School-university partnership for effective teacher learning

Issues Paper for the seminar co-hosted by ELTE Doctoral School of Education and Miskolc-Hejőkeresztúr KIP Regional Methodological Centre May 13, 2016

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BACKGROUND AND PURPOSE

The idea to organise a seminar on "School-university partnership for effective teacher learning" – co-hosted by the Doctoral School of Education of ELTE University (Budapest) and the Miskolc-Hejőkeresztúr KIP Regional Methodological Centre – has been stimulated by several parallel events.

The most important has been, by no means, the visit to Hungary of Professor *Rachel Lotan* from Stanford University. Professor Lotan has been recognised in Hungary as the one of those whose ideas contributed to the development of a particularly effective pedagogical approach of organising learning in heterogeneous student groups, called *Complex Instruction*. The Program for Complex Instruction at Stanford was established to support related research, documentation, and evaluation and to provide professional development for teachers in elementary and secondary schools in the US. It has created a structure that supported the dissemination of this innovative and effective way of organising teaching and learning in schools through professional collaborations among academics and practitioners. University faculty as well as other teacher educators in the US and internationally participated in several seminars provided by the Program to learn about Complex Instruction.²

Another stimulating factor has been the school-university partnership aimed at supporting the scaling up the Hungarian version of the Complex Instruction Program, developed in the innovative school of *Hejőkeresztúr*. This partnership between the University of Miskolc and the school of Hejőkeresztúr led to the creation of the Miskolc-Hejőkeresztúr KIP Regional Methodological Centre (MHKMK) which is an interesting illustration of how school-university cooperation can support not only the preparation of teachers and schools to implement a particularly challenging pedagogical model but also the spreading of this model from one school to many others.

A third factor that stimulated the idea of the seminar has been the commitment of the Doctoral School of Education of ELTE University to build new partnerships with schools in the framework of a the EDiTE (European Doctorate in Teacher Education) program. One of the "work packages" of this innovative doctoral program, supported by the Horizon 2020 research program of the European Union, aims at building institutional partnerships, encouraging schools and universities to work together to enhance the education of teachers and also research cooperation between academics and practitioners. In this framework the Doctoral School has invited a number of schools and other institutions (including MHKMK) to create a network supporting the implementation of the EDiTE program.

The partners have proposed three major purposes for the seminar.

- To deepen the understanding of the dynamics of school-university cooperation and collaboration in the field of teacher education, as well as educational research, development and innovation
- To acquire first-hand knowledge about a successful and proved model created by Stanford University (STEP) and to learn from this model

² Between 1999 and 2014, Rachel also served as the Director of the Stanford Teacher Education Program (STEP). In that capacity, she designed and led a yearly, week-long institute called Inquiry into STEP (iSTEP) for teacher educators from many different countries.

• To enhance school-university partnership and dialogue as a substantial element of the EDiTE/Horizon2020 program

This Issues Paper has been formulated with the following goals:

- To orient the preparation of the seminar from a substantial perspective
- To place the seminar into the broader context of global and European discussions on teacher education and educational research, development and innovation
- To link the seminar to on-going research and development programs in Hungary for creating synergies
- To provide food for discussion beyond the presentations to the participants of the seminar
- To support reaching relevant outcomes by the seminar

CONTEXT AND FRAMEWORK

Creating and fostering school-university partnerships has been seen as a key educational development goal in many countries for the last one or two decades. There seems to be a growing consensus that the quality of teaching and learning in schools can be improved significantly only if new bridges are built between practice and theory, between practitioners and those who provide training for them or do academic research to support practice.

As most current trends, school-university partnership also has strong roots in earlier developments. Educational thinkers such as Lawrence *Stenhouse* and John *Elliot* in Europe, alongside with Marilyn *Cochran-Smith* in the United States, have long been pointing out to the importance of embedding research into practice in the development, acquisition and sharing of teacher professional knowledge. Together with others they have often promoted the cooperation between academics and practitioners.

The quality of teacher work is seen by an increasing number of key actors as by far the most important factor determining the quality of student learning. In most countries universities hold the largest responsibility for the education of teachers. They are the providers of most initial teacher education programs and they also play a key role in providing professional development programs for practicing teachers. Universities are the most important source of new knowledge, generated by research, which constitutes the basis of teachers' professional knowledge used to solve problems in everyday teaching practice.

The nature of this professional knowledge and the way it is acquired by practicing professionals has, however, been put to serious scrutiny for the last few decades in many countries and also international organisations involved in educational development (see, for example, OECD, 2000). There is a growing awareness of *tacit* and *procedural* knowledge as opposed to *explicit* and *declarative* knowledge and there is also a growing attention paid to *work-based* and *horizontal* learning from peers in *communities of practice* (see, for example, Eraut, 2000; Stoll et al., 2006; Cheng, 2015). A revealing distinction between three forms of teacher knowledge has been made by Cochran-Smith and Lytle (1999a). They distinguished (1) knowledge for practice, (2) knowledge in practice and (3) knowledge of practice. The first one is the classical explicit or declarative knowledge, often with a purpose of improving practice, typically created, stored and shared by universities. The second is the typically implicit or tacit knowledge embedded into the daily work of practitioners. Third form, which

is often created and shared in the framework of school-university partnerships, is described in the following way by the authors

"Unlike the first two, this third conception cannot be understood in terms of a universe of knowledge that divides formal knowledge, on the one hand, from practical knowledge, on the other. Rather, it is assumed that the knowledge teachers need to teach well is generated when teachers treat their own classrooms and schools as sites for intentional investigation at the same time that they treat the knowledge and theory produced by others as generative material for interrogation and interpretation"

The growing recognition of the nature of teachers' professional knowledge and the related better understanding of the process how this knowledge is acquired and used in practice has led, in a number of countries, to the emergence of "teaching schools" or "professional development schools" as alternative, school-based forms of teacher education. Schools are now often seen not only as "users" of knowledge produced by universities but as co-producers of professional knowledge in partnership or sometimes in competition with universities.

A recent publication of the Centre for Educational Research and Innovation of OECD, exploring how innovative solutions to organise teaching for effective learning are generated and sustained has called the attention to the emerging "*meso-level learning ecosystems*" which are new institutional mechanisms based on networks of schools and teachers involved in knowledge creating and sharing partnerships (OECD, 2015). This study sees partnerships as one of the key drivers of innovation for effective learning besides focussing on learning as the "core business" of schools, changing schools into learning organisation and using new technologies for learning. Some countries make efforts to create "*education innovation clusters*" (Molnar, 2015) bringing together not only schools and universities but also business and civil society partners.

In a number of countries the creation of knowledge producing and sharing school networks facilitated by universities or other external knowledge brokers is seen as the most important source of improving the quality of education through practice-based innovations. Universities play as key role in supporting schools to assess the impact of their innovations on student outcomes and to present their successful practices in a generalizable form that make them accessible to others. Academics in many universities do not consider themselves any more as the only source of knew knowledge but as the facilitators of knowledge creation in cooperation with practitioners. They try to develop learner-centred approaches in teacher education supporting the self-regulated, autonomous learning of student teachers or adult practitioners. They also develop new approaches to educational research, such as design research or action research, creating methodologies that require intensive collaboration between researchers and practitioners. On the other side, schools are increasingly encouraged to develop capacities for professional reflection and systematic inquiry, to collect and use data to improve their own practice and to support the professional development of their staff using innovative approaches such as involving them in "in-house research", in mutual lesson observations and analyses or adopting the a variation of lesson study method (McLaughlin et al., 2004; 2006; Gordon-Győri, 2009; Cheng - Lo (2013).

These changes have made the creation and the development of school-university partnerships a major strategic field when it comes to educational development, teacher education and educational research. The emerging new way of understanding the nature of the professional knowledge of teachers, and understanding the way it is created, shared and acquired sheds a new light on the cooperation between schools and universities. This cooperation is seen by many as a necessary condition for improving the quality of learning. Schools and universities are increasingly perceived as equal partners who need each other as none of them is capable to assume its mission alone without relying on the other, without using the knowledge of the other and without involving the other into its own action.

KEY ISSUES FOR DISCUSSION

In this section a number of key issues related to school-university partnership are presented with the aim of orienting the introductory presentations and feeding discussions during the seminar.

The rationales behind creating school-university partnerships

There seems to be two major rationales behind efforts to create school-university partnerships. One is related with teacher education, professional development and teacher learning, the other with research, development and innovation. These two areas are naturally strongly interconnected: teacher professional development and professional learning is often embedded into research, development and innovation practices, and the latter is often stimulated or guided by the former. Although the seminar is focussing mainly on teacher learning we also have to explore the research development and innovation and the interconnection of these two dimensions.

The teacher learning rationale

When thinking about *teacher learning* our reflection typically also covers *teacher professional knowledge*. Learning is a major source of knowledge and the way we think about the nature of professional knowledge has significant implications on what we think about teacher learning. As already stressed, we tend to conceive teacher professional knowledge as containing both declarative and explicit as well as procedural and tacit elements. One implication of this is that an important part of professional knowledge is embedded into professional practice and many elements of this part of knowledge cannot be separated from practice. Although some elements of tacit knowledge can be made explicit, and – if this is done – can be shared through verbal communication – there is a large part which is elusive of efforts to make it explicit and to be shared though spoken or written words. This is one of the reasons why, in most countries, university-based teacher education contains what Elliot et al. (2011) describe as "extensive school placements" or "on the job" training. As they write:

- "...the school based model of teacher training is based upon a belief that mentors are able to render their knowledge and skills accessible to the trainee. While this is relatively unproblematic for many routinized procedures and functions, difficulties emerge when the focus involves more complex professional knowledge, for much of this is tacit and thus not easily made explicit as a set of guiding rules for action.
- Firstly, it is acquired without a high degree of direct input from others. Learning takes place not primarily from instruction from others but, rather, results from the individual's experience of operating within a given context. In these situations, such knowledge may not be easily understood or communicated.
- Secondly, tacit knowledge is essentially procedural in nature; it concerns how best to undertake specific tasks in particular situations. As is the case with procedural knowledge, this often serves to guide action without being easily articulated (...).Tacit knowledge is more than a set of abstract procedural

rules, however; it is context-specific and concerns appropriate action in given situations.

Thirdly, the utilisation of our tacit knowledge is intricately bound up with one's own goals. Thus, we may be instructed on procedures to adopt in a given situation (e.g. how to react when a student is abusive to the teacher) but our own circumstances, dispositions (...) and personalities may lead us to take a different approach that may seem more effective in serving our own personal goals and agendas."

Another key feature of teacher professional knowledge is that it cannot be possessed only by individuals: a significant part of it is created and shared by communities involved in common action. In case of complex school practices involving the collaborative action of whole communities (such as the practice of the school of Hejőkeresztúr) professional knowledge is unavoidably collective: no individual members of the teacher community can reproduce, store and share the totality of the knowledge that is needed to produce the effective practice of the school. This is one of the reasons why the practice of KIP is typically transferred not to individual teachers but to whole teaching communities through the simulation of real KIP lessons with the participation of groups of teachers as "playing" the role of students.

If a large part of professional knowledge is tacit, procedural and contextual and if a significant part of it is possessed and transferred by working communities the acquisition and the sharing of this knowledge makes is necessary that universities and schools actively cooperate in teacher education and teacher professional development during all phases of teacher education (initial teacher education, induction and continuous professional development). This also makes it necessary for a certain fraction of schools to develop special knowledge sharing or teaching/mentoring capacities: these are the schools that typically become the best partners of universities in their common endeavour for making teacher learning the most effective.

The research, development and innovation rationale

School-university cooperation usually cannot be described by linear and simplistic models in which universities are seen as the holders of professional knowledge transmitting it to teachers seen as simple receivers. This cooperation often develops into platforms characterized by cooperative creation and sense-making and realising what the current European discourse of innovation policy describes with the notion of knowledge triangle. Originally the notion of knowledge triangle, symbolizing the dynamic interplay of education, research and innovation, was conceived as a model guiding policies of technological research and innovation, and the innovation pole in this model typically pointed to business or industry players, supposed to transform the outcomes of technology oriented research into new market products. However, if we place schools, instead of other productive units, at the innovation pole – as this was done in the issues paper of the EDiTE final conference in July 2014 – the model might guide our thinking also in the context of reflection about school-university partnership (see Figure 1). In this model universities appear as educating teachers and doing research on teaching (see the "Teacher education institutions" and the "The knowledge base of teaching" poles in the figure) and schools appear on the third pole of innovation (where innovation is embedded into school practice). It is important to underline that three poles largely overlap, which implies that schools also educate teachers and they also produce relevant new knowledge. In fact, in the knowledge triangle of the education sector innovation system³ effective creation of knowledge and learning cannot be imagined without school-university cooperation.

Figure 1



The "knowledge triangle" of teacher education

When the knowledge triangle model is applied to the education sector with a special focus on innovation within this sector the question of the role of external partners (such as the representatives of the world of work, business or educational authorities) might also arise. For example, in the case of education innovation clusters, mentioned earlier, these external partners, especially IT companies, play a key role. Workplaces as learning environments besides formal educational settings might have an important role in all fields of vocational training. The presence of external or "third" partners may fundamentally transform the dynamics of school-university partnerships: it can have a positive impact on the communication and cooperation between schools and universities but it can also raise complications.

In a sense research, development and innovation realised in school-university partnerships illustrate, in the education sector, the emerging general new model of research described by Gibbons and his colleagues (1994) as "Mode2". In this model – opposed to the classical linear model based on the concept of university based basic research being transferred into practice – research requires the close cooperation of researchers and the clients or the users of research outcomes, the latter gaining stronger control above the whole research process. This is typical in research collaborations often described as *action research*, university-led *practitioner research* or, more recently, *design research*. It might be relevant here to refer to the classical

Source: ELTE/EDiTE (2014)

³ The notion of "education sector innovation system" has been introduced by the Hungarian education sector innovation strategy elaborated in 2011 by the National Institute of Educational Research and Development (IERD, 2011). The notion has been further developed in 2015 in by the team of the ELTE University (ELTE, 2015).

paper published in 1992 by the cognitive psychologist Ann Brown, then president of the American Educational Research Association:

- "I conduct what Collins (...) refers to as design experiments, modelled on the procedures of design sciences such as aeronautics and artificial intelligence. As a design scientist in my field, I attempt to engineer innovative educational environments and simultaneously conduct experimental studies of those innovations. This involves orchestrating all aspects of a period of daily life in classrooms, a research activity for which I was not trained. My training was that of a classic learning theorist prepared to work with "subjects" (rats, children, sophomores), in strictly controlled laboratory settings. The methods I have employed in my previous life are not readily transported to the research activities I oversee currently (...)
- Central to the enterprise is that the classroom must function smoothly as a learning environment before we can study anything other than the myriad possible ways that things can go wrong. Classroom life is synergistic: Aspects of it that are often treated independently, such as teacher training, curriculum selection, testing, and so forth actually form part of a systemic whole. Just as it is impossible to change one aspect of the system without creating perturbations in others, so too it is difficult to study any one aspect independently from the whole operating system. Thus, we are responsible for simultaneous changes in the system, concerning the role of students and teachers, the type of curriculum, the place of technology, and so forth. These are all seen as inputs into the working whole." (Brown, 1992).

It might be also relevant to make reference here to what analysers tend to describe as the *teacher researcher movement* (Cochran-Smith - Lytle, 1999b) or the development of *researching schools* (McLaughlin et al., 2004; 2006) and also to the emergent view of seeing knowledge creating and knowledge sharing *school networks* as a particularly effective form of promoting educational change and improving the effectiveness of school education (Jackson, 2002; Hargreaves, 2004; McLaughlin et al., 2004; Veugelers - O'Hair, 2005; McCormick et al., 2011). In most of the knowledge producing and knowledge sharing school networks, created in the last one or two decades through state funded development interventions, universities have played a key role of supporting and facilitating school-to-school collaboration and building the school level capacities for effective networking, that is, these school networks have almost always been operating as school-university partnership.

This has been reflected in the observations of the OECD CERI publication quoted earlier, which has synthetized the results of the final phase of an influential project focusing on understanding how innovative learning environments supporting effective learning are created (OECD, 2015). These new *"meso-level learning ecosystems"*, observed in several countries, are very often stimulated or operated by open school-university partnerships, joined by further partners, such as local communities, regional educational authorities or, increasingly, by business partners. They operate as dynamic ecosystems of innovation or platforms supporting both the creation of new professional knowledge and practice and the horizontal sharing of them. The growing participation of business partners in such innovation ecosystems is a key feature of the education innovation clusters, also mentioned above, which are promoted by the US federal government⁴ and which seem to become a major engine of innovation in the education in some of the states of this country.

⁴ See the website entitled "Education Innovation Clusters" of the Office of Educational Technology of the US federal Department of Education (<u>http://tech.ed.gov/innovationclusters</u>)

Forms of cooperation, challenges and solutions

In this section we present some of the challenges schools and universities cooperating with each other might face – together with possible solutions. As we have seen in the previous section, school-university partnerships might serve different purposes. The authors of a recent literature review on research into school-university partnerships (Handscomb et al., 2014) have identified three major forms and functions: (1) supporting initial teacher education, (2) enhancing continuing professional development and (3) creating research communities aimed at knowledge building often in form of consultancy.

According to this literature review there are several concurrent definitions of schooluniversity partnerships, stressing different aspects. One of the definitions describes school-university partnerships in a pragmatic way as "deliberately designed, collaborative arrangements between different institutions, working together to advance self-interest and solve common problems". Another stresses that such partnerships require "a structured approach in which institutions plan a common approach and deliver a programme of work to meet agreed objectives". Other definitions present these partnerships with a more positive and more normative tone, such as "the most frequently recommended approaches to educational reform" or "motivating potential stakeholders, promoting collaboration and team effort, communicating clear commitments to educational development, and distributing leadership". Further definitions underline aspects such as "sense of mutuality and reciprocal benefit" or "symbiotic relationships" and the motivation of joining them "intimately in mutually beneficial relationships". The literature also mentions a number of conditions for successful partnerships, such as the "mutuality of concern", the "reciprocity of services", commitment to sustain and common beliefs in the usefulness of partnership (the key conclusions of this literature review are presented in the annex.).

Bridging the two worlds

Communication between the world of schools and that of universities has never been simple and straightforward. Academics and practitioners have sometimes been labelled as "citizens of two different words" (Gravani, 2008), and their communication has long been determined by what one could describe either as the classical opposition of theory and practice or the conflict of different forms of knowledge. As underlined by Noel Entwistle in a personal, philosophical article: even theories of the highest scientific value can be entirely useless for practitioners whose reaction is often expressed in sentences like "that's all right in theory but it won't work in practice" (Entwistle, 2001). The importance of distinguishing various forms of knowledge in function of their relationship to educational practice has been stressed earlier when referring to the three forms described by Cochran-Smith and Lytle (1999a). But knowledge created by educational researchers often does not intend to support practice: it rather aims at better understanding educational phenomena or it has a cultural mission (Biesta, 2007). This is a form of knowledge what Oancea and Furlong (2007), in an article searching for a new definition of the quality of educational research, call demonstrable knowledge, linking this with the Aristotelian Episteme as opposed to Techne (technical skill) and Phronesis (practical wisdom). For many university-based educational researchers schools appear rather as the terrain of data collection than a place to improve which implies a form of partnership that is very

different from those forms in which researchers and practitioners work together to develop school practice.

In the literature on school-university partnership there are many implicit or explicit allusions to the questions of power, control and to potential tensions. Baumfield and Butterworth (2007) mention, for example, that although investing time by academics in cooperating with schools is "personally and professionally rewarding", "the cost may be too high if the resulting activity does not impact positively on the key performance indicators", that is, if this is not recognised when personal academic performance is evaluated within the university.

The complicated relationship between schools and universities has been epitomized by a specialist of the question, John Rudduck as "*liaisons dangereuses*" (Rudduck, 1992). On the basis of an analysis of developments in the UK he distinguished four consecutive forms of school-university cooperation for teacher development (1) high degree programs, (2) curriculum development projects, (3) the school-based curriculum development movement and (4) practitioner research. This seems to be useful classification for analysing dilemmas and challenges various school-university partnerships might face.

In the case of high degree programs universities cooperate with schools, or more frequently with individual teachers as providers of education, either in the form of initial teacher education or in the capacity of formal continuous development or inservice training programs. Most of these programs contain elements of practicum provided in schools which are typically formally designated as partner institutions with more or less autonomy to provide opportunities for practice-based learning. This is the classical form of partnership that we can observe practically in every country, although its actual form may be extremely different. In some countries these partner schools are socially attractive, prestigious institutions, far from being representative of the massive reality of educational settings. Their relationship with the university, which sends student teachers to them for teaching practice, might be very formal or superficial. In other countries the network of such partner schools include also "difficult" environments and the collaboration between university based teacher educators and mentors teachers working in these schools might be very intensive and substantial, including elements of common experimentation or common action research.

In the case of *curriculum development projects* the level and intensity of collaboration is typically much higher. In this case university-based researchers, working together with practitioners, elaborate special curricula, teaching material or innovative teaching methods, often based on the use of new technologies, and the partner schools accept the role of testing the new methods in practice. These projects are typically led and controlled by university-based inventors or innovators who often "use" the school as a "testing field". In this context of "research-based-innovation" (Bereiter - Scardamalia, 2008) the key dilemma is implementation, that is, how to get "from visionary models to everyday practice" (Resnick et al., 2010). Those initiating curriculum development projects from university settings in collaboration with schools can be successful only if they make serious efforts to understand the complex world of practice as illustrated by the earlier Ann Brown quotation. This might increase the probability of the emergence of a genuine partnership based on mutual respect and equal standing although the

chances of this are much higher when university based-researchers take the role of supporting or facilitating school-based curriculum development.

When it comes to *school-based curriculum development* the initiator, by definition, is rather the school than the university. Academics, in this case, get closer to the role of "service providers" looking at themselves rather as providing help, support, and facilitation instead of inventing and prototyping. This works only if partnership is taken seriously, based on a mutual need for cooperation. The changing attitudes of universities involved in partnerships aimed at supporting school-based curriculum development has been described in a particularly expressive way by Arieh Lewy in an Unesco document published at the beginning of the nineties:

"Firstly, universities redefined their roles and ceased to view themselves as institutions responsible only for research and teaching, instead committing themselves to direct social involvement. Universities are now consciously dedicated to serving the surrounding area and thus enhancing linkage with the community. Secondly, universities and particularly schools of education, realized that close contact with schools is necessary for generating knowledge which may contribute to the improvement of education. The curriculum of teacher education was broadened to include observing life in the school, carrying out experiments, training new teaching methods and instructional materials. Schools could serve as laboratories for generating knowledge about education. All these activities required partnership with the schools. Thirdly, universities became aware that improved high school teaching may raise the entry level knowledge of students being admitted to the universities. Thus, involvement in the high school programme provides a service for the university, too. Finally, collaborative studies, if supported by funds from external bodies, agencies or local or national educational authorities, increase the university's resources (Levy, 1991)."

Both curriculum development projects and school-based curriculum developments might lead to partnerships in which the dividing lines between schools and universities start blurring and practitioners become partners in research. This is exactly what happened in the context of the innovative curriculum development projects in the United Kingdom (notably in the famous Humanities Curriculum Project) led by Lawerence Stenhouse and John Elliott in the sixties and the seventies which combined nationally initiated curriculum development interventions and school-based curriculum development. This logically led to the idea and practice of "research-based teaching" and to the emergence of the "teachers as researchers" movement (Stenhouse, 1968; 1971; Elliot, 1990; Cochran-Smith - Lytle, 1999b). In this context the partnership between schools and national research and development agencies as well as schools and universities easily leads to common knowledge creation and innovation processes based on intensive and substantial collaboration.

The creation of genuine and sustainable school-university partnership is not an easy task. The significant benefits such partnership can produce for both parts do not appear automatically: they require commitment, openness, flexibility and also resources, especially in time and energy.

Practical issues

Those involved in building partnerships between schools and universities are familiar with most of the challenges mentioned in the previous sections and most of them can probably report on much more than what has been mentioned. But it is not enough to understand the challenges and the opportunities: there is also a need for thinking about practical solutions to be used if challenges are to be met and opportunities are to be exploited.

This discussion paper does not aim at providing direct support to those working on building partnerships. It is necessary, however, to stress that effective partnership needs favourable attitudes, intelligent tools and appropriate frameworks to make them work. One of the conclusions of the literature review by Handscomb and his colleagues (2014) is that "school-university partnerships can be sites of both struggle and enjoyment. They can involve clash of cultures, perspectives, and aspirations, whilst at the same time be valued for their dynamism, vibrancy and opportunity for children, teachers and the wider community to come together to bring about improvement" (see the whole text in annex). It is a difficult and complex practical task of avoiding school-university partnerships to turn into "struggle" and to make them a field of creative co-construction and cooperative problem solving.

First, this requires, from both parties, attitudes of mutual respect and mutual recognition. Experience shows that only partnerships based on the principle of equal standing can lead to effective cooperation and mutual learning. Intellectual openness is also essential, meaning the willingness and the pleasure of listening to the "different other". Effective school-university cooperation requires academics enjoying learning from practitioners and practitioners appreciating the usefulness of academic knowledge when solving daily problems in practice.

Second, there is a need for a rich repertoire of useful tools, such as effective use of mentoring techniques, development of action research planning templates, exchange of vignettes that capture experiential knowledge, involvement of systematically external experts in analysing school based experimentations, analysis of teacher diaries or teacher blogs etc. Those involved in programmes based in school-university cooperation are often borrowing or inventing such tools taking into account the diversity of partnership contexts.

Finally there is a need for a clear framework, accepted by both sides. Here again borrowing from existing frameworks is possible but given the diversity of contexts the logical solution is for all partnerships to establish their own framework. There are, however, other factors to consider, such as time constraints or the repugnance to paper work. As this has been formulated expressively in a relevant document by two American experts: "Each school/university partnership is unique. Partners seldom have a blueprint or roadmap to guide their efforts. Learning to work in new ways means that the member organizations of the partnership cannot simply continue to do business as usual. Partnership work, therefore, is labour-intensive, creative, and messy. It takes time to iron out the bugs. Often the urgent daily work of creating excellent schools demands that school districts and universities rely on the tried-and-true methods because these methods are well-known and it is tempting to fall back on what is familiar..." (Haller - Brown, 2011). An example of such framework elaborated for a specific school partnership context is presented in the annex.

THE LOCAL CONTEXT

Local (national) contexts strongly determine the dynamic of school-university partnerships. Cultural traditions, country-specific regulatory environments in the field of teacher education, the way educational research and development is institutionalised and the specific features of national educational reform and innovation policies have a major influence on how cooperation between schools and universities is conceptualised and practiced. The fact that most of the cases and literature references in the sections above has been taken form Anglo-Saxon contexts reflects not only the dominance of English as a communication tool of international comparison but also the reality of uneven global developments with Anglo-Saxon countries traditionally being more open to practice-oriented approaches than other countries.

Hungary belongs to the group of central and eastern European countries where there has traditionally been a relatively strong theory-practice divide in the field of teacher education. Universities in this region have had a much weaker role in educational development than in the Anglo-Saxon world: the major players in this area have been and still are national ministries and specialised national agencies established and operated by these ministries. In this context there has been a traditional division of work between universities and national educational authorities: the former having responsibility mainly for initial teacher education and the latter for the continuous professional development of teachers, strongly linked with nationally initiated curriculum reforms and development interventions aimed at modernizing teaching. University-based development has been allocated to national agencies preparing and implementing the curriculum reforms or managing larger development programs.

One of the consequences of this specific context is that the involvement of universities in school development programs has been rather limited and the typical university based teacher educator has had relatively little contact with experienced practitioners or innovative schools. The dominant model of organising teaching practice in the framework of initial teacher education has been based on "schools of teaching practice" (*gyakorlóiskola*) which are often, as mentioned earlier, prestigious selective schools not only far from being representative of mainstream educational environments but also far from being at the frontline of pedagogical innovations. Although many of these schools have been introducing various innovative solutions the nature of these institutions as a safe way towards the most prestigious higher educational paths. It is important to add, however, that most teacher training universities have been making efforts to extend the network of schools where their student teachers can acquire practical experiences beyond the limited circle of specialised schools of teaching practice.

In this region, and particularly in Hungary, the practice of development oriented intensive partnerships between schools and professional researchers and developers has been more marked outside the university sector, in national education development agencies, such as the Hungarian National Institute for Educational Research and Development and its predecessors or those more recent agencies that have been created for specific development tasks (see Halasz et al., 2001; Halász; 2007; 2010; Schuller, 2010). In some areas – a such as education for sustainability, education for democracy and active citizenship, special needs education, science education, use of ICT in education, the development of school based quality assurance mechanisms and competence-based education – these national agencies have created intensive collaboration with schools involved in the implementation of innovative pilot projects.

The participation of schools in nationally initiated innovative development programs has become particularly intensive since 2004, following the opening of EU development funds for educational development. The educational development interventions funded by the European Social Fund (ESF) have been supporting massive professional development programs for teachers involved in pedagogical innovations, organisational developments interventions in participating schools, the establishment of school networks for horizontal knowledge sharing and the creation of best practice sharing platforms. These programs resulted in intensive cooperation between hundreds of participating schools and researchers or development experts working not only in national development agencies but also in private consultancies. Collaboration patterns in these cooperative actions has been very similar to what we have seen in countries with advanced school-university partnership practices but, given the particular institutional, regulatory and policy environment, the institutional involvement of universities in these programs has remained relatively low. Many university-based researchers have participated in these programs rather as private experts or consultants contracted individually by the national agencies or private consultancy companies than representing their own university institution.

There was one specific ESF funded program in Hungary with the explicit objective of enhancing school-university collaboration. The so called "TAMOP 4.1.2 project"⁵ offered incentives for universities to create regional networks for supporting teacher education. In some universities this has led to intensive building of institutional links between schools and teacher educators or university based educational researchers. University of Szeged, for example, used this opportunity to launch a project called "Mentor network" (*Mentorháló*) in the framework of which university researchers collected data on the teacher competence needs of schools and used this data to improve the teacher education programs of the university (Kovács, 2014). Later on, in the same project, researchers have created a network of schools with ambitions of becoming learning organisational diagnostic tool developed for this purpose and they started providing organisational development support to schools to help their internal development.

Other programs, focusing on teacher development, have also contained elements supporting school-university cooperation. The projects "TAMOP 3.1.1" and "TAMOP 3.1.5", for example, have led to the elaboration of advanced continuous teacher development approaches supporting the integration of teacher professional development with innovative school development projects and encouraging horizontal knowledge sharing through school and teacher networks. Universities as important players in teacher continuous development have also been influenced by these new approaches as academics involved in teacher education have often been involved in the elaboration of these new approaches.

An interesting relevant outcome of these projects is the revision of the national education sector innovation strategy ("NOIR strategy"⁶) elaborated originally in 2010 by a government funded national research and development agency (IERD, 2011). In 2015 one of the national universities was charged to revise this strategy and to complement it so that it could support the development of a new teacher promotion system, namely the introduction of the status of *master teachers* and *researcher teachers*. This revision process has also been strongly

⁵ For a more detailed presentation of the project see: Horváth – Pálvölgyi (2015)

⁶ The abbreviation "NOIR" corresponds to the English abbreviation "NESIS" (National Education Sector Innovation System).

influenced by another national development intervention aimed developing the knowledge management system of school education. This revision work resulted in a new strategy document entitled NOIR+ strategy with a more detailed elaboration of the knowledge management pillar of the original NOIR strategy (see *Table 1*).

Priorities and intervention areas			Horizontal
Professionalization of teaching	Developing knowledge sharing and knowledge management systems	Supporting organisational development in schools	implementation priorities
 Improving the social recognition of teaching Broadening the definition of teacher competences Enriching teacher evaluation with innovation and knowledge management related components Creating a doctoral degree based on practical knowledge and practice based research Integrating innovation and knowledge management into the tasks and the training of school leaders 	 Supporting knowledge sharing school networks Creating clusters based on partnership between universities, schools and school maintainers Integrating knowledge management into teacher education and teacher continuous development Developing national best practice sharing platforms Developing knowledge about knowledge Measuring and evaluating innovation activities 	 Supporting the transformation of schools into learning organisations Supporting school level knowledge sharing technological platforms Supporting reference schools sharing good practices in organisational development Creating researcher and mentoring schools Organisational development in educational administration and pedagogical support services Creating a national centre for the coordination of leadership and organisational development 	 Focussing on master and researcher teachers Exploiting partnership resources. Supporting the practical use of educational research and evidence based practice Using technology as a major resource of the education sector innovation system Exploiting the benefits of international cooperation. Combining macro (system) and micro (school) level measures

Table 1.Proposed priorities and intervention areas of the NOIR+ strategy

Source: ELTE (2015)

Given the fact that since the middle of the eighties government policies and the ensuing features of the regulatory environment in the education sector have been particularly supportive for school-based innovations, the school sector has been ahead of higher education in terms of modernisation efforts and the spread of innovative solutions. This has naturally had an impact on the nature of school-university partnerships resulting in a situation of teacher education universities often seeking for inspiration and modernisation support in their cooperation with schools. Instead of being the engines of change and innovation, paradoxically they often found themselves in the role of followers. This has also led to a divide within universities between those who have been active players in school improvement movement and those who remained more or less intact by these movements.

APPLICATIONS

In this section we present a few illustrative cases from abroad and from Hungary, to support reflection. A number of questions based on the illustrative cases presented below or known by the participants of the seminar are also proposed for discussion.

Illustrative cases

In this section we offer a brief presentation of a number of illustrative cases of schooluniversity partnership. The previous sections demonstrate that in many countries the establishment of school-university partnerships has been a key instrument of educational development policies and there were many local or regional initiatives to create such partnerships. The selection of the illustrative cases will serve the function of supporting the theoretical reflection about how schools and universities can cooperate to enhance teacher learning.

The Stanford Teacher Education Program (STEP)

"The Stanford Teacher Education Program (STEP) was established in the early sixties. A key specificity of this program is the "clinical placements" of student teachers in partner schools and the principle of continuous alternation of course attendance and teaching work in real school context, which leads to an "increasing ownership of planning, instruction, and assessment in the clinical placement, culminating in independent student teaching" (Lotan, 2011). According to the website of the program STEP is "a nationally renowned 12-month full time program preparing future teacher leaders at the elementary and secondary levels. STEP integrates a high quality academic program with a well-supported, yearlong classroom placement."⁷ Coursework is integrated with "clinical practice": as STEP students and their cooperating teachers plan and teach together their lessons which are analyzed during university based courses and the result of this analysis is immediately influencing the teaching practice. This has been made possible by the institutionalized partnership between the School of Education and a number of partner schools where student teachers do real teaching with the support of mentor teachers.

STEP is a kind of "dual training" which makes the intensive cooperation of university based teacher educators and school based practitioners possible and necessary. As an external evaluator noted: in this program "no longer do individual faculty own courses" and the "quality of clinical practices has changed dramatically." The "problems of practice" are "readily recognized by Stanford faculty, routinely identified by the clinical associates, and incorporated into a new round of programmatic revisions." The same external evaluator also observed that "respect and trust among the school and university parties –rarely found in other partnerships (…) – were clear and present" and "highly energized faculty as well as STEP students and graduates (…) were the norm and all seemed to be reading off the same page when it came to questions about the purposes of the partnership and the significance of these relationships in how Stanford prepares teachers, what new teachers know and can do, and what is needed in the next generation of collaborative efforts" (Berry, 2008).

The case of the Complex Instruction Program in Hungary (KIP)

KIP is an innovative pedagogical method developed by the school of Hejőkeresztúr (a village in the north-east region of Hungary) to meet the challenges of increasing classroom heterogeneity (K. Nagy, 2012). The school of Hejőkeresztúr has been recognised the Centre for Educational Research and Innovation of the OECD as advanced innovative learning environment and included into its inventory of such environments.⁸ . The model has been inspired and directly influenced by the Complex Instruction Program elaborated and taught in the framework Stanford Teacher Education Program (see the previous case, and also Cohen -Lotan, 1989) but until recently the development process was fully controlled by the school

⁷ See the website of the program here: <u>https://ed.stanford.edu/step</u>

⁸ See the "Universe Cases" webpage of the Innovative Learning Environments (ILE) program of CERI (<u>http://www.oecd.org/edu/ceri/universecases.htm</u>) and also the case description at <u>http://www.oecd.org/edu/ceri/49756250.pdf</u>

itself without any major support from a higher education institution. In 2011 the director of the school was invited to teach in the teacher education program of the regional university (Miskolc) realising the strengths of KIP. The university has gradually integrated the elements of KIP in its teacher education program and also launched a pilot program – supported by the European Social Fund – to spread the KIP methodology to other schools based on the cooperation between professional university based teacher educators and some members of the staff of the school of Hejőkeresztúr. In November 2015 a methodological centre has been established within the university with the leadership of the head of the school of Hejőkeresztúr. In the framework of this program, aimed at upscaling KIP, academics responsible for teacher education in the regional university started intensive school development activities.

This is an interesting case of an innovation initiated and developed by practitioners without significant (domestic) academic support and "discovered", later on, by a university. In this case the university started "using" the innovative practice emerging from a school-based innovation to modernise its own teacher education program, to make it more relevant to the specific regional context (characterised by a high concentration of poor Roma children in schools) and to extend its activities towards social engagement in regional development activities.

The European Doctorate of Teacher Education program (EDiTE)

The EDiTE program has been developed by a consortium of five European Universities between 2012 and 2014 with the support of the European Commission in order to create a common doctorate for those interested in research on teacher education, teacher professional development and teacher professionalism.⁹ After successful completion the EDiTE program was awarded a grant from the European Horizon2020 research program to implement not only the doctoral program but also a common research program on "Transformative teacher learning for effective student learning in an emerging European context". In order to complete all the requirements for EU research funding, one of the cornerstones of this program was to create a collaborative network that will involve external partners, especially practitioners at school level. Therefore, the common research and doctoral training program includes a "work package" on building institutional links with schools, teacher associations, school and teacher networks, etc. This is in harmony with the professional orientation of the curriculum and the intended learning outcomes of the doctoral program, which has defined itself from the outset as a "professional doctorate".

This is an innovative solution as building institutional links with schools and teaching practitioners, including the creation of opportunities for doctoral students to spend a period of their doctoral training in internship in schools is relatively uncommon at doctoral level outside industrial field. An interesting element of this case is the development of the guidelines for the orientation of school-university cooperation assuming that the openness of doctoral schools to involve practitioners into the doctoral process is uneven among the participating universities. Each participating university has been establishing institutionalized cooperation with external partners, most of them being schools. The guidelines (see them in the annex) also encourage the horizontal cooperation between partners both domestically and across borders. It is expected that the active participation of schools as partners in the implementation of the EDiTE program will increase the relevance of both doctoral education and research for school practice.

⁹ See the website of the program here: <u>http://www.edite.eu</u>

The Bay Area School Reform Collaborative (BASRC) in the USA

The Bay Area School Reform Collaborative (BASRC)¹⁰ was one of the first school networks conceived deliberately to foster educational change through horizontal knowledge sharing and inter-school collaboration. BASRC was created in 1995 in the Bay Area of San Francisco by a group of people, committed to educational reform, form education, business and the local community, with the financial support of generous private charities. The network was organised around "five key aspirations": raising standards for students and teachers; sharing best practices of teaching and learning; creating systems to manage the change process; establishing partnerships with stakeholders; and creating a dynamic professional learning community (Black-Hawkins, 2008). Like many similar networks, BASRC had a wider scope than most school-university partnerships, which typically have a narrower mission: it can also be described as a precursor of the current education innovation clusters in the US. One of the specificities of this case is that universities and research centres connected with universities were only one group of stakeholders involved as partners and they did not have a leading role.

BASRC was an action research community based on a theory of "cycle of inquiry" starting with the identification of problems (based on data), the specification of change needs, the setting of measurable goals, the building of concrete action plans, the implementation of planned actions and feedback on the basis of analysing data on results. Its focus on research and the systematic evaluation based on data analysis made the participation of university based researchers logical and part of the resources was, in fact, devoted to funding school-university partnerships. BASRC was local reform initiative intensively studied by university researchers not only with the aim of supporting school development but also to understand better the logic of educational change and to develop sophisticated change theories (McLaughlin - Talbert, 2006).

Networked Learning Communities in the UK

In the early 2000s the creation of networked learning communities, that is, collaborating school clusters with universities as facilitators was a key policy instrument of the UK government to foster school improvement (Jackson, 2022; Jackson - Temperley, 2007). This has been rooted in a longer tradition (referred to in the earlier sections of this paper) and, even if the role of this instrument in government policy seems to have been diminished, this is still strongly supported by a number of national development programs and also by school improvement oriented local authorities.

In the well documented UK model, illustrated by many relevant reports and publications, the typical role of universities is to support practitioner research, experimentation and practicebased professional development. University staff is typically change-oriented, being aware of the fact that a large part of professional knowledge is embedded into practice, and that its sharing requires horizontal communication and learning between practitioners. Many academics seem to find enjoyment and professional benefit in working with schools and within schools together with teachers and in playing the role of facilitator of horizontal mutual learning. This British model of organising and supporting networked learning communities was shared by many players in school improvement in other English speaking countries, and has also been influencing the educational development approaches of a number of south and eastern Asian countries.

Development interventions supporting school networks in Hungary

Since the accession of Hungary to the European Union a number of EU funded development interventions have been supporting directly the creation of knowledge and good practice

¹⁰ See the website of the network here: <u>http://www.mdrc.org/project/bay-area-school-reform-collaborative#overview</u>

sharing networks that link schools to each other, with the facilitating role of various institutions. In some cases these facilitating institutions were private companies (for example in the case of regional network coordination agencies set up in the second half of the late 2000s), sometimes state funded public research, development and pedagogical support agencies at national and regional level, and sometimes universities. Some development interventions aimed at making universities more open to work together with schools in initial teacher education, continuous professional development and also school development.

The establishment of school-university partnerships was the explicit goal of the development intervention "TAMOP 4.1.2" and within this intervention great significance was given to the promotion of regional networks for teacher education. This program was opened for universities seen as regional centres. One of the explicit goals of this intervention was the development of practical training in initial teacher education, the development of support for mentoring novice teachers and the development of training programs for continuous professional development of teachers. A high proportion of supported activities could have been realised only through the establishment of school-university partnerships. These interventions resulted in an increased capacity of universities to work together with schools.

Questions for reflection

In this section a number of questions for reflection are proposed. The first set of questions is related to the rationales behind creating school-university partnerships, as exposed in the first part of this paper. The second set of questions concerns the possible forms of cooperation or collaboration between school and universities, as well as the main challenges and possible solutions. Finally the third group of questions is connected with the illustrative cases presented in the previous section.

These questions aim at stimulating and encouraging reflection on school-university partnership during the seminar but they also might be used in other platforms trying to promote professional debates on how schools and universities could support the effective professional learning of teachers and the building of professional knowledge through establishing and operating cooperative partnerships.

Questions related to the rationales behind creating school-university partnerships

- What are the implications of the current understanding about the nature of professional knowledge of teachers and about the way this knowledge is learnt for the institutionalisation of teacher education and educational research?
- What role school-university partnership might play in the development of teachers' professional knowledge and in supporting their further learning?
- What might be the possible implications of school-university partnership for national strategies for improving teacher education, as well as for strategies for developing national education sector innovation systems?
- What are the specificities of the knowledge triangle in the education sector with the focus on innovation within the education sector? What role external or "third" partners (such as the representatives of the world of work, business or educational authorities) could play in school-university partnerships?

Questions related to the forms of cooperation, challenges and solutions

• What are the main reasons justifying efforts to create school-university partnerships? What are the existing forms of these partnerships and what kind of new forms might emerge in the future?

- What are the key challenges school-university partnerships might face, and what are the opportunities that might be opened by them? How to meet the challenges and how to exploit the opportunities?
- What are the most useful practical tools to build and to maintain school-university partnership in various contexts?
- What are the specific needs and interests of universities, on the one hand, and schools, on the other, in the field of cooperation? What are the key features of their perspectives and what are the possibilities of bringing these perspectives closer to each other?

Questions related to the illustrative cases

- What are other illustrative cases can be used to broaden the understanding of school-university partnerships?
- What are the lessons that can be learnt from the illustrative cases presented in this document and from those that we know from our own experience?
- What are the specificities of the Hungarian context as compared to other national contexts? Is it necessary to see school-university partnerships as an important instrument to improve the quality and effectiveness of education in Hungary?
- What are the respective tasks of universities and schools to enhance the emergence of effective school-university partnerships?

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ANNEXES

The program of the seminar

ELTE, Faculty of Education and Psychology May 13, 2016 15.00 - 15.10*Opening of the panel and introduction to the topic* Facilitators: Gabor Halász (ELTE) and Emese Nagy (MHKMK) 15.10 - 15.40Presentation of the Stanford Teacher Education Programme (STEP) Speaker: Rachel Lotan (Stanford University) 15.40 - 15.55University's dimension of the School-University Partnership Speaker: János Gordon Győri (ELTE) 15.55 - 16.10School's dimension of the School-University Partnership Katalin Török 16.10 - 16.30Discussion and Questions from the Audience Facilitators: Gabor Halász (ELTE) and Emese Nagy (MHKMK) 16.30 - 16.50Reactions Panellists: Rachel Lotan (Stanford University), János Gordon Győri (ELTE) and Katalin Török 16.50 - 17.00Closing remarks Facilitators: Gabor Halász (ELTE) and Emese Nagy (MHKMK)

Key messages from literature review

"1. Understanding the dynamic nature of school-university partnerships matters. The management of change is a necessary and constant function.

- **School-university partnerships involve a wide spectrum of activity.** They embrace both broad relationships between universities and schools focussed on widening participation in universities of under-represented groups, to the more specific relationship between faculties of education and schools, focussed on initial teacher education, continuing professional development, consultancy and collaborative research.
- School-university partnerships can be sites of both struggle and enjoyment. They can involve clash of cultures, perspectives, and aspirations, whilst at the same time be valued for their dynamism, vibrancy and opportunity for children, teachers and the wider community to come together to bring about improvement.
- School-university partnership working has raised both considerable expectations and disappointment. They are popular as a means of delivering more with less by making better use of existing resources and adding value by bringing together complementary services. However, this optimism is also matched by a spirit of pessimism by others who report on the gap between promise and implementation.
- **Effective collaboration requires breaking out of traditional roles and relationships.** Nowhere is this more important than the need to revisit the traditional approach to research and knowledge production that promotes researchers as knowledge generators and teachers as translators. Schools and teachers need to be seen as research partners and a crucial part of the process rather than just the objects of enquiry.
- **Successful partnering often requires pragmatism and incremental change.** The problems partnerships tackle are complex and involve multiple strands. Therefore, making headway can requires tackling each in turn and securing step by step small gains.

2. Developing the capacity to work with different organisational structures and cultures matters. Each school-university partnership features different formal organisational arrangements and can thrive or falter depending upon the stability of partnership structures and culture.

- **Structures and culture can get in the way of partnership working.** There is a need for commitment and capacity building over the long term from both partners. However, this can be undermined when policy concerns interfere and affect the structure, culture and resources of partnerships in highly contradictory and uneven ways.
- **University organizational arrangements in particular can prove a barrier to partnering.** The organisational structure of the university, reflecting the values underlying it, often limits its ability to do interdisciplinary work and team approaches and, in so doing, inhibits the building of a professional community within the university and with schools.
- **Cultural differences in school-university partnerships can pose significant barriers to effective partnering.** There are stark differences in outlook between universities and schools relating to knowledge, language, audience, accountability and even mismatches in the different pace and scheduling of the working year.

3. Creating a bespoke partnership space, based on trust and mutuality, matters. Partnerships have their own dynamics based on building trusting relationships and the development of mutual respect.

Successful partnerships involve mutuality and symbiotic relationships. Much of the literature emphasises a mature view of partnering based on recognition of the value of all community contributions, of mutuality and a dynamic, often risky area, distinctive from either the school or the university.

- **Successful partnerships are built upon mutual trust.** They foster a sense of transparency and vulnerability which can be a tool for bridging the school/university cultural divide. This cultural dialogue in turn can only thrive on trust.
- **Partnerships are a third space distinct from the culture of the partnering organisations.** This "hybrid" space not only draws on the knowledge and discourses of two distinct communities but also facilitates them.
- **Partnership involves uncertainty and risk.** In committing to the partnership there is a sense of uncertainty, of risk, of operating outside one's comfort zone but at the same time it is a vibrant, creative space which may offer up potentially great dividends. The differences between schools and universities are thus seen as a source of creative tension rather than discord.
- **Mutuality can be achieved through joint working and joint development.** One key element is to put in place arrangements by which school and university colleagues work together on specific developments and to support this activity with joint professional development. This helps to ensure that there is mutual learning and a values approach of mutual benefit, mutual esteem, and shared responsibility.
- **Partnerships can have a collaborative advantage or dividend.** Mutually-constructed learning communities provide opportunities that are both different from and richer than the opportunities either the school or the university can provide alone.

4. Leadership matters. The challenge for school-university partnerships is to build capacity, commitment, and leadership to ensure and continuity and sustained impact over time.

- Leadership is vital in ensuring coherence and success in such vibrant and volatile partnership environments. It is only when school leaders make it a priority that partnerships can be used as external sources of support and that joint research communities can become sustainable.
- In successful partnership there is leadership vision combined with distributed leadership. Partnerships need to be led and have vision in order to be sustained over time. Leadership often bubbles up pragmatically to fulfil partnership tasks where it is needed.
- **Leadership across organisational boundaries makes an important contribution.** A crucial feature in partnership leadership is how this operates across the boundaries between the partners and the pivotal function carried out by key roles. This emphasises the role of "the 'blended professionals' who work across institutional boundaries.

5. Conditions matter. There can be conflict of interest in partnerships. Successful partnerships draw upon shared values, mutual commitment and a wide range of expertise and material resources.

There are key conditions for successful partnership working. These relate to certain skills, dispositions and relationships and also to the issues of time and sustainability.

Material resources

- **Partnership working has its costs and requires commitment.** Partnership can easily become a soft, warm and cuddly process of unchallenging relationships between professionals to achieve some modest outcome. Partnerships pose a challenge and have transaction costs the time, energy and resources necessary to keep the partnership alive and well.
- Funding is a crucial contributor to partnership success, but partnerships also need to develop strategies to persist in austere times. Without sufficient funding school-university partnerships struggle to survive. However, the very nature of partnership activity is that it takes place in a volatile political environment and that it inevitably produces new dilemmas and problems of practice.

Strategic fitness and relevance

Partnerships work well when there is joined-up coherence and strategic fit. Projects work best when relationships are developed over time, are strategic and support the missions of universities, colleges and schools involved in a targeted way.

- Localism is an important feature of partnership working. This involves a sense of a coming together to jointly address problems and craft local solutions.
- **Successful partnerships are often design led and focussed on local problem solving.** This involves a problem-centred approach that joins academic research, clinical practice and commercial expertise in sustained programme of activity.
- **Collaborative enquiry enables effective partnership working.** What promotes and drives exchange of understanding and learning across the membrane between partners is enquiry. As problems are posed and solutions sought then expertise is located in different people and in different places within the partnership.
- **Successful partnerships have a wider community dimension.** School-university partnerships may have an extended membership from the wider community including parents.

Ownership, power and control

- **Power and control issues are the most persistent features of school-university partnership dynamics.** This has particularly focused upon who drives the partnership and the continuing perception of this being university dominated. Too often teachers' contextual knowledge feels inferior and "threatened" in comparison to what universities bring to the partnership.
- **Policy developments have aimed to move control towards schools.** The recognition that, despite often good intentions, universities still tend to drive partnership direction and activity has resulted in some movement to shift power and control towards schools.
- **School driven partnerships can raise other concerns.** Prominent among these are that it insufficiently takes account of the challenges of a school-based approach delivering the Initial Teacher Education (ITE) system at scale, or of the reduced incentives for Faculties of Education to participate. There is also the danger of schools becoming inward-looking, trainee teachers uncritically taking on the possibly poor practices of established teachers.
- **There is a need for all voices to be heard.** The development of a partnership culture needs to be based on sharing and valuing differences as an alternative to the power and control pendulum swing between universities and schools.
- Effective outcomes are generated through ownership by the partnership. Meaningful and potent outcomes are more likely when they are conceived and achieved as part of the partnering process itself.

Monitoring and evaluation

Successful partnering requires more attention to monitoring and evaluation. Understanding on what works and is generated in local contexts can help to inform wider policy and scaling up.

6. Involving the wider community to improve the benefits of widening participation and increase STEM (Science, Technology, Engineering and Maths) participation matters.

- Widening participation is a persisting problem. Despite a number of attempts to address this issue, participation and retention of students from lower income families in university remains extremely low.
- **Improving widening participation requires reciprocal action and partnering with the wider community.** There needs to be close reciprocal interaction sustained over time within the partnership. There is also a need for the university to reach out to the community and develop both an educational and social presence in the lives of the residents of its immediate community, thus enhancing its credibility.
- **Increasing STEM participation and number of STEM graduates involves early intervention.** Action post 14 is too late; more needs to be done in the early stages of education. There is also a need for more capacity and greater coherence in research and evaluation."

Quoted from Handscomb et al., 2014

The EDiTE/Horizon guidelines for school-university partnership

Guidelines for Building Institutional Links EDiTE/Horizon programme (2015.04.26)

The The EDiTE "Guideline for Building Institutional Links" aims at supporting the five participating universities of the EDiTE-EJD consortium to establish and to maintain active cooperation with their partner organizations in accordance with the EDiTE-EJD Grant Agreement (number 676452 EDiTE-EJD H2020-MSCA-ITN-2015).

This document intends to be a general guideline and should be adapted to the specific circumstances, conditions and needs of each member of the EDiTE-EJD consortium.

Background

The appropriate use of this Guideline requires a short overview of the background of why partnerships between universities providing doctoral programmes and external partners has become a priority in Europe and why it's seen as a priority also by the EDiTE-EJD universities.

The Salzburg principles of doctoral education (EUA, 2010) have stressed the importance of "inter-sectoral collaboration", that is, the cooperation between "providers of doctoral education and the non-academic sector". The recommendation proposed "formalised but flexible research and research training collaboration between industry and higher education institutions, including joint research projects, industrial doctorates or similar schemes." This reflected what the 2007 EUA survey on doctoral programmes (EUA, 2007) has already stated about the growing cooperation between universities providing doctoral education and various external partners:

"Universities are increasingly involved in cooperation at doctoral level with other sectors such as industry, business, independent research organizations or public services. Inter-sectoral mobility and in particular doctorates earned through intensive university – industry collaboration and the placement of doctoral candidates in industrial and other laboratories enhances university industry cooperation and adds value to the individual researchers concerned, enhancing their experience, skills and employment prospects. Building strong links between universities with other sectors thus ultimately supports efforts to strengthen the transmission of knowledge as a determining factor in innovation." (p. 14)

The principles for innovative doctoral training published by the European Commission in 2011 have also underlined the importance of exposing doctoral students to experiences outside the academia (European Commission, 2011). The Commission has stressed that the term "industry" must to be used on the broadest sense in the context of doctoral education, including many forms of workplaces and of public engagement. In the context of this Guideline it is worth recalling the text of the Commission's principles:

"Exposure to industry and other relevant employment sectors The term 'industry' is used in the widest sense, including all fields of future workplaces and public engagement, from industry to business, government, NGO's, charities and cultural institutions (e.g. musea). This can include placements during research training; shared funding; involvement of non-academics from relevant industry in informing/delivering teaching and supervision; promoting financial contribution of the relevant industry to doctoral programmes; fostering alumni networks that can support the candidate (for example mentoring schemes) and the programme, and a wide array of people/technology/knowledge transfer activities." (p.1)

The EDiTE-EJD consortium is implementing a Horizon 2020 programme in the framework of "European Training Networks". In this programme it is a basic requirement to involve non-academic partners. In the case of a doctoral programme on teacher education non-academic partners are typically schools open to receive doctoral students for field research or internship and to cooperate in particular research activities. The importance of researcher and practitioner cooperation and the role of practitioner research have also been stressed in the final conference of the EDiTE Erasmus LLP project¹¹ in 2014. As the "Issues Paper" of the conference stated:

Integrating research with teaching and teacher education has become a major endeavour globally and also in Europe. A major observable trend is the move towards "research-based teacher education" although there are divergent views about the meaning of "research" in this context. One approach is to build capacities in teachers to conduct and to use scientific research in their own daily practice similarly to doctors which requires a certain level of "scientific literacy" (...) Another view stresses the importance of practical and tacit knowledge and the need to develop reflective practitioners who - typically in professional learning communities - build up practical knowledge for solving professional problems (...)." (EDiTE, 2014 p. 10)

Building partnerships with non-academic partners, in particular with organizations creating opportunities for active cooperation between researchers and practitioners has been a key priority of the EDiTE-EJD project. One of the five work packages of the project is focusing on this area, with a number of important deliverables (see **Hiba! A hivatkozási forrás nem található.**). The project description¹² defines partnership, in accordance with the principles of the documents quoted above, as follows:

"Sustainability of the EDiTE-EJD research programme is ensured through institutional links with academic/non-academic institutions. Collaboration is considered a key success factor for implementing the EDiTE research programme. Institutional links here refer to long-term, sustainable relationships with organizations which might be involved in the EDiTE research programme in a manner with mutual recognition of partners' interest, needs and aims. On the basis of a reciprocity approach partner organizations provide research opportunities for ESRs¹³ (...) and can co-create research questions on the basis of their needs and practical experience. Specific objectives are:

- Initiate long-term cooperation with different types of schools and different kinds of educational institutions,
- Building institutional links for knowledge exchange and public engagement, aiming at exploitation of research results,
- Enhance consortium and institutional capacities for building and sustaining collaboration with institutions involved in TE."

Each EDiTE university has identified a number of partner organizations who will be actively involved in the realisation of the joint EDiTE research programme and in the individual doctoral research programmes of the 15 ESRs employed by these universities. According to the principles defined in this Guideline, further partners can join the original circle.

Goals

¹¹ The previous EDiTE project funded under the Lifelong Learning Programme (Grant agreement number: 2012-3214/001-001; Project number: 527604-LLP-1-2012-1-AT-ERASMUS-EMCR).

¹² Part B, Annex 1 to the Grant Agreement (nr. 676452): Description of the EDiTE-EJD Action.

¹³ ESRs (Early Stage Researchers) are employed doctoral students of the EDiTE-EJD H2020-MSCA-ITN-2015 project.

Beyond the goal – to support the five EDiTE-EJD universities in their efforts to establish and to *maintain an active cooperation* with their partner organizations in accordance with the project description – this Guideline supports the achievement of other goals such as:

- supporting mutual knowledge sharing and learning between the EDiTE-EJD universities and their partner organizations,
- supporting the doctoral students¹⁴ in acquiring practical experiences and realising the empirical part of their research,
- supporting the transformative potential of teachers, schools and other partner organizations,
- supporting cross-national horizontal sharing of knowledge and good practices between partner organizations.

This Guideline supports all those forms of cooperation which can contribute to the successful accomplishment of the EDiTE-EJD programme.

Principles

Partnership between the universities of the EDiTE consortium and their partner organizations will be guided by a number of principles, such as:

– Linking research and practice.

Partners will actively seek opportunities of linking doctoral training and research with institutional practice supporting innovative solutions.

- Mutual respect.

Academic and non-academic partners see each other as having equal standing and communicate with each other on the basis of mutual respect.

– Mutual interest.

Partnership should serve the interest of both academic and non-academic partners; cooperation should be based on the principle of mutual interest and usefulness.

– Mutual learning.

Each partner has the intention to learn from each other. All forms of horizontal knowledge sharing are supported.

– Diversity of partnership models.

The development of various models of partnership between EDiTE–EJD universities and partner organizations is supported, according to their capacities and mutual interests.

- The active involvement of partners.

Partner organizations should be encouraged to play an active role in the implementation of the EDiTE joint research programme.

- Supporting horizontal cooperation between partners.

Horizontal cooperation between partner organizations should be encouraged at both national and international level.

– Transparency and visibility.

The partnership should be as transparent and visible as possible.

- Openness.

Although the number of primary partners is fixed and the primary partners are listed in the project description of the Grant Agreement, new partners can join the existing circle of partner organizations.

Coordination tools, solutions and mechanisms

¹⁴ "Doctoral students" or "EDiTE students" refers to the EDiTE-EJD candidates selected for participation in the EDiTE PhD programme under the EDiTE-EJD H2020-MSCA-ITN-2015 project requirements.

This part of this Guideline proposes specific coordination tools, solutions and mechanisms with the aim of supporting the implementation of the principles listed in the previous section.

Partnership Agreements

1) Commitment

Each university concludes a basic formal agreement with its partner organizations on collaboration within the EDiTE-EJD programme, called the "Commitment of and Non-disclosure Agreement with the Partner Organization¹⁵" (hereinafter "Commitment").

2) Institutional agreements

According to national requirements, institutional practices and to the nature of the collaboration between partners, further agreements might be established (hereinafter "Institutional Agreements").

Mutual recognition of this Guideline

The Guideline should be discussed and be accepted mutually by universities and partners. Universities should document this process.

Consortium members may decide to make reference to this Guideline in their Institutional Agreements and adapt this Guideline to their local contexts.

Designation of contact persons

Both EDiTE-EJD universities and partner organizations are encouraged to designate a person from their staff who will be responsible for partnership relations.

Representation of partner organizations

Partner organizations designate one representative from among themselves to represent the viewpoints of all partners. One representative of the partner organizations is invited to take part in the work of the EDiTE-EJD Supervisory Board and the EDiTE-EJD Quality Assurance Committee.

Meetings and workshops

In accordance with the activities of Work Package 5 as described in the project description, yearly workshops for building institutional links will be organised either through direct or virtual meetings. One of the aims of these workshops is to develop common reflection on the development of university-school partnerships and on how partnership can contribute to the development of research on teaching and teacher education.

Visibility and transparency measures

It is desirable that partner institutions are informed about the relevant events and interactions related with partnership. EDiTE-EJD universities and partner organizations can be invited to publish information on EDiTE partnership on their website. In accordance with the project description cooperation in the framework of partnership should be recorded and regular reports on progress should be produced by EDiTE universities. Partners should be consulted on the content of these reports.

Forms of Partnerships

According to their capacities and mutual interests EDiTE-EJD universities and partner organizations can develop various partnership solutions. The diversity of partnership solutions is encouraged, taking into account the specific context of each member of the consortium and also the capacities evolving in time.

¹⁵ Attachment 6 of the EDiTE-EJD Consortium Agreement.

Collaboration in partnerships can be classified according to their level of interactions in the following categories:

- Simple model:

In this form the cooperation remains at a basic level, with mutual visits, information sharing and at least one direct or virtual meeting per year.

– Structured model:

In this form partners create more advanced and structured cooperation with welldefined rules (e.g. supporting ESRs to conduct their field research in the partner organizations).

- Intensive model:

In this form partners intensively engage in common knowledge sharing and creating activities (e.g. common research, the direct involvement of partners into the delivery of the EDiTE doctoral programme, internship solutions based on the direct involvement of ESRs into the daily activity of partners with the purpose of enhancing their learning).

The specificities of collaboration might vary and change over time and do not necessarily have to be defined right from the beginning of the respective partnership.

Internship

If partners apply solutions of the "intensive model" category they might consider the application of internships. In this case ESRs are encouraged to spend a certain amount of time in one of the partner organizations, including non-academic partners, in order to acquire experiences on their daily professional practice and to use this for their own research and learning. In case partner organizations provide internship opportunities for doctoral students, the basic principles of organising internship should be attached to the partnership agreement in the form of a specific annex. Internships should:

- be based on the "*Template for Secondment Agreement*" (Annex 7 of the Consortium Agreement),
- make reference to the "European Quality Charter on Internships and Apprenticeships"¹⁶,
- specify relevant quality assurance mechanisms and principles, enhancing the field research and practice-based learning of doctoral students, adapted to the context of the EDiTE programme,
- specify the nomination of a mentor by the receiving partner institution whose task is to support the individual research and learning of the doctoral student(s) hosted for internship,
- specify the number of ECTS credits doctoral students can gain during internship and the conditions of their acquisition, as well as their recognition by the relevant doctoral programmes.

Supporting academic linkages

Linking partners with the curriculum of the EDiTE doctoral programme

Programme and course design should take into account learning opportunities provided by the partner organizations (for example through including reference to partners in course descriptions and the use of opportunities provided by partners). Partners can be involved in course delivery.

Linking partners with the EDiTE research programme

Institutional (university level) and individual (doctoral students' level) research programmes and projects should include different types of fieldwork in partner organizations. Partners might be invited to support the research work of designated

¹⁶ See the "European Quality Charter on Internships and Apprenticeships" adopted by the European Youth Forum (<u>http://qualityinternships.eu</u>).

doctoral students and the outcomes of PhD researches might be made available for the partner organizations. Partner organizations can be invited to EDiTE public academic events (academic debates, public defences etc.).

Linking partners with the supervisors

Supervisors should be informed about partner organizations and be encouraged to use their capacities when supporting the research and learning of their doctoral students. Supervisors might be invited to consider this Guideline when interacting with academic and non-academic partners.

Knowledge management

Since one of the most important goals of the cooperation between partners is mutual learning and knowledge sharing, references to these should be a key element of cooperation between the partner organizations and the EDiTE-EJD universities (e.g. sharing research results and data, mutual invitation to professional events etc.). Interactions between the EDiTE-EJD universities and partner organizations should support knowledge creation and knowledge sharing, and should be supported by tools such as virtual communication platforms.

The national and international networking activity of partner organizations

The EDiTE-EJD consortium supports the efforts of partner organizations to establish direct, horizontal cooperation among them and supports the emergence of a European network of EDiTE partners. Mutual accessibility to the relevant contact information will be ensured and access to the relevant parts of the common EDiTE communication platforms will be provided.

Ethical considerations

Partners should be informed about the general ethical norms as specified in the project description, institutional codes of ethics, guidelines and rules should be shared. Partner organizations accept these norms as guiding their behaviour when involved in research activities. Similarly, when working with partner organizations, the EDiTE-EJD universities respect existing ethical norms in use at partners.

Language support

Since the EDiTE partner organizations will work with doctoral students speaking typically only foreign languages (English) they might make efforts to provide linguistic support to them (e.g. native fellows accompanying students when visiting partner organizations or using the capacities of English teachers working in the partner organizations). Language support might be provided by the universities, the partners or both parties according to the local context.