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Reclaiming scholarship as an integrating dimension of academic work for the impact of research on teaching and learning in higher education

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Reclaiming scholarship as an integrating dimension of academic work for the impact of research on teaching and learning in Higher Education

Brian Hudson
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ABSTRACT

This paper offers reflections on Ernest Boyer's conceptions of scholarship which were first outlined twenty years earlier. It considers the ways in which such conceptions have become meaninglessness as part of a wider process of reductionism and how this relates to policy discussions on curriculum, competence and teaching. It argues for the central place of research in, and the central place of, Higher Education in the professional education of teachers. It proposes that in order to develop cultures of inquiry in Higher Education we need to do so in ways that integrate research, teaching and learning. The integration process is seen to be achieved through an understanding of the nature of wholes and through a process of seeing, and therefore thinking and acting, holistically. It is argued that this is part of a wider struggle over values which the academic community needs to advance by reclaiming the meaning of scholarship.

INTRODUCTION

Scholarship Reconsidered

My point of departure is based upon an holistic view of the nature of scholarship, and an inclusive perspective on the nature of academic work. This is one which recognises that knowledge is acquired through research, through synthesis, through practice and through teaching. Following Boyer (1990), academic work is conceived of as having four separate yet overlapping functions which comprise firstly the scholarship of discovery, more usefully conceived of in the social sciences as the scholarship of inquiry, secondly the scholarship of integration, thirdly the scholarship of application and finally the scholarship of teaching, which is more usefully expanded to the scholarship of teaching and learning. In relation to the first, it is recognised that scholarly inquiry is at the very heart of academic life and that the pursuit of knowledge must be assiduously cultivated and defended. With regard to the second, it is recognised that we need, through our academic work as educators, to help others make meaning from isolated facts by putting them in perspective and by making connections across the disciplines. This involves serious and disciplined work that seeks to interpret, draw together, and bring new insight to bear on original research. Thirdly the scholarship of application is seen as a two way process since new intellectual understanding can arise out of the very act of application – whether serving clients through social work, shaping public policy

or working with schools and local communities. In activities such as these, theory and practice vitally interact, and one is seen to continually renew the other. Finally in relation to scholarship in teaching and learning, it is recognised that teaching can be a dynamic endeavour involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning. Good teachers create a common ground of intellectual commitment, stimulate active learning and encourage students to be critical, creative thinkers, with the capacity to go on learning after their university studies are over. Such scholarship in teaching and learning can be characterised by having a deep knowledge base of the discipline, an inquiry orientation, a critically reflective approach to practice, openness to internal and external peer review and a commitment to internal and external dissemination for impact. However whilst this vision is based on Boyer's (1990) original seminal work, entitled "Scholarship Reconsidered", we might consider the question of what is the reality in Higher Education practice at the beginning of the 21st century.

A case of scholarship misunderstood?

Writing on the context of Higher Education in Australia ten years later, Andresen (2000) warned that if the notions of scholarship, scholar and scholarly are to avoid emptiness and become usable descriptors of teaching, as Boyer had hoped, the concepts behind these terms need clarifying and tightening-up, particularly in the context of a university system re-inventing itself and unsure about its future direction. He highlighted the way in which popular buzzwords tend, eventually, to meet an entropic or disorderly fate. They spiral downwards into meaningless and they finally deserve the philosophers' ultimate put-down of empty concepts. He warned that the concept of scholarship showed signs at that time of being in that parlous state.

In seeking to revive the concept he described three "quintessential scholarly attributes" as being central to scholarship. Firstly there is critical reflectivity that is seen as a *habit of mind* and which captures a complex set of values such as integrity, open-mindedness, breadth combined with depth, scepticism, fairness, generosity and intellectual humility. At another level these values are open to public scrutiny and challenge which invokes the idea of a college of scholarly practitioners engaged in a public conversation and scrutiny by peers as a *modus operandi*. Thirdly there is a spirit of curiosity which involves the desire to know, the passion to understand, the urge to discover with inquiry as a *motivation or drive*. In short, he calls for an ethic of inquiry.

A case of scholarship lost in translation?

The main reason for considering the question of how well the concept of scholarship travels across cultural and linguistic boundaries is based on my own experience of working in Sweden from 2005 to 2009. During this period I worked at Umeå University, initially in the Faculty of Teacher Education and subsequently in the reformed School of Education. My association with Umeå began much earlier through my involvement in the Thematic Network for Teacher Education in Europe (TNTEE) which was co-ordinated by the Faculty Board for Teacher Education and

Research at Umeå University. Whilst working in Sweden I engaged with colleagues at Umeå University in discussions around the concept of scholarship. In reflecting upon this experience, I was acutely struck by the difficulties that several of my Swedish colleagues had in making sense of this concept. It seemed that there was no corresponding word in the Swedish language and that the concept itself did not exist within the Swedish context. This experience evoked memories of the American film, directed by Sofia Coppola and starring Bill Murray and Scarlett Johansson, entitled "Lost in Translation".

The reasons for this were intriguing and subsequent experience and reflection led to a realisation of a possible reason for this. In particular it became clear to me that Boyer's notions of scholarship are essentially about values associated with and attitudes towards academic work. As such these are deeply embedded in particular social contexts and cultural practices and are more often than not simply taken for granted. This is an issue to which I return later in this paper.

A case of scholarship reduced?

I returned to the UK to work in the School of Education, Social Work and Community Education at the University of Dundee in October 2009 and took on the role as Associate Dean for Research in April 2010. Also I continue to supervise the studies of three doctoral students based at Umeå University as a visiting professor. My departure from the UK to work in Sweden preceded the advent of the Higher Education Role Evaluation (HERA) process and on my return to academic life in the UK this process had been implemented and a new set of Academic Role Profiles were in use in my new setting. I was particularly struck by the division of academic staff into categories of "Research and Teaching" and "Teaching and Scholarship" which was something I had never experienced before in over twenty five years of working in Higher Education.

I was also very intrigued to find out more about the rationale for such a way of viewing academic work and so visited the web site of the Educational Competencies Consortium Ltd. (ECC, 2011) web site which seemed to be the driving force behind this initiative. I studied various role profiles but could not find any articulation of the terms scholar, scholarship and scholarly. This created real concerns for me and seemed to imply an assumption of scholarship simply reduced to a form of undefined academic activity. If compared to research as a form of academic activity, what we have with research is clearly defined and there is a major infrastructure of potential resources and clear incentives for those who wish to pursue this as their major activity. The problem, as I see it, is that a division is created between research as privileged activity for an elite and scholarship as a watered down version involving simply reflecting on practice, developing one's own teaching and learning skills and engaging in the mere "auditing" of courses for the majority who undertake academic work in Higher Education.

It seems clear to me that if we accept this reductionist interpretation of scholarship then our voices as an academic community are silenced and I would argue that the struggle over values is lost. Hence the title of my Opening Lecture to the SERA 2010 Conference, and of this paper, which is based on a belief that as educationalists we need to reclaim the concept.

ON THE WIDER IMPACT OF A CULTURE OF FRAGMENTATION, DIVISION AND REDUCTIONISM

On the contested nature of curriculum

The contested nature of scholarship in Higher Education at this time is resonant with the contested interpretations of the nature and meaning of curriculum and reminds me of the warnings given by the late Lawrence Stenhouse in 1985 when discussing this aspect:

> What is curriculum as we now understand the word? … It is not a syllabus – a mere list of content to be covered – nor even is it what German speakers would call a Lehrplan … Nor is it in our understanding of a list of objectives. Let me claim that it is a symbolic or meaningful object, like Shakespeare's first folio, not like a lawnmower; like the pieces and board of chess, not like an apple tree. It has a physical existence but also a meaning incarnate in words or pictures or sound or games or whatever … by virtue of their meaningfulness curricula are not simply means to improve teaching but are expressions of ideas to improve teachers. Of course, they have day-to-day instructional utility: cathedrals must keep the rain out…
>
> Lawrence Stenhouse cited in Rudduck and Hopkins (1985, pp 67-8)

It also reminds me of the challenges faced in comparing different traditions as I have done in relation to the Anglo-American Curriculum tradition and the continental European tradition of Didactics (Hudson, 2007). In seeking to address the differences between different traditions in relation to teaching and learning, it is first of all necessary to acknowledge that terms are strongly culture-bound. The tradition of Didactics is based on planned support for learning to acquire Bildung. This is also a very elusive concept to capture in English and has variously been translated as 'formation', 'education' and 'erudition'. The latter derives from the Latin eruditio as used by Comenius. Formation is also suggested by others in coming close to capturing the meaning of the verb bilden (to form or to shape) and has close associations with the notion of religious or spiritual formation when applied to the preparation of a member of the religious clergy. In its turn, Bildung can be seen to be a state of being that can be characterised by a cluster of attributes described by terms such as 'educated', 'knowledgeable', 'learned', 'literary', 'philosophical', 'scholarly', and 'wise'. Others argues that within the Anglo-American tradition the social and cultural world is seen as an 'objective' structure and the task of curriculum is to present this structure to students, on the assumption that culture and society can be reduced simply to facts and skills to be learned.

The Scottish Credit and Qualifications Framework (SCQF)

Accordingly I was interested to find out what the Scottish Credit and Qualifications Framework (SCQF) has to say on the matter and so consulted the SCQF Handbook (SCQF, 2007). My interest in the paper is primarily with Higher Education, and the place of Teacher Education within it, so I will not discuss the Scottish Curriculum for Excellence extensively. However, I think that Curriculum for Excellence aspires towards a more subjectified approach, which is one of the major challenges being faced by the system at this time. In relation to the SCQF, this was developed to

meet the needs of Scotland's learners and was created by bringing together all Scottish mainstream qualifications into a single unified framework. The SCQF Handbook states that "learning outcomes are expressed in terms of a statement of competencies, including knowledge, skills and values, capable of being demonstrated at the end of a process of learning" (SCQF, 2007, p19). In conducting a word search of this document, I was able to find the words "knowledge" and "skills" mentioned 125 times each but could find no mention at all of the word "values". On closer examination however, I did find 20 references to "credit value".

It was very surprising to me when I realised the full implications of this i.e. that the national credit and qualifications framework for Scotland places no value on the fostering of values and attitudes. Furthermore this situation seems strangely at odds with the purposes and aims of Curriculum for Excellence which explicitly states that the curriculum is underpinned by the four values inscribed on the mace of the Scottish Parliament - wisdom, justice, compassion and integrity (The Curriculum Review Group, 2004, p11). Furthermore it is stated that these words have helped define values for democracy in Scotland and that:

> It is one of the prime purposes of education to make our young people aware of the values on which Scottish society is based and so help them to establish their own stances on matters of social justice and personal and collective responsibility. Young people therefore need to learn about and develop these values. The curriculum is an important means through which this personal development should be encouraged.
>
> (The Curriculum Review Group, 2004, p11)

Once more I was reminded of the contested conceptions of the everyday terms and in particular of the term competence. This situation suggests conceptions arising from behaviourist and positivist thinking that so often results in narrow and reductionist approaches such as we see in the SCQF framework. This is in sharp contrast to a broader and more liberal concept which sees the achievement of competence as accompanied in its appropriation and in its exercise by the attitudes, beliefs, and personal culture of the person who acquires and exercises the competency in question. (Coolahan, 2011). This broader and more liberal concept seems especially relevant in the context of the professional education of practitioners such as teachers.

On the place of Higher Education in the professional education of teachers

Such narrow conceptions seem to underly the simplistic thinking of policy makers elsewhere in the United Kingdom at the time of writing this paper. Is teaching merely a craft which is best learned as an apprentice according to the Education Secretary to the Westminster Parliament Michael Gove, as quoted in TES Connect (2010)? This raises questions about the place of Higher Education in the professional education of teachers and suggests a view of teaching which is simplistically and misguidedly reduced to that of a being a technician.

A further question raised is that of whose interests are being served. The reforms of teacher education being implemented by the Westminster Education Secretary at

this time can be seen as part of a wider set of related developments in relation to the governance, reform and privatisation of the education system and the wider public sector, as illuminated by Ball (2010). In this process public sector higher education institutions, whilst themselves being internally 'enterprised' and 'hybridised' in a new education policy knowledge market, are nevertheless being displaced by private sector and philanthropic organisations, as most powerfully illustrated by Becky Francis in her address to the SERA Conference in 2010 (Francis, 2010). Her address highlighted the way in which academic work in education is being notably marginalised in policy making, usurped by think tanks, voluntary organisations, charities and individuals who have the ear of civil servants and ministers. Even more worrying was her argument that many education academics seem unaware or unconcerned at this trend, while around us the education agenda is being driven by powerful forces, more often than not from the private sector.

So whose interests are being served by current reforms? Although O2, as one of the private vested interests behind the charity Teach First, is making content freely available, what quality assurance system is in place for monitoring and evaluating the associated content and who pays for the download or access time? In the particular exemplar of a mathematics lesson provided by O2, it is difficult to see how this could be judged to be exemplary of good practice. Apart from questions of quality, it is also reflective of a simplistic view of lesson planning that is merely concerned with the 'how' of the situation, i.e. methods.

Figure 1: Exemplar lesson by O2 available via link from the Teach First web site

A case of "Back to the Future" for Westminster Education Policy making?

Whilst the current Westminster Government policy is presented as a radical reform, the ideas on which it is based are nothing new. Continuing on the theme of film titles, the statements made by the Westminster Education Secretary are reminiscent of the 1985 American science-fiction film "Back to the Future", produced Steven Spielberg and starring Michael J. Fox. In the original film, the teenager Marty McFly is the main character played by Michael J. Fox and it tells the story of how he is accidentally sent back in time from 1985 to 1955. It would seem that Michael Gove, in a current version of the film, would not be out of place if he had

been transported back in time to 1878 in the Midwest of the United States. This is based on a comparison of his recent pronouncements with those of Henry Clay Speer who at that time was Chief Superintendant of Schools Wisconsin Frontier and who asserted that teachers are:

> master workmen … not architects … There is no genius wanted. Good intelligent, discreet teachers are needed.
>
> (Speer cited in Kliebard, 1999, p 18).

If we look back to the history of this time, we see that this was a context in which a male dominated curriculum administration presided over a largely feminised, technicised and poorly paid work force. Further we can contrast such a perspective with that offered by Lee S. Shulman who argued that:

> The teacher is not only 'master' (my underlining) of procedure but also of content and rationale, and capable of explaining why something has to be done. The teacher is capable of reflection leading to self knowledge, the metacognitive awareness that distinguishes 'draftsman' (my underlining) from architect, bookkeeper from auditor
>
> (Shulman, 1986, p 13)

Speer's words were a signal of what was to become a defining feature of the American curriculum tradition in the twentieth century i.e. "the virtual isolation of the design of the formal curriculum from its execution in the classroom" (Kliebard, 1999, p 18). This transfer of the responsibility for curriculum design carried with it significant implications in relation to the status of the largely female teaching force compared with the predominantly male administrators.

ON THE STRUGGLE FOR VALUES AND FOR THE PLACE OF RESEARCH

I would argue for the central place of research in academic work as the scholarship of inquiry in relation to both natural and social sciences. I refer again to Lawrence Stenhouse and the place of research in Higher Education and in particular its place in Education. He defined research as 'systematic and sustained enquiry, planned and self-critical, which is subjected to public criticism…contributing to the educational enterprise' (Cited in Rudduck and Hopkins, 1985, p 18).

In reflecting on the crucial role of the university in teacher education, Stenhouse (in Rudduck and Hopkins, 1985) argues that the knowledge taught in universities is won through research and that such knowledge cannot be taught correctly except through some form of research-based teaching. 'Knowledge' that is represented as authoritative, and established independently of scholarly warrant, he argues "cannot be knowledge. It is faith" (ibid, p 116). He argues further that what is unquestionable is unverifiable and unfalsifiable. In contrast our knowledge is questionable, verifiable and differentially secure. He highlights the point that unless our students understand that, what they take from their experience is in error: the error that research yields established authoritative knowledge that cannot be questioned. Speaking at his inaugural lecture in 1979, his words seem prophetic:

> That this error is widespread must be apparent to anyone who has listened to the questions asked of academics by laymen on television. And if we educate teachers who will transmit this error to their pupils, the error will continue to be widespread. We shall support by our teaching the idea that faith in authority is an acceptable substitute for grasp of the grounds of knowledge, even perhaps a substitute for faith in God … Once the Lord spoke to man: now scientists tell us that.
>
> Lawrence Stenhouse cited in Rudduck and Hopkins (1985, p 116)

From this perspective research is seen as a strategy that is applicable to the professional disciplines. So it follows that just as research in history, literature or chemistry can provide stepping stones for teaching about those subjects, so educational research can provide stepping stones for teaching and learning about teaching. Such an approach, in contrast to the constituent disciplines approach, treats education itself – teaching, learning, running schools and educational systems – as the subject of research. Problems are selected because of their importance as educational problems – for their significance in the context of professional practice. Research and development guided by such problems will contribute to the understanding of educational action.

What is the essential role of Higher Education in Teacher Education?

In her Key Note address to Lisbon EU Presidency meeting 2007, Hannele Niemi (Niemi, 2007) made reference to the paper that she had been instrumental in writing on "Improving the Quality of Teacher Education" (CEC, 2007). In particular she proposed that in order to fulfil the higher education mission in the European Higher Education Area, a necessary prerequisite is that teacher education rests on research-based foundations with the following basic conditions:

- Teachers need a profound knowledge of the most recent advances of research in the subjects they teach. In addition, they need to be familiar with the latest research on how something can be taught and learnt. Interdisciplinary research on subject content knowledge and pedagogical content knowledge provides the foundation for developing teaching methods that can be adapted to suit different learners.
- Teacher education in itself should also be an object of study and research. This research should provide knowledge about the effectiveness and quality of teacher education implemented by various means and in different cultural contexts.
- The aim is that teachers internalise a research-orientated attitude towards their work. This means that teachers learn to take an analytical and open-minded approach to their work, that they draw conclusions based on their observations and experiences, and that they develop their teaching and learning environments in a systematic way.

Of particular relevance to this paper is the aim that teachers internalise a research-orientated attitude towards their work. The idea of a "research-oriented attitude" is concerned with values and comes close to the conception of a scholarship of inquiry as advanced by Ernest Boyer. It is also resonant with the national goals of Higher Education of our close European partner Sweden. The national goals in the

Examensordningen in Sweden are structured around the three broad areas of

- Kunskap och förståelse,
- Färdighet och förmåga and
- Värderingsförmåga och förhållningssätt

The first two terms correspond to “Knowledge and understanding” and “Skill and ability” in turn, whilst the third goal is composed of terms that are very difficult to translate. The concept of värderingsförmåga can be translated as “values ability”, indicating a student’s ability to value and evaluate aspects of their learning and experience, including self-evaluation. With regard to the concept of förhållningssätt, this concerns values and attitudes, including the ability to relate to others and to knowledge itself through the development of a “praxis of consideration”. The notion of a praxis of consideration resonates with Ernest Boyer’s idea of “Scholarship Reconsidered”, with the aims of Bildung and also with Hannele Niemi’s description of the aim in Finnish teacher education that teachers can internalise a research-orientated attitude towards their work. It also resonates with my own professional experience over many years of working with undergraduate and post graduate students in the field of education. In my view, fostering the development of such attitudes and the internalisation of such “values abilities” lies at the very heart of professional education and of what it means to be a professional. The lack of a dimension which addresses values in the Scottish Credit and Qualifications Framework (SCQF) stands in sharp relief within this bigger picture.

What is Higher Education required to offer in the context of Scotland?

If we consider the General Teaching Council for Scotland Standard for Full Registration as a Teacher (GTCS, 2006), the role of Higher Education is made quite clear. In particular the key educational principles include statements which represent core professional interests and other requirements. Since these professional requirements and interests depend on an understanding of key educational principles, programmes of Initial Teacher Education are expected to:

- draw on a wide range of intellectual resources, theoretical perspectives and academic disciplines to illuminate understanding of education and the contexts within which it takes place;
- provide student teachers with a broad and balanced knowledge and understanding of the principal features of education in a wide range of contexts;
- encourage student teachers to engage in discussion with pupils;
- encourage student teachers to engage with fundamental questions concerning the aims and values of education and its relationship to society;
- provide opportunities for student teachers to engage with and draw on educational theory, research, policy and practice;
- encourage professional reflection on educational processes in a wide variety of contexts;
- develop in student teachers the ability to construct and sustain a reasoned

argument about educational issues in a clear, lucid and coherent manner; and

- promote a range of qualities in student teachers, including intellectual independence and critical engagement with evidence

Further if we consider the three main aspects of professional development these are listed as:

- Professional knowledge and understanding;
- Professional skills and abilities;
- Professional values and personal commitment.

There is a very close correspondence with the goals of the Swedish Higher Education Ordinance through the emphasis placed on professional values and personal commitment which is of particular relevance to the argument in this paper. Further the significance of placing these aspects within a triad is intended to emphasise that they are not simply lists of competencies or outcomes. Rather they are inherently linked to each other in the development of the teacher, and one aspect does not exist independently of the other two. It is this inter-relationship among all three which develops the professionalism of the teacher and leads to appropriate professional action. The inter-relationship is illustrated in the model below (Figure 2). What seems quite remarkable is the lack of correspondence with the narrowly conceived Scottish Credit and Qualifications Framework (SCQF).

Figure 2 The inter-relationship among the three aspects which develops the professionalism of the teacher (GTCS, 2006)

The programmes which are developed will be the result of the interaction among these aspects and each programme is expected to offer a distinctive balance and emphasis but will develop all three. Statements are available for each of the aspects and programmes are epxpected to give attention to each of these and to their interaction. The statements incorporate the expected features of student teacher performance in Initial Teacher Education as well as the requirements of academic study.

TEACHING AS A DESIGN PROFESSION

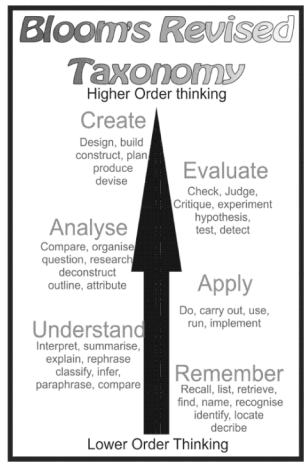
On the role of design

In this final section of this paper I offer some ideas on teaching as a design profession, the central place for scholarship in teaching and learning in academic work and for inquiry-based learning in Teacher Education in ways which offer the potential to integrate research for impact on both teaching and student learning. This is part of what I see as the development of culture of inquiry and is based upon my own experience of over 35 years as a teacher, initially in schools, and latterly as an important part of my academic work in Higher Education. I see design as a creative process that is a central aspect of teaching and the design process in this context as being very close to the scholarship of application (Hudson, 2008). The importance of design in education has been highlighted by Clark and Yinger (1987) who propose the idea of teaching as "design profession". This is echoed in the concept of teacher education as a related inter-disciplinary and applied "design science" by Herb Simon (1970, p 55-58) who highlighted both the importance of this way of thinking and also the resistance to accepting design sciences in the academic world. He highlights the way in which the historical and traditional task of the scientific disciplines was to teach about natural things whereas the task of engineering schools, for example, was to teach about artificial things and in particular how to design and build artefacts with particular desired properties. He argues that this conception of design is at the core of all professional education, giving the examples of architecture, medicine, business, law and education in addition to engineering. Moreover he argues that it is this aspect of design which is the principal distinguishing characteristic between the professions and the sciences. He also highlights the way in which the dominance of the natural science paradigm has influenced the curricula of the professional schools arguing that "in view of the key role of design in professional activity, it is ironic that in this century the natural sciences have almost driven the sciences of the artificial from the professional school curricula" (ibid, pp 55-58). This may have some resonance for anyone currently involved in the preparations for Research Excellence Framework (REF 2014) across the UK. He also argued that the older kind of professional school did not know how to educate for professional design at an intellectual level appropriate to a university and for the consequent need for "a science of design, a body of intellectually tough, analytic, partly formalisable, partly empirical doctrine about the design process" (ibid, pp 55-58). This is an aspect that has been the focus of my own research and in particular I have proposed the notion of "Didactical Design for Technology Enhanced Learning" based on the didactical design cycle in my own recent work (Hudson, 2011).

On higher order thinking as central to teachers' professional work

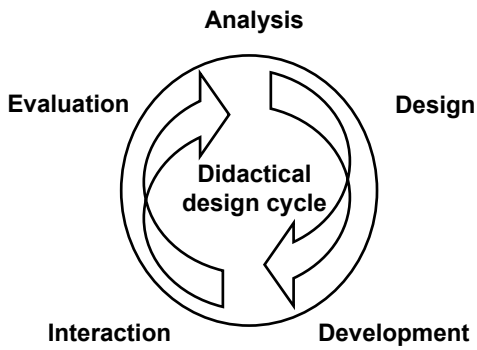
This interest links closely with ideas of higher order thinking (Figure 3) based on Bloom's Revised "Digital" Taxonomy (Churches, 2011) and on what "higher" education actually means in practice. This is applied to the creation of open and flexible blended learning environments and support for the development of online learning communities, as opposed to the common application of managed learning environments simply containers of content on the web.

Figure 3 Bloom's revised "Digital" Taxonomy showing the flow and process of learning



The didactical design cycle starts from an emphasis on the What and Why questions which address questions of the significance and meaning for individual learners from the outset of the process of preparation for teaching, in contrast to the traditional objectified and instrumental approach of the instructional designers. This starts from an emphasis on didactical analysis through to a process of creative design which I believe is at the heart of the professional work of teachers. Accordingly, we can consider the process of Didactical Design in the form of a cyclical process of analysis, (creative) design, development, interaction and evaluation leading through to a subsequent process of re-design, as illustrated below in Figure 4.

Figure 4 The didactical design cycle



On the central role of scholarship in teaching and learning in Higher Education

One way in which research may impact on teaching and learning is through the development of the scholarship of inquiry in teaching and learning. This is an aspect that I consider with reference to the work of Healey (2005) in relation

to curriculum design at what he describes as the research-teaching nexus. From this analysis it is proposed that teaching can be primarily research-led, research-tutored, research-orientated or research-based. This work highlights a major difference between research-led and research-based teaching, in that the former is content-oriented and teacher-centred whereas the latter is process-oriented and learner-centred. Under such a process-oriented approach students are seen to become the 'generators' of knowledge and not simply consumers of research findings. This model has significant implications for our approaches to teaching and for the development of cultures of scholarship and inquiry more broadly and more deeply. Furthermore if we switch the lens to those who are doing the teaching then research-based teaching is characterized by inquiry into the process of teaching itself i.e. Boyer's scholarship of inquiry applied to the professional practice of teaching.

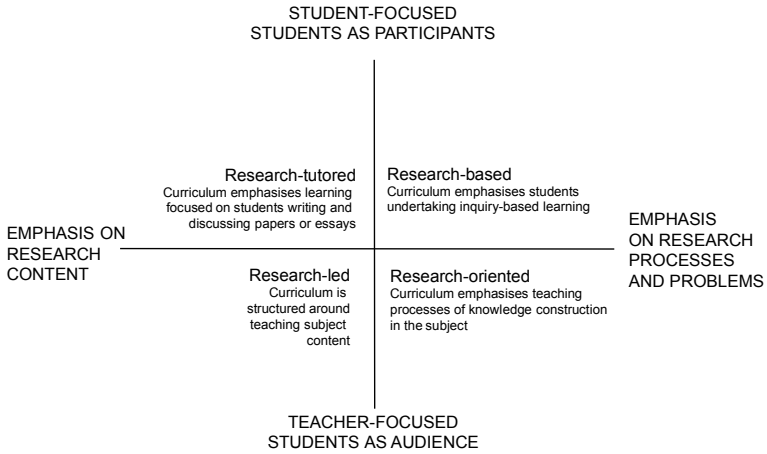


Figure 5 Curriculum design and research-teaching nexus (Healey, 2005)

SEEING HOLISTICALLY AS A BASIS FOR DEVELOPING CULTURES OF INQUIRY

A key line of argument through this paper relates to the idea of promoting cultures of inquiry, which focus on improvement and achieving high quality, in teaching and teacher education through Higher Education in ways that integrate research, teaching and learning. I believe that we can better achieve this integration process through an understanding the nature of wholes, and of how parts and wholes are inter-related. Our routine way of thinking misleads us into thinking of wholes as made up of many parts, in the same way as a car is made up of an engine, four wheels, a steering wheel and a fuel tank etc. From within this dominant mode of thinking, the whole is assembled from the parts and if one part is broken, it must be repaired or replaced. This is a very logical way to think about machines but is not an appropriate or useful way to think about living systems. Unlike machines, living systems create themselves and are not mere assemblages of their parts but are continually growing along with their elements. The whole exists through continually manifesting in the parts, and the parts exist as embodiments of the whole. Biologists describe self-organising systems at all levels of complexity and the wholeness that exists at all these levels which depends on the characteristic

organising field of that system. Senge et al. (2004) highlight the way in which "the part is a place for presencing the whole" and go further to argue that:

> This is the awareness that is stolen from us when we accept the machine world view of wholes assembled from replaceable parts.
>
> Senge et al. (2004, p5)

In my view, what is at the heart of the struggle for the meaning of scholarship is a struggle over values. It is also a struggle for seeing holistically rather than accepting the machine worldview which arises from mechanistic and blinkered thinking and which results in reductionism, blind spots and narrow forms of instrumentalism. The reductionist view sees competence in simplistic terms as narrowly defined behaviours in which there is no place for the consideration of values and attitudes. The curriculum is instrumentally conceived of as a manual that is objectively reduced simply to knowledge and skills to be learned. As part of this world view, the teacher is seen simply as a technician, the beginning teacher is only an apprentice and teaching as a mere craft. In turn, scholarship is approached as an undefined activity that is different to and separate from research. In contrast the holistic view is based on a view of competence that is conceived of as complex and as accompanied in its appropriation and in its exercise by the attitudes, beliefs, and personal culture of the person who acquires and exercises the competency in question. The curriculum is conceived of as the planned support for learning to become educated in the widest sense of the word. Consequently the teacher is conceived of as a creative designer, teacher education as a design science based on higher education and teaching as a design profession. In turn, scholarship is conceived of as related to values, as an attitude of mind and as a praxis of inquiry. These perspectives can be summarised as diametrically opposed views of the world around us (Figure 6).

Figure 6 The machine worldview versus seeing the world holistically

Reductionist view	Holistic view
Competence is simplistically conceived as narrowly defined behaviours in which there is no place for the consideration of values and attitudes	Competence is conceived of as complex and as accompanied in its appropriation and in its exercise by the attitudes, beliefs, and personal culture of the person who acquires and exercises the competency in question
Curriculum is instrumentally conceived of as a manual that is objectively reduced simply to knowledge and skills to be learned	Curriculum is conceived of as the planned support for learning to become educated in the widest sense of the word
The teacher is simply a technician, the beginning teacher is only an apprentice and teaching a mere craft	The teacher is a creative designer, teacher education is a design science based on higher education and teaching is a design profession
Scholarship is approached as an undefined activity that is different to and separate from research	Scholarship is conceived of as related to values, as an attitude of mind and as a praxis of inquiry

CONCLUSION

In this paper, I began by reflecting on Ernest Boyer's conceptions of scholarship which were first outlined in his seminal report twenty years ago. On this question, I considered the ways in which notions of scholarship, scholar and scholarly had spiralled downwards into meaninglessness and had become nothing more than empty concepts. This is part of what I see as a wider process of fragmentation, division and reductionism that has become dangerous for academic work and especially so for the future of educational research in Higher Education at this time. Further I have discussed how I see this process of fragmentation, division and reductionism also applies to discussions about curriculum, competence, what it means to teach and also what it means to be a teacher.

I have argued for what I see to be the central place of research in academic work in Higher Education and in turn the central place of Higher Education in the professional education of teachers which I see as part of a wider struggle over values. In particular I have considered this in relation to the European Higher Education Area and to Finland, Sweden and Scotland especially. In particular it is noteworthy that the national credit and qualifications framework (SCQF) for Scotland places no value on the fostering of values and attitudes. This seems to place it out of step with Curriculum for Excellence and highlights the fact that the goals of the Swedish Higher Education system align themselves more closely with the Standard for Full Registration of the General Teaching Council Scotland than those of the SCQF.

In order to combat the instrumentalism that arises from such reductionist views, I have offered some ideas on teaching as a design profession and have identified the role of higher order thinking as being central to teachers' professional work. Further I have argued for the central place for scholarship in teaching and learning in the academic work of Higher Education and for inquiry-based learning in Teacher Education in ways which offer the potential to integrate research for impact on both teaching and student learning.

Finally I have argued that in order to develop cultures of inquiry in Higher Education we need to do so in ways that integrate research, teaching and learning and that we can better achieve this integration process through an understanding of the nature of wholes, and of how parts and wholes are inter-related through a process of seeing, and therefore thinking and acting, holistically. Accordingly I see the struggle for values as being dependent on establishing the case for such an holistic view as being a central necessity to the education process at all levels. I have proposed that if we accept the reductionist interpretation of scholarship then our voices as an academic community are silenced and the struggle over values is lost. Hence I hope that this provides the rationale for the title of my lecture and convinces you of the need to reclaim the concept of scholarship in Higher Education.

Finally I will leave you with some questions to reflect on in relation to the debate about the nature of teaching i.e. whether teaching is to be considered merely a craft or rather as an inquiry-oriented profession. These come from Michael Uljens, who writes:

In teaching there always is:

- *somebody that (who?)*
- *sometimes (when?), and*
- *somewhere (where?), and*
- *for some reason (why?)*
- *in some way (how?) facilitates*
- *somebody else's (whose?)*
- *efforts (by means of what?) to reach*
- *some kinds of competence (what kind?)*
- *in some fields of knowledge (what?)*
- *for certain purposes (what/why?)*
- *that have been agreed upon (by whom?)*

so that an individual could better realise his/her interests.
M. Uljens (1997)

How could teaching be considered seriously to be other than an inquiry-oriented profession?

REFERENCES

Andresen, L. W. (2000) A Useable, Trans-disciplinary Conception of Scholarship, *Higher Education Research & Development*, Vol. 19, No. 2, 137-153.

Ball, S. (2010) New Voices, New Knowledges and the New Politics of Education Research: the gathering of a perfect storm? *European Educational Research Journal*, Vol. 9, No. 2., 124-137.

Boyer, E. L. (1990) *Scholarship Reconsidered*. Princeton University NJ: Carnegie Foundation for the Advancement of Teaching.

Clark, Ch. M. and Yinger, R. J. (1987) Teacher Planning. In Calderhead, J. (ed.) *Exploring Teachers' Thinking*, London: The Falmer Press.

CEC, (2007), *Improving the Quality of Teacher Education*, Communication from the commission to the Council and the European parliament 3.8.2007, Commission of the European Communities, Brussels, [WWW document] URL http://ec.europa.eu/education/com392_en.pdf (Visited on 22 February 2011)

Coolahan, J. (2011) Quality Assurance in Teacher Education in Ireland within an International Context. In J. Harford, B. Hudson and H. Niemi (Eds.) *Quality Assurance and Teacher Education: International Challenges and Expectations*, Peter Lang (Oxford) (Work in Progress)

ECC (2011) *Educational Competencies Consortium Ltd.*, [WWW document] URL http://www.ecc.ac.uk/homepage.php (Visited on 22 February 2011)

Churches, A. (2011) Educational Origami [WWW document] URL http://edorigami.wikispaces.com/Bloom%27s+and+ICT+tools (Visited on 22 February 2011)

Francis, B. (2010) Increasing Impact, *Key Note Lecture to Scottish Educational Research Association Conference*, Stirling, 25th November, 2010.

GTCS (2006) *The Standard for Full Registration*, GTC Scotland, Edinburgh [WWW document] URL http://www.gtcs.org.uk/web/FILES/the-standards/standard-for-full-registration.pdf (Accessed on 22 February 2011)

Healey, M. (2005) Linking research and teaching: exploring disciplinary spaces and the role of inquiry-based learning. In R. Barnett (Ed) *Reshaping the University: New Relationships between Research, Scholarship and Teaching*. McGraw Hill / Open University Press.

Hudson, B. (2007) Comparing different traditions of teaching and learning: what can we learn about teaching and learning? In Hudson, B. and Schneuwly, B. (Eds.) *Special Issue of the European Educational Research Journal (EERJ) on Didactics: Learning and Teaching in Europe*, Vol. 6, No. 2, 135-146.

Hudson, B. (2008) Didactical Design Research for Teaching as a Design Profession. In B. Hudson and P. Zgaga (Eds.) *Teacher Education Policy in Europe: A Voice of Higher Education Institutions*. University of Umeå/ University of Ljubljana, 345-365.

Hudson, B. (2011) Didactical Design for Technology Enhanced Learning. In Hudson, B. and Meyer, M. (Eds.) *Beyond Fragmentation: Didactics, Learning and Teaching in Europe*, Verlag Barbara Budrich, Opladen and Farmington Hills. (In press)

Kliebard, H. (1999) Constructing the Concept of Curriculum on the Wisconsin Frontier: How School Restructuring Sustained a Pedagogical Revolution. In B. Moon and P. Murphy (Eds) *Curriculum in Context.* London: Paul Chapman Publishing Ltd.

Niemi, H. (2007) Key Note address to EU Presidency meeting: *The Bologna Process and the Teacher Education Curriculum*, Lisbon.

Rudduck, J. and Hopkins, D. (Eds) (1985) *Research as a basis for teaching: Readings from the work of Lawrence Stenhouse*, London: Heineman.

SCQF (2007) Handbook Vol. 1 with Foreward by Dr Andrew Cubie, Chair, SCQF Partnership, SCQF Partnership [WWW document] URL http://www.scqf.org.uk/nmsruntime/saveasdialog.aspx?lID=125&sID=16 (Accessed on 22 February 2011)

Senge, P., Scharmer, C. O., Jaworski, J. and Flowers, B. S. (2004) *Presence: Human Purpose and the Field of the Future*. The Society for Organizational Learning, Cambridge, MA.

Shulman, L. S. (1986) Those who understand: knowledge growth in teaching, *Educational Researcher*, 15, 2, 4-14.

Simon, H. (1970) *The Sciences of the Artificial*. Cambridge, Mass., MIT-Press.

Speer, H. C. (1878) A course of study for common schools, Programme and Proceedings of the State Teachers' Association of Kansas and the Papers Read at the Session of the Association (Topeka, 1878), 22-23.

TES Connect (2010) Dons scramble to pour scorn on Gove's shake-up [WWW document] URL http://www.tes.co.uk/article.aspx?storycode=6049296 (Accessed on 22 February 2011)

The Curriculum Review Group (2004) *A Curriculum for Excellence*, Scottish Executive. [WWW document] URL http://www.scotland.gov.uk/Publications/2004/11/20178/45863 (Visited on 22 February 2011)

Uljens, M. (1997) *School Didactics and Learning*. Hove: Psychology Press.