

Quality in teacher education through school-university partnership

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Abstract

The main purpose of this paper is to present and discuss a school-university partnership project in the University of Iceland - School of Education as a research project at its initial stage. Teacher education in Iceland is currently under reconstruction due to new laws about teacher education, requiring a master's degree for teachers at all level. As a part of this reconstruction, the School of Education is attempting to develop closer ties with Icelandic schools at different levels and with other stakeholders, both in regard to policy and practice. One action taken in this respect has been to form a relationship with a number of "associate schools". These schools have two main roles in this context. First, they take an active part in teacher education as the school community fosters a group of student teachers throughout their studies. Second, they will participate in a learning community of school teachers, student teachers and university faculty focussing on different aspects of education. The partnership is underpinned by mutual commitment and responsibility. The main aims are to bridge the gap between theory and practice in student teachers learning and to encourage cooperation that might lead to school development as well as improvements in the teacher education programme. Related to this endeavour are a number of research initiatives. The main themes investigated in the research projects are: student teachers' learning, guidance and supervision; the university faculty, content in courses and research focus; the associated schools e.g. school development; and the partnership itself. Data will be collected over the next two years but some preliminary data are available from two pilot studies.

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Introduction

Teacher education in Iceland is currently under reconstruction based on a new law that requires a master's degree for teachers at all school levels. Besides, the University of Iceland, just having celebrated its one hundred years anniversary, merged with the University of Iceland as the School of Education and became one of five schools within the university.

As a part of the current reconstruction of teacher education, the School of Education is attempting to develop closer ties with Icelandic schools at various levels and with other stakeholders, both with regard to policy and practice. The School of Education considers itself as an active member of the Icelandic educational community. Different actions have been undertaken with this in mind, partnership at policy level: e.g. consultation with different stakeholders about main priorities, research partnership and joint school development programmes, community services, and finally partnership in student teacher learning.

The practicum in the Teacher Education programme has been restructured over the last two years. A relationship is formed with a number of "associate schools" based on mutual commitment and interests. These schools have two main roles. First, they take an active part in teacher education as the school community fosters a group of teacher-students throughout their studies (the full current three-year programme). Second, they will participate in a learning community of school based teachers and university faculty focusing on different aspects of education. At the same time teaching practice was defined as part of each course instead of being structured in separated blocks. Thus, now the majority of the faculty involved in the teacher training programme are involved in student practice.

This project is presented and discussed in this paper as a research base covering five strands: the teacher student learning; the associated schools; the university faculty and the content of courses; the relationship between involved partners and finally the partnership itself, i.e. how those involved manage to establish a learning partnership among students, university teachers and school teachers involving fruitful discussions.

The education of teachers is understood as being a collaborative task aiming at student teachers' professional development, where a central prominent feature is close cooperation between the university and the schools, referring to pre-schools, elementary and secondary schools. The roles of these institutions vary in the education process, but they share objectives and interests. Learning processes that take place in the university and in the schools are supposed to interact. The students are expected to apply practical experience in the field for interpreting and constructing their understanding of theoretical knowledge, and to apply theoretical and practical knowledge from the university studies in learning from their practice experience. This is seen as a mutually interactive process between the student, the university, and the schools.

The project is still in its initial phase and is introduced here for discussion in order to aid further development.

The background of the project

National context

The national educational system in Iceland is divided into four levels, plus a fairly extensive adult education arena, parts of which are within the formal system of education. Pre-schools are defined by law as the first level of the educational system, providing education for children until six years of age, at which point compulsory education begins. More than 90% of children from the age of two to six years attend these schools. Compulsory education (age 6-16) is organised within a single structure, i.e. primary and lower secondary education form a part of the same unified school level, and generally operate within the same school building. Upper secondary education (age 16-20) is not compulsory, but anyone who has completed compulsory education has the right to enter a course of studies in an upper secondary school. The length of the courses in vocational education varies, lasting from one semester to ten, but most prevalent are four-year courses. Currently, about 6% of the whole population are students at University level (Statistic Iceland, 2009). Two Universities in Iceland educate teachers for the pre-school and compulsory school levels; The University of Iceland where about 80% - 90% of teachers are educated in and the University of Akureyri, located in the northern part of the country.

Teacher Education in the University of Iceland

Teacher education is at university level in Iceland and has been so since 1971. A bachelor degree in education is required for teacher certification at the pre-school and compulsory level. The teachers in the upper secondary schools are required to add 60 ECTS to their BA or BS in their special subject. In June 2008, new laws were adopted for all schools levels in Iceland. At the same time, a new law about teacher education was adopted requiring master degree (five years at university), which becomes operative from July 2011, for teachers at all levels, pre-schools, compulsory schools and upper secondary schools.

A new structure adopted during the School of Education centenary, 2007, involved revision of all programmes at the university, both at bachelor and masters level in order to organise a cohesive five years, research-based study programme in teacher education. Undergraduate teacher education programmes were revised, resulting in more emphasis on students' possibilities to specialise within certain areas of subjects or within areas of teaching different age groups.

One of the main objective in the new teacher education program is to encourage the integration of school based practical experience, theoretical understanding and agency in students' learning, and thereby their professional competence. Three intertwined threads characterize most courses:

1. Connection to research:

- All courses must connect to a defined field of study and research. The aim is that students are able to relate research and theoretical knowledge in the relevant field to develop their occupational skills.

2. Connection to the field

- All courses must connect to the professional arena which is assured among other things, by students' visits to schools and direct participation in work in the field, discussions on practice or study material or surveys in the field.

3. An emphasis on creativity and communication

- All courses must emphasise students cultivating the creativity of their minds, and that they are coached in acquiring and sharing knowledge in varied ways. Students will be trained in shaping, stating and sharing knowledge in spoken and written language as well as in visual arts, music, drama and movement

when appropriate. Furthermore, an effort will be made to ensure that students become confident with using information technology as with classic ways of communication and expression.

Teacher student practice in teacher education programme is at least 24 ECTS out of 180 ECTS (i.e. around 13%). From the autumn of 2007, it is integrated into different courses. Before that, student practice was organised as separated, somewhat independent blocks that a small group of teachers took care of. The practice part at master's level is now under discussion and it is proposed that students in the teacher programme should use at least 20% of the study period in schools. That is one year out of five.

The partnership project

As described before the partnership project described here is a part of larger policy within the university. The main aims of the project were defined as follows:

- To bridge a gap between theory and practice in initial teacher training by encouraging school's influence in student learning and courses content.
- To provide opportunity for teacher-students for deeper learning about the practice as they always goes to one and the same school for practice.
- More coherent, effective and relevant practice for students.
- To link school teachers and university teachers in a learning community based on mutual interest and trust, which is expected to lead to school development, even school reform that may affect both the schools and the teacher education programme.

Since the school- university project started in the autumn 2007, contracts have been made between the university and about 80 pre-schools and 80 elementary (compulsory) schools, emphasising mutual commitment. These schools are defined as the university associate schools in teacher education and receive formal documents acknowledging the contract. Each of the associated schools nominates one person that coordinates and directs the collaboration with the university on behalf of the school. These schools have two main roles:

- First, they take an active part in teacher education as the school community fosters a group of 3 – 10 student teachers throughout their three year studies. As

such they are the student's home school. To respect this, the university teachers commit themselves to consult with the student and the home school taking into account the objectives and projects that the student is going to work on during practice period.

- Second, they participate in a learning community of school based teachers and university faculty focusing on different aspects of education. This learning community is supposed to develop as the members increasingly engage in discussions about different aspects of education. This collaboration is directed in such a way that members are lead together and they are encouraged to take initiatives for joint research of development programmes.

The whole programme of collaboration is underpinned by mutual interest and equality, all partners must gain and everyone's contribution is valued. The overall benefit is for teacher education that is in the interest of all partners. Besides that, special interests of different partners are respected. Those can involve access to children and school work for the university teacher and for the schools it could be support from academic partner for different projects within the school.

Now, most of the faculty members in teacher education programme are involved in organising teacher-student practice, many of whom have very little knowledge or experience of working in schools. Thus it is anticipated that this will gradually be of no less value for the School of Education, as a whole but also for its individual members to participate in the venture.

In short, the roles and responsibility of different agents can be described as follows:

The School of Education is responsible for creating and planning relationships between the teacher student and the relevant associated school which is defined as the student home school. But the university is also committed to find ways to support the associated schools in developing their professional standards. University faculty are expected to support students in developing their theoretical and practical competence as well as their professional identity (practice-theory). The practice periods are integrated parts of courses both general didactics courses and in subject didactics. The codified ideas or theories presented in these courses must be connected to the school practice in one way or another and the teachers are assumed to be familiar with school programs and teaching in their field.

The associated school assumes the responsibility for creating good learning conditions, giving the students the possibility to get acquainted with an excellent school, for giving them the opportunity to try out own ideas and teaching plans under the supervision of a competent teacher, and promote the students' insight in the many aspects of the school work and school culture. Experienced teachers in the home school act as supervisors for the teacher students. The school is expected to be a partner in the teacher education, be accountable for the education of a group of teacher students through their years of study, or a defined part of this study period. The schools should constantly strive for developing and improving their professional work.

The teacher student is responsible for her own learning, and attempts to combine the academic studies and own experience in the practice period using systematic methods (i.e. port-folios), to become active participant in the school-society, and thereby to construct a holistic practice theory (professional identity) that is built on solid pedagogical foundation and knowledge of the practice field.

Teacher students, supervisors in the students' home-schools, and respective faculty at the university are expected to have close relationship and be partners in a learning community, where all agents are learning. The role of the student is important in this collaboration, especially as far too often it is overlooked in school-university partnership projects (Korthagen, Loughran & Russell, 2006).

Learning partnership or learning community in the home school project could take many different forms but the main idea includes that three partners comes together, the student teacher, the school based teacher and the university teacher collaboratively reflect on teacher student learning from practical experiences. The collaboration is based on mutual respect and trust beneficial to all partners, which include the institutions they belong to or their field of expertise in general. Learning partnership could also exist without the student teacher when a small group of university teachers and school based teachers, sharing same interests; engage in a learning community about different aspects of the school work, regarding a subject or some aspect of education, such as inclusion (Anna Kristín Sigurðardóttir, 2008).

The main challenges

Generally, there is a broad agreement about this project among the faculty of the School of Education, among the associated schools and among the students. There are more

schools that want to join the project than needed. The main challenges that have appeared so far, mainly concern technical aspects of the project, especially within the university. They involve as an example uncertainty among many university teachers as how to organise their student practice since some of them have little experience or knowledge of the field. Other teachers that have considerable experience and knowledge may have difficulties in sharing responsibility and thus tend to direct too much the student's activities into the work place. The question of coordinating the tasks set by different faculty in different courses has also come up and also the question of affinity between the tasks in the associated schools and those at the university. It is certainly a challenge to facilitate coherence in the student learning process and to encourage deeper and broader learning about the practice during the studies. One suggestion as how to cope with these issues is to use a personal portfolio directed by the student, covering the studies, i.e. opened in the first semester and closed at the last semester. All teachers in the courses attended by this student must support the student in the development of this portfolio.

Some of the school based teachers are rather insecure in directing the cooperation with their student teachers and some of them look at it as a lack of preparation from the university when students arrive without a detailed programme for the practice period as usual. The overall structure also seems complicated for them since students are coming in different times with different background and requirements from the university.

Theoretical views and justifications

The pillars underpinning this general stance are manifold, see e.g. Jónasson (2009). They extend from general notions of the problem of relating declarative and procedural knowledge, through the understanding of the importance of the development of situated knowledge, through discussion of expansive knowledge, the importance of work place learning to various initiatives attempting to re-establish a close connection between teacher training and schools. It also derives inspiration from ideas about the development of professional competence. Teacher education institutions throughout the world are indeed developing partnership between university and schools in order to improve the quality of their teacher education programme.

In Icelandic teacher education considerable attention has been paid to the work of Korthagen and his colleagues, and this connection is one of the six basic principles that

Korthagen, Loughran and Russell (2006) emphasised on the basis of their study into the development of quality in teacher education. It is also emphasised as one of four recommendations from the International Alliance of Leading Education Institutes for improving the quality in teacher education (Gopinathan et. al 2008). Darling-Hammond and associates (2005) strongly recommend that learning to practice should take place in practice and that student teachers should gain clinical experience from the very beginning of their educational programme, a view also defended by Jonasson (1998) for any vocational or professional programme. The consensus is that such an arrangement could enable teacher student to reinforce, apply and synthesise both declarative and procedural knowledge they are mastering in other coursework. There is also evidence which suggests that this works in both directions and that practical experience affects the student teacher's acquisition of theoretical knowledge in the more traditional university based courses (Korthagen and Kessels, 1999).

Partnerships, between universities and schools, seem to have become a central term in the discourse about teacher education, especially in various proposals for reform, and thus, if only implicitly suggesting that the lack of impact of various earlier reforms can be accounted for by the lack of this component of cooperation between theory and practice.

Evaluations indicate that there are many positive effects of programs characterised by such interaction. However, the various results are debated, and the successes from the formal programs in England and in USA have been questioned (Darling-Hammond, 2006). Furthermore, many university reforms suffer from a lack of evidences (Korthagen, Lougran & Russell, 2006). There is a need for more exploration, evidence and discussion.

Anne Edwards and her colleges have been studying the partnership models in English teacher education from two perspectives; on the one hand they have investigated the role of theory in the models, and on the other hand how mentors are positioned in such partnerships (Edwards & Protheroe, 2004). The role of mentors in the partnership programs is of particular interest and turns out to be very complicated. The evidence from their studies indicates that mentors themselves understand mentoring as mediation of knowledge of primary teaching, and induction into the community of practice of primary teaching in each partnership school. In reality, the focus in mentoring seems mostly to be on pupil performances and learning as moving through the curriculum. To

some extent, the mentors' role and understanding of learning processes seem to be in harmony with the theories of situated learning; learning to teach is seen as a process of learning to be, see and respond in increasingly informed ways while working in classrooms (Edwards & Protheroe, 2004; Lave & Wenger, 1991). Edwards argues that this picture is too limited; for understanding the position and role of mentors new questions must be asked about their positions in the activity systems of their own schools and the training partnerships.

The justification for the new program in Iceland is derived from several theoretical sources. For the first, the emphasis on individual development, and the development of "practice theory" draws on the writings of Korthagen and Kessels (1999) about theory with a big T and small t, and Schön's (1983) ideas about the role of reflection in teacher education. Secondly, the ideas about practice as a source for theoretical learning are similar to those of "situated learning" and of communities of practice as the foundation for learning (Lave & Wenger, 1991). Thirdly the theoretical underpinnings of the emphasis on the partnership between the university and the home-schools are sought in socio-cultural theories, notably activity theory and the contributions from Anne Edwards (Edwards, Gilroy, & Hartley, 2002; Engeström, 2001; Þuríður Jóhannsdóttir, 2005). The subjects of learning are both individuals and the community they are part of; in this case the partners in the collaboration task between university and school and the system of practice teaching.

The importance of the transfer of knowledge between activity systems is highlighted, as well as ideas about learning from practice by using theoretical tools and creating learning communities (Anna Kristín Sigurðardóttir, 2006). The ideas about professional learning communities are currently a crucial focus in many studies of school improvement as a way of building up a school's capacity for development and increased effectiveness. The whole idea of a professional learning community is about the constant building up of new knowledge within the organisation and putting it into practice by constantly using collaborative enquiry and reflection (Stoll & Louis, 2007). An effective professional learning community has the capacity to promote and sustain the learning of all professionals involved in that community with the collective purpose of enhancing pupil learning (Bolam et al, 2005); it involves shared norms and values, the de-privatisation of practice, critical reflective dialogue (Mulford et al, 2004) and system thinking (Senge, 1990).

It is expected that the development in teacher practice in the teacher education programme in the School of Education will be as Rosie Le Cornu and Robyn Ewing (2008) describe the development in Australia, where noteworthy efforts have been made to develop the school university partnership in the sphere of teacher education. The development of these ideas has been through three different stages. They have moved from the traditional approach, claiming that student teachers put their newly acquired knowledge from study in university into practice during their time in school, towards emphasis on reflective approach where the students go beyond the technical skills of teaching to consider the moral and ethical issues of teaching and learning in a particular context. As such the student-teacher constructs her own knowledge by reflecting on her experience at a workplace and in university courses. The latest stage, according to Le Cornu and Ewing, is to go beyond reflection and towards learning communities where the group together inquires into the practice and engages in the learning partnership. They move from the individual focus to group focus, the aim is not just to develop one's own reflection skills but also to facilitate the development of others.

The overarching perspective is the ambitious development of the competent professional. In the project, teachers' professional competence is assumed to be more than knowledge, skills and qualities; it means being *able to use* the knowledge, skills, and qualities to act in a purposeful and accepted way in the job – in doing and thinking – regarding actual situations, social context and professional standards (Ragnhildur Bjarnadóttir, 2008).

Many scholars have studied and defined the concept “professional competence” and competence development. In the last decades, the importance of mastering competence in pedagogical thinking has been highlighted, as well as being able to apply one's own knowledge and skills at work (Dale, 2003; Handal & Lauvås, 1983; Kansanen, 2006). The Dreyfus brothers have developed a theory on learning from work experiences, and a model describing the progression from novice to expert. Competence is defined as the third level of five; with competency, planning and decision making becomes more conscious and the various elements of the situation become organized into *gestalts* – which leads to changed possibilities for acting in a professional way (Dreyfus & Dreyfus, 1999). According to Eraut (1994), professional competence refers to what

people know and can do, and arises from social interaction, knowledge sharing, and collective methods.

The school-university partnership project as a research project

The aim of the research is based on the aims of the partnership project. It has the character of action research in the sense that using the school- university partnership programme as a research base, evidence is collected that helps to improve the teacher education programme and hopefully also school development in our associated schools. The research project is in particular supposed to help us to gain some understanding of i) the development of professional competence in general, ii) the interplay between theory and practice, iii) the effect of participation of a student on the context of practice, iv) the differential effects of initial and later school experience, but in particular how the students develop professional competence related to a number of specific arenas.

Design and structure

The research project is split into several smaller studies, conducted by different colleagues at the University. Some of them are conducted relatively independently from other parts of the project while others are interrelated and highly dependent on one another. At the very end of the project, the results from all parts are summarised and interpreted together in order to provide information about the overall aims and for further improvements of the partnership project. The research is divided into four main categories:

- Student teachers' learning, guidance and supervision; i.e. studies on a) how the student teachers develop own professional competence throughout the study time, and, b) how student teachers' practice experiences and supervision in "the system of relations", connected to practice, contributes to their professional development.
- The associated schools; includes possible effects on school development programmes within the schools and the attitude of the key contact people towards teacher education.
- The University teacher, the content of university courses and research focus are they affected by closer and more frequent contact with schools.

- The partnership itself, including i.e. how the members manage to establish a learning partnership among students, university teachers and school teachers.

Time plan

The partnership project started in the autumn 2007, which mean that the first students graduate from it in the spring 2010. The main data collection will take place from autumn 2009 until spring 2011, even though some pilot data has already been collected about student's satisfaction after their stay in the associated schools each term and about the main challenges the schools face. Already some modifications of the initial implementation have taken place. The first steps have been taken in exploring how student teachers' practice experiences and supervision in the “systems of relations” – connected to practice – contributes to their professional competence. Some preliminary data has also been collected from associated schools and the student teachers.

Methods

Different methods are used for data collection between different category and also within them as suits the research question each time.

1. The student teacher:

- Questionnaire survey for student graduated in the spring 2009 (group that studied according to the older structure of TE programme) and again by the end of their first year at work 2010. The same procedure is used for students that graduate in the spring 2010 and again after their first year at work 2011. The main purpose is to make comparison on student's attitudes on their study and towards the profession.
- Interviews with a group of students throughout their study time to capture the development of their understanding and professional competence. The same student is interviewed three times.
- Questionnaire survey to student after each term about their experience from the practice period.

2. The associated schools:

- University teachers that visit the schools on regular basis collect field notes by using common checklist.

- Questionnaire survey to key contact in each school, conducted in the spring term 2010.
3. The University teacher:
- Questionnaire survey to all university teachers that were affected by the project, conducted in the spring 2010.
 - Follow up interview with 2-4 university teachers with different background.
4. Relations between involved partners aiming at learning, guidance and supervision /mentoring.
- Case studies, interviews and questionnaires. Participants are student teachers, university teachers, practice teachers and key contacts in schools.
5. The partnership:
- Developmental programme with three different groups of University teachers, school teachers and student aiming at developing learning partnerships. Data are collecting along the way in participating observations.

Some preliminary results

The university teachers did pilot observation in associated schools by the end of the fall term 2008 and spoke informally to teachers and student teachers. They noticed that the teachers in the schools appreciated the opportunity to direct student tasks during practice period and welcomed the student teachers into their schools. But at the same time they complained about lack of clear instruction from the university about expectations and requirements. The student teachers expressed their satisfaction with the programme the school offered but agreed with the teachers that the information to the school were not clear enough. Some of them worried about not being able to visit more than one school during their study time.

As a first steps in exploring the possibilities for supervision and competence development, embedded in the “system of relations” connected to practicum, a case study was designed (Ragnhildur Bjarnadóttir, 2009). The intention was to study the advantages of using individual and collective reflections in *student groups* for working with problems of teaching – experienced by the students in practice teaching. In analyzing the data the focus was on the relations between the student teachers as a

background for learning. How do the students describe the relations to the other student teachers in the “learning community”. What facilitates learning – and what are the main barriers for learning? Expanded understanding was an important component in the professional competence aimed at – rather than the competence for solving the problems.

According to the analysis, “intersubjectivity” seems to be a central theme in their experiences. The implications for teacher students are: it is important to listen, and have others listening to you; to try to learn from disagreement, try to understand different opinions of others, and to gain approval from others. If you feel you are a part of a group, you can make use of the collaboration and work with uncertainty connected to the teacher role.

The preliminary findings give some indications about what enables – or prevents – student teachers’ learning in a learning community focused on practice teaching. The next steps aim at further elaboration and exploration of the system of relations connected to practice in Iceland, the roles of those involved, and of support and guidance to student teachers as learners in practice.

The next steps

The next steps are threefold:

- a) We will reorganise some features of the practice programme in line with the issues noted as the main challenges noted earlier.
- b) We will of course collect the data already outlined, in accordance with the research plan
- c) We will adapt our research plan somewhat in light of the issues that have emerged and call for more emphasis on investigating the attitudes and competencies of each of the agents involved, but also related to the main organisational principles guiding the operation.

References:

- Anna Kristín Sigurðardóttir (2006). Studying and enhancing the professional learning community for school effectiveness in Iceland. Thesis for the degree of doctor of philosophy. Exeter: The University of Exeter.
- Anna Kristín Sigurðardóttir (2008). School-University partnership in teacher education in Iceland. Paper presented at Cross-National Invitational Symposium: Teacher Education for Inclusive Education. University 2nd - 4th November 2008.
- Bolam, R. McMahon, A., Stoll, L., Thomas, S. & Wallace, M. with Greenwood, A., Hawkey, K. Ingram, M., Atkinson, A. & Smith, M. (2005). Creating and sustaining effective professional learning communities. Dfes research report RR637. Bristol: University of Bristol.
- Dale, E. L. (2003). Pedagogikuddannelse og erkendelsesinteresser. In T. Kvernbekk (Ed.), *Pedagogik og lærerprofessionalitet* (pp. 93-116). Oslo: KLIM.
- Darling-Hammond, L. (2006). Constructing 21st century Teacher Education. *Journal of Teacher Education*, 57(3), 300-314.
- Darling Hammond, L., Hammerness, K., Grossman, P. Rust, F. & Shulman, L. (2005). The design of teacher education programs. In Darling-Hammond & Bransford (Eds). *Preparing teacher for a changing world*. p.390-441. San Francisco: Jossey Bass.
- Dreyfus, H., & Dreyfus, S. (1999). Mesterlære og eksperterens læring. In K. Nielsen & S. Kvale (Eds.), *Mesterlære* (pp. 54-75). København: Hans Reitzels Forlag.
- Edwards, A., & Protheroe, L. (2004). Teaching by proxy: Understanding how mentors are positioned in partnerships. *Oxford Review of Education*, 30(2), 183-197.
- Edwards, A., Gilroy, P., & Hartley, D. (2002). *Rethinking Teacher Education. Collaborative responses to uncertainty*. London & New York: RoutledgeFalmer.
- Engeström, Y. (2001). Expansive learning at Work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1).
- Eraut, M. (1994). *Developing Professional Knowledge and Competence*, London: The Falmer Press.
- Gopinathan, S., Steven Tan, Fang Yan Ping, Letchmi Devi, Catherine Ramos, and Edlyn Chao (2008). *Transforming 21st century teacher education through redefined professionalism, alternative pathways and genuine partnerships*. The International Alliance of Leading Education Institutes. Executive summary, from web 14th January 2009:
<http://www.dpu.dk/Everest/Publications/Arrangementer/Annual%20meeting%20t>

eacher%20education/20080827110528/CurrentVersion/Executive%20summary.pdf

Hagstofa Islands (Statistic Iceland). From website 20. October 2008:
<http://www.statice.is/Statistics/Education>

Handal, G., & Lauvås, P. (1983). På Egne Vilkår. En strategi for veiledning með lærere. Oslo: Cappelen Forlag.

Jónasson, J. T. (1998). The foes of Icelandic vocational education at the upper secondary level. In A. Tjeldvoll (Ed.), *Education and the Scandinavian Welfare State in the Year 2000*. (pp. 267-304). New York: Garland Publishing.

Jónasson, J. T. (2009). The nexus between research and school practice: vision and pragmatics. A critical investigation of the theory-practice relationship with respect to school improvement. Paper presented at the 37th Annual Congress of the Nordic Educational Research Association. Literacy as World making. 5th-7th March 2009.

Kansanen, P. (2006). Constructing a research-based program in teacher education. In F. K. Oser, F. Achtenhagen & U. Renold (Eds.), *Competence oriented teacher training. Old research demands and new pathways* (pp. 11-22). Rotterdam & Taipei: Sense Publishers.

Korthagen, F.A. & Kessels, J.P.A.M. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational researcher*, 28/4, 4-17.

Korthagen, Loughran and Russel (2006). Developing fundamental principles for teacher education programs and practices. *Teacher and Teacher Education*, 22, 1020 – 1041.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.

Le Cornu, R. & Ewing, R. (2008). Reconceptualising professional experiences in pre-service teacher education ... reconstructing the past to embrace the future. In *Teaching and teacher education*. 24/7 1799-1812.

Mulford, W., Leithwood, K.A. & Silins, H. (2004). *Educational leadership for organisational learning and improved students outcomes*. New York: Kluwer Academic Publishers.

Ragnhildur Bjarnadóttir. (2008). Markmið kennaranáms: Starfshæfni og fagmennska. *Tímarit um menntarannsóknir*, 5, 93-106.

Ragnhildur Bjarnadóttir. (2009). Practice experiences and supervision of student teachers as sources for developing their professional competence. Paper presented at AERA (American Educational Research Association) congress in San Diego, 13th -17th Apríl 2009.

Schön, D. (1983). *The reflective practitioner*. New York: Basic Books.

Senge, P. (1990). *The fifth discipline*. London: Random House.

Stoll, L. & Louis, K.S. (Ed). (2007). *Professional learning communities. Diverge, depth and dilemmas*. London: Open University Press.

Þuríður Jóhannsdóttir (2005). Fjarnámið sem lykill að þróun. In G. L. Marínósson, Ó. Blöndal & u. Jóhannsdóttir (Eds.), *Nám í nýju samhengi*. Reykjavík: Rannsóknarstofnun Kennaraháskóla Íslands.

Þuríður Jóhannsdóttir. (2008). *Boundary crossing between school and university*. Paper presented at the 10th Nordic congress on teacher education; The Relationship between teacher education and school development. Iceland University of Education, Reykjavík. 21st -24th May 2008.