry approaches
- school led professional development
- school to school support/alliances
- teachers learning from each other to improve skills and practices
- impact evaluation with a strong focus on improving outcomes for pupils.

Reviews and summaries of factors making for effective professional development continue to be published on a regular basis (e.g. see findings from review of reviews on effective teacher PD from the Teacher Development Trust and the publication *Developing Great Teaching*, 2015). These reviews and meta analyses, and their frequency, give an indication of the importance that is now given to teachers and their professional development. But as suggested the forms and processes of PD are different today than they were say ten years ago. David Hargreaves, an influential writer in this field, has suggested we have moved or are in the process of moving to a better model of professional development and learning - from a 'knowledge model' to a 'practice model'. The latter consists of regular opportunities for PD throughout a teacher's career; progressive development fused with best professional practice; learning by doing; teachers' own research; improving what teachers do not just what they know; coaching and mentoring; in-house design and in-house facilitation; and PD developed by schools for schools.

One of the key messages of this paper is that 'Good schools make good teachers' and 'Good teachers make good schools'. It is a reciprocal and complementary relationship. The school workforce and especially teachers are the school's most important and expensive resource. This means that schools need to be 'good employers' and that means getting the balance right and meeting the needs of the whole school (through its school development plan) and its staff - and their needs. Schools must strive to be learning communities or learning enriched after all:

- To learn from one who is still learning is like learning from a running stream.
- To learn from someone who has stopped learning is like learning from astagnan pond.

## References

Bubb, S. & P. Earley (2010). Helping staff develop in schools. London: Sage.

Bubb, S. & P. Earley (2007). Leading and Managing Continuing Professional Development. London: Sage.

Earley, P. & Porritt, V. (eds) (2009). *Effective Practices in Continuing Professional Development: Lessons from Schools*, London: Institute of Education and TDA, Bedford Way series.

Hargreaves, D. (2012). A Self-improving School System in International Context. Nottingham: National College for School Leadership.

Joyce, B. & Showers, B. (2002). *Student achievement through staff development*: Association for Supervision & Curriculum Development.

Little, J. (1990). The mentor phenomenon and the social organization of teaching. *Review of Research in Education*, 16, 297-351.

Micklewright, J., Jerrim, J., Vignoles, A., Jenkins, A., Allen, R., Ilie, S. & Hein, C. (2014). Teachers in England's secondary schools: evidence from TALIS 2013. London

Robinson, V. (2011). Student-centred Leadership, San Francisco: Jossey Bass.

Rosenholtz, S. (1989). Teachers' Workplace: The Social Organisation of Schools. New York: Teachers College Press.

Sebba, J. (2012). Powerful professional learning: a school leader's guide to joint practice development, Nottingham, NCSL.

Stoll, L., Harris, A., & Handscomb, G. (2012). Great professional development which leads to great pedagogy: nine claims from research. Nottingham, UK: National College for School Leadership.

# Jurriën Dengerink:

## Teacher Educator's Competencies: What is Needed in a Multi-faceted and Contested Profession

## 1. Introduction

According to a recent review study of Cochran-Smith and Villegas (2015), studying teacher educators has become a distinct research domain within the research into teacher preparation. Especially in the past ten years, the number of publications shedding light on aspects of the profession of teacher educators has increased (Lunenberg, Dengerink & Korthagen, 2014). But it is still considered an under-researched area (Davey, 2013). In addition to this, Loughran states (in Lunenberg et al., 2014, vii):

"It is almost as (...) that the work of teacher educators has been superficially perceived as relatively straightforward and easy to understand. As a consequence (....) the sophisticated knowledge, skills and ability necessary to do that work well, are either overlooked, or, sadly, ignored."

But who are they? Teacher educators constitute a *distinct professional group* within education, differing from teachers in primary and secondary education. Jean Murray (2005) in her study with Trevor Male qualified them as 'second order' teachers. Teachers teach pupils in primary or secondary education, teacher educators support the learning of (prospective) teachers in a higher education context.

Teacher educators are *a heterogeneous* group. They work in different settings (Lunenberg, 2010). There is a growing group of school-based teacher educators, co-operating with university-based teacher educators and their students (Cochran-Smith, 2003; Van Velzen and Volman, 2009). Some teacher educators have a single school-subject as their main field of interest, others have a background in pedagogy or psychology. In addition, teacher educators are increasingly expected to support the continuous professional development of teachers and to conduct research (Koster, Dengerink, Lunenberg, & Korthagen, 2008; Swennen, Jones & Volman, 2010). In this contribution, I use a broad *definition of teacher educators*: all those who teach or coach (student) teachers with the aim of supporting their professional development. This definition corresponds with the definition which, as a result of a peer-learning activity, is in use in EU-publications (European Commission, 2013).

This brings us to the question what these teacher educators have to know and have to be able to do.

In recent years, several national frameworks defining the competencies of teacher educators have been developed by national associations of teacher educators (ATE, 2003; 2008; VELON, 2001; 2012; VELOV, 2012; Mets & Van den Hauwe, 2015). In these same years, the use of frameworks has been increasingly criticized in research (Sachs 2003; Kelchtermans 2013; Ceulemans, Simons & Struyf, 2014). According to these critics, these frameworks do not reflect the complexity of the profession. They view them as simple instruments for quality control in an era of accountability, and therefore counterproductive for teacher educator development.

#### Central questions

This debate brings to the fore some central questions to be dealt with:

- What does recent research say about this multifaceted character of the profes sion of teacher educators?
- Is it (still) possible and meaningful to define generic competencies for teacher educators?
- If so, what do they look like and what can we say about an underlying knowledge base?
- What does this mean for the selection, education and professional development of teacher educators?

#### Main argument

In this contribution, I will suggest and, on the basis of published research, will try to underpin that it does make sense to formulate generic competencies, but that the required competencies depend on contextual factors, such as the prevailing vision on teacher education, and the specific role the teacher educator plays or wants to play within it. I will also bring forward that the necessary education of teacher educators is highly undervalued in both research and practice, and that the research into the professional development of teacher educators covers only a part of the multifaceted profession.

## 2. The multifaceted teacher educator

Research into what teacher educators do and what their role is, can be approached from different angles. This part of the contribution is mainly based on the review study into the *roles of teacher educators* of Lunenberg, Dengerink and Korthagen (2014), some recent Flemish PhD-studies based on an approach of *'enacted professionalism'* (Tack and Vanderlinde, 2014; Vanassche and Kelchtermans, 2014), a recent study into teacher educators in New Zealand (Davey, 2013), the first results of a European survey study into what teacher educators *are actually doing* and on some studies focusing on the biographical perspective.

## 2.1. Multiple roles of teacher educators

Lunenberg et al. (2014), in their review study based on a selection of 136 peer-reviewed articles out of a total of 1262, identified six main roles of teacher educators:

1. *Teacher of teachers*. The second order character of this role (Murray & Male, 2005) requires a specific pedagogy of teacher education, of which 'modelling' ('teach as you preach, 'walk your talk') and explicating are important aspects (Loughran & Berry, 2005; Swennen, Lunenberg & Korthagen, 2008).

2. *Researcher*. The attention to the role of the teacher educator as researcher is gaining in strength. Among teacher educators, there is no consensus on whether they have to fulfil the role of researcher and – if that should be the case - what this role involves: is it about reading literature, supervising research students or conducting research oneself? Several studies have shown that teacher educators have different views concerning the question of whether or not conducting research is a part of their work (Smith, 2005; Wold, Young & Risko, 2011; Murray, Czerniawski & Barber, 2011).

3. *Coach.* Coaching of the learning process takes place both at the institute and in the workplace, i.e. the school. The study of Wold et al. (2012) shows that teachers consider the coaching role of their teacher educators as the most influential. According to (prospective) teachers, essential aspects of this role are openness, accessibility, enthusiasm, passion, forgiveness, inspiration, respect, helpfulness, integrity and being generous and open-minded. Too often, mentor teachers base their behaviour on their own personal experiences as a teacher and advise students about practical issues in their specific school situation. Making their own teaching behaviour and the underlying thinking explicit proves to be hard (Van Velzen and Volman, 2009).

4. *Curriculum developer*. The development of a curriculum for teacher education is the subject of a relatively large number of studies, especially into curriculum development in collaboration with schools. However, closer analysis reveals that few articles have the teacher-educator-as-curriculum-developer as an object of (self-)study. Several studies reported on the lack of collaboration among teacher educators in curriculum development, with the result that many of the courses were highly disjointed (e.g. Kosnik and Beck, 2008).

5. *Gatekeeper*. In the role of gatekeeper, the teacher educator monitors the access of the student to the teaching profession, and in several cases also the admission to the teacher education curriculum. The yardstick by which teacher educators measure the future teacher is mainly determined by specified standards and profiles or rubrics. The emphasis on constructivist concepts has led to a wide use of portfolios in teacher education, and the role of the teacher educator as an assessor of portfolios. As to the practice component, the role of the school-based teacher educator as assessor and gatekeeper has become increasingly important.

6. *Broker*. University-based and school-based teacher educators increasingly share the responsibility for the education and development of (prospective) teachers. This calls for teacher educators able to shape this cooperation process. He An (2009) introduced the term 'broker' for this role, often carried out in the setting of a community of learners (Wenger, 2000).

### 2.2. Enacted professionalism

Since this review study, some new PhD-studies have been published. In Flanders in particular, we see research with a strong focus on actual teacher education practices in conceptualizing and studying teacher educator professionalism, the so-called 'enacted professionalism'. Regarding the dispositions of teacher educators on research, Tack and Vanderlinde (2014) in their study found three types of teacher educators: the enquiring teacher educator, the well-read teacher educator, and the teacher educator-researcher. The first category refers to teacher educators who recognise and appreciate that there are teacher educators as researchers, but they themselves do not have the knowledge and understanding to conduct research. On the other side of the spectrum, the teacher educator-researchers have the ability to engage in research and by nature conduct research into their teaching practices, and are convinced that engaging in research is the norm in order to become a good teacher educator. Tack notes that the latter category is relatively small in Flanders. Vanassche and Kelch-

termanns (2014) in their study focused more on the role of teacher of teachers and the kind of teachers teacher educators want to educate. They identified three teacher educator positionings: the teacher educator of pedagogues, of reflective teachers and the teacher educator of subject teachers. So within two of the roles, identified in the review study, we already see some very fundamental differentiations.

#### 2.3. Teacher educators about what they are doing

When asked what teacher educators are actually doing, the differentiation in activities is still larger. The first results of a European survey, based on more than 900 university-based teacher educator respondents, show that core activities are, not surprisingly, teaching, supervising and mentoring students and beginning teachers, providing professional development to teachers, and being engaged in research (InFoTED, still unpublished data). But asked about additional activities, the survey offers a large variety of answers, e.g. (the actual list is about four times longer): selection; recruitment; supervision of placements in schools; coordinating the work of other teacher educators; developing new courses; external examining; evaluation; admissions; administration for courses; supporting other colleagues; consultancy work; faculty management; managing a partnership of colleges; quality assurance; strategic management of programmes; (being) a national committee member; (being) a programme leader; publishing professional and academic writing; giving emotional and developmental support; developing school partnerships; developing blended learning; leading and marketing programmes; interviewing; providing career guidance; writing funding applications; community engagement, etc. We also see this notion of a large variety in Davey's study into teacher educators in New Zealand (2013, 79):

"The notion of job complexity is one that emerged constantly from their stories. They all had a conception of their role, work and job as multi-faceted and multi-layered – one in which many aspects overlap with others. As they described them, their jobs were a complex mix of the pedagogical, pastoral, scholarly, interpersonal, managerial, administrative, advisory and consultative. Moreover, they often had to operate across these quite different roles at the same time."

What comes out of these additional job-descriptions are additional clusters besides teaching and research: a managerial-administrative, and a service cluster, consisting of advisory and consultancy work, participating in national and international development projects and organisations, service to the community and the further development of university-school cooperation at different levels.

#### 2.4. With different biographies

Regarding the background of university-based teacher educators, in the US the most usual way of becoming a teacher educator is having some teaching experience, writing a thesis, or doing a doctoral study in education directly after a master and then enter teacher education (Acker, 1997; Zeichner, 2005). In many other countries teacher educators enter teacher education directly from primary or secondary education. In most of these cases, those with teaching experience in secondary education have a Master in a discipline related to the school-subject they are teaching, and not a degree in educational sciences. School-based teacher educators don't even enter higher education, though they are expected to mentor prospective teachers on a higher education level. So, for the large majority, entering teacher education is a second career in not their first discipline.

And during their career as a teacher educator, the character and the scope of their activities will become broader. In the beginning, their main focus will be on being the teacher of teachers and the mentor, but sooner or later they will also get involved in research, in supporting the continuing professional development of teachers, in service and maybe also in managerial tasks.

#### 2.5. In different contexts

Additionally, the responsibilities and activities of teacher educators are highly dependent on the way teacher education is looked upon in their immediate environment. These views are diverse and partially explain the not undisputed status and character of teacher education. What may be seen as the most prominent scenarios are on the one hand the school-based scenario, highly focusing on a practitioner-technicist approach, informed by classroom experience and local school settings; and on the other hand the academic, research-based or even research-driven, university-based scenario, where teachers are prepared to become agents of change and critical thinking, and where teacher education deals with broad social and philosophical issues and the more generic pedagogical implications (Aubusson & Schuck, 2013). This means that teacher educators have to navigate between the two and to encompass the requirements of both schools and academia. Besides, in universities we still see the assumption that knowledge necessary for educating teachers is not so much about teacher education pedagogies but about the content or discipline knowledge, and that effective teacher education focuses on transferring this content knowledge rather than on knowledge that might be specific to teacher education (Goodwin et al., 2014). Within teacher education there are several curriculum approaches. In addition, the political context plays an important role, with in some countries a strong focus on PISA-scores and accountability, or on the other hand on social justice. And we see all kinds of variations within and between these scenarios.

#### 2.6. Conclusion: a large diversity

Thus, the profession of teacher educators is, as Kari Smith (2011) labelled it, multifaceted and characterised by a large variety of responsibilities, roles and activities, especially among more experienced teacher educators within universities. Though the teaching and coaching of prospective teachers is prevalent, many teacher educators are involved in research as well. But they also have very different dispositions regarding research, for a great deal dependent on different expectations and discourses within their work environment. In addition, quite a lot of activities may be shared around administration, leadership, and quality assurance, within the own institute and in school-university partnerships. And what seems to be undervalued and also less researched are the activities which we may group under the third task of universities besides teaching and research: service. This includes supporting continuing professional development of teachers, supporting innovation in schools, community service, participating or leading national and international networks and innovative projects.

This diversity in the work of a teacher educator is related to (a) prior experience and expertise, (b) the career-phase they are in, (c) the position of teacher education within their university or school and (d) personal and contextual prevailing dominant conceptions on good teacher education and research.

# 3. Is it (still) possible and meaningful to define generi competencies for teacher educators?

So, with this enormous variety in mind, we come to the question: does it still make sense to define generic competencies for teacher educators? Competencies are here understood as a cluster of related abilities, commitments, knowledge, and skills enabling a person to act effectively in a professional situation. Generic competencies indicate sufficient knowledge and skills enabling someone to act in a wide variety of situations. Because each level of responsibility has its own requirements, the issue of competence can occur in any period of a person's life or at any stage of his or her career.

## 3.1. National frameworks defining competencies of teacher educators

As has been said above, in several countries national frameworks defining the competencies of teacher educators have been developed. Important to note is that these frameworks were developed by teacher educators themselves, mostly within national associations of teacher educators. Those who initiated the development of these standards highly valued the ownership of the professionals themselves. Also, the developers were aware that these frames of reference were developed in a politico-social context and an educational discourse which might change over time. The frames of reference were developed for a certain period, and should be revised periodically. Actually, in the Netherlands, a fourth version of the professional standard of teacher educators is in use at present. Our first conclusion is that the critique that these standards are imposed, needs to be refined.

But still, we have to be prudent with ownership. As Koster and Dengerink (2008) state:

"Even when a professional standard is developed by the professional group itself, alertness on the issue of what 'ownership' means, and how it is generated, still remains necessary. For example, a core group of teacher educators could very easily set up a new standard which might be 'state of the art' and 'up to date', but which does not accord with the views of the majority" (p. 142).

For instance, Kelchtermans (2013) supports a more practice-based approach of professionality, against what he calls the "blueprint-approach", where a panel of experts claims the legitimacy to express what teachers or teacher educators should know, be or do. According to him, standards embody the risk to make teachers and teacher educators instrumental executors of goals which are not their own. Professionalism should express itself in someone's specific personal expertise, engagement, responsibility, and care for students.

#### 3.2. Generic standards and the complexity of individual practice

So, we may refine our question to: where do the communally developed standards and the individual interpretation of an individual teacher educator of what he/she has to know and is able to do in a specific context, come together? Is a valuable relation possible between the generic standards and the complexity of individual practice, or are generic standards irrelevant to the individual teacher educator and his or her practice?

Both approaches have to acknowledge that teaching and teacher educator practice are complex and that the effect of the behaviour of teachers and teacher educators on their students is to a certain extent unpredictable. Standards cannot prescribe practice. But at the same time they are a condensed description of what the prevailing conceptions of professional quality are. In that sense, standards can be a valuable frame of reference for individual professionals in helping them to make choices in their professional practice and personal development. And they can also be a frame of reference for individual professionals and teams of how they want to relate to these more generic professional values and competencies. In the Netherlands, the standard is widely used and appreciated as such. In dialogues with colleagues or peers, teacher educators reflect on their own practices and identify their own qualities and professional development needs, using the professional standard of teacher educators as a frame of reference. And by applying for certification as teacher educator, they express to what extent and in what respect they want to belong to that tribe of professionals we call teacher educators.

#### 3.3. Does defining general competencies make sense?

It is our conclusion that for these reasons it does make sense to define generic competencies of teacher educators, but that it is necessary to be alert to the conditions for ownership and professional autonomy when they are to be described in a national framework like e.g. standards. Their main function should not be managerial or controlling, using them as a 'tick list', but supportive in interpreting and developing one's own personal and professional identity and qualities, in professional dialogue and in instilling a sense of belonging to a professional group. These standards should be open to the diversity within the profession and not be one-dimensional.

Additionally, conditions and contextual factors are important and they differ per country. They characterise to a large extent the debate about and the possibilities for the development of a framework that makes sense to the actual practices of teacher educators.

## 4. The competencies and knowledge of teacher educators

This brings us to our third question: what do generic competencies of teacher educators look like and what can we say about the underlying knowledge?

To gain a greater grip on the content of the competencies of teacher educators, two ways will be explored in this contribution. The first is a short analysis and comparison of three existing frames of reference. The second focuses on the underlying knowledge teacher educators have or should have, by looking at the structure and contents of a knowledge base for teacher educators as developed in The Netherlands, and at some recent studies.

## 4.1. Three frames of reference: their focus, structure and contents

Our first analysis deals with the main focus, structure and contents of three frames of reference describing competencies of teacher educators: the American Standards for Teacher Educators, developed within the Association of Teacher Educators (ATE, 2008), the Dutch standard for teacher educators, developed by the Dutch Association of teacher educators VELON (VELON, 2012; Melief, Van Rijswijk & Tigchelaar, 2013), and the Flemish/Belgian 'Ontwikkelingsprofiel' (Developmental profile) of teacher educators, developed within the Flemish association of teacher educators VELOV (VELOV, 2012). All three have been developed in close cooperation with and by teacher educators.

Regarding their *focus*, they are all intended as a starting point for self-evaluation, feedback by peers and intervision, in order to enhance the professional development of teacher educators. To support this development, they all have the accomplished teacher educator as a reference, and not the beginning teacher.

Regarding the structure, the American standard consists of nine elements describing the competencies of the teacher educator in behavioural terms (sentences starting with: model teaching..., engaging in inquiry..., providing leadership....), with indicators for each element. The Flemish and Dutch standard both start with some fundamental principles regarding the being, and attitudes and responsibilities of teacher educators. In these fundamental principles, the Dutch version refers to modelling, awareness of one's own values, relatedness to knowledge, inquiry as a stance, and reflection. Subsequently, the Flemish Developmental Profile makes a subdivision into nine generic teacher educator roles (for instance: the teacher educator as a supervisor of learning and developmental processes; the teacher educator as a content expert; the teacher educator as an involved and critical social participant), and attaches a short description to each of these roles, intended as a source of inspiration for development, of related knowledge, behaviour, and attitude. While the description of roles and competencies of teacher educators is integrated into the American and Flemish standards, we see in the model of the Dutch standard a unique circle of roles and contexts of teacher educators around the foundational principles and competency areas. This circle expresses the diversity within the profession. Several of these roles and contexts, but not all of them, apply to most teacher educators, and for most of them in a different balance. This circle supports the teacher educator in relating to the foundational principles and competency areas. Each area of this circle contains a brief description on aspects such as responsibility, knowledge and behaviour, and references to accompanying sections of the Dutch knowledge base of teacher educators. These competency areas or domains are:

- Pedagogy of teacher education: structuring learning processes of (prospective) teachers; educating and training by modelling; promoting the exchange between theory and practice; monitoring the development of (prospective) teachers;
- 2) Supervising professional learning: interpersonal interaction; dealing with diversity; supervising the development of a professional identity;
- Organisation and management: structuring shared education; working in a multi-disciplinary team; contributing to the organization of teacher education; contributing to teacher education management;
- Developmentally competent: reflection; analytical performance; maintaining one's expertise.

These competency areas are mainly described in verbs with a noun and an adjective.

Overviewing the *contents* of the competency areas of the three frames of reference, all refer to identity-aspects (being), knowledge and understanding, attitude and actual practice or behaviour. Regarding the themes, all deal with the pedagogy of teacher education, interpersonal relations and coaching, and organisation. Compared to the others, the Dutch standard pays little attention to what the ATE standard calls the cultural competency of promoting social justice. Values in the Dutch standard are formulated in a more post-modern way: teacher educators have to be aware of the choices they and other people make.

All standards, and especially the Dutch one, are low key regarding research. They refer to inquiry, or inquiry as a stance, to systematic reflection, to being research-informed, sometimes to scholarship (ATE). Only in sublines we see sentences like 'Engage in action research' (ATE) or 'is able to carry out research or make an academic contribution relating to topics relating to education, learning' (VELOV).

## 4.2. Underlying knowledge

Our second way of gaining a greater grip on generic competencies of teacher educators is to look at the specific knowledge they need for their individual practices. Particular knowledge and expertise is central to a professional group's identity. It binds together individuals within the group, and distinguishes them from other groups (Verloop, Van Driel & Meijer, 2001; Davey, 2013). Therefore it is important to address the question if the profession of teacher educator requires particular knowledge and expertise.

### 4.2.1. The Dutch knowledge base

The first version of a Dutch knowledge base of teacher educators was developed some years ago (Attema-Noordewier, Dengerink, Lunenberg, & Korthagen, 2012; VELON 2011). For this knowledge base, an international focus group identified ten knowledge domains, relevant to the profession of teacher educators. Of these domains, four core domains are generic for all teacher educators: the identity of teacher educators, the pedagogy of teacher education, and (with Murray's metaphor (2005) regarding teacher educators as second order teachers in mind) knowledge about learning and learners and knowledge about teaching and coaching. Next, we have a cluster of two 'specific' domains: the contents of these domains are specific to different groups of

teacher educators, depending on the kind of institution they are working in (including a differentiation between teacher education for primary, vocational, and lower and upper secondary education), and the specific school subject they are specialised in. The remaining four 'extended' domains are especially relevant to more experienced teacher educators. They are about the policy context and participation in networks, about participation and leadership within their own institution, about the knowledge they need for developing curricula and assessment, and about a special domain on doing research.

For each knowledge domain, four core questions were formulated. E.g. for the domain 'Profession Teacher Educator' the questions 'what is characteristic of the profession', 'what types of teacher educators can be distinguished', 'how do you become a teacher educator' and 'how can you continue your development'. And for each of these questions, an encyclopaedic article was written by a specialist in that field, with further literature references. The character of the corpus of these articles is not monolithic, and even sometimes contradictory, inviting discussion and reflection.

Recently the preparations for an update of the knowledge base have started.

4.2.2. Recent studies into the underlying knowledge of teacher educators

In more recent years, several studies regarding the underlying knowledge of teacher educators have appeared, mainly on the basis of interviews with teacher educators (Davey, 2013) or on the basis of what should be in the curriculum of teacher education (Goodwin and Kosnik, 2013). Davey (2013) identified three broad areas of propositional / content knowledge as essential for teacher educators *and* their student teachers: a comprehensive knowledge of the specialist subject, including pedagogical content knowledge, a comprehensive knowledge of a range of educational and pedagogical theories, and a working knowledge of schools, schooling and the teaching profession in its national context. Additionally, she argued that the kind of knowledge teacher educators ought to have is comprehensive in three dimensions: a. it is not only the knowledge of the what and the how, but it is also knowledge-in-action: teacher educators have 'to walk their own talk', but also 'to talk their own walk'; b. (and related to this) it is what Davey calls the 'nestedness' and 'recursiveness' in the expertise of teacher educators: it is teaching about teaching; and c. the knowledge is inclusive and generalist in its scope. One of her interviewees puts it as follows:

"I get the impression that in most fields of academia success is defined by knowing more and more about less and less. (...) In our job [though], it seems we always have to know more and more about more and more" (p. 115).

Goodwin and Kosnik (2013) distinguish five domains of teacher educator knowledge, based on what should be in the curriculum of teacher education. These domains pay more attention to sociological knowledge than we observe in the Dutch knowledge base, but do represent, perhaps in a somewhat different terminology, the same components as in the Dutch and Flemish frameworks:

- 1) Personal knowledge autobiography and philosophy of teaching;
- 2) Contextual knowledge understanding learners, schools, and society;
- Pedagogical knowledge content, theories, teaching methods, and curriculum development;
- 4) Sociological knowledge diversity, cultural relevance, and social justice; and
- 5) Social knowledge cooperative, democratic group processes, and conflict resolution.

## 4.3. Concluding: structure and main contents of competencies and underlying knowledge of teacher educators

On the basis of several approaches, we may conclude that there appear to be corresponding domains in all of these studies and frameworks regarding the competencies of teacher educators.

The first domain has to do with *foundational principles* and the character and identity of the profession, especially the second order character of the profession.

Then there are some underlying basic domains that *teachers* should master: content knowledge, pedagogical content knowledge, knowledge about learning and teaching. And in a broader sense: knowledge on the role of education, and on the roles of schools within and serving the surrounding community.

Then, we see the central domains more specific to *teacher educators*: pedagogy of teacher education, teaching and learning in teacher education as a subsystem of higher education, developing scholarship and conducting research, supporting the continuous professional development of teachers and service to the further development of education in a global and diverse society.

As we have already noted: to combine all of these domains in one person seems to be impossible. To overcome this problem, the Dutch standard has incorporated a differentiation in work context and work profile. So eventually there are teams of teacher educators, with a wide array of expertise. In line with this approach, the Flemish VELOV propagates the use of the 'Ontwikkelingsprofiel' (developmental profile) in teams, in which each individual teacher educator can identify his or her own role and the expertise needed to implement this role. So, this identification and a more elaborated description of general domains of competencies may serve as a frame of reference for personal and professional positioning and development, and for professional discourse within teams of teacher educators.

## 5. Selection, education and professional development

What does this imply for the selection, education and continuing professional development of teacher educators? Aspects I want to address are selection and induction into the profession; learning needs and learning preferences of teacher educators; factors promoting professional development, and a model of the dynamics of the professional learning of teacher educators.

## 5.1. Education, selection and induction

Research about the selection of teacher educators is very scarce. Twombly et al. (2006) analysed the required and preferred qualifications in advertisements for posts of teacher educators in the US. Nearly all institutions either required or preferred the highest degree, a PhD or the equivalent. This, while, compared to other staff in higher education, in fact relatively few teacher educators have a PhD. About one third of the advertisements did not ask for prior experience in primary or secondary education. However, especially research universities required experience in higher education teaching. Other detailed studies are lacking, but studies from other countries suggest a much higher percentage than two-thirds of teacher educators with prior experience in primary or secondary education (Murray, 2005; Martinez, 2008). Only recently, a study based on recruitment materials and interviews with personnel involved in the

employment of teacher educators at university-based New Zealand initial teacher education distinguished three constructions of teacher-educator–as-academic-worker: the professional expert, the dually qualified, and the traditional academic (Gunn et al., 2015). A general tendency seems to be that, due to a further academisation of teacher education, the quest for teacher educators with a PhD, research experience and experience in higher education teaching will increase. Further research in this field is necessary, because the selection of teacher educators may be an important factor in the quality of teacher education.

Research into the *induction* of beginning teacher educators has increased in recent years, especially the research into their introduction and initial years in academia after their previous career as a teacher In primary or secondary education. Prior education specific to teacher educators is non-existent. In most countries there are professional development trajectories for school-based teacher educators and mentors, but differing considerably in size and quality. Only in some countries (Israel, The Netherlands e.g.) are voluntary courses introducing newly appointed teacher educators into their new professional life at the university. One of the most problematic aspects seems to be that being a respected teacher, you have to find your way to become a teacher of teachers in a higher education context, with the feeling of being a novice, and with conflicting allegiances to scholarship and research. While most inductions are unstructured, many beginning teacher educators valued as very helpful the informal and ad-hoc talks with one or two more experienced colleagues, with whom they could build a positive relationship (Davey, 2013, p. 62). But most studies advocate far more and better formalised induction schemes (Murray & Male, 2005; Martinez, 2008; Korthagen, Loughran & Lunenberg, 2005; Davey, 2013). A very informative brochure on how to set up induction schemes for teacher educators in their initial years of higher education was written by Boyd, Harris and Murray (2007; 2011).

#### 5.2. Differentiated learning needs and preferences of teacher educators

Regarding the professional development of teacher educators, it is helpful to consider the learning needs of teacher educators. Some years ago, Dengerink, Lunenberg and Kools (2015) conducted a survey in the Netherlands of the learning preferences of teacher educators in schools and universities. On *what* teacher educators prefer to learn, this study found significant learning needs and preferences between schoolbased and university-based teacher educators and between teacher educators in their initial years and experienced teacher educators. In their initial years, teacher educators struggled to find their way and identity and feel a need for coaching or supervision. After their first years of experience, an interest in experimentation and conducting projects emerged. The focus of school-based teacher educators was predominantly on the cooperation with the teacher education institution and on coaching, while the focus of university-based teacher educators was mainly on the pedagogy of teacher education.

Regarding *how* they wanted to learn, all teacher educators had a preference for intentional informal learning (reading literature, attending congresses, intentionally experimenting and having conversations with their colleagues). Significant differences were found between school-based and university-based teacher educators with regard to the person with whom they wanted to learn. School-based teacher educators mainly wanted to learn together with colleagues in their own region, being involved in a partnership between schools and universities, while university-based teacher educators wanted to learn individually or with colleagues within their own institution and (as experience was growing) also with colleagues of other universities.

On the basis of these differences, four profiles of teacher educators were identified related to their learning preferences. So, it is important to emphasize that there is no 'one size fits all' regarding the professional development of teacher educators. On the other hand, if we want integrated curricula of university- and school-based teacher education, it is important to bring together into professional development arrangements teacher educators from different backgrounds and to make these differences explicit as a basis for collaborative learning.

#### 5.3. Research about and factors promoting professional development.

The review study of Lunenberg et al. (2014) gives a better insight into the factors promoting and inhibiting the professional development of teacher educators in their various professional roles. Hardly any research was found into the professional development of teacher educators in their roles as curriculum developer, gatekeeper and broker. In the other roles, of teacher of teachers, researcher and of coach, some recurring elements promoting professional development were (a) the existence of an accepted frame of reference, (b) an institutional context which has a vision on and facilitates professional learning, (c) personal characteristics such as an inquiring stance and (d) the necessity to connect with prior knowledge and experience. Also, studying one's own practices, for instance by self-study or lesson study, has proven to be very fruitful for one's professional development. Transformative tensions, when

professionals are assigned new roles or tasks or are (temporarily) situated within new contexts, are also considered as a powerful factor for professional learning in practice.

## 5.4. Towards a model of the dynamics of professional learning of teacher educators

Recently, a group of European teacher-educators–researchers, called the International Forum of Teacher Educator Development (InFoTED), has developed a conceptual model of teacher educator development (Vanassche et al., 2015). It is *a* model, not *the* model, as it implies normative, political and professional choices.

According to this model, the starting point for the professional development of teacher educators has to be their practice, situated in the actual setting of the local teacher education institute and in the national or regional policy context. The local level refers to, for instance, the culture of the teacher education institute, the existing teacher education programs, or teacher education curricula. This level can also refer to relations with placement schools or other partnerships. The national level refers to national policy measures, existing frameworks, or standards for teacher educators. Finally, teacher educators' practices are situated at a global level stressing their relationship with supranational and societal change.

Within this model, teacher education and the professional attitude of teacher educators should be critical and inquiry oriented, self-regulating, caring, contextually responsive and research informed.

This professional attitude is related to several aspects characterizing the 'dynamics of professional learning', for instance social and technological change, diversity in society, communication and relations between teacher educators and different stakeholders, and the visions teacher educators have about the nature and future of 'good' education.

Finally, what is relevant to the professional learning of teacher educators depends on their role and situation (for instance being situated in a school or university) and their career-phase.

In my view this is a very rich framework. It is respectful of the multifaceted dispositions and practices of teacher educators, it makes contextual factors and the rich character of professional development explicit, and also lends focus to the kind of professional development opportunities which can be developed for the different career phases and the specific positions of the individual teacher educator.

## 6. Summary and conclusions

In this contribution, we have addressed the character and work of teacher educators, the possibility and meaningfulness of defining generic competencies for teacher educators, what the contents of these competencies and an underlying knowledge base could be and what this means for the selection, education and professional development of teacher educators.

The work of teacher educators can be studied from different perspectives: their roles and responsibilities, their enacted professionalism and what they are actually doing, and their biographies. Their work is multi-faceted. Though teaching and coaching of (prospective) teachers is prevalent, many teacher educators are also involved in research. Additionally, especially later in their career, many of their activities may be grouped around leadership and service: supporting development and innovation in the professional practice of teachers, in schools and school-university partnerships and in national and international educational networks and policy. These leadership and service activities are under-researched. The work of teacher educators is also contested and not always recognised in its double function of serving teachers in schools and serving academic standards in higher education and research.

It makes sense to define general competencies of teacher educators but when they are described in a national framework such as, for instance, standards, it is necessary to be attentive to the conditions in which they are being developed and used. These conditions concern professional ownership and a political and professional culture which is not mainly based on accountability, but also on supporting development and diversity.

The competencies and underlying knowledge of teacher educators are multi-layered. Principles about the character of the profession and identity of teacher educators are foundational. The core of these principles is the multi-layeredness and second order character of the profession. This means that the competencies teacher educators have should include the first order competencies teachers possess: disciplinary content knowledge, pedagogical content knowledge, knowledge about learning and teaching. And in a broader sense: knowledge of and a vision on the role of education, and on the roles of schools within and serving the surrounding community. The second layer is essential and more specific to teacher educators: pedagogy of teacher education, teaching and learning in teacher education as a subsystem of higher education, developing scholarship and conducting research, supporting the continuous professional development of teachers and service to the further development of education in a global and diverse society.

To combine all of these competencies in one person is impossible. Teacher educators are supposed to work in teams. An elaborated description of general domains of competencies may serve as a frame of reference for the personal and professional positioning and development, and for the professional discourse within teams of teacher educators.

The issue of the selection and education of teacher educators is under-valued in research and practice, while it is an essential aspect regarding the quality of teacher education. Prior education specific to teacher educators is non-existent. Induction for teacher educators into a university context is mostly based on informal mentorship by a colleague. What teacher educators want to learn depends to a large extent on their specific tasks, context and career-phase. As to how they want to learn, most teacher educators prefer `intentional informal learning'. Concerning their professional development in their roles as curriculum developer, gatekeeper and broker, hardly any research has been conducted. Factors promoting professional development of teacher educators are the existence of an accepted frame of reference, a supportive institutional context, personal characteristics of the teacher educators, and transformative tensions.

This means that principles and notions such as identity-development, communication, responsibility, contextuality and diversity are essential to the professional development of teacher educators individually, in teams and in communities, as a professional group, and to the educational community as a whole.

#### References

Acker, S. (1997). Becoming a teacher educator: voices of women academics in Canadian faculties of education. *Teaching and Teacher Education*, *13*(1), 65-74.

ATE (2008). *Standards for teacher educators. 3d revised edition*. The Association of Teacher Educators. Retrieved 8 December 2015 from http://www.atel.org/pubs/Standards.cfm.

Attema-Noordewier, S., Dengerink, J.J., Lunenberg, M.L., & Korthagen, F.A.J. (2012). Kennisbasis, relevantie en nut. [Knowledge base, relevance and use]. *Tijdschrift voor Lerarenopleiders*, 33(2), 4-11.

Aubusson, P. & Schuck, S. (2013). Teacher education futures: today's trends, tomorrow's expectations. *Teacher Development: An international journal of teachers' professional development*, *17*(3), 322-333.

Boyd, P., Harris, K., & Murray, J. (2011). *Becoming a teacher educator: guidelines for induction*. 2<sup>nd</sup> edition. Bristol, UK: The Higher Education Academy, ESCALATE.

Ceulemans, C., Simons, M., & Struyf, E. (2014). What – If Anything – Do Standards Do in Education? Topological Registrations of Standardising Work in Teacher Education. *European Educational Research Journal*, *13*(1), 73-88.

Cochran-Smith, M. (2003). Learning and Unlearning: the Education of Teacher Educators. *Teaching and Teacher Education*, 19(2003), 5-28.

Cochran-Smith, M. & Villegas, A.M. (2015). Framing Teacher Preparation Research: An Overview of the Field, Part I. *Journal of Teacher Education*, 66(1), 7-20.

Davey, R. (2013). The Professional Identity of Teacher Educators. Career on the cusp? London: Routledge.

Dengerink, J., Lunenberg, M., & Kools, Q. (2015). What and how teacher educators prefer to learn. *Journal of Education for Teaching*, 41(1), 78-96.

European Commission (2013). *Supporting Teacher Educators for better learning outcomes*. Brussels: European Commission – Education and Training.

Goodwin, A.L. & Kosnik, C. (2013). Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development: An international journal of teachers' professional development*, *17*(3), 334-346.

Goodwin, A.L., Smith, L., Souto-Manning, M., Cheruvu, R., Tan, M.Y., Reed, R., & Taveras, L. (2014). What should Teacher Educators Know and Be Able to Do? Perspectives from Practicing Teacher Educators. *Journal of Teacher Education*, 65(4), 284-302.

Gunn, A.C., Berg, D., Hill, M.F., & Haigh, M. (2015). Constructing the academic category of teacher educator in universities' recruitment processes in Aotearoa, New Zealand. *Journal of Education for Teaching*, *41*(3), 307-320.

He An E. (2009). Bridging the gap between teacher educator and teacher in a community of practice: a case of brokering. *System*, *37*(2009), 153-163.

Kelchtermans, G. (2013). Praktijk in plaats van blauwdruk. Over het opleiden van lerarenopleiders. [Practice instead of a blue-print. About educating teacher educators]. *Tijdschrift voor Lerarenopleiders*, *34*(3), 89-99.

Korthagen, F., Loughran, J., & Lunenberg, M. (2005). Teaching teachers – studies into the expertise of teacher educators: an introduction to this theme issue. Editorial. *Teaching and Teacher Education*, 21(2005), 107–115.

Kosnik, C. & Beck, C. (2008). We Taught Them about Literacy but What Did They Learn? The impact of a preservice teacher education program on the practices of beginning teachers. *Studying Teacher Education*, *4*(2), 115-128.

Koster, B. & Dengerink, J.J. (2008). Professional standards for teacher educators: how to deal with complexity, ownership and function. Experiences from the Netherlands. *European Journal of Teacher Education*, 31(2), 135-149.

Koster, B., Dengerink, J., Korthagen, F., & Lunenberg, M. (2008). Teacher educators working on their own professional development: goals, activities and outcomes of a project for the professional development of teacher educators. *Teachers and Teaching*, *14*(5), 567-587.

Loughran, J. & Berry, A. (2005). Modelling by teacher educators. *Teaching and Teacher Education*, 21(2), 193-203.

Lunenberg, M. (2010). Characteristics, Scholarship and Research of Teacher Educators. In: E. Baker, B. McGaw, & P. Peterson (eds.). *International Encyclopedia of Education*. 3<sup>rd</sup> Ed. Oxford, UK: Elsevier. pp. 676-680.

Lunenberg, M., Dengerink, J., & Korthagen, F. (2014). *The Professional Teacher Educator. Roles, Behaviour, and Professional Development of Teacher Educators.* Rotterdam/Boston/Taipei: Sense Publishers.

Martinez, K. (2008). Academic induction for teacher educators. *Asia-Pacific Journal of Teacher Education*, 36(1), 35-51.

Melief, K., Rijswijk, M. van & Tigchelaar, A. (2013). Accounting for the Dutch Professional Standard of Teacher Educators 2012. *Pedagógusképzés*, 1(4), 118-180.

Mets, B., Hauwe, J. van den, & Meeus, W. (2013). Vlaamse lerarenopleiders weten waar naartoe! Het ontwikkelingsprofiel als professionaliseringsinstrument [Flemish teacher educators know where to go to! The developmental profile as an instrument for professional development]. *Tijdschrift voor Lerarenopleiders*, 34(4), 31-42.

Murray, J. & Male, T. (2005). Becoming a teacher educator: evidence from the field. *Teaching and Teacher Education*, 21(2005), 125–142.

Murray, J., Czerniawski G., & Barber, P. (2011). Teacher Educators' Identities and Work in England at the Beginning of the Second Decade of the Twenty First Century. *Journal of Education for Teaching*, *37*(3), 261-277.

Sachs, J. (2003). Teacher Professional Standards: controlling or developing teaching? *Teachers and Teaching: theory and practice*, 9(2), 175–186.

Smith, K. (2005). Teacher educators' expertise: what do novice teachers and teacher educators say? *Teaching and Teacher Education*, 21(2005), 177-192.

Smith, K. (2011). The multi-faceted teacher educator: a Norwegian perspective. *Journal of Education for Teaching: International research and pedagogy*, *37*(3), 337-349.

Swennen, A., Jones, K., & Volman, M. (2010). Teacher educators: their identities, sub-identities and implications for professional development. *Professional Development in Education*, *36*(1), 131-148.

Swennen, J.M.H., Lunenberg, M.L., & Korthagen, F. (2008). Preach what you teach! Teacher educators and congruent teaching. *Teachers and Teaching, Theory and Practice*, 14(6), 531-542.

Tack, H. & Vanderlinde, R. (2014). Teacher Educators' Professional Development: Towards a Typology of Teacher Educators' Researcherly Disposition. *British Journal of Educational Studies*, 62(3), 297-315.

Vanassche, E., Rust, F., Conway, P., Smith, K., Tack, H., & Vanderlinde, R. (2015). InFo-TED: Bringing Policy, Research, and Practice Together Around Teacher Educator Development. In: C. Craig & L. Orland-Barak. *International teacher education: Promising pedagogies (Part C)*. Brinkley, UK: Emerald Books.

Vanassche, E. & Kelchtermans, G. (2014). Teacher educators' professionalism in practice: Positioning theory and personal interpretative framework. *Teaching and Teacher Education*, 44(2014), 117-127.

VELON (2011). *Kennisbasis model* [Model Knowledge base]. Retrieved 8 December 2015 from http:// www.lerarenopleider.nl/velon/kennisbasis/kennisbasis-model/. http://www.lerarenopleider.nl/velon/ kennisbasis/kennisbasis-model/

VELON (2012). Beroepsstandaard voor lerarenopleiders: referentiekader voor de beroepsgroep [Professional Standard for Teacher Educators – frame of reference for the profession]. Eindhoven: VELON. Retrieved 8 December 2015 from http://www.lerarenopleider.nl/velon/wp-content/uploads/2013/09/brochure\_beroepsstandaard\_web.pdf.

VELOV (2012). *The Flemish Teacher Educator Development Profile*. Antwerpen: VELOV. Retrieved 8 December 2015 from http://www.velov.eu/.

Velzen, C. van & Volman, M. (2009). The activities of a school-based teacher educator: A theoretical and empirical exploration. *European Journal of Teacher Education*, *32*(4), 345-367.

Verloop, N., Driel, J. van, Meijer, P. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research*, 35(2001), 441-461.

Wenger, E. (2000). Communities of Practice and Social Learning Systems. Organization, 7(2), 225-246.

Wold, L.S., Young, J.R., & Risko, V.J. (2011). Qualities of Influential Literacy Teacher Educators. *Literacy Research and Instruction*, 50(2), 156-172.

Zeichner, K. (2005). Becoming a teacher educator: a personal perspective. *Teaching and Teacher Education*, 21(2005), 117-124.

## **Meinert Meyer**

## **Beyond Fragmentation - Opening the European Space for Didactics, Learning and Teaching**

## Introduction

In this paper I try to find an answer to the following question: Can we find space for didactics, learning and teaching in a European framework? And before answering that: Do we need a common framework for didactics? The answer is, of course, fairly difficult.

We tend to understand teaching and learning as something natural. It has to be the way it is. But, unfortunately, everybody sees this natural normalness of teaching and learning differently. I therefore start with sketches of Rembrandt as visualisation of this problem and look back at the work of one of the great German educationists, Friedrich Schleiermacher (1768 – 1834). He claims that there are only three kinds of educational activity (Schleiermacher, 1826/1958, 61 - 107) and I retraced them in Rembrandt's sketches.

The first educational action is *protection* which children need in order to grow up in safety. However, Schleiermacher stresses that protection will always have to come to an end. In Rembrandt's sketch, the mother takes the little boy onto her arms because he cannot yet master to climb down the stairs on his own. But protection of this kind will, of course, have to come to an end, the sooner the better.



Figure 1: Rembrandt: Mother and child (probably his wife and his son)

The second of Schleiermacher's educational activities is *counter-action*, and there can be no doubt, what Rembrandt shows in his second sketch is directed against the intentions of the child:



Figure 2: Rembrandt: The disobedient child

From my point of view the drawing is an excellent visualization of educational counter-action! See the shoe flying through the air, and the boy half naked struggling against his mother gripping him and the second woman and the two children in the dooryard watching the scene. We can imagine that the mother asked the boy before to come into the house, and that he didn't do it.

Counter-action happens all the time in the process of raising children, but Schleiermacher has a warning. To him counter-action is the most problematic educational activity because the children will try to find ways out without changing their opinion nor their intentions concerning their disobedience.

Our third type of educational activity is the only effective one, as Schleiermacher points out. It is the support of the child. This can be seen in a sketch of Rembrandt called "The first free steps".



Figure 3: Rembrandt: The first free steps

We see two women, probably once again the mother and the neighbour, helping the child to learn to walk. But they do not help directly, their intervention is hardly noticable. The boy in his endeavour to walk needs only their helping stimulation: "Come on, you can walk!"

All three situations as sketched by Rembrandt appear to be natural, entirely self-evident. But this exactly is my problem: We may ask ourselves how it comes that we understand the three sketches as self-evident, how it comes that we see them as representing educational scenes, and the answer is that obviously we bring in our own life experience, the knowledge we have acquired through life. We understand the scenes because teaching and learning belong to the basic actions of humankind throughout history and throughout world cultures. Educating, teaching and learning belong to the universals of humankind. Does this, however, mean that we understand the educational situations depicted by Rembrandt just the way in which Rembrandt understood them? We don't know, even though this is counter-intuitive (Meyer, 2011). John Amos Comenius (1592 – 1670), the founding father of didactics and contemporary of Rembrandt living nearby in Amsterdam, would most likely have seen 'old Adam', sinful man, in the disobedient child, and would have assumed behavioural and intellectual principles most of us today might not easily understand. And what holds for raising and educating children holds even more for schooling and instruction. We, the grown-ups, have learnt to understand our world in a specific way, we have made it teachable and ascribe sense to it, and this means that again and again we misunderstand the others.

I therefore formulate a first argumentative assumption: "It seems as if there is a basic element in education, including teaching and learning in schools, as exemplified by the three Rembrandt pictures showing us three kinds of educative activity: taking care in the literal sense, i.e. guarding the young against dangers, objecting against what we, the grown-ups, think is not right, and helping them to learn on their own". (Meyer 2007, 2011).

The assumption helps to better contextualize the title of my presentation, "Beyond Fragmentation: Opening the European Space for Didactics, Learning and Teaching". We have to ask ourselves whether there really is, whether there can be a state of education, schooling, teaching and learning that is not distorted by fragmentation. Speaking of "fragmentation" thus gives our problem a specific turn. I imply that there has been a unity which has been shattered sometime in the past.

In the following I will explain the didactical theory of Comenius, hoping to find common ground. Prior to that I will briefly sketch the didactical situation in contemporary Germany.

## 1. Structuring the present-day didactical field

It is fairly difficult to give a short description of the prevailing trends in the field of didactics in Germany, today (cp. Meyer, Prenzel and Hellekamps, 2008; Terhart, 2009; Porsch, 2016; Meyer, 2016 forthcoming). But as far as I know, there is some kind of overall consensus regarding the tripartite relationship of teacher-student-content that can be visualized with the so-called "didactical triangle" below:


Figure 4: The didactical triangle

Didactics deals with the relation of the teacher to both, the student(s) and to the subject matter at hand. However, this is only a first step. The next step is bringing in the teacher as actor in the instructional process. He has to be aware of his position in the school system, he has to have competence in his subject(s) of instruction, and he has to know the curricula which hold for his subject(s), for his type of school and for the age group he has to teach. Teaching next means that he has to identify his teaching aims, find the adequate content to be taught, master the methods he needs and be aware of the organisational frame determined by his school in particular and the school system in general. Product of his activity is a lesson plan which can be realized in the classroom.

This however is rather an idealized representation and at the same time a very traditional indication of what really happens in the classroom. It identifies the field of research for general didactics with focus on the teacher and his job. The students only show up as objects of his activities, and that is why we have to transform the teacher-centred model into a student-centred model of the instructional process. I will come back to that later, but will, for now, first return to the didactical triangle. How do we have to understand the relation of the teacher to his/her students and of the students to their teacher? Obviously what they do is not the same. The teacher teaches and guides the students in their studies, he tries to help them to develop their individuality and their social competence, but learning is what the students themselves have to accomplish. And what is the relation of the teachers to subject matter? Obviously it is different from the students' relation to subject matter. But in both cases it is a construction! The teacher constructs what he holds to be the cultural heritage in order to teach it to the students, by that realizing 'general knowledge' ("Allgemeinbildung"), and the students try to make sense out of the programme administered by the teacher. They produce their own sense constructions. Thus the sense constructions of the students work like a filter. Only what the students consider to be meaningful for them will they let through.<sup>1</sup> The didactical triangle introduced above therefore has to be re-written as a triangle identifying the problems connected with the teacher's and the students' roles and with subject matter and by that with lesson planning.



Teacher should not teach but coach?



Students should not acquire general knowledge but solve their developmental tasks?

The content of instruction is always a construct which also might be otherwise?

Figure 6: The expanded and problematized didactical triangle

Didactics deals with the relation of the teacher to the students and to subject matter as explained above, but all three corners are problem areas.

In the following sections I take lesson planning as the best suited example for the demonstration of what didactics is all about. Of course, the sub-fields of didactics deal with much more than only lesson planning:

- Institutionalised teaching and learning
- Curriculum theory (including curriculum implementation research)
- History of instruction
- Teacher education / professionalisation

<sup>1</sup> Let me add here that I use the concepts of consstruct/construction, destruction and reconstruction in John Dewey's way, I am not a follower of the radical constructivism as it can be seen today.

- Teacher and student biography research
- General education ("Allgemeinbildung" and "Bildung")
- Lesson planning and instruction
- Evaluation and consultation

We see that didactics covers a field much broader than instructional research and curriculum research in the English speaking countries. And we have a further increase in complexity: Quite a number of didactic models in Germany compete with each other in their claim to have the best focus on teaching and learning (cp. Terhart 2009; Porsch 2016). And there are models outside of Germany which are generally unknown to us. This – among other points – also exemplifies my thesis that today didactics continues to benational didactics, in Germany and beyond.



Figure 7: German competing didactic models and the European perspective

In the following sections I will write about Wolfgang Klafki's first didactical model (Bildung-oriented categorical didactics) and a little bit about his second model (critical-constructive didactics) with focus on content or, as he puts it, on thematic structure, about didactics for learner development and educational experience (Bildungsgang didactics) and about Joint Action Theory in Didactics with its focus on transposition of an <u>a</u>-didactical content into didactical content. But I go back now to  $17^{\text{th}}$  century Comenius.

## John Amos Comenius: theologically-grounded didactics

I start with my two key statements which we had been asked for by the organizers of the Eger conference:

Didactics in Europe has its origin in the epochal works of Jan Amos Comenius, but over the centuries, it has become a national enterprise. We should therefore try to trace back the common roots and explicate the differences in order to profit from the comparison and to establish networks of communication on teaching and learning in today's fragmented world.

In his introduction to "Pampaedia", *the all-encompassing education*, Comenius states his ultimate objective: He writes: "*Pampaedia means the universal culture of all of mankind*" (Comenius 1960, 15).<sup>2</sup> The objective of *cultura universalis* is to improve what man does on earth (in Latin: it is to be an *emendatio rerum humanarum*). All children (*omnes*) have to go to school, they have to learn everything (*omnia*) that is necessary, and they have to do it thoroughly, encompassing everything (*omnino*). and what holds true for children also holds true for adults: Comenius constructs man's whole life as a sequence of schools. He therefore understands the world we live in as an *artificial world (mundus artificialis*). Only then can man strive to realise *cultura universalis*, to engage in building a better world, to start with the improvement of things.

In the Middle Ages, general education meant studying the seven free arts (*septem artes liberales*). Comenius breaks with this tradition. He writes:

"It appears to be a difficult undertaking to make sure that all men be led to culture, universal culture, solid culture, thus becoming new men, really transformed to become images of God. But since our wish is so wonderful, we have at first to postpone the idea that it may be the case that it cannot be realised. Only after an examination of all and everything should we come to the conclusion that we have searched in vain" (Comenius 1960, 10).

The central concept here is the concept of 'transformation'. The transformational process means the development of freedom, and here Comenius is full of enthusiasm about having found his "wonderful" educational idea. He sees *transformation* quasi-automatically as a *didactical* issue:

<sup>2</sup> This and all the following translations have been produced by the author.

"Man's freedom is not unconditional since it depends on God's objectives, but God has to cope with the problem that man can reject his proposal, his action plan for mankind" (Comenius, 1960, 25). Man has to strive to become equal to God and since nobody can know, in early life, which particular competencies he will have to make use of as a grown-up in his compliance with God's will, excluding anybody from a good general education would mean working against God's will. A comprehensive school for all children is therefore obligatory in Comenius' eyes.

In his Didactica Magna, Comenius formulates two maxims for his theologically grounded didactics. In Chapter 2 he writes: *"The ultimate end of man is beyond this life."* And in Chapter 6: *"If man is to be become man, it is necessary that he be formed by education."* Man has to strive to become equal to God; he is a picture (*imago*) of God. However, this imago-Dei construction stands in marked contrast to Comenius' conception of the teacher's teaching activity:

In order to become effective, teaching must be arranged in an analogy to what happens in nature and to what craftsmen do. Comenius presents many examples for this analogical aspect of his didactics. He compares the teacher to the gardener and to the sun, he sees the learning child like a bird growing up in its nest; he adopts an analogy of man's soul and the clockwork mechanism. What is most fascinating, very detailed and strange in comparison to present-day thought (at least at first glance) is his comparison of the art of teaching with the art of book printing. Teaching is like book printing. The discovery that a teacher can teach more than one student at a time is crucial for Comenius. He explicates the benefits of his invention, direct instruction, with great joy (Comenius, 1960, 130). Everything that has to be learned, omnia, must find its way into the students' minds, and this means that the teacher has to 'impress' the students, and from the students' side it means that they have to 'absorb' what the teacher tells them. In the introduction to his Orbis sensualium pictus (1658), Comenius writes; "The antidote to rudeness is ex-rudition (formation, education, author's addition, My) which the minds (of children) have to absorb in schools". If I teach, then I want the students to absorb what I say. Otherwise I would stop teaching.

I come to my conclusion concerning Comenius' didactics.<sup>3</sup> A didactic model should give advice for pre-service and in-service teachers with respect to preparation, realisation and evaluation of instruction.

<sup>3</sup> For more on Comenius cf. Meyer in Goris, Meyer and Urbánek. 2016.

In the following diagram I sum up the basic elements of Comenius relating them to lesson planning.



Figure 8: Lesson planning following Comenius

I could not explain all concepts as they show up in this diagramme. But I do hope that it has become understandable what Comenius intends with his theologically grounded didactics.

## Wolfgang Klafki: Bildung-oriented didactics

Klafki is the most prominent of the German didacticians. But this does not mean that I do not have critical questions. For Klafki, the really important point in didactics is "Bildung" itself, the untranslatable word for general knowledge plus self-education on a higher level.

In his PhD thesis from 1959, he explains the relevance of "Bildung". "Bildung" means that what was closed, hidden, not in the scope of learners becomes visible, and this is a categorical process. The learner learns to use the categories which open up the world to him. The learning process therefore is a process of generalization.

Let me add that here Klafki's argumentation leads astray, as I see it, because he wants the teacher to present concrete content which at the same time is general. Klafki calls this phenomenon "categorical autopsia" ("kategoriale Anschauung") and writes:

"In spite of the directness and closeness of the objective that can be experienced in autopsia (Anschauung), this object of autopsia is never presented as individual, but as particular. Always there is also something "general" produced in this process: however, the fact that this "general something" is given directly, without mediation, is what the educational concept of autopsia aims at." (Klafki, 1959/1964, 431)

The centre piece of Klafki's Bildung theory then is to be found in the following statement:

"We take Bildung to be that phenomenon, by which we realize directly the unity of a subjective (formal) and an objective (material) moment in our own experience or in understanding other men" (Klafki 1959/1964, 297).

Dialectics comes in. The learner, opening a categorical field for himself, thereby undergoes a process in which he opens himself for the field and, in the long run, for all of reality:

"This double-sided opening happens as visualization of ,general' content on the objective side and as rise of ,general' insights, exposures and experiences on the side of the subjects." And Klafki once more brings in generalization: "In other words: The visualization of ,general' content on the side of the ,world' is nothing else but the construction of ,categories' on the side of the subjects." (Klafki 1959/1964, 297)

The important point here, as I see it, is Klafki's thesis that Bildung is produced via Anschauung, once more a term difficult to translate. It is *autopsia* in the Greek/Latin language meaning of the word. It is what happens with the learner when he/she develops a higher understanding of what can be seen.

Klafki writes again and again that Bildung offers this perspective: the special object experienced assumes general qualities, as if it were Jack-in-the-box popping out. Klafki does not ask in which ways you may get from the special objects experienced towards 'the general' ("das Allgemeine") on an empirical basis (Klafki, 1959/1964, 431). He assumes that the basics of his first, categorical model also hold for his second, critical-constructive version. He now focuses on how to transform any subject matter communication into communication that fosters Bildung.<sup>4</sup>

The reader will agree that there is an enormous difference between Comenius' and Klafki's models even though they write about the same topics, namely Bildung/education and lesson planning:



Figure 9: Lesson planning from Klafki's perspective

I use the description and evaluation of Klafki's model of didactics for a generalisation. From my point of view it is an often forgotten fact that over the centuries – as already mentioned in section 1 of this paper - didactics has become a national enterprise – in Europe and everywhere else in our world, and I can take Klafki's didactics as my example. At first sight my claim that his didactical model has a national basis seems to be unwarranted. In Germany, after the Holocaust and the end of World War II, the concept of national Bildung was unthinkable! But this is exactly what Klafki offers with his categorical didactics: Didactics not as work on an explicit national basis, didactics without a political dimension. Let me add that this deficit made Klafki develop his second model, the critical-constructive didactics. Didactical analysis has to reflect the political dimension of schooling and instruction.

**<sup>4</sup>** I once more refer to one of my publications: Meinert Meyer and Hilbert Meyer 2007 for further information.

### Gérard Sensevy: Epistemology and Joint Action

Sensevy is a French mathematics didactician, but he has produced a very long general didactics, obviously because there is a need for such a work in a country without chairs for general didactics.

For Sensevy, instruction is a learning game in the Wittgensteinian sense and a winwin situation in which the two players, the teacher and the student, have different roles but nevertheless need each other for success. While the teacher very often has to cooperate with his students by being "reticent" with respect to the content, the students have to be cooperative by accepting the rules of the learning game. Under this condition a didactic 'contract' – the agreement of teacher and students on conjoint action – identifies a system of (largely implicit) expectations; a didactic 'milieu' – the learning dispositions of and the learning environment for the students – qualifies their principally antagonistic roles. I try to elucidate the systematic character of Sensevy's didactical theory with the help of five quotations and their interpretation which again is meant as an invitation for much more reading:

Sensevy, in his theory, combines the Wittgensteiniann approach – you always see something as something – with John Dewey' model of joint action – growth of meaning depends on learning by doing. He writes:

(1) "Producing the theory of a practice means to orient oneself in the production of the theory with respect to the grammar of the practice. The game is a model meant to express that grammar. A given social game can be described as a specific language game/ form of life in a Wittgenstein perspective." In other words: Theoreticians (including didacticians) construct models of a practice.

(2) "A language game/form of life is also a way of producing a specific system of signs whose recognition allows the game to be played." In other words: Theory construction may take the form of a description of a language game–form of life unit in the Witt-gensteinian sense.

(3) Sensevy now goes further than Wittgenstein. He asks how the signs with whose help one can produce the language games/forms of life come into existence "*The process of sense production is seen as a semiosis. The institutions produce thought styles which can be understood as systems which are enclosed in the games which form the perception and the actions*". Sensevy here combines Wittgenstein's language game

with sense production in the pragmatist 'semiosis' tradition. He asks how sense can be produced with the help of signs. And he asks how to describe the institutional frame of the language game/form of life unity, and thereby reaches the complexity he needs in order to describe didactic games as variants of social games:

(4) "The social games which constitute the institutions can be played because they relate to a reciprocal semiosis of one another which allows them to draw joint inferences. And it allows them to understand each other by allowing them to play the games together". After having explained how sense can be produced, Sensevy describes the procedure which keeps the sense production running, i.e. the social institutions. We do not have to invent our language anew every morning! We simply go to school, as always.

(5) The last step then is the description of the didactical game as the objective of all the constructions. Sensevy produces a frame with fixed roles of the players, the Teacher (with a capital T) and the Student (with a capital S, and in the singular). "*The didactic game is an institutionalised game in which the Teacher in his role as teacher can win the game if and only if the Student in his role wins. Didactic action thus is fundamentally cooperative: The Teacher and the Student play together in their transactions in order to guarantee that they win together*" (Sensevy, 2011a, 57, 88).

Sensevy integrates interesting empirical findings in his model construction. Here comes an example from a mathematics primary classroom. Students are asked to enlarge a square figure in such a way that one side with a length of 4 cm becomes 7 cm long. The students' problem is that they have to produce a proportional change of the other sides of the figure. They will realise after some time that the method they already know, addition, does not work. This means that the 'milieu', i.e. the learning situation, is 'antagonistic'; the students do not know how to go on, and the teacher practices 'reticence', she does not 'give' the students 'the solution', knowing that this will not help them in their learning process, in the long run.

While Klafki understands didactical work as thematic analysis, Sensevy understands it as joint action. He writes:

"In a didactic situation, joint action is simultaneously necessary and paradoxical. It is necessary since the teacher's and the student's action cannot be conceived separately. It is paradoxical since the joint action gains its ultimate meaning in the student's autonomy, thus amidst a certain kind of disappearance of the teacher's action" (Sensevy, 2011a, 75). And he defines the ultimate aim of instruction: "The knowledge/competence is what allows one to live better, the knowledge / competence exists for the good life, and if it is the power to act, then it is the power to act for a better life, here and now" (Sensevy, 2011, 738).

Without the last three words, the proposition might have come from Comenius. He would, of course, have added that a better life needs God's help! And Sensevy would probably have answered that Comenius' massive religious orientation produces an unacceptable openness of his didactic theory, while Comenius might have told Sensevy that restricting the didactic theory's objective to "here and now" is an illegitimate closure.

What follows now is Sensevy's model of lesson planning as I see it, again with elements so far not explained:



Figure 10: Lesson planning from Sensevy's perspective

#### **Bildungsgang didactics**

I conclude my presentation with reference to my own research perspective, i.e. *Bil-dungsgang* didactics, and start with a short commentary on Lothar Klingberg (1925 – 1999) who has developed a dialectical didactics because dialectical thinking is needed in Bildungsgang didactics.

From Klingberg's point of view, the instructional process is an interplay of teacher and students, and this interplay can be characterised by both harmony and conflict. Klingberg describes the teacher position and the student positions as follows:

"In instruction, teachers and learners act in a specific pedagogically intended and didactically arranged – structure of interdependencies and conditioning factors, in a pedagogically dense constellation. The fundamental contradiction is that, <u>on the one hand</u>, pedagogically intended, didactically arranged (and often organized processes influence the learner(s), in that pedagogically legitimate objectives, contents, methods, and modes of organization are intentionally directed towards their education (and consequently also aiming at change and development) so that the learners find themselves in a pedagogically and didactically intended object position, while – <u>on the other hand</u>, this same process can only function properly if these 'pedagogical objects' simultaneously adopt the position of a subject.

Obviously, the pedagogical rationale consists in both the permanent synthesis of learner(s) synchronized, varying, overlapping subject- <u>and</u> object position(s) and in a linking of the teachers' subject- and object positions. [...] Learners are neither mere subjects of pedagogically intended instructional processes nor are they objects, rather they are at the same time (direct or indirect) objects and subjects of a process which they, on the one hand, are exposed to, and which, on the other hand, they co-construct" (Klingberg, 1987, 8).

This approach allows the constructive synthesis of the two positions: The teacher leads/ guides the class, and, at the same time, the students do their self-regulated learning. The approach also allows a first conclusion. We accept from Klafki that "Bildung" should find a central place in our didactics. However, we introduce the compound "Bildungsgang" because the process of Bildung is what we need for a good didactical theory. We accept from Comenius that the perspectives for Bildung as process are broader than Sensevy indicates with his "here and now", but we are very much in favour of Sensevy's question, how an a-didactical situation can be transformed into a didactical one. "Bildung" has no simple, straightforward English equivalent. We define a person with Bildung as somebody who is competent to participate in the society he/she lives in and that he/she is capable and willing to take responsibility for himself/herself and for others. This means that Bildung is more than education, it is education in a humanistic sense. It aims at self-regulation and includes a moral dimension. "*Gang*", the second part of the compound, means movement, walking, process, direction et cetera. In combining "Bildung" and "Gang", the focus is on the didactical process, on hope for self-regulated learner development, based on educational experience. The *process* of Bildung is based on the biographical background of students on the one side, and on the developmental tasks the students have to cope with, on the other side.

We thus can overcome the traditional orientation of didactics, from the teachers' perspective, on educational aims, content, methods and media and on institutional contexts as explained above. "Bildungsgang" didactics integrates the past and the future of the students, as they see it, not as the teachers or the didactical researchers want to see it, and sense construction is the bridge and at the same time the filter that combines biography with classroom interaction. We therefore see the possibility of transformation of what the grownups offer as central element of our model (Peukert 2000, Koller 2008, Koller 2014, Meyer forthcoming). Let me add that the teachers, in a parallel process, cope with their professional developmental tasks.

In order to give our didactical constructs an empirical basis, we have investigated how children, adolescents and young adults act in teaching and learning situations. We have analysed how they experience school and instruction and how their biographical background influences their actions. In short: we have analysed – as Havighurst (1948/1972) put it - how the students combine societal constraints and individual freedom. We thus reconstruct the students' developmental processes with their ups and down, crises, and breakthroughs; we reconstruct their sense constructions concerning teaching and learning in the different subjects of instruction. This then opens up to examining how the students become responsible persons (or: drop outs) in an increasingly complex and difficult world.

Let me give one example of empirical research concerning teacher-student interaction in the classroom. All three didactical models presented above, Comenius' Klafki's and Sensevy's, where *positive* in their modelling of classroom interaction which means that one very important factor was left out too often: we found in our research that students and teachers made contracts clearly below Sensevy's one-one win-situation. The 'contract' of the teacher with his students often deteriorates, and the 'milieu' is not always motivating. What we have found in our research was an ambivalent combination of cooperation and conflict, a contract in which the two parties come to an agreement below the level of their real capabilities.

I can now construct lesson planning from the perspective of Bildungsgang didactics (once more with unexplained elements which however the reader will know from other didactical contexts):<sup>5</sup>



Figure 11: Lesson planning oriented by Bildungsgang didactics

I leave the necessary critique of my own presentation to others because, as we all know, self-criticism is a very complicated business. Instead, I try to compare the different models.

<sup>5</sup> For further information see Meyer 2007, 2008, and 2016 (forthcoming).

## Didactics in Germany, France and Russia, but not in the United Kingdom and the other English speaking Countries

I formulated my assumptions for this paper in section 3 above, and I repeat that now: Didactics in Europe has its origin in the epochal works of Jan Amos Comenius, but over the centuries, it has become a national enterprise. We should therefore try to find back to the common roots and explicate the differences in order to profit from the comparison and to establish networks of communication on teaching and learning in Europe.

The reader should accept that till now I could not demonstrate that the two assumptions are right in total. I have to explain in which way we can go back to the common roots, and I start now with two necessary footnotes: 1. We have to cope with the fact that didactics does not exist as an educational sub-discipline in the English speaking countries. But we can cooperate with those educational researchers who work in the fields of curriculum research, in instruction research etc. And 2: We have problems with respect to the situation in Eastern Europe. In the Russian Federation there are thousands of didacticians working in teacher education. However, they nearly never participate in the discourse opened by the didactics network of the European Educational Research Association. We can only hope that this situation will change soon.

And what about the rest of Europe? I have taken the didactical models of Comenius, of Klafki, of Sensevy and of Bildungsgang didactics as examples demonstrating the great variance of model construction in Europe. I have not shown that these models are the product of national history and by that contingent. Nevertheless I assume that the didactical sense constructions documented in these models can be appreciated as good foundations for the attempt to consolidate didactics in Europe without fragmentation. This however implies a change of expectations. The unity of European didactics, the state beyond fragmentation, should be organized on a network basis, not as a top down model. My comparison of the different lesson planning schemes obviously has greater potential than identified so far. The four approaches, the theological one from Comenius, Klafki's categorical orientation, Sensevy's clear distinction between <u>a</u>-didactical (non-didactical) surroundings and didactics proper and my own model including Klingberg's dialectical appproach, need further reflection. Is it possible to combine two or three or four of them? And, even more demanding: what do we have to conclude from the fact that didactics did not develop as a higher education discipline in the English speaking countries? Was it nothing else but Oliver Cromwell's successes in the Civil War that destroyed the perspective of consolidation

of didactics in England? We don't know and we should avoid unwarranted speculation. What we can do, however, is to continue with the formulation of research questions. We can thus appreciate the great diversity of national didactics in Europe as enrichment for all the different models. Seen from this perspective the diversity of didactical models is a sound state of affairs. We don't strive at European uniformity concerning lesson planning and similar didactical activities. And I come to the most important aspect of my findings: It should be possible to practice joint didactical research in spite of differences in theory construction.

From my point of view, sense construction therefore becomes a central didactical concept. In this paper I have not written very much about it, but I have used the concept. It is very broad, with existential qualities and it goes into the depth of classroom communication. It is what teachers and students presuppose in their activities. Let me therefore conclude my tour d'horizon with a comparison of the central didactical sense constructions as I have identified them above:<sup>6</sup>



Figure 12: Comparison of didactical sense constructions in Europe

I thus come to the open end of my argumentation. We should try out how much synthesis of the divergent models is good for us, as Europeans.

<sup>6</sup> The diagramme would show even greater variation if we would include the behaviouristic model of the US-American educational researcher Ralph W. Tyler which was of very great influence in the United States.

#### Conclusion

In this paper I wanted to show that it should be possible to find common ground in didactics with the help of controlled joint instruction research. I therefore foster a European network in didactics. And I mean by that more than what we have already accomplished in the European Educational Research Association. This accomplishment is only an intermediate success in need of further development. The accomplishment, however, has to be made explicit. It has to be defended against national idiosyncracy.

A further question had been whether it is feasible to take the didactical model of John Amos Comenius as starting point for the search for common ground for European didactics, and the answer to this question is a clear yes *and* no. *Yes*, Comenius' didactical works can be appreciated as the powerful and inspiring contribution of the founding father of didactics. But at the same time, we have to accept a clear *no* because from the point of view of research quality there cannot be a privileged position of Comenius' works before and above the works of the other didacticians. What counts is quality, not ancestry. And the same holds for my attempt to demonstrate common ground for didactics on the basis of my interpretation of the Rembrandt sketches. We are prone to see something common to all mankind in them, but further analysis shows that this harmony is only on the surface of our appreciation.

In spite of this negative result, we should strive for a state of didactics beyond fragmentation. Our question then will be what we can imagine, with divinatory power, concerning the future of didactics, what we are able to communicate with each other, in a community of didacticians and educational researchers from the English speaking countries. In other words: What we need is space, a network of communication, not a hierarchical prescription on how to construct our didactical models, and we have been engaged in that activity since long. Comenius' *Imago Dei* objective, Sensevy's contract-milieu equilibrium, and Klingberg's conception of the classroom as an open, never completed, creative communicative process invite us to practice dialectical thinking and to cultivate communication and critique among friends.

#### References

Comenius, J. A. (1657/2000). *Große Didaktik*. Original 1657. Translated by Andreas Flitner, with a commentary by Klaus Schaller. 9th ed., Stuttgart: Klett-Cotta. Comenius, J.A. (1966). *Pampaedia, Editio princeps*. German-Latin edition by Tschižewskij and others, Prague: *Academia Scientiarum Bohemoslovaca* (= *Czech Academy of Sciences*).

Comenius; J. A. (1664). The English version of Orbis pictus, 1664: <u>http://catalogue.nla.gov.au.Re-cord/2463766.</u>

Goris, W., Meyer, M., & Urbánek, eds. (2016). Gewalt sei ferne den Dingen. Contemporary Perspectives on the Works of John Amos Comenius. Wiesbaden: Springer VS.

Havighurst, R.J. (1948/1972). Developmental Tasks and Education. New York: McKay.

Klafki, W. (1959/1964). Das pädaagogische Problem des Elementaren und die Theorie der Kategorialeen Bildung. Weinheim/Bergstr.: Julius Beltz.

Klafki, W. (1985/1991). Neue Studien zur Bildungstheorie und Didaktik. Darin: Grundzüge eines neuen Allgemeinbildungskonzepts". Im Zentrum: Epochaltypische Schlüsselprobleme, 43 -81. Weinheim und Basel: Verlag Beltz.

Klingberg, L. (1987). Überlegungen zur Dialektik von Lehrer- und Schülertätigkeit im Unterricht der sozialistischen Schule. Potsdamer Forschungen, Reihe C, Heft 74. Potsdam: Pädagogische Hochschule "Karl Liebknecht".

Koller, H.-Chr. (2013). Bildung anders denken. Einführung in die Theorie transformatorischer Bildungsprozesse. Stuttgart: Verlag W. Kohlhammer.

Meyer, M.A. (2007). Didactics, Sense Making, and Educational Experience. In: European Educational Research Journal, Volume 6, Number 2, pp. 162–174.

Meyer, M. A., (2008). Unterrichtsplanung aus der Perspektive der Bildungsgangforschung, Zeitschrift für Erziehungswissenschaft (Sonderheft) 9/2008, 117-137.

Meyer, M.A. (2011). Professional Teacher Development and Educational Experience. In: Hudson, B., and Meyer, M.t A., (Eds.): Beyond Fragmentation: Didactics, Learning, and Teaching. Barbara Budrich Publishers, Opladen and Farmington Hills, pp. 404–422.

Meyer, M.A. (2016). Present-day-School Pedagogy and Didactics and the Educational Programme of John Amos Comenius. In: Goris, W., Meyer, M., and Urbánek, V., eds.: Gewalt sei ferne den Dingen. Contemporary Perspectives on the Works of John Amos Comenius. Wiesbaden: Springer VS.

Meyer, M.A. (2016b). Einführung in Schulpädagogik und Allgemeine Didaktk. Opladen and New York: Barbara Budrich (forthcoming).

Meyer, M.t A., & Meyer, H. (2007). Wolfgang Klafki: Eine Didaktik für das 21. Jahrhundert? Weinheim und Basel: Beltz.

Meyer, M.A., Prenzel M., and Hellekamps, S., (Eds.) (2008). Perspektiven der Didaktik, Sonderheft 9 der Zeitschrift für Erziehungswissenschaft.

Peukert, H. (2000). Reflexionen über die Zukunft von Bildung. Zeitschrift für Pädagogik 46 (4), pp. 507–524.

Porsch, Raphaela, (Eds.) (2016). Einführung in die Allgemeine Didaktik. Münster and Toronto: Waxmann.

Schleiermacher, Friedrich D. E., (1957). Die Vorlesungen zur Erziehung aus dem Jahre 1826, Weniger, E., and Schulze, Th.. Düsseldorf: Verlag Küpper und Bondi.

Sensevy, G. (2011). Le Sens du Savoir. Eléments pour une théorie de l'action conjointe en didactique. Bruxelles: De Boeck.

Sensevy, G. (2011a). Overcoming fragmentation: Towards a joint action theory in didactics. In Hudson, B. & Meyer, M. A. (Eds.) *Beyond Fragmentation: Didactics, Learning, and Teaching*, pp. 60-76. Verlag Barbara Budrich, Opladen and Farmington Hills.

Terhart, E. (2009). Didaktik. Eine Einführung. Philipp Reclam jun., Stuttgart

# Györgyi Kovács

## Gamification in Teacher Education. Experiences Based on a Gamified Online Language Pedagogy Course

### Abstract

Gamification is becoming an increasingly popular concept in education. Today's digital natives have grown up with computer and video games, and they look for excitement. The fast pace of many games fits their short attention spans. Nowdays teachers face major problems around students motivation and engagement. Gamification or the application of game elements into non-game settings provides an opportunity to help teachers solve these difficulties. The 21st century highly values critical thinking, collaboration, creativity, and communication. However, in a google friendly world, creating collaborative relationships and fostering meaningful communication is a demanding task. Preparing students for the future also requires high level of their engagement. In order to recognize their interests, and discover their learning aptitudes and attitudes, students should be actively involved in the learning process. This is why making use of rules and principles of a game to enhance the learning experience in higher education seems to be a reasonable option. Game mechanics, that is, rule based simulations, are employed to encourage students to explore the boundaries of their possibilities. At the same time, students are provided with valuable feedback in a safe environment. In other words, gamification of learning experience seems to be a powerful tool for preparing university students for the requirements of the contemporary world.

#### 1. Introduction

Gamification is often defined as the concept of applying game mechanics to non-game situations. It primarily refers to a process of making systems, services and activities more enjoyable and motivating. Considering the relevance of gaming in higher eduction can take one of two admittedly overlapping paths. In the first, gaming is deemed significant as a conceptual practice with outcomes that enable students to gain skills needed specifically in an information-based culture. The second path finds relevance in specific gaming content, helping students learn material in an innovative way. (Huotari-Hamati, 2012) Gamification commonly employs game design elements in non-game situations attempting to improve user engagement, productivity, flow, learning, recruitment and evaluation. The use of game thinking and game mechanics can engage users to solve problems. (Kapp, 2012)

Gamification is not about developing games, but rather it is about using gaming attributes to drive engagement, strengthen skills, or behaviour changes. (Burke, 2014) Learning is not made into a game, the features of games (curiosity, collecting, exploring) which entice players to engage are used to draw in learners.

As the 21st century highly values, creativity, critical thinking, communication and collaboration, applying gamification in education seems to be a necessary and reasonable task. Preparing students for their future also requires high level of their engagement. In order to recognize their interest and discover their learning attitudes and aptitudes, students should be actively involved in their learning process. This is why making use of principles and rules of games to enhance the learning experience seems to be reasonable option.

#### 2. Benefits of Gamification in Education

As gamification in education has become increasingly popular it seems useful to discuss its benefits. It offers a wide range of advantages for students and can help to make their learning experience enjoyable and effective, but on the other hand keeping up with technogeek students can be a real fear for today's teachers.

The following can be said as the major benefits of gamification in education:

1. Increasing student engagement: Gamification hold students' attention and motivate them, given that they are striving to reach a goal. When students feel positive about their learning process and know that they are going to be rewarded in some way for their efforts, then they stop becoming passive and turn into active participants. By doing it, they are able to absorb the information effectively and store it in their long-term memory, because the knowledge itself is linked to a positive and liked experience they are provided through gamification.

2. Making learning fun and interactive: Learning is more effective if students are excited about what they are learning.

3. Providing instant feedback: It provides instant feedback so that learners know what they know or what they should know. According to Brown, learner engagement is driven by accelerated feedback. Games provide immediate and effective feedback in the form of scores, thereby leading to better engagement and motivation. (Brown, 2007)

4. Prompting behavioural change: Scores, badges and leaderboards would surely make training awesome. However, gamification is about a lot more than just those surface level benefits. Gamification can drive strong behavioural change especially when combined with the scientific principles of repeated retrieval and spaced repetition.

5. Reinforcing learning: Games are ideal tools to reinforce learning. When the learner attempts a quiz and gives an answer, he can be given a chance to go through the content and reinforce what he has learnt. This can be done in a playful and effective manner through game-based interactivities.

6. Can be applied for most learning needs: Gamification can be used to fulfil most learning needs.

7. Ensuring better comprehension: Many learners face difficulty in understanding and remembering complex content. Games can be used to overcome this problem as they help learners learn and recall difficult content. They help people to stay focused on important parts of the content by specifying learning objectives clearly. Games are very useful to deliver process training and impart trouble-shooting skills.

8. Helping increase the time spent on learning: Learners are likely to spend more time on learning if it is more engaging, entertaining and exciting. Games increase the chances of the learners returning to the course on a regular basis because they are enjoyable and fun-filled.

9. Anytime - anywhere learning: Learners are never far from a game environment, mobile devices are always at hand. Knowledge is everywhere; learners need only time and freedom to find the knowledge they need and that is suitable to their learning style.

### 3. Applying Gamification Elements

The gamification process in education comes down to the elements that are applied to the learning program. As mentioned earlier, gamification is the addition of game-like elements, also called game mechanics, in non-game settings. Game mechanics can be classified as self-elements or social elements. Self-elements are points, achievement badges, levels, or simply time restrictions. These elements get students to focus on competing with themselves and recognizing self-achievement.

Social-elemnents on the other hand, are interactive competition or cooperation. These elements put the students in a community with other students, and their progress and achievemnents are made public in the group.

The following game mechanics were taken into consideration during designing the OLP course:

1. Cascading Information Theory: Breaking up information into bits so that each bit can be effectively learned, not getting all the information at once.

2. Achievements: It is where participants have accomplished something, and they know it. These may be made visible in a variety of ways.

3. Community Collaboration: Working together to solve a problem or do a task. In traditional education it is called group work, in game theory 'socializers' are especially motivated by this. Women are more likely to be socializers and motivated by collaboration than men.

4. Points, scores: Giving numerical value for actions.

5. Loss Aversion: Not getting a reward, but avoiding punishment.

6. Behavioral Momentum: The tendency of people who are doing something to keep doing it.

7. Countdown: Having only a certain amount of time to do something. As the deadline approaches, there is more activity on the part of the students. The key is making sure that everyone can succeed sometime.

8. Levels: Gaining more points leads to more or different rewards.

9. Progression: Gradual success, typically through completing a seies of tasks, the key is that progress is visual in some way.

10. Ownership: The feeling that you control something. Having students to publish their work for the others can give this sense, as they get more autonomy in choosing topics and tasks to share with the others.

11. Produvtivity: The idea that people like working hard and being productive.

12. Discovery and Exploration: People like certain kinds of surprises. Some learners are especially motivated by discovery.

13. Challenges: Overcoming obstacles, either alone or in a team.

14. Virality: A game or task that works better with more people.

#### 4. Case Study on a Gamified Online Language Pedagogy Course

The study outlined here is to present the experiences based on an gamified online language pedagogy (OLP) course run for three years. As the participants are qualified, experienced language teachers my aim was to help them in being familiar with modern technology, web 2.0 tools and mobile applications that can be used in foreign language teaching. Although the participants are qualified, experienced language teachers studying for their master's degree, they are rather digital immigrants dealing with digital natives. Prensky defines digital natives as those born into an innate "new culture" while the digital immigrants are old-world settlers, who have lived in the analogue age and immigrated to the digital world. (Prensky, 2001)

The participants of the OLP course were born before the existence of digital technology and adopted it to some extent later in their life, while their students are all digital natives who have been interacting with digital technology from the get-to go, they wake up and fall asleep with their smartphones and tablets in their hands. This is why it is understandable that digital immigrant teachers using technology often have fears, they know that their students, who are digital natives, are better in using technology. The objective of the OLP course was to covince language teachers to leave their fears at the door. Technology is not just the theme of the course, but participants are required to interact and collaborate during their studies as they expect it from their students: experiencing learning by doing. Participants are supported to experience social interaction, content sharing, reflecting on others' ideas and work, collaboration, peer-support, teamwork or competition and being flexible in the gamified learning environment.

#### 4.1. Procedure

Participants attending the OLP course are given an overview about contemporary trends in modern languages education and changes of foreign language teachers' roles and tasks in education. The course gives the opportunity to develop attitudes and skills in order to help foreign language teachers to meet the new requirements. The OLP course introduces participants to the basic aspects of using learning technologies in the English language classroom in an efficient, engaging and effective way. The course consists of 4 modules, all modules have an underlying belief that activities using learning technologies in the classroom should be driven by pedagogy and not by technology, and students learn languages best through a communicative, constructivist approach. By the end of the course participants are able to recognise the advantages and disadvantages of using learning technologies in the classroom and recognise issues when integrating learning technologies into a lesson or course or syllabus. Participants are required to visit the 'Plenary Forum' to discuss pedagogic issues or questions by starting and commenting on topics that arise during their studies to promote online interaction and systematic thinking. They can also join 'Chat' for sharing their thoughts and ideas on a given question. For each unit participants are required to summarize their thoughts in the 'Reflective Journal' which is an activity designed to think reflectively and systemically by writing an essay on the main theme of the given Module. During each Module participants gain scores and they reach different levels. The OLP course was developed by applying various activities in order to create an effective gamified online learning environment based on social constructivism theory. Vygotsky stated that by interaction and help from more knowledgeable peers, one could develop more profound comprehension than his individual capacity. According to social constructivism, learning occurs when students share background information and participate in the give and take of collaborative and cooperative activities. While they are negotiating the meaning, they are constructing their own knowledge. The social constructivism theory places the emphasis on students rather than teachers or tutors. Students learn best when they actively construct their own understanding through social interaction with their peers. They are encouraged to discover their own solutions and to try out ideas and hypotheses. The responsibility of the instructor is to facilitate the students' learning process around a particular content. Instructors and tutors should design and structure learning activities so that students can exercise their capabilities in knowledge formation. (Wink-Putney, 2002)

#### 4.2. Efficacy Reserach

Examining the efficacy of the online language pedagogy course the following two surveys were applied:

– Constructivist On-Line Learning Environment Survey (COLLES) by Taylor and Maor.<sup>7</sup>

- Attitudes to Thinking and Learning Survey (ATTLS) by Galotti et al. were applied. 8

222 participants were involved in the research during 3 years between 2012 and 2015.

Answering the questions of the surveys were voluntary. The main objective of this study is to help us examining how the participants' active social interaction and reflective collaboration could develop their communicative competence and how the online language pedagogy course could help them in learning in the aspects of relevance, reflection, interactivity, tutor support, peer support and interpretation. The other objective of the research is to examine how the participants' critical sense was developed during the online language pedagogy course and how participants could use the interactive capacity of the online language pedagogy course in order to acquire dynamic learning skills. The hypothesis of this study was that an online learning course designed on social constructivism theory would promote social constructivist learning environment.

1. The Constructivist Online Learning Environment Survey (COLLES) measures particiants' perceptions and preferences and was designed to help tutors assess from a social constructivist perspective, the quality of their online learning environment. Taylor and Maor state that "the efficacy of innovative web-based teaching for engaging distance learners in enriching their epistemological growth cannot be evaluated adequately without obtaining a measure of learners' perceptions of their online classroom environment". (Taylor-Maor, 2000)

<sup>7</sup> Taylor P, Maor D. (2000). Assessing the efficacy of online teaching with the Constructivist On-Line Learning Environment Survey. In: Flexible Futures in Tertiary Teaching 9th Annual Teaching Learning Forum, Perth, Australia. Available at:http://lsn.curtin.edu.au/tlf/tlf2000/taylor.html Accessed September 4, 2015.

**<sup>8</sup>** Galotti, K. M., Clinchy, B.M., Ainsworth, K., Lavin, B.,and Mansfield, A.F. (1999). A New Way of Assessing Ways of Knowing: The Attitudes Towards Thinking and Learning Survey (ATTLS). *Sex Roles*, 40(9/10), 745-766.

In social constructivism learners are portrayed as active conceptualisers within a socially interactive learning environment. The theory describes an epistemology where learners collaborate reflectively to co-construct new understandings in the context of mutual inquiry grounded in their personal experience by developing a communicative competence that enables them to engage in critical discourse with their peers and is characterized by an empathic orientation to constructing reciprocal understanding (Dougiamas-Taylor, 2002).

There are 2 forms of the COLLES, the preferred and actual form. The COLLES contains parallel items designed to measure how often participants express preferences and the actual extent of the online learning environment. Thus, the person-environment match could be estimated as participant satisfaction, which is measured by comparing actual and preferred scores. It could reveal whether the participants' expectations are fulfilled. This survey consists of 24 questions arranged into 6 aspects, including relevance, reflection, interactivity, tutor support, peer support, and interpretation. Relevance questions assess how this online learning is relevant to participants' professional practices. Reflection questions ask if this online learning stimulates participants' critical reflective thinking. Interactivity questions measures the extent of participants' online educative dialogue. Tutor Support questions evaluate how well tutors enable participants to participate in this online learning. Peer Support questions assess if fellow participants provide sensitive and encouraging support. Interpretation questions ask if students and tutors make good sense of each other during their communication. Those 6 aspects are concerned with participant preference and perception of the existence of an online social constructivist learning environment. The question items utilize a 5-point Likert response scale on which 1 = never, 2 = seldom, 3 = sometimes, 4 = often/frequently, and 5 = almost always. Participants completed the preferred form of the COLLES at the beginning and the actual form at the end of the course.

2. The Attitudes Towards Thinking and Learning Survey (ATTLS) was used to measure the quality of discourse within the online language pedagogy course.

The other objective of the research is to examine how the participants' critical sense was developed during the online language pedagogy course and how they could use the interactive capacity of the course in order to acquire dynamic learning skills. It measures the extent to which a person is a 'connected knower' (CK) or a 'separate knower' (SK). People with higher CK scores tend to find learning more enjoyable, and are often more cooperative, congenial and more willing to build on the ideas of others, while those with higher SK scores tend to take a more critical and argumentative stance to learning. The two different types of procedural knowledge (separate and connected knowing) were identified by Belenky, Clinchy, Goldberger and Tarule (Galotti, 1999) Separate knowing involves objective, analytical, detached evaluation of an argument or piece of work and takes on an adversarial tone which involves argument, debate or critical thinking. "Separate knowers attempt to 'rigorously exclude' their own feelings and beliefs when evaluating a proposal or idea". Separate knowers look for what is wrong with other people's ideas, whereas connected knowers look for why other people's ideas make sense or how they might be right, since they try to look at things from the other person's point of view and try to understand it rather than evaluate it. These two learning modes are not mutually exclusive, and may 'coexist within the same individual'. Differences in SK and CK scores 'produce different behaviors during an actual episode of learning, and do result in different descriptions of, and reactions to, that session'. (Galotti, 1999)

#### 4.3. Assessment

222 participants completed the preferred form of the COLLES at the beginning of the course. Participants expected the environment of the course to be social constructivist learning environment ( $4.0 \pm 0.3$ ). They had the highest expectation on the aspect of professional relevance ( $4.2 \pm 0.5$ ) and the lowest on the aspect of interactivity ( $3.7 \pm 0.5$ )

220 participants completed the actual form of the COLLES at the end of the semester. The result showed that participants perceived the environment of the course as social constructivist learning environment with a mean score of  $(3.9\pm0.3)$ . Actual social constructivist learning environment scores on all aspects were rated in the same way as participant's preference scores that participants rated the highest on the aspect of professional relevance  $(4.1\pm0.5)$  and the lowest on the aspect of interactivity  $(3.7\pm0.5)$ . The preferred and actual social constructivist learning environment scores were compared and no significant difference was found. The result indicated that participants' expectations were fulfilled and they were satisfied with the course.

| Aspects of SCLE | Preferred COLLES<br>Score Mean (MD) | Actual COLLES<br>Score Mean (MD) | Р     |
|-----------------|-------------------------------------|----------------------------------|-------|
| Relevance       | 4.2(+/-0.5)                         | 4.1(+/-0.5)                      | 0.338 |
| Reflection      | 3.9(+/-0.5)                         | 4.7(+/-0.4)                      | 0.160 |
| Interactivity   | 3.7(+/-0.5)                         | 3.7(+/-0.5)                      | 0.494 |
| Tutor Support   | 4.0(+/-0.6)                         | 4.1(+/-0.4)                      | 0.456 |
| Peer Support    | 3.8(+/-0.5)                         | 3.8(+/-0.5)                      | 0.399 |
| Interpretation  | 4.1(+/-0.5)                         | 4.0(+/-0.3)                      | 0.123 |
| Total SCLE      | 4.0(+/-0.3)                         | 3.9(+/-0.3)                      | 0.185 |

#### Table 1

The mean actual score of the COLLES was  $(3.9 \pm 0.3)$ . By implementing a new online learning tool, participants tended to prefer the environment of the course as social constructivist learning environment as seen by the mean preferred score of  $(4.0\pm0.3)$ . The result was consistent with Taylor's findings that participants had rated the preferred form of COLLES as high expectations for social constructivist learning environment in an online course. (Taylor-Maor, 2000). The comparison between the preferred and the actual COLLES scores revealed that participants seemed to be satisfied since their expectation seemed to be fulfilled. The actual scores were not significantly different from their expectations. Under the social constructivist learning environment, participants constructed their own knowledge using social interaction. Participants found it was not easy to move from a passive learning to an active learning style. This result was confirmed by the relatively low actual scores of COLLES on 2 aspects: interactivity and peer support  $(3.7 \pm 0.5 \text{ and } 3.6 \pm 0.5)$ .



220 participants answered the ATTLS questions. The 20 questions in the ATTLS are displayed in the questionnaire in random order as not to reveal which questions are Connected Knowing (CK) related and which are Separate Knowing (SK) related.

Like the COLLES the range for the responses of the ATTLS is from 1 to 5 for each question with 1 meaning 'Strongly Disagree' and 5 meaning 'Strongly Agree'. The higher the CK and SK scores, the higher the participants' connected and separate knowing. As mentioned earlier, these two knowing modes are not mutually exclusive as the same participant may be both a separate knower and a connected knower.

People with higher CK scores tend to find learning more enjoyable, and are often more cooperative, congenial and more willing to build on the ideas of others, while those with higher SK scores tend to take a more critical and argumentative stance to learning.

Separate knowing involves objective, analytical, detached evaluation of an argument or piece of work and takes on an adversarial tone which involves argument, debate or critical thinking. Separate knowers attempt to 'rigorously exclude' their own feelings and beliefs when evaluating a proposal or idea. Separate knowers look for what is wrong with other people's ideas, whereas connected knowers look for why other people's ideas make sense or how they might be right, since they try to look at things from the other person's point of view and try to understand it rather than evaluate it.

These two learning modes are not mutually exclusive, and may coexist within the same individual. Differences in SK and CK scores produce different behaviors during an actual episode of learning, and do result in different descriptions of, and reactions to, that session.

In the online language pedagogy course's case, the mean CK score was 3.83 out of 5 and the mean SK score was 3.76 out of 5. This means that the average participant in the course was both a Connected Knower and a Separate Knower with the mean CK scores being averaged slightly higher than the mean SK scores.







Table 4

| ATTLS CK Results |                            | ATTLS SK Results |                            |
|------------------|----------------------------|------------------|----------------------------|
| Question         | Mean<br>(St.d)             | Question         | Mean<br>(St.d)             |
| CK 01            | 3.41<br>(±1.21)            | SK 01            | 3.79<br>(±1.14)            |
| CK 02            | 4.46                       | SK 02            | 4.03                       |
| CK 03            | 4.14                       | SK 03            | 4.03                       |
| CK 04            | (±0.98)<br>2.92            | SK 04            | (±1.08)<br>3.54            |
| CK 05            | (±1.30)<br>3.84            | SK 05            | (±1.08)<br>3.64            |
| CK 06            | (±1.03)<br>3.79            | SK 06            | (±1.15)<br>3.55            |
| CK 07            | (±1.05)<br>3.64            | SK 07            | (±1.05)<br>4.12            |
| CK 08            | (±1.09)<br>4.03            | SK 08            | (±0.93)<br>2.94            |
| CK 09            | (±1.11)<br>3.95            | SK 09            | (±1.32)<br>3.89            |
| CK 10            | (±0.98)<br>3.97<br>(±0.99) | SK 10            | (±1.11)<br>4.06<br>(±0.85) |
| Mean CK Score:   | 3.83                       | Mean SK Score:   | 3.76                       |

Table 5

The online language pedagogy course was developed by applying various activities in order to create an effective online learning environment based on social constructivism theory. It is believed that sharing various perspectives and experiences with other people who have similar or different aims and life experiences is the process of learning. The difficulty of this course was in creating the most appropriate learning environments for participants to interact and construct their own knowledge. The tutor should influence the way of learning to develop and empower participants to take ownership and responsibility of their own learning by staying behind, not being dominant. Participants perceived that knowledge was gained and they were satisfied with the course. The result revealed that the social constructivist learning environment of this course was promoted although participants found it was not easy to move from a passive learning to an active learning style.

#### 5. Conclusion

Gamification does not imply creating a game. It can make education fun and engaging. It helps students gain motivation towards studying, and because of the positive feedback they get pushed forwards and become more interested and stimulated to learn. Gamification can constitute a powerful boost to determine them to study more. In a traditional learning environment, a student's motivation to learn effectively can be hindered due to a number of reasons. However, with the successful application of suitable gamification techniques, the delivery of the information can transform a simple or task into an addictive learning process for the students. While the underlying objective of applying gamification to any education program is to prompt some type of behavioural change in the student, many teachers specifically look to tackle the issue of student motivation and engagement during their learning process. For students, gamification serves the purpose of minimising negative emotions that they usually encounter in traditional forms of education. It lets them approach knowledge and skills, using the learn-by-failure technique that is popular in game-like environments, without the embarrassment factor that usually forms a part of classroom education. Teachers on their part can efficiently achieve their set objectives and use currency-based tracking mechanisms to get feedback on their students' progress.

Though it is not easy to successfully implement gamification in education, a mindful approach using the steps laid out in this paper, can increase the probability of creating an effective education gamification strategy. It is also recommended that teachers remember that gamifying education may require long periods of fine-tuning and most definitely should not replace the original value of human teaching. Gamification in education can be a powerful strategy when implemented properly, as it can enhance an education program, and achieve learning objectives by influencing the behaviour of students.

## References

Brown, H. D. (2007). Principles of Language Learning and Teaching. Pearson Longman

Burke, B. (2014). *Gamify: How Gamification Motivates People to Do Extraordinary Things*. Brookline, MA: Bibliomotion.

Dougiamas, M., Taylor, P. C. (2002). *Interpretive analysis of an internet-based course constructed using a new courseware tool called Moodle*. Australia, Paper presented at: Teaching and Learning Forum, Improving the effectiveness of tools for Internet-based education. http://online.dimitra.gr/sektrainers/file. php/1/MartinDougiamas.pdf Accessed August 21, 2015.

Galotti, K. M., Clinchy, B. M., Ainsworth, K., Lavin, B., & Mansfield, A. F. (1999). A New Way of Assessing Ways of Knowing: The Attitudes Towards Thinking and Learning Survey (ATTLS). Sex Roles, 40(9/10), 745-766.

Huotari, K., Hamati, J. (2012). *Defining Gamification: A Saervice Marketing Perspective*. Proceedings of the 16th International Academic MindTrek Conference 2012, Tampere, Finland, October 3-5.

Kapp, K. M. (2012). The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education. Pfeiffer, USA.

Prensky, M. (2001). Digital Natives, Digital Immigrants. In: On the Horizon, MCB University Press, Vol. 9 No. 5.

Taylor, P., Maor, D. (2000). Assessing the efficacy of online teaching with the Constructivist On-Line Learning Environment Survey. In: Flexible Futures in Tertiary Teaching 9th Annual Teaching Learning Forum, Perth, Australia. 2000. Available at:http://lsn.curtin.edu.au/tlf/tlf2000/taylor.html Accessed September 4.

Wink, J., Putney, L. G. (2002). Vision of Vygotsky. Boston: Allyn & Bacon.

## Adrienn Fekete, Roland Hegedűs and Krisztina Sebestyén:

First-Year English and German Language Teacher Majors' Profile: From Where? Who? Why? and How?

#### Abstract

The aim of the study is to investigate English and German teacher training focusing on (1) territorial features of the higher education institutions offering such trainings, (2) the proportion of disadvantaged students, and (3) foreign language teacher majors' attitude both towards the integration of foreign language teaching and intercultural competence (ICC) development, and (4) studying abroad during their university years. We felt that it is essential to provide a profile of this group since there are no similar studies in the Hungarian context. For the analysis, we used two databases: the Hungarian Higher Education Admission (Felvi, 2013), and the TESSCEE I (Teacher Education Students Survey in Central and Eastern Europe I). Data analysis presented here used map representation and factor analysis. Results show that the institutional catchment area of foreign language teacher trainings is centered mostly around Budapest, and the majority of disadvantaged students were admitted to institutions located in the northeastern part of Hungary. Furthermore, the following factors are identified based on the ICC development test values: (1) interdependence of foreign language learning and culture teaching, (2) broadening the cultural dimension, (3) positive effects of intercultural experience on the personality, (4) cultural influence on critical thinking. In addition, the factors that hider students from studying abroad are as follows: (1) structural problems, (2) external barriers, (3) lack of emotional and financial support, (4) administrative difficulties and (5) internal barriers. We did not find correlation between the ICC development factors and the mobility factors.

**Keywords**: foreign language majors, institutional catchment area, intercultural competence development, mobility, disadvantage

#### Introduction

This study aims to approach English and German teacher training in Hungary from various prospective as well as to present a profile of English and German teacher majors, focusing on some particular dimensions. We chose these two language majors since these are the most popular among students. First, it is important to investigate the territorial features of higher education institutions because non-capital institutions in Hungary typically provide graduates to areas of students' residency. On the basis of this, we can concentrate on the catchment area of institutions that could provide graduates to the areas suffering from teacher shortage. In addition to the territorial features, disadvantage is a crucial topic, as well, since disadvantaged students have to face difficulties such as institutional integration and low academic achievement. Therefore, we provide information about the territorial features of the higher education institutions offering such trainings, more specifically, about students' residency and the catchment area of the institutions; moreover, about the proportion of disadvantaged students in order to have an insight into the social background of the students.

Second, being adaptive and open to construct new knowledge about one's own and other culture is more current than ever since one of the most significant changes that our modern world has brought about is the ever-increasing spread of multiculturalism and interculturalism. In order to keep up with the modern social and economic needs and expectations, both teachers and learners have to face changes and challenges related to these phenomena since interaction between people with different cultural backgrounds has become a crucial global issue. Thus, it is essential for teachers in general and foreign langue teachers in specific to be able to interpret and facilitate life-long learning and competence development within an intercultural context. As a result, it is necessary to have a better understanding of foreign language teacher majors' attitude towards the integration of foreign language teaching and intercultural competence (ICC) development because foreign language learning is the most plausible context for ICC development. Closely related to the topic of ICC development and gaining intercultural experience, thirdly, we examine the mobility of students of the University of Debrecen in terms of their willingness to participate in a partial training abroad since the relevant literature conforms that compared to other professionals, teachers are the least mobile (Chrappán, 2013).
#### Literature review

Our study operates with the theories and methodologies of different disciplines, hence the relevant literature is approached from various fields of study. One of the disciplines is social geography with a special focus on regional characteristics, students' mobility and institutional catchment area. Moreover, related to these dimensions, we also deal with disadvantage since it has a special significance, especially in the case of teacher training. The other approach is rooted in foreign language pedagogy and concentrates on intercultural competence (ICC) development because it is essential to examine future foreign language teachers' attitude towards this topic.

It can be stated that the literature of students' mobility has been widely discussed in the Hungarian context, however, the relevant analysis mostly focuses on the institutional level and uncommon disciplines and/or majors. Regarding the catchment areas of non-capital universities, four universities are dominant: in the Northern Hungarian region, The University of Miskolc (UM); in the Northern Great Plain region, the University of Debrecen (UD); in the Southern Great Plain region, the University of Szeged (USZ); in the Western Transdanubian region, University of Széchenyi István; and in the Southern Transdanubian region, the University of Pécs (UP). The number of students at the University of Pécs has recently decreased, hence, it also means that its attraction has also substantially decreased. As a result, it rivals the University of Kaposvár (UK) in the region. (Teperics and Dorogi, 2014; M. Császár and Wusching, 2014). The catchment area of non-capital universities mainly cover their own region, and students coming from the borderlines of the institutions' catchment area choose to study in the capital due to more favorable transportation conditions (Polónyi, 2012). As regards the analysis of teachers, there is a significant difference in territoriality. Full-time teacher majors prefer universities, whereas, part-time teacher majors rather choose colleges (Hegedűs, 2015a).

Predominantly, the following aspects influence students' choice of institution: family background, territorial availability of particular majors (the closer they are to student's residency, the more likely to be chosen) and engagement with childhood social environment (Denzler and Wolter, 2010). The proportion of disadvantaged students defers on the basis of the level of training, they chose, but basically the disadvantaged students come from two areas: from the micro-regions along the river Dráva and areas of North-East Hungary (Hegedűs, 2015b). Considering the level of trainings and programs, there are more disadvantaged students studying on lower levels (e.g.: Advanced Vocational Programme, Bachelor Programme) (Szemerszki, 2010).

Based on territorial dimensions, there are also differences between the advantaged and disadvantaged students because the disadvantaged ones are less mobile, thus their number is much higher in institutions which are closer to their residency (e.g.: University of Debrecen, Eötvös Loránd University (ELU)) (*Pusztai*, 2011). The geographical location of students' secondary school has a great impact on their admission higher education as well. Students living far from bigger towns have smaller chance to study at higher education institutions (Howley et. al., 2014).

Besides the territorial features, we analyzed students' attitude towards ICC development driven by the idea derived from Vágó (2009) that in order to become successful language teachers, foreign language majors should have a well-round language education both in public and higher education (Vágó, 2009). We believe that well-rounded education definitely involves the integration of culture and language teaching, raising language learners' cultural awareness and developing their ICC, which is also recognized by the most prominent (language) education policy documents (The National Core Curriculum 2012, Common European Framework of Reference 2012) in Hungary. Thus, it is essential to examine future language teachers' attitude towards this topic. Empirical results show, moreover, that although foreign language teachers are open towards the integration of foreign language teaching and intercultural competence development, the cultural dimension of language is still neglected in the foreign language classroom (Sercu, 2005; Holló and Lázár, 2000; Fekete, 2015).

We use Sercu's definition of ICC who states that ICC consists of "knowledge, skills and attitudes at the interface between several cultural areas including the students' own country and the target language country" (Sercu, 2005, viii). It is important to highlight that culture cannot be perceived as "artefacts that 'can be found out there', it is also the glasses through which we perceive the world around us and the language we use to express the culture of which we are an integral part" (Fenner and Newby, 2000, 147). Moreover, in the case of English, when we talk about ICC development, the association to culture and culture related knowledge cannot be restricted to the target language culture. The most salient reason for that lies in the unique status of English as 'the common language,' which "knows no national boundaries" (Kramsch, 2013, 70). English is used by a variety of people with diverse cultural backgrounds and world views who engage in international communication for different purposes.

Undoubtedly, having intercultural experience and being exposed to foreign cultures are vital in intercultural competence development. As a result, it is probably a safe assumption that traveling to abroad and gaining (inter)cultural knowledge is essential for becoming a successful foreign language teacher. However, it is claimed that compared to other professionals, teachers are probably the least mobile when it comes to applying for a scholarship or taking a job abroad (Chrappán, 2013). That is why we decided that we examine future German and English teachers' attitude towards studying abroad during their university years.

### **Database and Methodology**

First, we analyzed the Hungarian Higher Education Admission (Felvi, 2013) database. We selected the institutions offering full-time English and/or German teacher training. We found ten institutions, from which two is located in the capital, Budapest. All together 522 students were admitted to the 'undivided' (4+1 or 5+1-year) teacher training programme or to the MA programme in teacher training. Data was analyzed by SPSS Statistics and depicted by MapInfo software.

We checked the proportion of disadvantaged students coming from micro-regions and their proportion in the given higher education institutions. We chose the 2013 database because it includes the student population as the other database called TESSCEE I (Teacher Education Students Survey in Central and Eastern Europe I<sup>9</sup>) that we used for analysis. The TESSCEE I survey was conducted in the higher education Partium region in the border region of Ukraine, Romania and Hungary. The questionnaire was completed by 306 teacher education students in the spring of 2014. There are three Hungarian institutions in the sample: The University of Debrecen (UD), Debrecen Reformed Theological University (DRTU) and the College of Nyíregyháza (CNY), however, from these institutions only the UD offers teacher training for English and/or German teachers, hence the UD sample was analysed. It means that there are 36 students in our analysis, which is 60% of the number of students admitted in 2013 according to Hungarian Higher Education Admission (Felvi, 2013) database.

**<sup>9</sup>** The database was conducted in the framework of project entitled *Enhancing the regional networks of professional services and research activities to support teacher development in the North-east region of Hungary* (TÁMOP4.1.2.B.2-13/1-2013-0009).

From the TESSCEE I questionnaire, we performed factor analysis with the help of SPSS Statistics on two blocks of questions. The first block measures students' attitudes towards the integration of foreign language teaching and ICC development; the second block examines factors that hinder students from studying abroad. We investigated how these two dimensions emerge in factors.

#### Results

#### Territorial characteristics of German and English language teacher training

First of all, we provide an overview of the Hungarian English and/or German language teacher training. The first map depicts where these institutions are located in Hungary, moreover, the proportion of students admitted as well as the proportion of disadvantaged students. The special structure of higher education is disproportionate in Hungary because in the Transdanubian region, there is one less such institution. Moreover, in Budapest and in its agglomeration, there are three institutions. Furthermore, the number of students is outstandingly higher in the institutions of the capital compared to non-capital institutions (Figure 1).



Figure 1 The territorial structure of foreign language teacher training and the micro-region and institutional proportion of disadvantaged students (N=522) (Source: Felvi, 2013)

As regards disadvantage, data show that the proportion of disadvantaged students is higher among the students admitted to language teacher trainings than the proportion of advantaged students in certain institutions. Most of these students are admitted to the University of Miskolc (UM) (18%) or to the University of Debrecen (UD) (10%). Not surprisingly, these institutions are the closest to the disadvantaged regions, however, it is intriguing that although the College of Eszterházy Károly (CEK) is also close to these regions, the proportion of disadvantaged students are much lower than in the other two institutions (UM, UD) mentioned. In the catchment area of the University of Szeged (USZ), there are also micro-regions, where the number of future teachers applying for extra points for being disadvantaged is high. As a result, the USZ has the third place in terms of proportions of disadvantaged students.

It is interesting that this proportion is 8% in the capital, which is higher than expected, especially, if we take into consideration that in the immediate surroundings of Budapest, the number of micro-regions having registered disadvantaged students are minimal. Consequently, it can be inferred that disadvantaged students are willing to travel more to participate in foreign language teaching trainings. The proportion of disadvantaged students in the institutions located in the Western region of Hungary is far lower than in other regions. What is more, there is no student admitted to foreign language teacher training at the University of West-Hungary (UWH).

The second map presents the catchment area of the given institutions micro-regional division. The size of the circles is proportional to the number of students admitted to the particular institution. There are micro-regions presented on the map from which no students were admitted to these trainings. First, it is worth having a closer look at the size of the circles, which shows the number of students admitted to the particular training. Naturally, in proportion to the population, most students who chose these trainings come from Budapest, but what is striking is that the number of students from Debrecen who chose these trainings is above the average. In contrast, there are much less students at the University of Szeged (Figure 2).



Figure 2 The catchment area of institutions offering English and German language teacher trainings (N=522) (Source: Felvi, 2013)

Miskolc and Pécs are the ones standing out from the county seats, which might be contributed to – besides the large population – the fact that there are such trainings offered there; moreover, Figure 1 also shows that because substantially less students coming from Győr chose these trainings. The catchment area of the University of West-Hungary, the University of Pannon (UPAN), the University of Miskolc and the College of Eszterházy Károly is restricted to their own county. There are only a few exceptional cases. These institutions are mainly dominant in macro-regions, where their seat is located, but other institutions' attraction is also sensible there. A good example for that is Zalaegerszeg, which is well-circumscribed by foreign language teacher trainings (Szombathely, Veszprém, Pécs), however, even though ELU is further away from their residency, more than one third of the students choose to

study there. The most dominant English and German language teacher training is undoubtedly offered by ELU in Hungary since it has more than 200 students. ELU predominantly attracts students from the Northern part of the Nagykanizsa-Balaton-Miskolc axis. Despite of its central location, the Pázmány Péter Catholic University (PPCU) and the Károli Gáspár University of the Reformed Church (KGURC) have a much narrower catchment area similarly to the institutions mentioned above. Three big non-capital universities have an effect on their regions, but the dominance of the University of Pécs (UP) seems to be decreasing because the University of Szeged attracts more students from Tolna County.

# *Foreign language majors' attitude towards intercultural competence development (ICC) and studying abroad*

The TESSCEE I database contains statements and questions related to students attitudes towards the integration of ICC development and foreign language teaching as well as towards studying abroad; more specifically, we examined the factors that hinder students from studying abroad. First of all, we present some data focusing on the main characteristics of our subjects. Then, we create factors based on the values given to ICC attitude test and student mobility test.

In our sample, there are 36 subjects from the University of Debrecen; 28 women and 8 men. The subjects asked are first-year students, thus data can be compared to the data gained from the Hungarian Higher Education Admission database. Although not all of them answered the questions related to their parents' level of education, based on the answers of the rest, the pattern is the following: 2 students' (foster) mother have primary-level, 10 students' (foster) mother have secondary-level and 16 students' (foster) mother have higher-level education. In the case of (foster) fathers, the numbers are: 2 primary-level, 16 secondary-level, 13 higher-level education.

The ICC attitude test contains 15 statements about the importance of the integration of foreign language teaching and ICC development. The subjects had to evaluate these statement on a four-point Likert scale on the basis of the extent of their agreement (1 = strongly disagree; 4 = totally agree). Based on foreign language teacher majors' answers to the ICC attitude test, the following factors can be identified: (1) interdependence of foreign language learning and culture teaching, (2) broadening the cultural dimension, (3) positive effects of intercultural experience on the personality, (4) cultural influence on critical thinking.

The first factor includes statements about the inseparable nature of language teaching and culture teaching. In other words, these statements emphasize that learning about different cultures has a positive impact on language proficiency, more specifically, on motivation and accuracy. Moreover, they underscore that there is no language teaching without culture teaching, and one has the same importance as the other.

In the second factor named 'Broadening the cultural dimension', there are statements highlighting that 'culture' should not be interpreted as a static entity, a collection of directly teachable and learnable facts about the members of the target language country but as "*dynamic discursive process*" (Kramsch, 2013. p. 68.). Moreover, culture teaching should be interpreted in the framework of ICC development which can happen at any level of proficiency. Furthermore, since English is the official language in many countries, and it is the 'global language', teaching culture should involve presenting a great variety of nations, countries and their cultures. Not to mention that language and culture teaching should also foster learners' European and global identity.

Statements of the third factor are about the positive impact that cultural knowledge can have on the personality. Namely that the more students know about different cultures, they become more aware of the similarities and the differences between other cultures and their own culture, which support them in understanding more their own culture. As a result, it is highly possible that they become more open and tolerant.

The forth factor consists statements that mostly support the idea that culture related knowledge can shape students' critical thinking. Moreover, it deals with the possibility of losing one's national identity while gaining more and more knowledge related to other cultures (Table 1).

|                                                                                                                                                             | Interdependence<br>of foreign language<br>learning and culture<br>teaching | Broadening<br>the cultural<br>dimension | Positive effects<br>of intercultural<br>experience on the<br>personality | Cultural<br>influence<br>on critical<br>thinking |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------|
| Culture teaching motivates language learners.                                                                                                               | 0,875                                                                      | 0,150                                   | 0,280                                                                    | 0,089                                            |
| The integration of language and culture<br>supports learners' language skills devel-<br>opment.                                                             | 0,757                                                                      | 0,224                                   | 0,267                                                                    | 0,012                                            |
| Culture teaching has a positive effect on foreign language learners' accuracy.                                                                              | -0,746                                                                     | 0,068                                   | 0,200                                                                    | 0,365                                            |
| In a foreign language classroom, teaching<br>culture is as important as teaching the<br>foreign language.                                                   | 0,725                                                                      | 0,076                                   | 0,274                                                                    | -0,009                                           |
| Culture teaching and intercultural com-<br>municative competence development can<br>happen at any level of proficiency.                                     | -0,189                                                                     | 0,932                                   | -0,265                                                                   | 0,159                                            |
| If a foreign language is spoken by more<br>nations, any of these nations' cultures can<br>be represented in the language classroom.                         | 0,229                                                                      | 0,661                                   | 0,298                                                                    | -0,177                                           |
|                                                                                                                                                             | Interdependence<br>of foreign language<br>learning and culture<br>teaching | Broadening<br>the cultural<br>dimension | Positive effects<br>of intercultural<br>experience on the<br>personality | Cultural<br>influence<br>on critical<br>thinking |
| In the foreign language classroom, it is<br>important to support the development of<br>students European and global identity.                               | 0,323                                                                      | 0,574                                   | 0,160                                                                    | 0,266                                            |
| The culture of different countries should<br>be presented more in the language class-<br>room.                                                              | 0,547                                                                      | 0,569                                   | 0,452                                                                    | 0,252                                            |
| Foreign language teaching should not<br>only touch upon foreign cultures. It should<br>also deepen pupils' understanding of their<br>own culture.           | 0,343                                                                      | 0,196                                   | 0,800                                                                    | -0,024                                           |
| The more pupils know about the foreign culture, the more tolerant they are.                                                                                 | 0,326                                                                      | -0,048                                  | 0,655                                                                    | 0,164                                            |
| In international contacts misunderstand-<br>ings arise equally often from linguistic as<br>from cultural differences.                                       | -0,022                                                                     | 0,094                                   | 0,512                                                                    | 0,345                                            |
| Studying different cultures in the foreign<br>language classroom can help students to<br>strengthen their national identity.                                | -0,145                                                                     | 0,141                                   | -0,057                                                                   | 0,977                                            |
| Gaining knowledge about different cul-<br>tures can change students' attitudes<br>towards their own culture.                                                | -0,003                                                                     | -0,017                                  | 0,361                                                                    | 0,593                                            |
| The main aim of learning about different<br>cultures is to enhance students' critical<br>approach towards both their own culture<br>and different cultures. | 0,201                                                                      | 0,310                                   | 0,246                                                                    | 0,353                                            |

 Table 1 ICC attitude test factors (Source: TESSCEE I, 2014)

KMO: 0,564; explanatory value 67,81%; Barlett sign.: 0,000

We compared the ICC factors to parents' level of education, and we found two significant correlations. One is the correlation between 'the interdependence of foreign language learning and culture teaching' and the fathers' level of education (p=0,023). The other one is between the 'cultural influence on critical thinking' and the mothers' level of education (p=0,006). The majority of fathers have secondary-level education, thus, presumably, they want their children to achieve more than they did, so they support their children to gain more knowledge about different cultures since it opens up several possibilities for them. Since the majority of students' mothers have higher-education, it is not surprising that they consider important the impact of knowing, understanding and critically view culture related issues.

Despite that students consider ICC development important, few of them participate in partial trainings abroad during their higher education years (Jaritz, 2011). Consequently, the other group of questions that we analyzed investigates the factors that hider students from studying abroad. The answers to these questions were also analyzed by factor analysis. The following factors emerged: (1) structural problems, (2) external barriers, (3) lack of emotional and financial support, (4) administrative difficulties and (5) internal barriers. These problems can restrain students from getting (inter)cultural experience abroad.

The first factor consists of structural problems such as difficulties in integrating Hungarian and foreign training structures, low degree of utility of studies abroad in Hungary, difficulties in course admission. The second factor means the external barriers including difficulties in finding an appropriate teacher training abroad in the target institution, restricted access to mobility programs, difficulties in finding an appropriate teacher training in the target situation, insufficient foreign language proficiency and inadequate academic performance. The third group involves problems related to the lack of emotional and financial support. Not all the scholarships abroad cover the full expenses of the student, which can be a great deterrent from embarking on a travel abroad. The forth factor means the administrative difficulties. Problems related to difficulties related to the regulations of the target country, for example, getting a visa or lack of information provided by the home institution. The last factor involves the internal barriers such as fear from the unknown and the lack of any motivation (Table 2).

|                                                                                    | Structural problems | External<br>barriers | Lack of<br>emotional<br>and financial<br>support | Administrative<br>difficulties | Internal<br>barriers |
|------------------------------------------------------------------------------------|---------------------|----------------------|--------------------------------------------------|--------------------------------|----------------------|
| Difficulties in integrating Hungarian<br>and foreign training structures.          | 0,987               | -0,031               | 0,005                                            | 0,068                          | -0,138               |
| Low degree of utility of studies abroad in Hungary.                                | 0,849               | 0,103                | 0,056                                            | 0,132                          | 0,144                |
| Difficulties in course admission.                                                  | 0,701               | 0,182                | -0,180                                           | -0,104                         | -0,136               |
| Difficulties in finding an appropriate teacher training in the target institution. | 0,249               | 0,945                | 0,111                                            | 0,086                          | -0,143               |
| Restricted access to mobility program.                                             | 0,015               | 0,580                | -0,237                                           | 0,118                          | 0,278                |
| Insufficient foreign language proficiency.                                         | 0,051               | 0,459                | -0,110                                           | 0,365                          | -0,079               |
| Inadequate academic performance.                                                   | -0,353              | 0,423                | 0,083                                            | 0,394                          | 0,094                |
| Extra financial burden.                                                            | 0,017               | -0,022               | 0,909                                            | 0,071                          | -0,004               |
| Being away from family, friends and children.                                      | -0,091              | -0,022               | 0,701                                            | -0,234                         | 0,479                |
| Difficulties related to the regulations of the target country (e. g.: visa).       | 0,033               | 0,101                | 0,105                                            | 0,985                          | 0,077                |
| Lack of information provided by the home institution.                              | 0,120               | 0,283                | -0,361                                           | 0,496                          | 0,042                |
| Lack of motivation.                                                                | -0,031              | 0,082                | 0,093                                            | 0,066                          | 0,958                |
| Fear from the unknown and insecure life.                                           | -0,187              | -0,330               | 0,403                                            | 0,156                          | 0,428                |

Table 2 Factors that hider students from studying abroad (Source: TESSCEE I, 2014)

#### KMO: 0,453; explanatory value 70,92%; Barlett sign.: 0,000

It is important to examine the factors hindering students from studying abroad in order to find alternatives to overcome the problems caused these factors. For example, raising scholarship funds levels, simplifying the admission process of partial trainings, strengthening the international relations between institutions.

Studying abroad and gaining intercultural experience are crucial to develop students' competences in general, however, it can be more imperative in the case of foreign language teacher majors since these experiences can become integral part of their teaching. Naturally, having considerable intercultural experience abroad is closely related to higher level intercultural competence and makes future foreign language teachers more authentic intercultural mediators. It is thoughtful that although the majority of the students consider culture teaching to be significant in the language classroom, they are not willing to participate in partial trainings abroad due mainly to the inhibiting factors mentioned.

## Conclusion

In our analysis, we provided an overview about territorial characteristics, institutional network and the social background of future teachers. Results show that compared to the average, the institutional catchment area of foreign language teacher training is centered predominantly around the capital, Budapest. The proportion of disadvantaged students among those admitted to higher institutions in the capital were much higher than expected. Thus, it seems that students are willing to travel more to attend German and English teacher trainings. Presumably, these trainings have a positive effect on the micro-regions in which they are offered because in Pécs, Debrecen, and Miskolc the number of applicants to these trainings were above the average; however, in the case of Miskolc, most of the students did not choose the University of Miskolc. The smaller higher education institutions cannot compete with the attraction of the capital, as a result, they cannot retain the students even in their immediate environment.

In addition, we also examined students' attitudes toward ICC development and studying abroad. Four factors emerged from the values given to the ICC test: the inseparability of foreign language and culture teaching; need for broadening the cultural dimension of foreign language teaching; the personality development impact of cultural experiences; the relationship between cultural knowledge and critical thinking. There are significant correlations between the factor named 'interdependence of foreign language learning and culture teaching' and the education level of students' fathers as well as between that factor, 'cultural influence on critical thinking' and the education level of students' mothers. Furthermore, we also compared the factors that hinder students from studying abroad with the parents' level of education, but we did not find significant correlation. Moreover, in spite the fact that we did not find correlation between the ICC development and the barriers of mobility factors, these factors can be used in further analysis.

## References

Chrappán Magdolna (2013). Elégedettség és mobilitási esélyek a pedagógusképzésben végzettek körében. In: Garai Orsolya and Veroszta Zsuzsanna (eds.): *Frissdiplomások 2011*. Educatio Társadalmi Szolgáltató Közhasznú Társaság, Budapest. 231-263. (= Diplomás pályakövetés)

Denzler, S. & Wolter, S. C. (2010). Wenn das Nächstgelegene die erste Wahl ist. Der Einfluss der geographischen Mobilität der Studierenden auf die Hochschullandschaft Schweiz. SKBF, Aarau. Common European Framework of Reference (CEFR) 2012. Council of Europe.

Fekete Adrienn (2015). A Debreceni Egyetemen tanuló angol nyelvtanárok és nyelvtanárjelöltek hozzáállása az interkulturális kommunikatív kompetencia nyelvórán történő fejlesztéséhez. In: Tóth Zoltán (ed.): Új kutatások a neveléstudományokban 2014. *Oktatás és nevelés – gyakorlat és tudomány*. Debrecen: MTA Pedagógiai Tudományos Bizottsága – Debreceni Egyetem. 106-118.

Fenner, A. B & Newby, D. (Eds.) (2000). Approaches to Materials Design in European Textbooks: Implementing Principles of Authenticity, Learner Autonomy and Cultural Awareness. European Centre for Modern Languages, Council of Europe Press, Graz, Strasbourg.

Hegedűs Roland (2015a). Tanulmányi mobilitás és felsőoktatási vonzáskörzet kelet-magyarországi pedagógusképzésben. In: Pusztai Gabriella and Ceglédi Tímea (eds.): *Szakmai szocializáció a felsőoktatásban.* Partium, PPS, ÚMK, Nagyvárad, Budapest. 155-175. (= Felsőoktatás & Társadalom 2.)

Hegedűs Roland (2015b). Pozitív diszkrimináció a magyar felsőoktatásban. Educatio, Vol. 2. 139-147.

Holló, D. & Lázár, I. (2000). The neglected element – Teaching culture in the EFL classroom. *noVELty*, 7. vol. 1. 76–85.

Howley, C., Johnson, J., Passa, A. & Uekawa, A. (2014). *College enrollment and persistence in rural Pennsylvania schools*. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Mid-Atlantic, Washington D. C.

Jaritz, G. (2011). Developing a Culture of (Inter)national Mobility in Initial Teacher Training. Expectations, Limitations and Ways Forward. In: Goetz, T., Jaritz, G. and Oser, F. (eds.): *Pains and Gains of International Mobility in Teacher Education*. Sense Publishers, Rotterdam, Boston, Taipei. 7-24.

Kramsch, C. (2013). Culture in foreign language teaching. *Iranian Journal of Language Teaching Research*, **1**. vol. 1. 57-78.

The National Core Curriculum (NAT) 2012. *Magyar Közlöny*, Vol. 66. <u>http://www.kozlonyok.hu/nkonline/</u> <u>MKPDF/hiteles/MK12066.pdf</u> [14. 08. 2015]

M. Császár Zsuzsa & Wusching Á. Tamás (2014). A Pécsi Tudományegyetem vonzáskörzetének változásai 2004 és 2013 között. *Modern Geográfia*, Vol. 4. 25-38.

Polónyi István (2012). Honnan jönnek a hallgatók? Educatio, Vol. 2. 244-258.

Pusztai Gabriella (2011). A láthatatlan kéztől a baráti kezekig. Új Mandátum Könyvkiadó, Budapest.

Sercu, L. (2005). Foreign Language Teachers and Intercultural Competence. Multilingual Matters, Toronto.

Szemerszki Marianna (2010). Regionális eltérések a harmadfokú továbbtanulásban. In: Kozma Tamás and Ceglédi Tímea (eds.): *Régió és oktatás: A Partium esete.* Debreceni Egyetem Felsőoktatási Kutató és Fejlesztő Központ, Debrecen. 172-188. (= Régió és oktatás 7.)

Teperics Károly & Dorogi Zoltán (2014). Az egyetemek gazdasági és regionális hatása. *Educatio*, Vol. 3. 451-461.

Vágó Irén (2009). Nyelvtanulás. In: Szárny és teher. A magyar oktatás helyzetének elemzése – háttéranyag. A Bölcsek Tanácsa oktatási szakértői bizottságának és a bizottság által felkért szakértőknek az elemzései. 76-89. http://mek.oszk.hu/07900/07999/pdf/szarny-teher-oktatas-hatteranyag.pdf [2015. május 15.]

## lldikó Furka

## Implementing a Portfolio Based Evaluation System to Foster Internal Motivation in Foreign Language Learning

## Abstract

The personal teaching experience of the absence of internal motivation in learners of a foreign language (FL) and the lack of learning on a daily basis inspired a portfolio based evaluation system to foster internal motivation. A structure of tasks was developed to be awarded with monthly points in a way to involve both the formal learning process of the compulsory material and the informal learning process of what students are generally doing with the foreign language outside the classroom. Results of the piloting implementation period show that there is not only a need from students to change the existing evaluation pattern, but also that they actually have not realized how much informal learning they have been doing so far. This realization together with the performing of the actual tasks resulted in less classroom anxiety and therefore freer, more spontaneous language use in the lessons. In addition, the flexibility provided by the variety of optional tasks nurtured more creativity both for learners and the teacher, and offered the possibility of widely catering individual needs. Participating in creating the system of rules was highly valued by participants and made learners interested in managing their learning process. Limitations and future research focus are also discussed.

## 1. Introduction

It was McCorsky (1985) who first conjured the term *willingness to communicate* (WTC), the measurable and researchable concept which has become one of the focal points of motivational studies (MacIntyre et al., 1998). Personal teaching experience shows there is a lack of internal motivation in students to learn and actively participate in foreign language lessons, as well as a lack of learning on a daily basis, when the latter of which in fact should be the aim of foreign language teaching according to Dörnyei (2005). Students learn haphazardly for word quizzes and tests on learning units, which does not mean regular learning for the sake and pleasure of knowledge. They only show grains of instrumental motivation as opposed to the preferred inter-

nal motivation even though the latter would foster the continuity of language learning outside school and beyond curricular requirements (Gardner, Smythe, Clement, and Gliksman, 1976; Krashen, 1981). Testing knowledge in the form of regular word quizzes forces students into the realm of *learning* which does not develop communicative language use as much as *language acquisition* (Krashen, 1981). What is more, preparing for word quizzes and unit tests does not transfer the lexical knowledge into spontaneous and continuous speech, thus communicative competence is not developed effectively enough. In addition, instrumental motivation does not support WTC outside the classroom either (Modirkhameneh & Firouzmand, 2014), when in truth it is foreign language usage outside the classroom which most fosters internalized language acquisition (Cummins, 2000).

To achieve this goal of independent, internalized foreign language acquisition, resulting in improved WTC, a new approach of evaluating the learning process was designed and implemented to test whether it could in any way influence the shift from *learning* to *acquisition*. The aim of the project was two-fold. Partly, to increase the motivation of daily practice at home to develop internal motivation in class, and partly to make learners use the target language creatively in a complex way. With changing the traditional testing patterns and evaluation it was hoped that new motivational forces would surface, which would in turn create and/or strengthen the need for intrinsic motivation.

## 2. Theoretical background

Even though it is clear that internal motivation is boosted by language acquisition (Krashen, 1981; MacIntyre et al., 1998) rather than instrumental learning, it is very difficult, if not impossible to create situations and opportunities of interacting with native speakers or speakers of the target language in a foreign language educational environment. Even if the teacher is a native speaker of the target language, the educational situation puts him/her in a position where free, interaction on a one-on-one level is highly limited. The type of language acquisition that takes place when a language learner lives in the target culture is unlikely to be reproduced in a foreign language educational environment.

To counterbalance the limitations of a foreign language educational situation, one option is to involve the informal learning situations that learners partake in. The European Union, in unison with the creation of the CEFR, dealt with the question of a modern and effective evaluation system that supports language learning processes already in the 1990s. Based on thorough research and international surveys the European Council suggested that – in order to expand learner autonomy which in turn supports the lifelong learning attitude – the best evaluation method is one which incorporates learner self-evaluation (Little, 2005), raising awareness of and practicing learning skills, and developing intercultural competence (Little, 2003). When summarizing results Schärer (2000) stated that this evaluation method could be the European Language Portfolio, which (1) is a feasible learning tool from the point of view of pedagogy; (2) involves the most important issues of the European educational environment; and (3) supports the implementation of the goals of the European Council, which is linguistic as well as cultural diversity (Schärer, 2000, 14–15).

The portfolio can be defined as a collection of works done by a student during a certain period of time on a given topic that reflect their learning process (Paulson, Paulson, & Meyer, 1991). Responsibility of controlling the learning process is given over to students, thus making them more interested. Portfolio based evaluation requires tasks that include the informal learning situations into the grading, thus the learning system (Krashen, 1981).

A portfolio based evaluation system makes authentic and diverse testing possible where due to the different participants a one-directional, teacher-induced evaluation may be avoided, and thus learners can reflect on their progress more actively (Kohonen, 2002). The fact that the portfolio based evaluation system is multifaceted and diverse actively encourages the possibility of diversifying the learning process itself, and increases as well the efficiency of the learning process of learners with special educational needs (Kohonen, 2002).

In the decade since the first studies and as a result of detailed research and collaboration, several language portfolios have been accredited in Europe as a form of evaluating the language learning process (The European Language Portfolio: http://www.coe. int/t/dg4/education/elp/). Portfolio based education is also widespread in the United States of America because it provides insight into the learner's head and thus offers more discussion on the learning process and assisting learning difficulties (Paulson, Paulson & Meyer, 1991).

Several publications are available on the introduction and implementation of the European Council accredited language portfolio in Hungary (Darabos, 2002; 2009a & b). Its implementation on a national level was carried out and evaluated between

2003 and 2007 and was taken into consideration on different educational levels when updating the National Curriculum (NAT) in 2007 (Bandiné, 2009). The pilot started with 57 schools; however only 20-25 registered schools continue to use the portfolio system on a school level (Bandiné, 2012). Bandiné (2012) claims one of the reasons for failing to incorporate it nationally is that the mark system was left in effect. Teachers were unwilling to leave behind a mark-based evaluation system, parents were not supportive of the portfolio system, and there was a lack of long-term assistance for teachers. Nonetheless, the portfolio based pedagogy received positive feedback from learners and it was shown that it may serve as the catalyst of language and intercultural competence development (Bandiné, 2012).

#### 3 Methods

#### 3.1 Research approach and hypothesis

Inspiration for the present study stems from everyday experiences and practices, therefore it took the approach of participatory action research (Herr & Anderson, 2015) over a school term that documented the implementation of a portfolio based evaluation system in order to foster internal motivation of foreign language learning. It was hypothesized that including informal learning situations into the evaluation system might cause new motivational forces to emerge as success in such situations could be defined less strictly, thus it could foster willingness to do more.

#### 3.2 Participants

One group of 20 students in Year 10 (aged 16) in a secondary school situated in Budapest, Hungary were chosen who were preparing for their B2 language exam. The language in question (English as a foreign language) was their first foreign language, the second being German. At the time of the implementation, they had been learning English for four years in four lessons per week. As mentioned above, the researcher's role was filled by their teacher who had been teaching them at the time for the third year. The group consisted of middle class students who rarely have major problems in their social background. The majority has the moral support of their family in learning. They have plans of higher education in the future, and based on discussions they seemed to be open-minded and curious about the project. After having asked for permission from the teaching staff and the principal, the students were asked to get involved in the planning and implementation process.

### 3.3 The assessment tool

The working definition for the foreign language learning portfolio applied in the study is a collection of works which, according to the learner, best connect to the topic discussed in current lessons. It reflects the depth, breadth and increase in the skills of the learner, and develops awareness of the learning process. It is tailor-made for each student, it allows and supports diversification, and improves social skills by forming learning collaborations. Finally, it creates independent learners (Paulson, Paulson & Meyer, 1991).

The portfolio presented here is adapted to the given educational circumstances and target group. As its aim is to foster continuous, independently controlled and motivated language learning, it combines different types of portfolios. It is a *growth* portfolio because it records development and task achievement (Education, 2014). It is also a *process* portfolio, as it collects drafts and final versions together which makes improvement visible (Valencia, 1990). In addition, it is *reflective*, as learners need to assess their achievements at the end of the month compared to their beginning-of-the-month goals (Zubizarreta, 2004). Finally, due to its nature of showing the best works related to the topic, it is also a *showcase* portfolio (Lankes, 1998).

## 3.4 The process of implementation

The portfolio based evaluation system was first researched and designed in the fall of 2014. After successful authorization with the teaching board and the management of the school, the plan was discussed with the chosen group of learners. Implementation started in the second term of the 2014/2015 academic year (from second half of January 2015). As a first step, the main teaching goals were identified as improvisatory speaking skills development and vocabulary development from level B2 (intermediate) to C1 (upper-intermediate) based on the curriculum. Afterwards, the content of the portfolio was decided upon with regards to the teaching goals identified earlier. Thus, the actual elements of the portfolio used in the project were the following:

- personal learning goal of the month
- language learning CV10

<sup>-</sup> Language passport based on the Council of Europe format<sup>11</sup>

<sup>10</sup> major events in language learning process based on the Council of Europe format: http://www.coe. int/t/dg4/education/elp/elp-reg/Templates\_EN.asp#TopOfPage

<sup>11</sup> http://www.coe.int/t/dg4/education/elp/elp-reg/Templates\_EN.asp#TopOfPage

- contents page of collected works

- compulsory elements related to the material defined by the National Curriculum of Hungary currently in effect (NAT 2012): word quizzes (4/month); unit tests (1/month)

- electives:

- o presentations (Power Point or Prezi)
- o travel experiences
- o intercultural experiences
- o book, film, play reviews
- essays
- projects
- presentations connected to English speaking cultures (history, literature)
- o written or oral summary of YouTube videos
- o short films
- o acting out short stories/plays/film scenes/own scene
- $\circ~$  summary of FÉK (Young Christians at the threshold of life) club event
- o interview with native speakers
- o AFS Exchange student native speaker interview
- o language exam preparation tasks
- o other items suggested by student, approved by teacher
- date on tasks
- drafts and final versions
- reflection: What have I learnt? What did I do right? Why did I chose a particular task? What would I like to correct on the task? What was my achievement like? What was difficult?

The intention when selecting the optional activities was to give as much space for individual initiative as possible so that learners would have a say in their work and would acquire rather than learn the language.

As a next step, values were added to the tasks in form of points and were administered to each completed task. The maximum amount of points was 60 per month. It consisted of the compulsory word quizzes (20 points/month), the unit test (15 points), the goal and reflection of the month (together five points). That left 20 points to be collected with elective tasks to achieve the maximum. An equivalence scale was set up between the 60 points and the five-scale marking scheme that is binding by the Hungarian National Curriculum (NAT 2012), where five was awarded to points 60-54, four to points 53-48, three to points 47-42, two was points 41-36 and one was below 36 points originally. The monthly grade was given based on the score scale, whereas the end-of-term grade was the average of the monthly grades.

The responsibility of the participants consisted of expressing monthly goals and reflections, preparing compulsory and elective tasks on time, asking for help or ideas, and collecting tasks in a durable format.

The teacher's responsibility during the process included making decisions on topics, providing enough practice time on the compulsory material, preparing the list of electives, offering and giving assistance when needed, evaluating works handed in, and fine-tuning monthly goals with students as required.

The work-in-progress nature of the process was emphasized to the participants. They were informed in advance that any arising issue would be discussed together and that they could make propositions and suggest changes within a reasonable range if they found something inconsistent, unfair or problematic. For example, it was highlighted that anything could be added to the list of electives as long as it was discussed and approved in advance. Thus participants had an active role in forming the rules of their own learning process.

Finally, at the end of the pilot phase, a group interview was carried out by an independent expert researcher to obtain objective feedback from the group (Seliger & Shohamy, 1995) on how they found the new evaluation system after closing the term and the year.

## 3.5 Data collection and analysis

Data collection during the implementation of the portfolio based evaluation system meant recording participants' monthly goals and reflections, listing chosen types of tasks, administering points acquired for word quizzes and unit tests, noting the amount of time spent on doing elective tasks. These forms of data were meticulously collected and recorded in an EXCEL file in order to find any patterns. Problematic issues that arose during the term were recorded in a research log with date, the label of the problem and the solution or an attempt for the solution, together with remarks on any problem that should be resolved in the future.

Data analysis in a qualitative type research as this study belongs to may arise from different analytical procedures. In this particular case the recorded qualitative (descriptions of monthly goals and reflections, group interview and types of tasks) and quantitative data (points of word quizzes and unit tests) were analyzed for any patterns, characteristics, and mainstream features. No special statistical procedures were applied as the limited number of participants did not yield such amount of numerical data that would require automatized statistical analysis.

## 4. Results

Results derived from the qualitative data came from annotating (Dey, 1993) monthly goals and reflections, remarks on problematic issues arising during the term, and labeling issues (Merriam, 2009) in the group interview that was carried out after the term ended in order to get feedback from the participants.

On the whole, it may be stated that the participants favored the portfolio based evaluation system (Figure 1.). Of the 20 students, 25% found it acceptable commenting in the group interview that they did not have any objection to it, but they did not particularly prefer it either. 20% of the participants were content with the new system, and 30% said they were very happy. Five learners were absent (20%) at the time of the interview and could not comment. One learner expressed his dislike of the new system (5%), as it made him work more for his grade five than the traditional one would have.



#### RATIO OF PREFERENCE OF PORTFOLIO BASED EVALUATION SYSTEM

Figure 1. Ratio of how much participants preferred the implemented evaluation system. It shows an overall positive attitude to new system

Some of the remarks made by the participants (Figure 2.) included reference to their preference of the new system and expressed their wish it be introduced in other subjects as well. They verbalized the benefit of working on a topic in their individual way as they felt they knew better what areas they needed to focus on to develop. On the other hand, others expressed the extra burden it put on their workload, and others articulated their desperation at choosing topics of interest. Finally, there were those who mentioned that it helped them make an effort in learning the language or the benefit of having their extra preparation for their language exam accounted for in their schoolwork. On the whole all the participants expressed that they had done more work, spent more time focusing on their English studies than before as a result of the new evaluation system.



Figure 2. Excerpts from the group interview with the participants after the term.

Apart from the qualitative data set, some quantitative results could be derived from the project as well. Altogether 220 instances of homework assignments or tasks were handed in during the four-month term, half of which were exercise sheets (Figure 3.). They were either a gap fill exercise dealing with a grammar issue or a language exam related task, such as a reading or listening comprehension with short answers or gap fill exercises. The second most common type of assignment was a book or film review in writing (26 instances), then formal and informal letters (17 instances). In 16 cases participants wrote essays on topics related to the materials dealt with in class, 13 presentations were prepared and 11 travel experiences were described. Some more interesting task choices were six cases of short films including self-taped reviews, or accounts of stories handed in in a digital format. Six students participated in an online dictionary competition, five listening tasks were completed, which were not exam practice listening tasks, two books were read, one culture related presentation was prepared, one task categorized as 'other' was participation in the yearly school competition.



Figure 3. Type of self-set tasks chosen most by participants.

It shows a lack of creativity in choosing tasks, inability to work without specific or exact instruction, not independent enough to make decisions, focus on learning not acquisition.

Figure 4 shows how much time participants spent on doing their chosen exercises. The obvious decrease of minutes spent by doing electives as the months progressed is easily visible. As to its meaning, several options will be presented in the discussion section of this paper.



Figure 4. Time spent on doing self-set tasks in minutes.

It shows an increased level of awareness by the participants of the time they were spending with the foreign language outside the classroom, but losing momentum.

Another result derived from quantitative data is the correlation between the goals participants set for themselves at the beginning of each month and how much that goal was represented in their reflection at the end of the month. Whereas February shows a distinct lack of correlation, throughout March and April this absence of correspondence started to disappear, and 60% of the participants took into account at the end of the month what they had planned for at the beginning of the last month.



Figure 5. Correlation between learning goals and the end-of-the-month reflections. It shows a lack of awareness of learning the foreign language.

#### 5. Discussion

As a result of its qualitative nature, the testing of the portfolio based evaluation system was experimental. Expected results were leaning towards descriptive characteristics of the process rather than numerical data and statistically significant numbers, the interpretation of which would lead to the key of increasing internal motivation and fostering language acquisition. It was expected that participants' independent thinking would develop, they would take part in controlling their learning processes, and they would even make an effort when preparing their homework, all of which would then result in more efficient learning outcomes and less anxiety prone behavior in the classroom. In addition, it was hoped that due to the mixed nature of the tasks, their general communicative competence would improve together with acquiring the positive value of life-long learning. Some results were in line with the above expectations, others were unexpected. Of course, it was highly probable that any system that made it easier for students to get a mark five would have a chance of becoming popular with them. However, it was reassuring to receive the feedback that the majority had positive feelings about it. It reflects that they understood one of the main aims of the project: developing learner autonomy. Even if they had difficulties in making decisions about what course their learning process should or could take, most of them made an effort, and some actually found what way of accomplishing a task, or what task itself, would provide the most benefit for them.

Nonetheless, it was disheartening to see how basically no creativity was shown in choosing task types (Figure 3.). Even though more creative, free-speech inducing tasks were worth almost triple points, learners still decided to hand in some kind of exercise sheet. It could reflect laziness (it is always easier to do a gap-fill than use language productively and freely), or it could very well be that they have been taught to learn a language instead of acquiring it. It is then possibly not their fault or responsibility that given the chance they still stick to learning – that is the only way they know how to approach a foreign language learning process.

On the other hand, the overwhelming amount of exercise sheets might be due to the inability to work without specific instructions, that is to say, learner autonomy among the participants was generally lacking. Too much freedom can dim the initiative, even if it is desired. It was as if having received a free hand in making decisions, learners felt at a loss as to which way to pick. It was indeed verbalized by several participants in the interview and also during the term in class how difficult it was for them to come up with an idea for an essay or a task that would secure their maximum points for the given month. It seems as though they could not handle their autonomy at first. This was also supported by the lack of correlation in monthly goals and reflections at the beginning of the project (see Figure 5). Luckily, that began to change during the term. It is an essential finding, thus, that learner autonomy, even though desired, is something that needs to be taught. Students need to be helped how to take advantage of their freedom in controlling their learning processes and how to achieve their goals.

The issue of the time spent on tasks was important from several points of view. On the one hand, the amount of time in the first month might mean that they either had difficulty in performing the tasks, or had yet to make more efficient choices. The sharp decline in the amount of time spent on the elective work by the end of the term could mean that they got much better at the self-set tasks, so less time could mean better performance. It is also plausible that they were getting tired around the end of the school year, and did not put as much emphasis on tasks as earlier. Thirdly, it may very well be that participants chose tasks which were less time consuming even if they were worth less points (e.g. presentations versus letter writing), which reveals that the time factor in doing homework or electives is more essential than the amount or form of evaluation. It can easily be pictured that after a certain level of workload the questions is not how much points or how good grades a learner gets, but it switches on the survival instinct: get rid of a task as soon as possible. However, to see the logical connection between the two, further research on a bigger sample would be required.

The fact that the amount of time spent on tasks was recorded conveyed a decisively positive message. It made learners realize how much English they use outside the classroom – and they were more than surprised. By recording the time that they spent on doing homework or the electives, they had to face and consider the difference between formal and informal learning situations and the differences and similarities that go with them.

The change in the correlation of monthly goals and end-of-the-month reflections also signifies change in the students' attitude. It shows that by the fourth month they started to think in bigger chunks than lessons or weeks, and paid more attention to their learning processes and possibilities. Even though it seems to be a slow process, it may just be the key to developing learner autonomy.

Overall, it was delightful to see from remarks and questions of the participants during the months how their thinking started to change and they began to ponder the significance and consequence of their choices and actions. Even though they seemed to bend under the overall workload of being a secondary school student by the end of the year, some of them started show less stress during lessons, they expressed their opinions more freely, whether about the project or a topic in the coursebook. Unit tests became less important, because they knew they can still get a five at the end of the month if they did not perform well on the test. The exclusive, one-chance-only nature of a unit test was eliminated, which visibly relieved some students.

### 5.1 Some difficulties

When testing a new system or method, it is inevitable that one encounters unforeseen difficulties. This was no different with the portfolios. One of the most paralyzing issues was deciding which type of exercise was worth how many points. Guidelines forming the base of evaluation included quality, length, content, originality, accuracy, vocabulary used, coherence and cohesion, and showing effort. However, these features of written and spoken discourse might be subjectively transformed into a numerical scale. Thus, even though the guidelines were set up and discussed with participants, eventually it had to be faced that one person's performance was valued higher than another's, even though at first both tasks seemed to be the same. This sometimes caused resentment among the students which then had to be managed head on in the classroom. It was discussed with them why the decision was made as it had been, and they were asked to position themselves in the evaluators' shoes and decide then who gets how many points. If two essays on the same topic were written they were asked how they would try to reflect the quality or effort put into it in points. What if for one student a 150-word essay with certain vocabulary was like climbing Mount Everest, but for the other a 300-word composition is a walk in the park? How should that be reflected in the points? Or should an improvised, two-minute tutorial video on how video games are played be worth more points than a film review written on paper in one and a half hours?

Another issue that turned out to be problematic was the points to mark scoring scale. Originally, word quizzes contained 10 words, and 10 or nine correct answers were worth five points, eight correct answers were four points, seven correct words three points, six correct words two points and less than five correct words, one point. However, during the first month students complained about the strictness of this scale. At the time in order not to lose their motivation in testing the new method, a softer measurement was introduced that was acceptable for all parties involved and thus five points were given for nine-10 correct answers, four points for seven-eight, three points for five-six, two points for three-four correct answers, and one point was given for two or less correct answers in word quizzes.

Furthermore, it was planned at the beginning to grade the monthly goals based on details and well-articulated (five points), less well-articulated (four points), superficial (three points), carelessly phrased (two points), and impossible to value (one point), however, this was never implemented because it turned out to be more

important to create simply the habit of thinking ahead than focusing on quality as of yet. So whatever quality a goal or reflection had, it was awarded with 2.5 points.

Another concern at half term was the feasibility of the project in the long run. Last year brought a long-lasting flu epidemic that made every third student ill within a twomonth period. During this time it was often the case that more than one third of the participants were absent. Sticking to the rules and regulations so that the monthly maximum point would always be 60, even if word quizzes cannot be administered to the majority of the group, had to be abandoned. Thus maximum points and the number of word quizzes were subject to change. Not only illness forced the planned system to be adapted, but also school breaks and other scheduling problems (conflicting with school-wide programs that cancelled lessons, for example) forced the project to be flexible about rules and regulations.

Last but not least, there was one matter that was not taken into consideration at the outset, that is, lack of doing regular homework, that is, exercises in the accompanying workbook. Within the compulsory material specified by the curriculum, exercises reinforcing the lesson's material were still assigned regularly, although without extra points. It was taken for granted that homework was a must, whatever evaluation system was in effect. By the second month it was obvious that this was a weakness of the system as many students skipped thee drills that would have helped them reinforce the material.

In the future one option to correct this planning error would be to deduct points for no homework, and if the learner still wanted that five for the month, he/she would have to do extra because of the skipped homework task. If homework was more consciously scored, it would make participants more interested in doing homework. Another possibility to avoid the trap of no homework preparation would be to emphasize the topic of the elective tasks more directly, to control the choice more strictly. If, for instance, the topic of the electives was more closely related to the topic of the compulsory material, less effort would have to be made to collect the points while learning the compulsory material. The disadvantage of this though would be that students already complained in the group interview that topics of the coursebook were boring, and repetitive every year. If electives were forced to be only about the topic of the coursebook, it would mean taking away the freedom of choice from students. It would mean that the same type of tasks would be repeated that students find boring when in fact the electives and the whole project was developed to filter the boredom factor, perceived or not, out of the learning process.

Another option to counterbalance the skipping of homework exercises would be to show learners several elective tasks that focus on the same material the curriculum prescribes, and encourage doing those instead of doing word quizzes, exercise sheets, readings and gap fills. For instance, the topic of 'value and money' could be tackled by watching financial tutorials and videos on You Tube or news channels, or by conducting interviews with their elderly family members on what they think is valuable in today's world. Yet another possibility would be to render points to compulsory workbook homework assignment as well, thus facilitating their choice of task towards what the teacher wants them to perform more of. The latter course of action would push the innovative nature of the project into the field of experimenting with learning techniques as opposed to creative language use or communicative competence. It is excellent news though that the present system could be adapted flexibly to both aims, whether more spontaneous language use was the objective, or experimenting with several learning techniques to foster the retaining the compulsory material.

#### 5.2 Limitations of the system

As Hungary has a National Curriculum (NAT, 2012) which specifies the material in the curriculum and the available coursebooks that may be used for teaching, it is at the moment illegal to refrain from evaluating the work of learners without grades. Therefore whatever system one develops to help the assessment of learner progress, at the end of the day transforming it into a five-to-one scale marking scheme is unavoidable. What is more, the effort a student makes in his/her studies is only evaluated once every term complexly, and not in connection with each subject, whereas in Britain for instance, a grade for shown effort is given for each subject the student completes in a term. If grades for effort were allowed to be given in each subject, that could shed more light on the actual whereabouts of the students concerning their achievement in a particular subject, as well as provide feedback whether their attitude should be adjusted or maintained.

Furthermore, in harmony with the secondary school's pedagogical program and the local syllabus, a minimum amount of material must be specified. As a result, learner autonomy is restricted right from the beginning, therefore the full impact of a portfolio based evaluation cannot be assessed. Finally, it cannot be completely controlled that while completing the electives, learners might employ outside help to obtain a more preferable evaluation, thus it will not be his/her actual language knowledge that receives an evaluation, but someone else's and his/her progress will be slower than if

he/she completed the tasks him/herself. However, this might be eliminated by maximizing the points electives can collect, thereby emphasizing the need to work on the in-class compulsory material as well.

#### 6. Conclusion

To sum up, on the one hand it may be true that the above presented portfolio based evaluation system requires more time from the teacher's side and that there is an inherent difficulty in developing a framework that enables fair and equal assessment criteria which, in addition, also accounts for the diversity of self-set tasks. It was also found that instrumental motivation is hard to uproot while the grading system remains as it is in Hungary (Bandiné, 2012). It was also established that more time is needed for students to adjust to the new expectations and forms of thinking and learning, but the process had begun. Yet there are several advantages of the presented portfolio based evaluation system. For starters, there is a greater choice of assignable tasks for teachers, which means greater opportunity for creativity for both teachers and students. If a more varied array of tasks were used by educators, learners would be more encouraged to react in a creative way. In addition, since the overall feedback from students was positive, and they would support such an evaluation system in case of other subjects as well, it shows that learner autonomy does foster internal motivation, it raises awareness of the learning process and nurtures independent thinking.

All in all, as personal teaching experience suggests that learner motivation needs serious restructuring if the learning outcomes are to be improved in the short term, or if students' life-long learning attitudes should be enhanced. This project showed that motivation may be increased if the learners' point of view and needs are taken more into consideration when planning the learning process. Handing over more of the responsibility into the hands of the learners, letting them have a say in the rules, even if not from the first minute, such portfolio structured evaluation enhances learner autonomy in the long run. The portfolio based evaluation system presented here aims to assist the shift of focus from pure language learning to language acquisition to foster internal motivation (Krashen, 1981) with the intention to increase willingness to communicate. The tested procedure with further adaptions and research may provide insight into how secondary school evaluation should be revised, what changes would be needed, which good practices should be kept, and how the overall quality of educational and teaching processes could be maintained.

## References

Bandiné, Liszt A. (2012). Portfolió a nyelvpedagógiában [Portfolio in language pedagogy]. Doktori értekezés [Unpublished doctoral dissertation]. Pannon University.

Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon, England: Multilingual Matters

Darabos, Zs. (2002). *Európai nyelvtanulási napló*. Középiskolás változat [European language diary. Secondary School version]. Veszprém: Nodus Kiadó.

Darabos, Zs. (2009a). *Kalauz az Európai nyelvtanulási naplóhoz* [Guidebook to the European language diary]. Veszprém: OTKER-NODUS Kiadó.

Darabos. Zs. (2009b). Kalauz 2. az Európai nyelvtanulási naplóhoz. [2<sup>nd</sup> Guidebook to the European language diary]. Veszprém: OTKE-NODUS Kiadó

Dey, I. (1993). *Qualitative data analysis. A user-friendly guide for social scientists.* London & New York: Routledge.

Dörnyei, Z. (2005). *The psychology of language learner: Individual differences in second language acquisition*. Mahwa N J: Lawrence Erlbaum

Education, S. (2014). *Guidance for using student portfolios in educator evaluations*.retrieved 17 October, 2015 from https://dese.mo.gov/sites/default/files/Portfolio-Handbook.pdf

Herr, K. & Anderson, G.L. (2015). *The action research dissertation: a guide for students and faculty* (2nd ed.). USA: Sage Publications Inc.

Kohonen, V. (2002). The European language portfolio: from portfolio assessment to portfolio-oriented language learning. In Kohonen, V. & P. Kaikkonen (Eds.), *Quo vadis foreign language education*? Tampereen yliopisto: Tampereen yliopiston julkaisusarja A 27, 77-95.

Krashen, D. S. (1981/2002). Second language learning and second language acquisition. University of Southern California. retrieved on 13 December, 2014 from http://www.sdkrashen.com/content/books/sl\_acquisition\_and\_learning.pdf

Lankes, A. M. D. (1998). Portfolios: a new wave in assessment. *T H E Journal; Vol. 25, Issue 9,* 18, retrieved 17 October, 2015 from http://tccl.rit.albany.edu/knilt/images/9/9a/Lankes.doc

Little, D., & Simpson, B. (2003). *European Language Portfolio - The Intercultural Component and Learning How to Learn*. Strasbourg: The Council of Europe.

Little, D. (2005). The Common European Framework and the European Language Portfolio: involving learners and their judgments in the assessment process. *Language Testing*, 22, 321-336.

MacIntyre, P.D., Clément, R., Dörnyei, Z., & Noels, K.A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *Modern Language Journal*, 82, 545-562.

Merriam, S.B. (2009). *Qualitative research. A guide to design and implementation.* San Fransisco: Jossey-Bass.

Modirkhameneh, S. & Firouzmand, A. (2014). Iranian EFL Learners' Willingness to Communicate and Language Learning Orientations. Procedia - Social and Behavioral Sciences: Proceedings of the International Conference on Current Trends in ELT, Vol. 98, 1134–1139.

Nemzeti Alaptanterv (NAT) [National Curriculum of Hungary] (2012). *Magyar Közlöny, Vol. 66*, 10635 retrieved 17 October, 2015 from http://www.budapestedu.hu/data/cms149320/MK\_12\_66\_NAT.pdf

Paulson, L.F., Paulson, P.R. & Meyer, C.A. (1991). *What makes a portfolio*? retrieved 16 December, 2014, from http://web.stanford.edu/dept/SUSE/projects/ireport/articles/e-portfolio/what%20makes%20a%20 portfolio%20a%20portfolio.pdf

Schärer, R. (2000). *Final report: European Language Portfolio pilot project phase 1998–2000.* Strasbourg: Council of Europe DGIV/EDU/LANG (2000) 31.

Seliger, H.W. &Shohamy, E. (1995). Second language research methods. Oxford: Oxford University Press.

The European Language Portfolio: http://www.coe.int/t/dg4/education/elp/

Valencia, S. (1990). Assessment: A Portfolio Approach to Classroom Reading Assessment: The Whys, Whats, and Hows. *The Reading Teacher*, Vol. 43, No. 4 (Jan., 1990), pp. 338-340

Zubizarreta, J. (2004). The learning portfolio: Reflective practice for improving student learning. Bolton: Anker.

# Judit Orgoványi-Gajdos

## Differences between expert and novice teachers' attitude to challenging classroom situation<sup>12</sup>

## Abstract

Teaching is a profession that (similarly to other profession) require high level of content knowledge as well as problem solving skill. Every moment of teaching process from preparing to evaluating is textured by problem solving and decision making (Shavelson, 1973; Calderhead, 1993). In spite of this fact problem solving skill is developed neither during teacher education nor during in-service training. Only some related teaching skill (communication, class management, conflict management) has some attention during the developmental process (Cooper, 2011).

Earlier psychology and pedagogy studies pointed out that there are important differences between novices' and expertise's problem solving process also in the filed of teacher profession. A Hungarian research team carried out a national survey in 2014 involving beginning and experienced teachers. Beside more topics the survey examined the differences between novice and expert teachers' attitude towards classroom situation and their opinion about initial teacher training. Using stratified random sampling 120 beginner and 102 experienced teachers were selected to take part in this survey according to four subgroups from preschool to secondary school teachers and representing every region of the country and different type of schools. The hypothesis were examined by questionnaire method.

The study highlights the most important results of the survey comparing novice and experienced teachers' reaction to the same classroom situation. Furthermore the study (based on the presented results) gives suggestion for the development of preservice teacher training focusing on the improvement of prospective teachers' problem solving skill.

**<sup>12</sup>** This study is a modified and extended version of the author's former work called EXPERT AND NOVICE TEACHERS' APPROACHES TO PROBLEMATIC PEDAGOGICAL CLASSROOM SITUA-TIONS that was originally published in Proceedings of INTCESS15: 2nd International Conference on Education and Social Sciences (2015- Istanbul, Turkey). International Organization Center of Academic Research (OCERINT), 2015. pp. 591-600.

**Keywords**: experienced and novice teacher, classroom management, problem solving, initial teacher training

#### 1. Introduction

A pilot project of supporting beginning teachers by mentor teachers took place in Hungary between 2013 December and 2014 July. One part of the project contained an extensive Hungarian survey. The purpose of this article is to present those parts of the survey that deal with the approaches of classroom problem from different angles. The study focuses two angles: differences between novice - expert teachers and also between subgroups according to their teaching levels. The intention of the article is to point out the main tendencies of each view and make conclusion for further development of initial teacher training.

### 2. Differences between experts and novices

The differences between experts and novice cognitive process were examined mainly domain-specifically from the 1970's and 1980's years. Psychological researches on different filed like chess playing (see De Groot, 1966, 19-50; Chase & Simon, 1973, 55-61; Simon & Gilmartin, 1973, 29-46), physics (Chi, Glaser & Rees, 1983, 7-76; Larkin, Dermot, Simon & Simon, 1980, 1335-1342) and other subject have supported and completed each other's findings.

Similarly the above mentioned findings of psychology, researches pointed out that there are significant differences between expert and novice teachers in their cognition process and behaving. However there is huge amount of difference in how researchers understand the word "expert" when they do their study with teachers. First of all it needs to be clear who count expert among teachers. Therefore I found important to define the word of *expert* within teaching profession. The tendency is that researchers pick up one or more of the following categories when speaking about teacher expertize (Palmer, Stough, Burdenski & Gonzales, 2005, 13-25):

- a) years of experience (in most studies the number of years of experience is usually between 5 and 10 years),
- b) social recognition or nomination (teacher certification),
- c) professional or social group membership (status as a cooperating or mentor teacher),
- d) performance-based criteria (student achievement such as knowledge and love of subject).

Because of the wide variety in teacher's attribution that count, in this study I am going to use "experienced" and "expert" in the same way.

Teachers' work is divided into two main parts: an interactive phase (during lesson) and planning phase with evaluating the last lesson (see Jackson 1968; Sutcliffe & Whitfield, 1979; Clark & Peterson 1986).

In the preparation phase there are considerable difference between novices and experts. These differences manifest especially in planning flexibility and in type of planning (Calderhead, 1984, Housner & Griffey, 1985, 45-53; Carte & Doyle,1987; Strahan, 1989, 53-67; Borko & Livingstone, 1989, 473-498; Westerman, 1991, 292-305; Kagan & Tippins, 1992, 149-158; Brown & McIntyre, 1992, Rabinowitz & Craven, 2003, 235–247; Hoge & Rabinowitz, 2009, 153-169; Tsui 2009, 22-41).

#### The main differences in planning flexibility:

- novices less flexible and tend to follow closely the official curricula without having an eye on the special needs of the group, students,

- experienced teachers have a wide variety of well-established routines of situations that they can use during the planning process,

- during planning expert teachers pay attention to more specific and current information of learning environments concerning students skill, former knowledge, the features and interest of the group etc.

#### *The main differences in the types of planning:*

- novices are usually plan for short-term (for a couple of lessons) while experienced teachers prefer long-term planning,

- in short-term planning beginners have more detailed but less flexible lesson plan.

Connecting to interactive phase of teachers' work former researches also pointed out some differences between beginner and expert. These were the attention of class-room situation and reaction to the unusual events. The differences manifest themselves in the teacher's knowledge, perception, reaction, and recalling of classroom events. (Doyle 1977, 51-55; Peterson & Comeaux's, 1987, 319-331; Borko & Livingstone 1989, 473-498; Cartes, Cushing, Sabers, Stein, & Berliner, 1988, 147-157; Sabers, Chusing & Berliner, 1991, 63-88; Corno, 1981, 360-366; Westerman, 1991, 292-305; Tsui, 2009, 22-41).
#### Differences in teachers' knowledge:

- expert teachers possess more knowledge about learning and teaching process, learning environment etc.,

- experts have well-integrated and organized knowledge of subject, curriculum, students, methods etc.

#### Differences in teachers' perception of classroom events:

- the perception of experienced teachers is more analytical and interpretive than beginner's,

- experts are able to select between the information and pick up the important ones,

- expert teachers see classroom as a moving organization of work-related actions of students.

#### Differences in teachers' recalling of classroom events:

- expert teachers are able to explain classroom events by recognizing familiar patterns while beginning teachers try to notice the phenomenones,

- experts recall on students behaviour and understanding while novices focus more on their own behaviour,

- novice recall the physical appearance of students rather than their work-related actions,

- experienced have more and greater recall of classroom events after the lesson than novices.

#### Differences in teachers' reaction to classroom events:

- experts have more complex, connected and easy accessed schemata about classroom events, students' behaviour, curriculum etc.

- experienced teachers are much more prepared to differ from the lesson plan and improvise according to the current circumstances and needs.

There is similarity between teaching and another professions relating the development problem solving process. Being an expert means to possess high level of content knowledge and problem solving skill (Table 1).

| Cog-<br>nitive<br>aspects              | Expert' characteristic in general                                                                                                         | Expert teacher's characteristic                                                                                                                                                                                              |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Content<br>knowl-<br>edge              | High level of content<br>knowledge                                                                                                        | High level of general pedagogical knowl-<br>edge, subject matter knowledge, peda-<br>gogical content knowledge, curriculum<br>knowledge                                                                                      |
| Organi-<br>zation of<br>knowl-<br>edge | Well-organized content<br>knowledge and "condi-<br>tionalized" knowledge                                                                  | Well-integrated and richly elaborates<br>knowledge about subject, methods, class-<br>room mechanism, students' behaviour,<br>curriculum etc.                                                                                 |
| Problem<br>percep-<br>tion             | Pattern recognition:<br>Structuring information<br>by underlying functions<br>Categorizing problems<br>according their deep<br>structures | Selecting between the information of<br>classroom event<br>Complex, connected, well-established<br>and easy accessed schemata for class-<br>room events<br>Explaining classroom events by recogniz-<br>ing familiar patterns |
| Problem<br>repre-<br>senta-<br>tion    | Complex and sophisticat-<br>ed representation of prob-<br>lem situation                                                                   | <i>Seeing classroom as an organization of work-related actions of students</i>                                                                                                                                               |
| Problem<br>solving<br>strategy         | Forward thinking process<br>Spending more time on<br>understanding and ana-<br>lysing problem                                             | Having more analytical and interpretive perception of classroom events                                                                                                                                                       |
| Self-reg-<br>ulation                   | Having strong connection<br>between metacognition<br>and self-regulation pro-<br>cess                                                     | Being engaged in long-term planning<br>Making own judgement (by evaluating<br>and reflecting previous lessons) while<br>planning                                                                                             |
| Attitude                               | High level of flexibility ap-<br>proaching novel problem                                                                                  | Being prepared and having the flexibility<br>to differ from the lesson plan and impro-<br>vise according to the current needs                                                                                                |

Table 1 Expert characteristic overview in general and in the teaching profession

# 3. A Hungarian survey of teachers' atitude to challenging classroom situation

#### 3.1 Sampling

Count

The participant selection was made by stratified random sampling method according to four subgroups of teachers: preschool teachers (dealing with 3-6 years old children), low primary teachers (dealing with 7-10 years old pupils), upper primary teachers (dealing with 11-14 years old students) and secondary school teachers (dealing with 14-18 years old students). As a result of the selection 120 beginning and 102 experienced teachers took part in this survey representing all parts of the country and different types of schools as well as subjects.

|        |                     |                      | Sub s                   | ample                     |                                 |       |
|--------|---------------------|----------------------|-------------------------|---------------------------|---------------------------------|-------|
|        |                     | preschool<br>teacher | low primary<br>teachers | upper primary<br>teachers | secondary<br>school<br>teachers | Total |
| Sample | Novice teacher      | 29                   | 27                      | 28                        | 36                              | 120   |
|        | Experienced teacher | 20                   | 12                      | 32                        | 38                              | 102   |
| Total  |                     | 49                   | 39                      | 60                        | 74                              | 222   |

#### Sample \* Sub sample Crosstabulation

#### Table 2 Repartition of the sample by subgroups

In this research *beginning (or novice) teachers* mean that *they have 0-2 years teaching experience. Experienced (expert) teachers* in this survey *have minimum 5 years' teaching experience* and they have a role in common as all of them are mentor teachers too.

#### 3.2 Research questions and methods

#### 3.2.1 Research questions

This study analyse those answers from the national survey that are connected the next questions:

- How much and in what way do teachers' reactions to a problematic pedagogical situation differ from each other?

- Is there any tendency of teachers' reactions according to the level of education that teachers give to the same pedagogical situation?

- Do novices teacher require more support for handling classroom situation?

- How did novice teachers find the preparation of initial teacher training concerning classroom problems?

This study examines only three hypotheses of the survey:

- 1. Experienced teachers look at problematic pedagogical situation from a deeper view while beginning teachers have less sophisticated strategies to solve a pedagogical problem.
- 2. Preservice teacher training does not give enough support for future teachers to handle class situations.
- 3. Novice teachers require support for handling classroom problems while experts do not.

The hypotheses were measured by questionnaire method in the national survey. For this this study only next relevant questions were analysed.

#### 3.2.2 Questionnaire

Unfinished sentences were used examining teachers' different reactions for the same situation:

#### 1. Complete the sentences:

Q1/a) "In that case when despite my repeating request a student doesn't seem willing to do the exercise I..."

Q1/b) "If this solution doesn't work I..."

The reliability of the coding process were grant by personal triangulation. During intra coding the researcher repeat the categorisation process another time and put the result of them in the equation of coding reliability (Figure 1). The coding indicator can be between 0 and 1. When the indicator is above 0,6, the categories are reliable (Sántha, 2015, Dafinoiu and Lungu, 2003).

$$Km = \frac{n \times 2}{i + j}$$

**Figure 1** Equation of coding reliability (n=number of common categories, i=number of categories in the first coding, j=number of categories in second coding)

After categorization the answers two times, the indicator of coding reliability were 0.7 which is an appropriate result (Figure 2).

$$Km = \frac{6 \times 2}{10 + 7} = 0.705$$

Figure 2 Result of the categorization of the open answers

By the combination of the two process the following groups were formed for both 1/a b) questions:

- *Reasoning*: those answers were put in this category where teacher looking for information, causes, explanation of the situation.

- *Helpful*: this category contains those supporting answer where teachers try to have positive effect on their student by gesture, eye contact or helpful behaviour like doing the exercise together with the student.

- *Threatening*: it contains every kind of threats from verbal to behavioural (giving bad mark etc.).

- *Motivating*: those answers count here when the teacher tries a new way to motivate the passive student to start working such as offering other task, change the form of work (preferring group or pair work).

- *Ignoring*: this category contains those answers where teachers let the passive student out of attention either in order to pay more attention to the others or in order to give time to the student and see what happen.

- *Calling for help*: reaction when teacher decided to involve other adults (college, parent, psychologist etc).

- Depending situation: when teachers answers were that "it depends on the situation".

Questions by Likert scales was used for the measure of the agreement with certain statement by four level (1-not at all, 2-slightly, 3-significantly, 4-absolutely):

#### 2. How do you agree with the statement?

Q2/a) Preservice teacher training provides enough preparation for handling pedagogical problems: 1 2 3 4 (only for novice teachers)

Q2/b) I need support for handling pedagogical problems: 1 2 3 4

Q2/c) I have good strategies to handle pedagogic problems: 1 2 3 4

Q2/d) To handle problems during lesson is problem for me: 1 2 3 4

Q2/e) I always realize what was the reason of the problem: 1 2 3 4

The analysis of the result had two main aspects. One examination aspect was according to the teaching experience where *group 1*: novice teachers; *group 2*: expert teachers. The other analysis was according to the teaching level: 1-preschool, 2-low primary, 3-upper primary, 4-secondary school teacher.

#### 3.3 Findings

**3.3.1. Hypotheses 1.:** Experienced teachers look at problematic pedagogical situation from a deeper view while beginner teachers have less sophisticated strategies strategy to solve a pedagogical problem.

This hypothesis was examined by questions Q1/a b) and Q2/c d) e).

#### 3.3.1.1 Differences between novice and expert teachers

The summarized answers of the two unfinished sentences (Q1/a) b) can be seen below.



Teachers reaction to passive student behaviour

Teachers reaction to continuing passive student





"In that case when despite my repeating request a student doesn't seem willing to do the exercise I..." (3/a), "If the former solution doesn't work I..." (3/b)

Looking at the Figure 3/a it can be agreed that the most typical reaction category in both novice and expert group contained reasoning answers (novice 31%, expert 39%). There is a difference of the second and the third place between beginning and experienced ones. At novices the second place is tied between threatening and motivating reaction as they got nearly the same percent (24%, 22%). However at experts, motivating (24%) and other helpful reaction (18%) got the second and the third place.

The most prominent and interesting distinction between novices and experts is the measure of threatening answers: 24% of novices chose threatening as a solution of this situation while only 6% of experts think the same. (I am going to touch the

possible causes of it while analysing table 4.). Finding another tool of motivation as a possible solution of the situation got nearly the same percent in each group (novice 22%, expert 24%).

Looking at the Figure 3/b we can see that answering ongoing passive behaviour threatening become the most dominant attitude among novices (29%). In the contrast, new motivation form is the mostly preferred tool by experts (32%). Compering the percent of threatening and motivating reaction we can see the same measure of percent in the groups but the other way around. It can be also claimed that experts more tend to involve other person (college, parent or specialist) to find the explanation of the unusual behaviour as this reaction had the second place (16%) before threatening (13%) and reasoning (12%) in this turn.

Comparing the answers in Figure 3/a and 3/b some tendency can be drawn. The percent of the threatening answer increased in both group however at novices the percent of the threatening answer reach 1/3 of all reaction in the second turn. At experts it is about 10%, however it is double measure than in the first round. The high rates of reasoning (20%) in the second turn indicate that most novice start this reaction if other tools (motivating, threatening) don't work or the former attribution was false. However experts behave the other way around. First they try to find the cause of the given situation and then look for solution depending on the result of their attributing. The decreasing result of reasoning (from 39% to 12%) shows that they are more successful in attributing. These results were supported by the answers of question 2/c) d) e).

There is significant difference between novices and experts in the meaning how much they feel to have good strategies to handle pedagogic problems (t=-4,471, p=0,000) and also in the meaning to do successful reasoning (t=-2,632, p=0,009). Experts feel their self more self-confident in both questions (Table 3).

|                                                     |                                |               | Indep           | endent San | nples Test |                 |                     |            |                |                 |
|-----------------------------------------------------|--------------------------------|---------------|-----------------|------------|------------|-----------------|---------------------|------------|----------------|-----------------|
|                                                     |                                | Levene's Test | for Equality of |            |            |                 |                     |            |                |                 |
|                                                     |                                | Varia         | lces            |            |            |                 | t-test for Equality | of Means   |                |                 |
|                                                     |                                |               |                 |            |            |                 |                     |            | 95% Confidence | Interval of the |
|                                                     |                                |               |                 |            |            |                 | Mean                | Std. Error | Differe        | ance            |
|                                                     |                                | F             | Sig.            | +          | df         | Sig. (2-tailed) | Difference          | Difference | Lower          | Upper           |
| I need support for<br>handling pedagogical          | Equal variances<br>assumed     | 2,139         | ,145            | 3,597      | 220        | ,000            | ,436                | ,121       | ,197           | ,675            |
| problems                                            | Equal variances not<br>assumed |               |                 | 3,630      | 219,468    | ,000            | ,436                | ,120       | ,199           | ,673            |
| To handle problems<br>during lesson is problem      | Equal variances<br>assumed     | ,522          | ,471            | 3,452      | 217        | ,001            | ,392                | ,114       | ,168           | ,616            |
| for me                                              | Equal variances not<br>assumed |               |                 | 3,445      | 211,110    | ,001            | ,392                | ,114       | ,168           | ,617            |
| I have good strategies to<br>handle pedagogic       | Equal variances<br>assumed     | 1,225         | ,270            | -4,471     | 214        | ,000            | -,459               | ,103       | -,662          | -,257           |
| problems                                            | Equal variances not<br>assumed |               |                 | -4,521     | 212,408    | ,000            | -,459               | ,102       | -,659          | -,259           |
| I always realize what was the reason of the problem | Equal variances<br>assumed     | 1,684         | ,196            | -2,632     | 214        | 600'            | -,227               | 980'       | -,396          | -,057           |
|                                                     | Equal variances not<br>assumed |               |                 | -2,645     | 213,925    | 600'            | -,227               | ,080       | -,395          | -,058           |

 Table 3 Result Table of Independent Sample Test

There is also a significant relationship between attributing well and having strategies for solving classroom problems (r=471, p<0,001 see in Table 4). Moreover those who have good strategies tend to declare that handle classroom problems is less challenge (r=-429, p<0,001 see in Table 4).

| ***. Correlation is significa |     | the reason of the problem | I always realize what was | proziciine | handle pedagogic | I have good strategies to |     | for me          | To handle problems  | prostoring | handling pedagogical | I need support for  |     |                 | Sub sample          |     |                 | Sample              |            |                |               |             |
|-------------------------------|-----|---------------------------|---------------------------|------------|------------------|---------------------------|-----|-----------------|---------------------|------------|----------------------|---------------------|-----|-----------------|---------------------|-----|-----------------|---------------------|------------|----------------|---------------|-------------|
| ant at the 0.01 level (2-ta   | N   | Sig. (2-tailed)           | Pearson Correlation       | N          | Sig. (2-tailed)  | Pearson Correlation       | Ν   | Sig. (2-tailed) | Pearson Correlation | Ν          | Sig. (2-tailed)      | Pearson Correlation | Z   | Sig. (2-tailed) | Pearson Correlation | z   | Sig. (2-tailed) | Pearson Correlation |            |                |               |             |
| iled).                        | 216 | 600                       | "771,                     | 216        | ,000             | ,292,                     | 219 | ,001            | -,228,              | 222        | ,000                 | -,236               | 222 | ,079            | ,118                | 222 |                 | 1                   | Sample     |                |               |             |
|                               | 216 | ,048                      | ,135                      | 216        | .000             | ,240***                   | 219 | ,841            | ,014                | 222        | ,245                 | -,078               | 222 |                 | 1                   | 222 | ,079            | ,118                | Sub sample |                |               |             |
|                               | 216 | ,313                      | -,069                     | 216        | ,008             | -,181"                    | 219 | ,165            | ,094                | 222        |                      | 1                   | 222 | ,245            | -,078               | 222 | ,000            | -,236"              | problems   | pedagogical    | Support for   | Ineed       |
|                               | 218 | ,000                      | -,240~~                   | 218        | ,000             | -,429""                   | 221 |                 | 1                   | 219        | ,165                 | ,094                | 219 | ,841            | ,014                | 219 | ,001            | -,228**             | me         | is problem for | during losson | To handle   |
|                               | 218 | ,000                      | ,471**                    | 218        |                  | 1                         | 218 | ,000            | -,429               | 216        | ,008                 | -,181               | 216 | ,000            | ,240**              | 216 | ,000            | ,292"               | problems   | pedagogic      | strategies to | I have good |
|                               | 218 |                           | 1                         | 218        | .000             | ,471***                   | 218 | ,000            | -,240 ~~            | 216        | ,313                 | 690'-               | 216 | ,048            | ,135                | 216 | 600'            | ,177***             | problem    | reason of the  | realize what  | l always    |

**Table 4** *Correlation between mean scores of the answers question 2/b c) d) e)* 

#### 3.3.1.2 Differences among subgroups

This phase is analyse the answers by four subgroups (preschool, law primary, upper primary, secondary). Table 5 shows the answers of Q1/a) by subgroups. The answers are significant ( $\chi$ 2=30.984, p=0,009).

|            |                        |                     |           | Teacher | 's reaction to pa | ssive studen | tbehaviour |             |        |
|------------|------------------------|---------------------|-----------|---------|-------------------|--------------|------------|-------------|--------|
|            |                        |                     |           |         |                   |              |            | Calling for |        |
|            |                        |                     | Reasoning | Helpful | Threatening       | Motivating   | Ignoring   | help        | Total  |
| Sub sample | preschool teacher      | Count               | 10        | 7       | 2                 | 22           | 9          | 2           | 49     |
|            |                        | % within Sub sample | 20,4%     | 14,3%   | 4,1%              | 44,9%        | 12,2%      | 4,1%        | 100,0% |
|            | low primary teachers   | Count               | 15        | 7       | 7                 | 7            | 0          | 1           | 37     |
|            |                        | % within Sub sample | 40,5%     | 18,9%   | 18,9%             | 18,9%        | 0,0%       | 2,7%        | 100,0% |
|            | upper primary teachers | Count               | 20        | 8       | 13                | 11           | 6          | 1           | 59     |
|            |                        | % within Sub sample | 33,9%     | 13,6%   | 22,0%             | 18,6%        | 10,2%      | 1,7%        | 100,0% |
|            | secondary school       | Count               | 32        | 10      | 13                | 11           | 4          | 4           | 74     |
|            | teachers               | % within Sub sample | 43,2%     | 13,5%   | 17,6%             | 14,9%        | 5,4%       | 5,4%        | 100,0% |
| Total      |                        | Count               | 77        | 32      | 35                | 51           | 16         | 8           | 219    |
|            |                        | % within Sub sample | 35,2%     | 14,6%   | 16,0%             | 23,3%        | 7,3%       | 3,7%        | 100,0% |

**Table 5** Percentage distribution among the answers by subgroups

The biggest differences between the two groups in Q1/a) were in the choice of threatening answer. So it is well worth to pick out only those answers from Table 5 that consist of threatening reactions. It can give us the possibility to have a look at the division according to the four subgroups of novice and expert teachers.



Figure 4 The division of threatening answers from

It should be noticed that threatening reaction is much more popular among novice school teachers then among experts. Except preschool teacher the negative given reaction was around 30% among novices on each educational level. According to the teaching experience the biggest distinction is in low primary level where 27% of novices used threatening as a solution tool, as opposed to experts, who didn't give this reaction at all. It can be seen as well that this kind of negative reaction is avoided by novice and expert preschool (kindergarten) teachers. It is normal on this level because directed activity is only a possibility but kids are not forced to take part in. The highest percent of threatening answer was on the upper primary level in each group.

Searching the cause of the pattern showed in table 4 we can draw some parallel with the expert-novice establishments that were detailed in the second part of the paper.

The cause of the considerably higher rate of threatening reaction among beginning teacher can be:

- Beginning teachers are novice problem solver and tend more to start with the solution instead of reasoning.

- Experts tend much more to change motivation tools according to the student's need.

- Beginning teachers notice rather the surface feature of the problem and react on this surface level.

- Beginning teachers concentrate rather on the behaviour of the passive student than the causes of it.

- Novices have a lack of schemas in certain situation.

- Novices have a low level of content knowledge especially about student behaviour, classroom management, problem solving strategies.

However, there also can be more explanation behind the high rate, such as: they may want to establish their directing role and save their prestige. It is also worth considering that the given situation of the questionnaire may mean different situation for the two groups. As far as beginning teachers are concerned they have just started to meet experiences of classroom events. That means most events are new for them so they need to establish they rule first. Experienced teachers have already formed their rules for the main types of possible events and also have an eye to prevent the disturbing situations. When despite the preventions a student shows unexpected behaviour experienced teachers are entitled to say that it could have a hidden reason.

#### 3.3.1.3 Sum

The findings supported the first hypothesis. Expert teachers are more prepared to handle classroom problems. More expert than novice feel successful in reasoning. Experts also try more to look at a pedagogical problem from inside by searching the causes and missing information. Those who can reasoning well tend to have good strategies as well. Those who feel they have good strategies they also feel handling classroom problems as less challenge than novices. Beginning teachers either because of their poor content knowledge and strategy or because of their simple perception, tend to solve pedagogic problem on a surface level.

## **3.3.2 Hypotheses 2.: P**reservice teacher training does not give enough support for future teachers to handle class situations.

In this part of the questionnaire teachers were asked to indicate their agreement of this given statement presented to them (Q2/a): "*Preservice teacher training provides enough preparation for handling pedagogical problems*." The participants could choose between four categories: *not at all, slightly, significantly, absolutely*.

The statement was asked only from beginners, because they were so close to the end of the training. The result can be seen in Figure 5 in categorization of subgroups.



Figure 5 The agreement measure of the statement: "Preservice teacher training provides enough preparation for handling pedagogical problems."

Around 70% of novice teachers found that preservice teacher training had provided a poor preparation for classroom problems. It is considerable that according to 44% of secondary school teachers' opinion, initial teacher training didn't give any preparation for handling pedagogical problems. Only 30% of this subgroup is satisfied. On preschool level the measure of dissatisfaction is over 80%, the highest of any. The most satisfied group of the four is the upper primary teachers, however, 60% of them still do not agree with the statement. All in all, it can be established that the findings definitely supported our hypothesis. **3.3.3 Hypothesis 3.:** Novice teachers require support for handling classroom problems while experts do not.

To confirm this hypothesis questions (2/b) c) d) were analysed where the participants could also choose between four categories (*1-not at all, 2-slightly, 3-significantly, 4-absolutely*).

The pattern of the novices' answers (Figure 5/a) is quite similar in every subgroup. Only less than 10% of novices don't think about receiving support. The cause can be either that they can do it by themselves or that they usually don't encounter a pedagogical problem. Over 20% of them find that help is definitely needed, as they significantly or absolutely agreed with the statement, but on upper primary level this ratio reaches 30%.

The table of experts (Figure 6/b) shows that around 30% of them still call for support. The most support is demanded by upper primary teachers, however, this group also showed the highest rate of the "not at all" category. The least need for help is required on low primary level. It is worth mentioning that this is also the group that uses threatening tools the least often in school (see Figure 4).





Figure 6/a (Novices) and 6/b (Experts): The agreement measure of the statement: "I need support for handling pedagogical problems"

Comparing the result of the tables (Figure 6/a and 6/b) shows that around 60% of novices definitely require some considerable measure of support for handling pedagogical problems, much more than experts do (around 30%). The difference between the two groups is significant (t=3,597, p<0,001 see in Table 3). OECD results shows the same pattern. According to it nearly twice as much new teachers require professional development on the field of classroom management and student discipline than experienced ones. In this study teaching students with special needs gets the highest rate from both categories in the same percent (Jensen, B., et al., 2012).

It is surprising that there is not much difference in the given answers between novices and experts on the upper primary level. Upper primary teachers need the most help (around 50%) among experts (Figure 6/b).Taking a glimpse at the previous tables (Figure 4 and Figure 5), it can be seen that the upper primary group is everywhere a bit out of the pattern. They gave the highest rates of threatening reactions in both experts and novices groups.

Summarizing these results we can claim that the hypothesis was supported. Nevertheless, it should be noted that beside novices, some of the experts also require help for pedagogic problems.

#### 4. Discussion

The aim of this study was to uncover the hiatus in the field of beginning's problem solving process in order to make suggestion for further development of preservice teacher training. Therefore the study analysed questions relating to novice-expert differences from an extensive national survey. Analysing the results of the chosen questions, our study came to important conclusions. The first was that beginning teachers tend to react to the surface level of the classroom problems. Novices don't have much practical experience, so they have poor schemata systems. It follows that their pattern recognition is not really working. Also, they don't have enough experience, confidence and flexibility to change their original plan according to the current situation. Therefore their solution technique focused strongly their goal: to stop disturbing events, and not to the reason of the disturbing events. That is why their decision usually stopped on a surface level that affects only the symptoms of the situation. Because of the symptom solution, the problem may repeats itself again and again. In this case, they would need long-term planning, using problem solving models that they are not prepared for. This relates to our second justified hypothesis: according to their opinion, teacher candidates would need more preparing to handle problems in preservice teacher training. Our third hypothesis supported by the results follow from the previous two: beginning teachers require a considerable measure of support concerning pedagogical problems. However some of experienced teacher also claim it.

## 5. Conclusion for further development of preservice teacher training

As it was shown in the first part of the paper, to become an expert teacher one needs to possess high level of content knowledge as well as a high level of general problem solving skill. In the teaching profession, content knowledge is widely diversified. Summarising Shulman (1987) categories it includes:

- general pedagogical knowledge (general psychology and pedagogy knowledge such as learning and teaching, learning environment, classroom management, student assessment etc.)

- subject matter knowledge
- pedagogical content knowledge (teachers' interpretations and transformations of subject-matter knowledge for facilitating students' learning)
- curriculum knowledge (planning, curriculum development, evaluation of curriculum)

Beside content knowledge, general problem solving skill is also an important part of expert teachers' competencies. Problem solving skill is the link between knowledge and action, declarative and procedural knowledge, and thus, it has an important knowledge transfer role. It includes divergent (creative or lateral) and convergent (critical) thinking processes, as well as systems thinking (De Bono 1966; Treffinger and Isaksen 2004). It is strongly connected to our cognitive and metacognitive skills (perception and representation of the problem, reasoning, gathering information, analysing, creating solutions, decision making, planning, reflecting and evaluating), as cognitive scientists pointed out (Eysenck and Keane 2010).

As we analyse the result of the study, we can make an assumption that problem solving is a key element of teachers' thinking in both the interactive and the planning phase (Calderhead 1993). Because of this significant role of the problem solving skill, more attention should be paid to it during preservice teacher training.

In summary, the authors provide some suggestions for improving preservice teacher training. In order to prepare handling pedagogic problems, preservice training should develop the candidates' problem solving skill by

- case-based learning,
- forming mental structures of problem solving
- giving techniques for metacognition of problem solving process
- examining classroom situations with complex approaches.

The author's future study will elaborate on some models and techniques and how they can be used in teacher training courses.

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#### References

Borko, H., & Livingston, C. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal*, 26, 473–498.

Bransford, J. D., Brown, A. L., & Cocking, R. R. Eds. (2000). *How People Learn: Brain, Mind, Experience, and School.* Washington, DC: National Academy Press.

Brown & McIntyre (1992). *Making sense of teaching*. Open University Press, Buckingham and Philadelphiade Bono, E. (1966): *Teach Yourself to Think*. Penguin Books Ltd.

Calderhead, J. (1984). *Teachers' Classroom Decision Making*, London: Holt, Rinehart and Winston.

Calderhead, J. (1993). The contribution of research on teachers' thinking to the professional development of teachers, in: Day, C., Calderhead, J. and Denicolo, P. eds., *Research on Teacher Thinking:Understanding Professional Development*, London, Falmer Press.

Carter, K. & Doyle, W. (1987). Teachers' knowledge structures and comprehension processes. In J. Calderhead (Ed.), *Exploring teachers' thinking*. London: Holt, Rinehart and Winston. Carter, K., Sabers, D., Cushing, K., Pinnegar, S., & Berliner, D. C. (1987). Processing and using information about students: A study of expert, novice, and postulant teachers. *Teaching and Teacher Education*, 3, 147–157.

Chase, W. G. & Simon, H. A. (1973). Perception in Chess. Cognitive Psychology, 4.

Chi, M. T. H., Feltovich, P. J. & Glaser, R. (1981). Categorization and representation of physics knowledge by experts and novices. *Cognitive Science*, 5, 121–152.

Chi, M. T. H., Glaser, R. & Rees, E. (1982). Expertise in problem solving. In R. Sternberg (Ed.), *Advances in the Psychology of Human Intelligence* 1. Hillsdale, NJ: Erlbaum

Chi, M.T.H., Glaser, R. & Farr, M. J. (Eds.). (1988). *The nature of expertise*. Hillsdale, NJ: Erlbaum.

Clark, C. M. & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 255–296). New York: Macmillan.

Corno, L. (1981). Cognitive organizing in classroom. Curriculum Inquiry II. 360-377.

Doyle, W. (1977). Learning the classroom environment: An Ecological Analysis Journal of Teacher Education 28: 51-55

Dafinoiu, I. & Lungu, O. (2003). *Research Methods in the Social Sciences / Metode de cercetare* în științele *sociale. PeterLang*, Europäischer Verlag der Wissenschaften, Frankfurt am Main

De Groot, A. D. (1966). Perception and Memory versus Thought: Some Old Ideas and Recent Findings. *Problem Solving: Research, Method, and Theory*. (ed. B. Kleinmuntz), John Wiley, New York.

Douglas J. Palmer, Laura M. Stough, Thomas K. Burdenski, Jr. & Maricela Gonzales (2005). Identifying Teacher Expertise: An Examination of Researchers'Decision Making. *Educational Psychologist*, 40(1), 13–25

Hogen, T. & Rabinowitz, M. (2009). Teacher expertise and the development of a problem representation. *Educational Psychology* 29. (2.) 153-169.

Housner, L. D., & Griffey, D. (1985). Teacher cognition: Differences in planning and interactive decision making between experienced and inexperienced teachers. *Research Quarterly for Exercise and Sport*, 56(1), 45–53.

Eysenck, M. & Keane M. T (2010). *Cognitive Psychology. A Student's Handbook*. Psychology Press.

Jackson, P. (1968). Life in classrooms. New York: Holt, Rinehart, and Winston.

Jensen, B., et al. (2012). The Experience of New Teachers: Results from TALIS 2008, OECD Publishing

Kagan, D. M., & Tippins, D. J. (1992). How US preservice teachers read classroom performance. *Journal of Education for Teaching*, 18(2), 149-158.

Larkin, J. H., Mc Dermott, J., Simon, D. P. & Simon, H. A. (1980). Expert and novice performance in solving physics problems. *Science*, 208, 1335-1342.

Livingston, C. & Borko, H. (1989). Expert and novice differences in teaching: A cognitive analysis and implications for teacher education. *Journal of Teacher Education*, 40, 36–42.

Peterson, P. L. & Comeaux, M. A. (1987). Teachers' schemata for class- room events: The mental scaffolding of teachers' thinking during classroom instruction. *Teaching and Teacher Education*, 3(4), 319–331.

Rabinowitz, M., & Craven, J.A. (2003). Problem representation in teaching: Inferences from research of expert and novice teachers. *Educational Psychologist*, 38, 235–247.

Sántha K. (2015). *Trianguláció a pedagógiai kutatásban/Triangulation in educational research*. Eötvös József Kiadó. Budapest

Sabers, D. S., Cushing, K. S. and Berliner, D. C. (1991). Differences among teachers in a task characterized by simultaneity, multidimensionality, and immediacy. *American Educational Research Journal*, 28(1) 63–88.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.

Simon H. A. & Gilmartin, K. (1973). Simulation of memory for chess positions. *Cognitive Psychology*, 5.

Strahan, D. B. (1989). How experienced and novice teachers frame their views of instruction: An analysis of semantic ordered trees. *Teaching and Teacher Education*, 5, 53–67.

Sutcliffe, J., & Whitfield, R. (1979). Classroom-based teaching decisions. In J. Eggleston (Ed.), *Teacher decision-making in the classroom*. London: Routledge and Kegan Paul.

Treffinger, D.J. & Isaksen, S.G (2004). Celebrating 50 years of Reflective Practice: Versions of Creative Problem Solving. *The Journal of Creative Behaviour* 38, 75–101

Tsui, A.B.M. (2009). Teaching Expertise: Approaches, Perspectives and Charaterizations. In A. Burns & J. C. Richards (Eds.), *Cambridge Guide to Second Language Teacher Education* (pp. 190-197). Cambridge: Cambridge University Press.

Westerman, D. A. (1991). Expert and novice teacher decision making. *Journal of Teacher Education*, 42(4), 292–305.

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