An emerging research ethos
1998–2004
A case study from a merger in teacher education in Iceland

The aim of this case study is to identify factors that influenced the research culture and the emerging research ethos in the Iceland University of Education (IUE) during the years 1998–2004. The IUE was formed in 1998 when four organizations merged, only one of which had staff with a salaried responsibility for research prior to the merger. The study analyses published documents, as well as summaries of research activity and other information, collected between 1998–2004, in order to describe internal assimilation and external adaptation, as well as interactions between the two. Artefacts, basic assumptions and espoused values underpin the emergence of the culture (Schein, 2010). Attempts were made to strengthen the research infrastructure in the institution as staff members grappled with the need to engage in discovery, the scholarly activity defined by Boyer (1990) to be most like research.

The IUE was characterized by new management structures, as well as provision of support and incentives. Staff motives for carrying out research influenced and were influenced by internal developments. The organizational culture was affected also by the external research environment, especially the changing research structures at the larger University of Iceland (UI) and changes in national research policy in science and technology.

The interaction between assimilation and adaptation is apparent in the request for a national evaluation of educational research and in the development of research policy documents. There was some conflict between the tendency of staff to work on integration and application, as defined by Boyer (1990), and the external pressure to further develop discovery as a scholarly activity. The conflict arose in part because many of the staff were service-oriented in their work but the form of discovery dominating the external environment was oriented towards pure rather than applied research. The ethos of research activity was one of cautious optimism.
about the value of research and growing self-confidence in carrying it out, tinged however with reluctant compliance with measures taken by management. The IUE and its staff wanted to be credible players in the field of research.

Introduction

Higher education in Iceland has changed significantly over the last 15–20 years through the emergence of new universities and mergers. This case study describes factors affecting the research ethos in a small tertiary level institution, the Iceland University of Education (UCE), over a seven year period following a four-way merger, of one university of education and three post-secondary training colleges in January 1998. The merger was based on a 1997 law on teacher education (Law 137/1997) and required the University College of Education (UCE), engaged primarily in teacher education for compulsory schools, to merge with colleges engaged in the training of preschool teachers, sports teachers and social development specialists. Tenured staff of the UCE had a research responsibility ever since its own upgrading to university level in 1971 (Jóhannsdóttir, 2002) and these staff were to spend 48% of their time on research. The staff at the other three colleges had not been obliged to carry out research. In the merged organization, the UIE, all tenured staff were required to carry out research. Staff of the three former post-secondary colleges had to apply for tenure and for their positions to be upgraded from teacher to lecturer. They were given four years to meet requirements, which included a research-based master’s degree.

The new, merged institution, the UIE, had to address internal issues and function in an external environment which was changing rapidly. Research governance and attempts to motivate academic staff and increase research productivity have received attention among universities and policy-makers in different parts of the world (Macdonald, 2002; Harman, 2000; Mohrman, Ma, & Baker, 2008; Murray et al., 2009; Pratt, Margaritis, &
Coy, 1999; Sigfúsdóttir, Ásgeirsdóttir, Macdonald, & Feller, 2005). One impetus for change has been economic as mergers have been used as the solution to more effective management in higher education (Harman & Harman, 2003; Harman & Meek, 2002). Accompanying the economic driver is a global move towards quality control, competitive funding and peer-reviewed research (Mohrman, et al., 2008; Smith, Ward, & House, 2011).

This case study of the early years of research in the IUE investigates how the merging of institutions requires and effects changes in institutions (Harman & Harman, 2003) and in particular how a national setting promoting high impact science effected internal change, making demands on the motivation and productivity of researchers. In addition, the ‘peculiar’ problems of educational research (Labaree, 2003, Zeichner, 1999) affected the interplay of institutional and environmental factors and in turn the development of policy and practice.

Many teacher education institutions have faced similar problems. Research has not been integrated into their activities, though in the last 15-20 years there has been an increasing trend towards ‘upgrading’ teacher education to university level. For example, in Australia, Scotland and New Zealand, schools of education have been merged with traditional universities (Hill & Haigh, 2012; Menter, 2011). Similar changes of status have also been undertaken in Canada (Acker, 2003, Smyth, 2003, Webber & Sanderson, 2003). One mitigating factor in the case under study here was that the 1998 merger was first and foremost a horizontal merger of training institutions working with educational and developmental issues, thus from the outset it was assumed that some core experiences and perspectives were shared by all staff. Studies have shown that when teacher education is merged with a more traditional university and a range of academic disciplines, educational research may be seen at best as ‘emerging’ or ‘new’ or ‘primitive’ or ‘irrelevant’ at worst Teacher educators have in some cases experienced the dominance of certain types of research as a threat to the teaching profession which is practice-oriented (Arreman & Weiner, 2003, Smith & Tinning, 2011). In a small country such as Iceland the proximity of a larger more traditional university could be expected to have an effect. Ten years later, in 2008, the IUE itself went through such a merger.

This article identifies internal and external factors affecting the emerging research culture between 1998–2004 in the IUE. A theoretical framework is developed first, based on notions of scholarly activity (Boyer, 1990), the university as institution and two views of culture (Bateson, 1958/2006, Schein, 2010). This is followed by a brief description of contextual change around the turn of the century as the merger came into being. Internal policy and practice in the IUE is then considered, followed by characteristics of the external research environment. The assumption is made that an interaction between institutional features and environmental factors drove the development of the organizational culture from which the ethos can be extracted.

I should note my own involvement in the research affairs of the IUE during this period. In 1998 and 1999 I was a member of the selection and appointments committee of the IUE, which considered applications from the staff at the three colleges for tenure and new appointments. From 1999–2004 I directed the IUE Research Centre and I chaired the committee that carried out the baseline assessment of productivity of all staff in 2000 and 2001 at the request of the rector, as part of negotiations with the ministry on funding for the IUE. Also I chaired the steering committee that supervised the external evaluation of educational research from 2003–2005. I was a member of the Research Council of Iceland 2000–2005 and a member of the Science and Technology Policy Council from 2003–2006.
Theoretical framework

Scholarly activity and educational research

Scholars engage in four different types of scholarly activity, suggested Boyer (1990): discovery (akin to traditional notions of basic research); integration of research findings; application of findings; and teaching (Figure 1). Part of Boyer’s argument developed for the Carnegie Foundation was designed to promote teaching as a scholarly activity in American universities. In the case of the merged IUE, other activities were to be strengthened, specifically discovery, as new staff were expected to take on research work. The application of existing knowledge, for example to course design or curriculum development, was also to be encouraged, or the integration of research findings, for example into a new teaching model. While integration and application do not fall under the category of ‘knowledge production’ or discovery, they were also to be strengthened as staff integrated the results of research – of others or their own – into their teaching practice.

Running universities and securing research funding increasingly involves questions of status and rankings at the institutional and national level, with competition not only with other universities but also among disciplines. The notion of ‘educational research’ is weakly developed in academia (Icelandic Centre for Research, 2005; Labaree, 1998, 2003, Murray et al., 2009) and it seems widely accepted that educational research has not been a strong player when competing with an academy premised on disciplines, that it has ‘peculiar problems’ and ‘produces a lesser form of knowledge’ (Labaree, 1998, 2003). This is part of the puzzle in understanding the culture and ethos at the IUE. Developing the identity of a university devoted to educational research might be complicated in a national setting where the concept of such research is weakly developed and its value questioned (Meyer, Ramirez, Frank, & Schofer, 2007) or actually seems absurd to some
who think of education as a commonplace activity synonymous with teaching. Therefore the extent to which it is possible for educationists to develop research capacity and an enhanced identity as researchers may be subject to the views of (other) academics on the relevance, excellence or the nature of educational research (Mortimore, 2000).

Acceptance and success in the field of research occurs at many levels, or as Acker (2003, p. 69) suggests, ‘layering’ is needed to understand the changes in careers of teacher educators and new demands made on them, ‘moving from individual stories to institutional contexts to historical location’. Building a research career ‘encompasses a thick layer of definitions’ even if these are not reflected in day-to-day activities of the researcher (Meyer, et al., 2007). Thus, in seeking to understand the way that research environments affect local developments, three levels of analysis can be used: persons, organizations and societies (Meyer, et al., 2007). This article does not take up personal stories, but focuses on the next two levels, exploring institutional and national policies of research as well as institutional research cultures (Murray et al., 2009). Discovery, integration and application are concepts of interest (Boyer, 1990).

**The university as institution**

All universities are institutions, and in many countries research universities are part of the public sector under the jurisdiction of a government ministry. An institutional perspective identifies ‘the dependence of local social organization on wider environmental meanings, definitions, rules and models’ (Meyer, et al., 2007, p. 188) and can be seen as both coercive and normative (Kavanagh, 2009). This perspective means that emerging rules and models for a university are constituted nationally and globally. The university is nested in a set of environments (Figure 2).

![Global understandings of a research university](image)

**Figure 2 – Environmental factors affecting the research ethos at the IUE 1998-2004.**
Developments and policies of dominant bodies in the national environment, such as the Ministry of Education and the larger University of Iceland (UI) as well as global understandings of what it means to be a 'research university' all affected the instincts and emotions of those involved in the challenge of establishing an ethos in the newly formed IUE.

Global understandings are also changing as can be seen in the Emerging Global Model (EGM) of a research university (Mohrman, et al, 2008).

Typically the reward systems in EGM universities favour research published in prestigious journals, and research credibility acquires an international dimension, including staff that is culturally competent in a variety of settings. The characteristics of a globally excellent research university include a global view, being research intensive, showing role flexibility and willingness to establish new relationships, having access to funds beyond government support, drawing international recruits among staff and students and increasing internal complexity (Mohman et al., 2008, Rauhvargers, 2011).

The emergence of a research ethos and its validation by the larger environment is a problem of external adaptation and internal integration (Schein, 2010). The problem might include differing epistemological and ontological views, judgements about the relevance of the research, the credibility or otherwise of methodological approaches and the expected value and impact of findings (Smith, Ward, & House, 2011). The quality of research journals, the criteria for conference paper acceptance and the existence of a professional association (Nisbet, 2005) are also considered to be indicators of the development of a research profession. Add to this the typically wide range of disciplines, fields and professions to be found in a school of education, and it is probably not surprising that researchers working in other fields might have a hard time seeing or understanding the purpose, research capacity and strengths of an organization entrusted with teacher education and related professions.

In an analysis of the development of knowledge transfer in universities, Jacobson, Butterill and Goering (2005) found several structural barriers such as promotion and tenure, resources and funding, knowledge transfer orientation, and documentation. To understand the development of a research university as an institution, the research environment and its influence on forming the institution must be considered (de Zilwa, 2005, Meyer et al., 2007). Collective authorities, associated with the university, set the agenda even though a broad mission, or ethos, drives internal development. However, institutional theory may have lost sight of its primary focus on value, meanings and culture (Suddaby, Elsbach, Greenwood, Meyer, & Silber, 2010) and in this case study it is important to understand the espoused values and assumptions made by those required to carry out and support research. Culture can be shaped by patterns that agents, such as researchers, support, change or use to further their interests. Kavanagh (2009) in an analysis of the ‘University’ suggests that agency is an attribute of institutions and instead of considering an agent-institution dichotomy one should focus instead on institution-institution relationships and how they have changed over time, in terms of identity, structure and content. This is the approach taken in this paper.

**Culture and ethos**

Schein (2010) has defined organizational culture as follows:

*The culture of a group can now be defined as a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid*
and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.

(p. 18, italics added by the author)

Schein’s (2010) model of organizational culture has three elements: artefacts, espoused values and assumptions. (Figure 3)

Figure 3 – Schein’s model of organizational culture – application to IUE 1998-2004 (Schein, 2010)

The artefacts are visible and include processes and structures, and in the case of research governance in a university, might include the range of contracts which provide the framework for managing research. Espoused values refer to those held by leading figures in the organization. Tensions can arise if these values are not in accordance with the shared values or basic assumptions made by members of the organization, which may not be visible.

Culture has been a key concept in anthropological descriptions and since it could be said that the author had the status of a ‘participant observer’ during the period under discussion, another concept of culture was explored in an attempt to approach the notion of ‘ethos’. A classical definition of ethos was proposed by Gregory Bateson (1958/2006):

… we may abstract from a culture a certain systematic aspect called ethos which we may define as the expression of a culturally standardised system of organisation of the instincts and emotions of individuals.

(p. 44, italics in the original)

More importantly for this study on research culture and ethos, Bateson goes on to say:

The point I wish to stress … is that any group of people may establish among themselves an ethos which as soon as it is established becomes a very real
factor in determining their conduct. This ethos is expressed in the tone of their behaviour ... The details were in the past selected by the ethos and are still preserved by it. The system is a circular one; and the very attitude which the dons adopt towards the past has been historically formed and is an expression of their present ethos. (p. 45)

The attitude of the dons plays a part in establishing and then maintaining the culturally standardised system of organisation of the instincts and emotions of individuals. The ethos described by Bateson may manifest itself in an interplay of the elements of Schein’s model but whereas Schein seems to promise that cultural change is possible in that it can be ‘taught’, Bateson seems to argue for something more intangible by calling on instincts, emotions and a tone of behaviour.

This study will thus address one main research question: What factors affected the development of the research ethos in the IUE during the period 1998 to 2004?

To answer the question a case study approach is adopted, with the IUE considered to be an institution with agency. In one sense, the ethos is considered as the dependent variable and is influenced by the independent variable of research culture arising from internal integration after the merger and external adaptation to the environment. What is accessible though are the cultural elements defined by Schein (2010). What must be deduced is the ethos. This will be determined on the one hand by the level of acceptance of Boyer’s notion of discovery and the requirement to carry out research and on the other by the ‘tone of the behavior’. Schein talks of the way a group in the culture has learnt to ‘perceive, think, and feel’, but Bateson speaks of the ‘instincts and emotions of individuals’. Since the approach in this paper is to look at integration and adaptation and not focus on the individual, use will be made of Schein’s perspective in the analysis.

**Overview of changes in the period 1998–2004**

The social and educational context in Iceland and of the IUE was more varied in 2004 than before the merger. National and local governments were dealing with a range of new issues, not least in education (Fræðslumiðstöð Reykjavíkur, 2003). In 1996 the administration of primary and lower secondary schools was transferred from the central government to local authorities, leading to new types of interaction for those concerned with schooling and education and from which have arisen a number of evaluation studies. In 1999 a new national curriculum was introduced for pre-schools (until age 6), primary and lower secondary (grades 1-10) and upper secondary schools, leading to revisions of courses being offered to students, and creating new needs for research, innovation and development. Finally opportunities for learning had multiplied rapidly in recent years, with more tertiary education available, more leisure options available, new forms of distance learning being introduced and adult education centres being established around the country.

On the other hand, the university environment and internal governance was acting on the assumption that discovery, i.e. research, was to be a key – if not the most important – scholarly activity, rather than integration, application or teaching. The increasing demand for peer-reviewed science moved the emphasis in the IUE rapidly from service and development to academia and research. The jury on the link between the quality of teaching and of research was, and still is, out, with conflicting research findings on the issue, but for world-class universities the key activity is research and the production of new knowledge (Shannon, McComb, & Martin, 2011). Hicks (2010) has also pointed out the dual roles of university research, which needs to serve both the university as an institution as
well as the nation, may conflict with each other. Converting educational research into national innovation was not an obvious task for the IUE.

Four unique social institutions merged into one in the IUE in 1998, and in three of them staff had not been required to carry out research, but one had operated as a university with a research responsibility since 1971. The professional activity of staff as assessed through CVs and lists of publications in 2001 showed that although there had not been a research responsibility in the three colleges there was considerable development work in progress. The UCE model had the dominant position though, with the existence of a semi-independent Research Centre, a research project fund, a research-oriented library, sabbatical leave privileges, a peer-reviewed journal, an annual series of public lectures, an annual national conference and a graduate programme leading to a master’s degree.

Six years later the Research Centre had become part of a ‘research department’, and research funds had increased marginally within the institution, but more external funding had been secured. The research-oriented library was part of an educational centre that provided support for researchers, for example with specialised services and short courses. Sabbatical leave was becoming a contentious issue, with insufficient funding for the number of applicants and the use of new criteria for eligibility based on productivity. There were now three peer-reviewed journals on educational research: the number of articles being submitted to the education journal Uppeldi og menntun had more than doubled, a new on-line journal Netía – Vefðimarit um uppheldi og menntun published its first issue in early 2002. In 2003 the first issue of the Journal of the Icelandic Educational Research Association (TUM) appeared. The IUE had taken the initiative in establishing this association in 2002 in cooperation with several others. Public lectures were still being held but interest was dwindling. The annual conference was still focused on developments in the field but with more presentations of research related work, and the graduate programme now included both a master’s and a doctoral degree.

Approach and methods
This study has its origins in the project Traditions and transitions in teacher education initiated by Sandra Acker at OISE in Toronto and Gaby Weiner then at the University of Umea. Participants in Sweden, Canada and Iceland carried out case studies of developments in several teacher education, units, and some of them were presented in the Journal of Teacher Education in 2003 and the Nordic Educational Research Association conference in 2004. The project also led to one master’s project and a related study on a comparison of changes in the curriculum over time. The main focus of the Icelandic contribution was on teacher education from 1940–1980, with two articles in the journal. Guðrún Kristinsdóttir, Gunnar Börkur Jónasson and the author were the Icelandic participants.

Case study approach
This paper is a case study based on an analysis of published and unpublished documents and archival material from the period 1998–2004. It focuses on data from an organization about an organization (Yin, 2009). The analysis involves elements of the process-tracing method, which ‘attempts to identify the intervening causal process between an independent variable (or variables) and the outcome of the dependent variable’ (George & Bennett, 2005, p. 206), although not all the intervening steps will be analysed in detail here.

Documents and archival material from the IUE
Key research documents from the period are:

- Two policies on IUE research from 2000 and 2004, prepared by the director and the board of the Research Centre (RC) and under the chairmanship of Sigurður
Konráðsson and Erlingur Jóhannsson respectively (Rannsóknarstofnun KHÍ, 2000, Visindarð, 2004)

- Web-site for RC/IUE symposium in March 2002 on developing research capacity.

Two articles published in 2002 and 2004, based on conference papers, and an unpublished conference paper from 2004 are also used as sources (Macdonald, 2002, 2004a, 2004b). A working paper written in the summer of 2003 in preparation for the policy revision summarised much of the data then available and has been used as data in this case study.

A wide range of unpublished administrative documents were available to me during my term as director from 1999–2004, including: minutes of meetings; committee reports; assessments of CVs from all staff; annual reports from staff and assessment of their research activities; working copies of rules and regulations; numerical data from the assessment of staff; plus notes made in notebooks covering the entire period. The widening range of topics over time is an indication of increased assessment of institutions and individuals and policy-making setting its mark on research activity.

**Documents related to the external environment**

Sources for this study also included research artefacts at a national level, including:

- Laws concerning research and universities in Iceland
- Reports on the status of research published by the Icelandic Research Council (IRC), of which the author was a member from 2000–2003/4
- Meetings and minutes from the IRC and Science and Technology Policy Council (STPC), of which the author was a member from 2003–2006
- Reports on trends in research in the Nordic countries and Europe
- An evaluation of educational research in Iceland carried out 2003–2005, sponsored by the IRC, the Ministry of Education and three universities (IRC, 2005)
- An evaluation of scholarly activity at the University of Iceland conducted in 2004 (Sigfúsdóttir et al., 2005).

**Results**

In its early years, the new IUE had to fight on three fronts in developing its research ethos. One was to convince some of its own staff that research was a useful scholarly activity; another was to convince others that educational research itself was a worthy enterprise, and a third was to convince others of its credibility as a university that governed and produced research according to acceptable standards.

The results of the case study will be presented as shown in *Figure 4*. After a brief description of the initial situation in 1998, there will be a description of the internal integration activities and the effect of adapting to the external environment. This is followed by a presentation on the interaction of the two, leading to the research culture seen in 2004 and its associated ethos.
Starting out: the new institution in 1998
When the IUE came into existence in January 1998, total academic staff numbered about 120, with about 50–70 support staff. About 70–75% of the staff of the IUE came from the UCE and most of the new organization was housed on the college campus, in Reykjavík, the capital city. Physical integration proceeded slowly, with pre-school staff moving to the main campus in 2001 and the social development staff in 2002.

Only one of the four organizations, the UCE, had offered a university-level education. The primary responsibility of the UCE had been to run a three-year course for primary school teachers. The three colleges had offered training at the tertiary level, but staff had had no research responsibilities, though several had completed or were in the process of completing their master’s or doctoral studies. Two colleges had offered three-year courses for pre-school teachers and for development therapists who work with the disabled of all ages. The courses they offered were to be upgraded to university level immediately in 1998. About 15–20% of the IUE staff came from the pre-school college and about 5–8% from the college for social development. The third college, located a little more than an hour’s drive from Reykjavík, had offered a two-year course to sports teachers. About 5–8% of the IUE staff lived on-site and taught in the area of sport. At first, some generic courses were taught by staff from the main campus.

Internal organization of research in 1998
One way in which the IUE differed from other universities is that there were no subject departments. Instead it was divided into only two “departments” according to level of studies, the Department of Undergraduate Studies and the Department of Graduate Studies, each led by a dean, who was advised by a departmental committee, thus defining the activities by the level of the students and not by the subjects or disciplines taught.
This basic division into two departments had been the case in the UCE, and was maintained after the merger.

The UCE had established a Research Centre (RC) in 1992, which had grown steadily in size and remit. The RC housed some independent research projects as well as evaluation projects carried out in cooperation with, or at the request of, other institutions, the Ministry, schools and local authorities. It published one journal, *Uppeldi og menntun*, first issued in 1992, as well as reports and books on the research done by staff of the UCE. The RC also published translations of seminal works in education (e.g. by Dewey and Myrhe) and some educational materials for use in the college and in schools. It ran a series of weekly public lectures each academic year, held an annual conference on research, development and innovation in education and hosted seminars and other events. By 1998 it was also active in producing evaluation reports for schools and school districts after school management was decentralized from national to local level in 1995–1996.

Research governance in the UCE prior to 1998 set the tone in the early days of the IUE although a decision was taken in 1998 that representatives of all four parties to the merger would sit on all the major committees. It is worthwhile noting that during the preparation of the merger there was considerable discussion about what the new university should be called. In the end the name by which the University College of Education (UCE) had been known in Icelandic (i. *Kennaraháskóli Íslands*) was also the name given to the merged institution, the Iceland University of Education (IUE), a natural decision given the fact that *college* and *university* are not differentiated in Icelandic.

**Development and practice**

**Research capacity**

At the close of the 2002–2003 academic year there were still about 120 academic members of staff at the IUE, of which about 55% were women and 45% men. Since the IUE offered a range of courses and specializations, there was a need for staff from a wide variety of backgrounds, such as many sports, the full range of creative arts (visual, performing, music), design and technology, disability studies, ethics and philosophy, adult education and all the traditional school subjects. Often such specialists were only "one-of-a-kind".

The academic backgrounds of staff in 2003 varied with close to 40% having a first degree in education. Over half of the staff in 2003 had undertaken formal graduate studies abroad, at least 16 in the USA, 12 in Sweden, 12 in the UK, at least 4 in Denmark, at least 4 in Norway, and others in Canada, France, Yugoslavia, Czechoslovakia and Ireland. One member of staff had studied in Germany and Israel. Many teachers in the IUE were engaged in master's or doctoral studies during the period 1998–2004.

The UCE had initiated in the 1990s the publication of a register of the scholarly work carried out by individual professional staff, including books, exhibitions, articles or reports, conference talks or public lectures and editorships. The first issue recording the work of the staff of the merged institution (1998–2000) drew mixed comments, with some impressed and surprised by the range of activities being carried out at the IUE, while others felt that "standards" were slipping and that too wide a definition of scholarly activity had been used. The second issue after the merger, covering 2001–2004, was substantially larger, with more entries per staff member and a wider variety of activities recorded, in part because of the demands of the productivity assessment scheme originating in 2000–2001.
Research productivity and incentives
A bonus remuneration system had been in place in the UCE before the merger for exceptional research or administration. The new scheme to assess research productivity developed during this time was hotly debated with some emotional responses to the criteria being used.

The prototype for the new system came from the UI, both for initial assessment of staff as total productivity was to be linked to salary, and also for calculating an annual bonus. Peer-reviewed publications received the highest number of points in the assessment scheme. In the merged university the bonus was limited to research only, and in 2002 and 2003 about 25% of staff could expect to receive a bonus. In addition, staff could receive a monthly addition to their research-related salary in amounts of 5%, 10%, 15% or 20% more, according to their mean level of productivity the preceding three calendar years. This proviso was included so that the benefits of significant productivity could be felt over a longer period, and recent research receiving a higher weighting than earlier research. (The monthly bonus scheme was later dropped). Year by year the submission rate of reports from staff had risen, reaching over 90% in 2003.

The new assessment scheme meant that increasingly academics were using a variety of opportunities to disseminate their research, either through talks or articles. The assessment scheme was also seen by some as an incentive to publish reports on work being done in schools and development projects. At one international conference, an IUE colleague said to the author: ‘This incentive scheme – it really works!’ On the other hand, the group of staff that saw service to schools as a reason for scholarly activity was used to working face-to-face with teachers, where activities were mediated through personal contacts and development activities. Some IUE teachers in this group were finding it difficult to begin recording this work so that it could be made more accessible to others.

The assessment scheme was easy to accept by those who had already taken on board the values and assumptions of its creators, who themselves had taken on the academic values emerging across the world, namely, that peer-reviewed research was to be the gold standard of university governance.

Despite the use of the assessment scheme, the traditions inherent in the different colleges that made up the IUE still had a momentum of their own in those early years, and the scheme did not prove to be strong enough to divert some away from service to schools or other workplaces. Faculty were not willing to give up fruitful connections that were meaningful for their work with students and for their own satisfaction or inspiration. Staff may not have gained research points for work in schools, but many of them continued to do it anyway.

Scholarly activities and educational research
As indicated above, faculty at the IUE engaged in a range of scholarly activities during this period. Several groups were identified on the basis of their research or development work: 1) researchers; 2) service providers; 3) hybrid professionals; and 4) teachers.

The group of well-established researchers (about 25–30%), most but not all from the UCE, made significant research contributions to their own field, either in Iceland or internationally. Several were involved in multinational cooperative projects and were more likely to be cooperating with academic staff in other universities than with IUE neighbours (Icelandic Centre for Research, 2005). Some of this group viewed themselves first and foremost as researchers, and their origins were to be found in disciplines such as history and psychology. Others carried out research in professional areas such as child welfare,
disability studies, child development, information and communication technology, or teacher education itself.

However, a large group (about 40-50%) was highly motivated by the service concept and prioritised working in and with the workplace and in-service activities. Their projects were more likely to be applied rather than basic research and involved school development work and action research. When a one-day internal conference was held in March 2002, about 40% of the staff present selected from a choice of six options the seminar entitled, “From development project to action research”. Those attending the seminar had their origins in all four of the colleges that merged in 1998.

There were some faculty, a hybrid group (perhaps 10–15%) who moved between formal research and educational services, keeping the latter in mind when planning and carrying out research. With time this group grew in size, viewing connections between research and the workplace as a benefit.

Finally in 2003 there was a small number of staff (about 10–15%) that had not accepted the demand for research. They came from a variety of backgrounds and no single attribute can be found to characterize them all. In many instances these faculty were particularly well liked as teachers within the IUE.

Several research groups emerged during this period. Examples include projects on the health of nine and fifteen year old children (led by Erlingur Jóhannsson), on the education and support being experienced by students with developmental challenges (led by Gretar L. Marinósson) and on the use of ICT in schools (led by the author). There were growing pains in some projects as issues were raised about the ethics of co-authorship and relationships among staff and students, especially where some of the team were working towards a degree and others were fulfilling a research requirement (Macdonald & Jóhannsdóttir, 2004).

### Support for IUE staff

Research Centre (RC) staff provided a range of advice and support which will not be discussed here, though this individual or small-team support was much used, and its development was supported by the board and central administration. Advice was sought on project design, grant applications and methodological problems. Three additional staff members were employed in 2003 to work on support for staff and other activities of the RC.

A collective approach was also used. The rector of the IUE had introduced staff days once a semester. In spring 2001, the RC was assigned the task of working on the evaluation of distance teaching and learning (Kristinsdóttir, Matthíassdóttir & Macdonald, 2001), which was presented and discussed at a staff day in November 2001.

In March 2002 the RC was asked to develop a staff day on research, in order to provide staff with an opportunity to reflect on research being conducted in the IUE and where it was going. A committee was established to develop the programme and a web-page was developed to underpin the idea of a conference. The ‘research day’ started with a short talk on the ideas of Boyer (1990) followed by a session in which short presentations of five very different research projects were made that had all begun after the merger. Three seminars followed on 1) academic freedom, 2) connections between student research projects and research projects of staff, and 3) the value of researching educational professions. The rector saw such earmarked events as artefacts by which espoused values could be made visible. It seemed appropriate to introduce Boyer’s (1990) model of scholarly activity, discuss professional learning communities and transformative learning,
as well as raise the issue of whether others outside the IUE should define the quality and value of staff activities, or whether faculty should do it themselves.

While most seemed to enjoy the research day it did not appeal to all staff, indicating a clash of values and that too much had been assumed, despite the good intentions. Some of the senior academic staff from the former UCE were critical of the programmes since none of the longer-living research had been spotlighted, nor was any particular mention made of the earlier developments of the RC and researchers within the UCE prior to 1998. The criticism served as a timely reminder that there was a wide range of histories within the IUE and that some individuals were receiving more attention than others. Some professors said that they had been forgotten in all the efforts to strengthen research within the IUE.

**Values and leadership**
Leadership is important in developing a research culture. The way in which the IUE was managed by the rector who took office in 2000 did provide opportunities for social construction of new ideas, for example by introducing staff days as discussed above and introducing posts in new areas. He was instrumental in securing the evaluation of educational research, discussed below, and initiated useful contacts in the Nordic countries.

The remit of the Research Centre (RC) changed over the period. In the first few years following the merger it continued its role of supporting staff and making their research visible through journals, reports, conferences, seminars and special events. Increasingly the rector asked the board of the RC to deliberate on administrative issues regarding the general management of research, many of which were linked to the introduction of the productivity assessment scheme. A sensitive example was drafting new rules for eligibility for sabbatical leave. By 2003 it had been decided that research-related issues in the IUE would be handled by a Scientific Board (í. Visindaráð), that would function as the management board of the RC and that the director and staff of the RC would be responsible for practical aspects of research management as well as for the established activities (Visindaráð, 2004).

**The research environment in Iceland**

**The ‘other’ university**
In the IUE research policy approved in 2000 and discussed below (Rannsóknarstofnun KHÍ, 2000), an important benchmark was the activities of the Department of Social Sciences at the University of Iceland (UI). For example, an overview of internal research grants in the UCE/IUE in the period 1995-2000 showed that about a quarter of staff applied for and received grants in 2000 and that the size of the grants was about half those granted in the Social Sciences in the UI. The incentive fund at the UCE/IUE, established originally in the 1990s, was in 2000 estimated to be about one-third the size of the comparable fund at the UI. The right to go on sabbatical leave was considered as a major incentive by IUE staff and was a top priority in the policy to be discussed below but with limited funds this was not always possible, despite clauses in the teacher contracts. At the time this right was more or less guaranteed at the UI but not in the IUE.

As the research infrastructure at the IUE developed over the next few years, in part to meet legal requirements arising from the merger and in part from working at university level, regulations for assessment, promotion, selection and recruitment, and sabbatical privileges all were re-evaluated and the starting point was invariably the regulations that had been developed at the UI.
As the demand for research credentials at the IUE increased, more staff wanted to undertake doctoral studies in Iceland and in about 2002 several IUE staff members were enrolled in the doctoral programme at the UI. Although the IUE had just started to offer its own programme at about that time, the unspoken rule was that the IUE staff could not enrol at the IUE and this ‘rule’ was not changed until 2007. The staff in the relatively small Department of Educational Studies at the UI had mixed feelings about taking on the research education of IUE staff, and some felt that they were not being rewarded enough for doing this. Their resources were stretched and the doctoral programmes in both universities were still under development.

The rector of the IUE and the UI worked closely together, and in 2002 they commissioned an advisory group to carry out a study of options for closer collaboration (Nýsir hf., 2002). Many practical processes were common to the two universities, and two options seemed feasible: either to formalise the existing cooperation between schools in specific areas or to merge the two schools under one central administration. The latter option was deemed to be more effective, not least for financial reasons.

National research policy and funding
Research policy in Iceland underwent a significant change during the period under study. The Research Council had been established in 1994 and managed the main research funding schemes on behalf of the government. Its influence on research policy in Iceland and with international partners was increasing steadily. A political decision was announced in 2001 that the council, made up mainly of scientists, was to be replaced by the Science and Technology Policy Council (STPC), chaired by the prime minister, which had its first meeting in April 2003. In all, there are 16-18 council members, including at least four cabinet ministers, and representatives appointed by the ministers, the universities and private industry. The council is split into a science and a technology committee, which meets without cabinet ministers, both separately and together. These two committees meet twice a year to present policy ideas to the full council, which includes the cabinet ministers.

The opportunity to serve on the councils gave the IUE more direct access to policy developments and a better understanding of some of the funding schemes, for example the targeted funding of projects involving the use of information and communication technology. The 2003–2006 policy (STPC, 2004) emphasised building up the infrastructure for research in Iceland and securing more funds for project grants, including doctoral studies.

The participation of educational researchers in policy-making also made such research more visible. Recently an engineering colleague from that period told the author: ‘I had no idea about educational research until we worked together on the council.’

Interaction of the institution and the environment
The IUE research policy 2000
The Research Centre (RC) continued its activities more or less unchanged for eighteen months until new regulations provided for one member from each merged organization. This board and the director of the RC prepared a policy and strategy document in 2000 to guide the work of the RC and strengthen and support research within the IUE (Rannsóknarstofnun KHÍ, 2000). The policy document included an evaluation of the status of research at the IUE, comparing research conditions in the Department of Social Sciences at the University of Iceland with the IUE.

The mission statement in the 2000 policy stated that its main function was to strengthen and carry out research and other knowledge creation in the IUE. The plan indicated that
the RC would increasingly support research governance by developing regulations, managing research grants, establishing a fund for research assistants, revising the rules for sabbatical leave and increasing the general visibility of research being conducted at the IUE and encouraging staff with support for the research process (funding, planning, implementation, dissemination). The 2000 policy mentioned that the time was right to ask the Research Council to carry out an evaluation of educational research, discussed below.

It was also suggested in the 2000 policy document that a professional association for educational researchers be established. The IUE took the initiative, and in February 2002 the Icelandic Association for Educational Research was formally established, with over 150 members.

Validation of educational research
There was a steady increase in research during the period, and much of it was related to the field of practice. One of the most popular events in the calendar during that period was the annual conference run by the RC in consultation with an advisory committee from 2000 with representatives from the Ministry and the teacher unions and attended by academics, teachers and other professionals. The presentations covered research as well as development projects, many of them cooperative and funded by the Ministry. The conference underscored the close links between the IUE staff and the field, particularly evident in the master’s projects and the school development projects. One problem however was the feeling that we were talking to ourselves and that the importance of research to the field was not understood at a national level.

With this in mind, an evaluation of educational research and development in Iceland was carried out from 2003–2005, with the approval and support of the then Research Council. The Ministry would fund one third and the Council another third. Ultimately the three universities (IUE, UI and the University of Akureyri) paid the final third. The agreement to carry out the evaluation was considered by IUE senior staff to be a step towards recognising the nature and value of educational research. The evaluation focused on four areas: academic research in universities; commissioned research often carried out in institutes, or by or on behalf of the Ministry; development projects in schools; and training and continuing education for adults. Some results from the IUE were compared with those from the UI and the University of Akureyri.

It was found that the emphasis on basic and applied research in the period 1998–2002 was more pronounced at the other two universities, coupled with a relatively low level of publications related to development or advisory work (Icelandic Centre for Research, 2005). About half of the IUE results from 1998–2002 were communicated orally and only a small percentage in peer-reviewed journals. One noteworthy result was that although university researchers claimed to be carrying out basic or applied research, they had not published much in peer-reviewed journals. The researchers felt that they had written for practitioners (61% of publications), the scientific community (58% of publications) and policy-makers (44% of publications). It should be noted that a publication could have more than one target group.

The STPC advertised for submissions for research programmes in 2004, and in August 2004 a group led by the IUE in cooperation with a major trade union (ASÍ), the Icelandic Educational Research Association, the Reykjavik Education Centre, the University of Akureyri, the University of Iceland and the National Testing Institute prepared a proposal for a programme on educational research (Icelandic Research Centre, 2005, p. 33-40). The programme was not funded and faced stiff competition, but it reached the final group of ten and the ideas presented were taken seriously in the STPC discussion.
The results of the evaluation provoked other discussions on the appropriacy and value of educational research, which fed into the ongoing evaluation on developments over the period until and including 2004. Those who had commissioned the evaluation expected to see what was being done, while the steering committee focused more on process and conditions for research. The draft report was discussed at a well-attended conference (over 150 people) in February 2005. In addition to two introductory talks, working groups discussed resources in university research, the interplay between policy and researcher initiative, policy and decision-making, the practical use of knowledge in school development and research and development in the employment sector (Icelandic Centre for Research, 2005, p. 29-30).

Research at the IUE was also given a boost in March 2004 when the Nordic Educational Research Association (NERA) held its 32nd Annual Conference in Iceland. Preparations had begun in 2002, and over 800 Nordic and other international researchers took part.

The IUE research policy 2004

The policy from 2000 was reviewed by the board of the Research Centre (RC) in 2003 and published in early 2004 (Visindaráð, 2004). The board analysed the internal and external environment for its effect on the status of educational research and published a mission statement similar to that of 2000 stating that the main role of the research domain (i. svíð) is to strengthen research and other ways of creating knowledge with the IUE.

In 2003 the senior administration had decided to strengthen the research infrastructure of the IUE by establishing a research ‘department’ with a defined function that was different from the function of the RC. The department would handle all matters related to staff research. The scheme developed to evaluate research productivity of staff was fundamental as it formed the basis for annual reports from staff, the results of which affected remuneration through the incentive scheme, and the right to be granted sabbatical leave. The RC was to fall under the research department and the research board would be the steering committee of the RC. This step indicates a move away from working with individual researchers and supporting particular projects to a more generic approach at organizational level.

Three urgent challenges were identified in the 2004 policy (Visindaráð, 2004), which was prepared by the board of the RC in 2003 and presented to the IUE staff for comment and discussion at an open meeting in January 2004 (Figure 5). They represented challenges that might not have been raised in 1998 and were not key issues in the 2000 policy. Two of the questions are perhaps not surprising, concerned as they were with functioning in a competitive environment and raising the value of educational research. The third question focused on the capability of researchers (not unexpected) but also on their well-being as some struggled to find their identity in the evolving culture.

In the 2004 policy, eight areas of activity were identified in order to address these challenges:

- Increase research cooperation
- Develop the research environment
- Enhance the research relationship between teachers and students
- Strengthen graduate programmes with regard to research
- Multiply connections with school authorities, schools and the employment sector
- Increase the research productivity of faculty
- Develop cross-disciplinary research
- Find new ways of financing research
Figure 5 – The IUE research challenges in 2004.

The eight activities comprising the three challenges reflect the developing ethos within the IUE, where research was becoming more visible in teaching, productivity was increasingly important for individual progress and team research was being encouraged. Particular attention was to be paid to the continuing relationship of scholars working with others in the field. Work with other disciplines was to be developed, but the spectre of not doing well in a research-competitive environment was real.

Summary and discussion

Earlier the three elements of Schein’s model of organizational culture were introduced: artefacts, espoused values and assumptions made by leaders. In Table 1 they are identified more closely for the case of the IUE during the period 1998–2004. Furthermore, they are analysed further according to the two processes of internal integration and external adaptation, and the culture that was evident by 2004.

The changes in the IUE were part of a pattern of a need for research to understand learning at a variety of levels and sites, including a closer look at learning in the workplace. The interests of IUE researchers were starting to reflect these pressures, and appointments to advertised positions in 2004 covered new areas of knowledge, including communication and interaction, adult learning, and the relationship of ICT and media studies. There was a greater need to know about and understand a wide variety of social constructs. Decentralization of educational administration, both at university and pre-university level, was creating a need for knowledge of educational matters.

To some extent, the institutional origins of staff still formed the dominant context in the IUE for mediation of ideas, but in a series of discussions with groups of staff organized by the rector using a SWOT analysis, the diversity of experience within the IUE was considered to be a strength of the context in which they worked and offered opportunities that
Table 1 – The organizational culture in the IUE in 2004: integration and adaptation

<table>
<thead>
<tr>
<th>Artifacts are the visible elements in a culture, such as work processes or organizational structures.</th>
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<tr>
<td>IUE adopts an assessment scheme and productivity bonuses similar to that of UI</td>
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<td>Optional reporting on individual scholarly activity becomes compulsory</td>
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<tr>
<td>Criteria for assessing scholarly activity in the arts and in sports are developed</td>
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<td>Publishing opportunities in Icelandic increase</td>
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<td>Support for new researchers</td>
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<td>Emphases and activities in research policy of 2004</td>
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<tr>
<th>Espoused values are the values normally espoused by the leading figures of a culture.</th>
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<tr>
<td>The IUE leadership promotes discovery/research through increased support to the Research Centre and to research-related activities</td>
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<tr>
<td>Some leading researchers in the IUE are starting to benefit from the new assessment scheme</td>
</tr>
<tr>
<td>The IUE wishes to keep its close connection with the field of practice</td>
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<tr>
<td>It is possible to develop criteria for scholarly work in the arts and sports</td>
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<th>Assumptions reflect the shared values within the specific culture.</th>
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<td>Research groups and project teams are being established, but the case is still made for individual research</td>
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<td>Scholarly activity is best when related to practice</td>
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had not been available a few years earlier. Individuals at the IUE did enjoy academic freedom in their choice of topics, and indeed whether they did research at all. Educational research itself was not necessarily a priority for the wider academy or government in Iceland, despite the hopes raised by the evaluation of educational research, which in the end brought with it no tangible follow-up from the environment.

There was at the time a need and a wish to develop stronger links with the professional areas served by the IUE, and to increase the student understanding of and an appreciation for the value of educational research. Changes in education and society led to increasing numbers of students wishing to enjoy a university education and to more institutions offering such an opportunity. These changes opened a debate on the role of research in universities in Iceland and the means to finance research. Concomitantly and unsurprisingly the new national policy for research relied on the adage that competition for research resources leads to quality of product. A competitive process was considered non-problematic. The scarcity (apparent or otherwise) of resources would provide the backdrop to developments in university funding. The emphasis on competitive funding ultimately restricts academic freedom as criteria of productivity and value favour some forms of research over others.

Artefacts such as the assessment scheme had effects on institutional and researcher behaviour, and for some in the IUE this was a cause for concern. Harman (2000) writing from Australia said, “For example, it is widely claimed … that academics are being encouraged to publish in academic journals rather than in practitioner publications, thus possibly lessening their impact on practice and professional work.” The value of research to the practice of education was vulnerable unless the IUE could develop ways of rewarding a wide spectrum of knowledge and discovery, integration and application in its scholarly activities (Boyer, 1990).

Not all social processes are democratic (Bateson, 1958/2006, Ratner, 2000). Internally, in the IUE, the senior administration was a ‘benevolent authority’ which provided space for taking initiative, but in some areas the ethos was clouded by the hues of reluctant compliance; rules and regulations coming from the environment seemed to be limiting access to funding and status in some areas, but for others, increased status came more easily. The assessment scheme was having a significant though sometimes ambiguous role on the way that researchers viewed their work and their need to be productive. The scheme encouraged collaboration and cooperative practices through co-authorship because of the way the artefact worked, but if funds were not forthcoming for proposed projects then such practices were limited.

**Conclusion**

Many educational researchers and teacher educators begin their careers as school teachers and encounter difficulties in making the transition from teacher to researcher, says Labaree (2003), who framed the preparation of researchers in terms of institutional settings and knowledge space. He suggested that the low status of teacher education institutions and the special nature of the knowledge which educational researchers are asked to produce play a part in making the transition from practice to research difficult.

The research ethos developing in the IUE during the period 1998-2004 increasingly reflected all types of scholarly activity introduced by Boyer (1990) with stronger performance in the research and hybrid groups. There were those who had an interest in discovery, in research for its own sake, and found value in the contribution they could make to knowledge in their areas of specialization; those who placed high value on integration and application and who achieved this by working within schools, in the workplace and
other social settings but who still felt constrained by the need to document their work; and those who prioritized their teaching, showing little interest in research activity. There was some movement between the groups as the research ethos developed, with pressures of accountability and the chance of an increased income.

The merger of 1998 opened practical opportunities for all of those working at the new IUE. Ideas were being exchanged, new challenges met and shared understandings were becoming the basis of new work. Despite the frustration reflected in the one of the three challenges in the 2004 policy, there was also increased self-confidence and optimism among some of the staff, and a belief that not only did they have the means of making a contribution to society but also that they had a moral obligation to do so. The ethos did not exist for its own sake; it was starting to connect researchers to their environment of choice: educational settings, which seemed to become more, rather than less valuable in competitive settings. This is shown for example in the lead taken by the IUE in submitting a proposal for targeted funding to the STPC.

By 2004, teacher education in Iceland was on the road to becoming research-based. The IUE developed a new policy for teacher education, approved in December 2004 (Bjarnadóttir, 2012) in which it recognised the Bologna agreement and began the process of preparing a five-year course of study, advocating strong connections to research. The deans of undergraduate and graduate studies led the process of policy implementation, and they and the rector took part in an important conference in Finland in 2004, where the value of research and scholarly work in teacher education was emphasised. IUE policy stated that students were to become competent consumers of research and should take part in research activities in the field and in the development of schools (Stefna KHÍ, 2005). Not only across the rest of Europe (Niemi, 2008) but also in Iceland, research-based teacher education was becoming the policy norm.

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An emerging research ethos 1998–2004: A case study from a merger in teacher education in Iceland


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Key words
merger – organizational culture – research ethos – research – scholarly activity – teacher education

Um hófund

Efnisorð
samruni stofnana – stofnanamenning – rannsóknarmenning – rannsóknir – fræðistörf – kennaramenntun
