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Putting Knowledge to Work: A New Approach Karen Evans, David Guile, Judy Harris, Helen Allan

Abstract

Approaches to the longstanding challenges of 'integrating' subject-based and work-based knowledge have typically focused on questions of how learning can be 'transferred' from one setting to another, relating the assumed 'abstract' nature of theory to the assumed 'real' nature of practice. This is often seen as a single movement as encapsulated in the term 'from theory to practice'. The authors have developed a fresh approach that concentrates on different forms of knowledge and the ways in which these are contextualised and 'recontextualised' in movements between different sites of learning in colleges and workplaces. While the research has been carried out in a range of professional fields outside nursing, the arguments put forward by the authors are relevant to continuing debates within nursing around the theory-practice gap. The aim has been to explore how the subject-based and work-based aspects of a curriculum or learning programme can articulate with one another more effectively. The potential of the 'recontextualisation' approach for nurse education is outlined, with a view to further research. The original research was sponsored by the London Chamber of Commerce and Industry Commercial Education Trust and the Economic and Social Research Council Teaching and Learning Research Programme.

Introduction

Recent research by Allan (2008) into the experiences of student nurses has suggested that conflicting expectations of 'academic nurses' and those who supervise students in clinical practice settings leads not only to a the lack of integration of theory and practice, but to a disintegrated learning context. 'Students have to learn within a disintegrated learning context in which opposing values of learning exist' (p. 1).

The research underpinning the present article has responded to the challenges of finding ways of improving practice in higher education programmes with substantial work-based elements (WBL) by researching how the subject-based and work-based aspects of a curriculum or learning programme can better articulate with one another. In this research, forms and 'flows' of knowledge have been foregrounded. Exemplar programmes from banking, aircraft engineering, media practice, financial services, management development (glass industry) and leadership development (Ministry of Defence) have illuminated what is involved in successfully moving knowledge from

disciplines and workplaces into a curriculum; from a curriculum into successful pedagogic strategies and learner engagement at higher education level in educational institutions and workplaces. These point the way towards some key principles, explained through the aircraft engineering exemplar and briefly illustrated through other cases in order to stimulate debate about how exemplars from outside the field of nursing might trigger new thinking within it.

Approaches to the longstanding challenges of 'integrating' subject-based and work-based knowledge have typically focused on questions of how learning can be 'transferred' from one setting to another, usually from theory into practice. What has continually dogged attempts at transfer is how to overcome the assumed 'abstract' nature of theory in relation to the assumed 'real' nature of practice. This is often seen as a single movement as encapsulated in the term 'from theory to practice'.

This contribution offers a fresh approach that concentrates on the different forms of knowledge involved, including those manifested in 'skills' and 'know how' and embedded in communities as well as in propositional knowledge. While research undertaken by Eraut (2004a;2004b) has extensively typologised forms of knowledge used in a range of professional fields, our approach takes a different perspective. It focuses on ways in which different forms of knowledge have features and inherent 'logics' that are privileged and play out in different ways according to context. Understanding how different forms of knowledge are re-contextualised as people move between sites of learning and practice in universities, colleges and workplaces provides new ways into longstanding and seemingly intractable problems of relating 'theory' and 'practice'. This has been seen within nursing particularly since the move of nursing education to institutions of higher education and the construction of new curricula and new teaching and learning roles (Corlett 2000; Landers 2000; Gallagher 2004; Maben et al 2006).

Methods

The research has explored ideas and current practices in 'putting knowledge to work' through extensive fieldwork. (See Figure 1). Over the 30 months of the project, interviews have been conducted in colleges and workplaces, with learners/employees during and after their programmes, with programme designers, course tutors, supervisors and workplace trainers. The authenticity of the findings has been cross-checked with practitioners, both in the field and through our advisory group. Preliminary findings from the project have been refined through review by practitioners and other informed commentators as well as though seminars and specially arranged workshops.

Figure 1: 'Putting Knowledge to Work' has four inter-dependent elements:

| The framework | Exploring practices |
|---------------|---------------------|

| Work-based Learning -what do previous studies tell us? The framework of ideas | 'Progressive focusing' through initial scan of 25 programmes 6 detailed case studies |
|---|--|
| Networking Feedback Consultation (Providers, employers researchers, academics) | Iterative development of exemplars of 'integration' in selected occupations-subjects |

Explaining recontextualisation

Understanding the flows of knowledge in programmes involving substantial elements of work exposure goes beyond typologising forms and features of knowledge to analysing the knowledge logics that underpin them and how knowledge is changed as it is 'put to work' across contexts of learning and practice in universities, colleges and workplaces.

All knowledge has a context in which it was originally generated Some knowledge is regarded as context independent, and ascribed higher status on that basis (see for example Young 2007). Contexts are often thought of as settings or places, but contexts in our use extend to the 'schools of thought', the traditions and norms of practice, the life experiences in which knowledge of different kinds is generated. For knowledge generated and practised in one context to be put to work in new and different contexts, it has to be recontextualised in various ways that simultaneously engage with and change those practices, traditions and experiences. Our starting point is that recontextualisation is multi-faceted, pedagogic practice. It refers to the idea that concepts and practice change as we use them in different settings. The research has drawn on (i) developments of Bernstein's idea that concepts change as they move from their disciplinary origins and become a part of a curriculum (Bernstein 2000; Barnett 2006) and (ii) van Oers' (1998) idea that concepts are an integral part of practice and that practice varies from one sector or workplace to another. Both of these notions have been substantially expanded in order to embrace the ways in which learners change as they recontextualise concepts and practices and the extent to which this process may spur innovation in workplaces as much as in educational contexts. Chains of recontextualisation can be forged by practitioners, as they seek to understand and evolve practice. Four kinds of recontextualisation are significant:

CONTENT RECONTEXTUALISATION

-putting knowledge to work in the programme design environment PEDAGOGIC RECONTEXTUALISATION

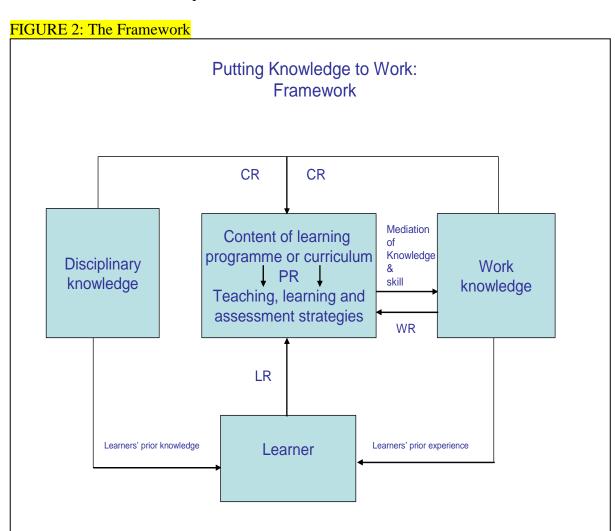
- putting knowledge to work in the teaching and facilitating environment

WORKPLACE RECONTEXTUALISATION

- putting knowledge to workI in the workplace environment

LEARNER RECONTEXTUALISATION-

what learners make of these processes



PUTTING KNOWLEDGE TO WORK IN THE PROGRAMME DESIGN ENVIRONMENT: Content recontextualisation (CR)

What most descriptions of the theory-practice relation fail to acknowledge is that knowledge viewed as content is knowledge that has been 'codified' in accordance with the rules and procedures of particular, sometimes competing, disciplines, schools of thought and practices. Consequently, when curricula are created, this occurs through content recontextualisation - when knowledge moves from its original context of production (for example in the academic research community or industry R and D programme) into the formal learning programme offered by a learning provider.

This is a process whereby codified knowledge is selected, simplified, recast and made more teachable and learnable for particular learners, as part of the programme design. In professional and vocational education it entails the selection and organisation of work and subject knowledge for the demands of professional and vocational practice.

This process is tricky because vertical (i.e. move towards greater degree of abstraction) and horizontal (move towards making a series of practical, operational connections) knowledge logics differ and are not seen to be easily related to one another. The vertical/horizontal distinction can be fruitfully used to shed light on the difficulties of relating different forms of knowledge in professional and vocational programmes. Disciplinary knowledge logics offer greater resources for recontextualisation than others because codification provides principles for selection and recombination. In contrast, codified procedural and work process knowledge offer more limited principles for selection because codification is designed to describe procedures and processes not relations between these two types of knowledge, while personal tacit knowledge is by definition uncodified. This leaves those involved with curriculum design with clear criteria to use to determine the order in which vertical knowledge should be introduced to learners and less clear criteria for how to introduce horizontal knowledge

PUTTING KNOWLEDGE TO WORK IN THE TEACHING AND FACILITATING ENVIRONMENT: Pedagogic recontextualisation (PR)

Once different knowledge logics have been reconciled in a curriculum, the focus changes to pedagogic recontextualisation, the design and organisation of the teaching and learning dimensions of programmes. PR takes place as vertical and horizontal forms of knowledge are organised, structured and sequenced into learning activities, options, modules, for the purposes of effective learning and teaching.

PR is also tricky. It involves teachers, tutors, trainers making decisions about how much time they devote to and what strategies they use to explain the background to different forms of knowledge. The challenge is to strike a balance between offering learners time and freedom to engage with these forms of knowledge in their own terms and to consider them in relation to practice.

These decisions are never technical matters. They are inevitably influenced by teachers', tutors' and trainers' assumptions (often un-articulated) about what constitutes good learning experiences and worthwhile learning outcomes, and also by the specifications set by professional or examination bodies. Consequently the challenge is to

- present the 'general principles' that underpin disciplinary knowledge so that learners can use them to understand/change design of work and production of goods and services
- Use work as 'test-bench' for distinctive form of application & encompassing nature of general principles

PUTTING KNOWLEDGE TO WORK IN THE WORKPLACE ENVIRONMENT:

Workplace recontextualisation (WR)

The story of the theory-practice relation is usually left here. Our approach demonstrates the limitations of this approach because integration processes start with PR, but do not end there. Workplace environments fundamentally affect how knowledge is put to work, and they vary in the nature and quality of learning experience that they afford (Guile 2006). WR takes place through the workplace practices and activities that support knowledge development, and through the mentorship, coaching and other arrangements through which learners/employees can engage with and learn through workplace environments.

These practices and activities are fundamental to learners beginning to vary and modify existing workplace activities or to develop the confidence and capability to work with others to significantly change those activities. They allow us to see that we constantly 'progressively recontextualise' concepts in activity, for example, the concept of measurement takes many different forms in workplaces hence pedagogic contextualisation requires a range of supports.

In the workplace, knowledge is embedded in routines, protocols and artifacts. The key challenges include learning (i) to participate in workplace activities and use artefacts, and (ii) to use work problems as a further 'test-bench' for 'curriculum' knowledge.

This is facilitated when:

- workplaces create stretching but supportive environments for working and learning
- learners take responsibility for 'observing, inquiring and acting'

WHAT THE LEARNER/EMPLOYEE MAKES OF IT: Learner recontextualisation (LR)

What learners make of these re-contextualisation processes varies according to personal characteristics, group/cohort and the scope for action they have in any particular environment. Together with their prior learning and tacit knowledge, these may be unequally distributed (see Evans et al 2004). Learner re-contextualisation takes place through the strategies learners themselves use to bring together knowledge gained through the programme and gleaned from working with more experienced people in the workplace. These strategies sometimes involve learners in the creation of new knowledge, insights and activities.

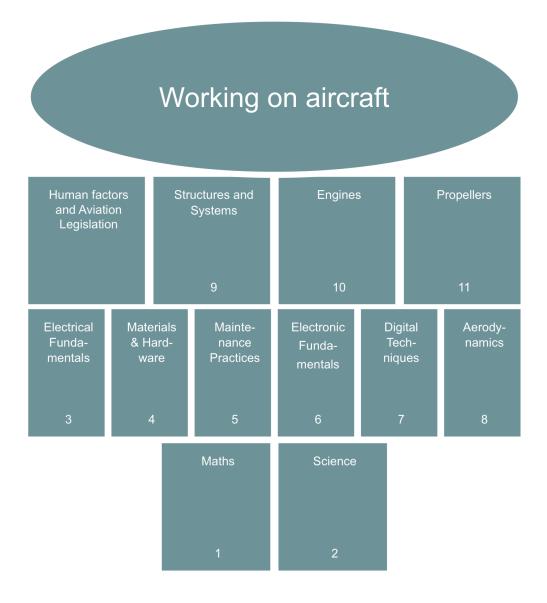
Learner recontextualisation is critical to the development of a professional and/or vocational identity. It entails understanding and articulating the reasons for the

constitution of their chosen occupation and their reasons for wanting to join it. It also influences their motivation and engagement with the other processes of recontextualisation. Learners come to self-embody knowledge cognitively and practically. The dual challenge is use knowledge as a set of resources to develop professional and academic identity together, using both curriculum and workplace knowledge as 'test—benches' for general principles and to meet academic requirements. Thinking and feeling one's way into a professional identity is facilitated by such practices as engaging in 'learning conversations' and hearing 'war stories'; voicing (articulating) developing understandings to others, being stretched through opportunities to work at the next level.

Each of the four expressions of recontextualisation sheds light on some element of the challenge of relating subject-based and work-based knowledge in real-life programmes. The research process resulted in six detailed case studies (exemplars) that have been structured and analysed according to the re-contextualisation framework set out in Figures 2. In each case commentaries have traced the chains of recontextualisation and lessons that can be drawn for programme design and practice (for a full account see Evans, Guile and Harris, 2009).

In Aircraft Engineering, KLM and Kingston University came together to mount a programme for aspiring maintenance engineers leading into development of the first Bachelor of Engineering Honours degree incorporating European Aviation Safety Agency (EASA) licensing requirements. Student engineers can complete their studies after the 'practice' year with a foundation degree or proceed to a further year full-time (two years part-time) to the B.Eng degree., with two years of further practice required in each case for the full license.. The principal challenge for the designers of this programme here was meshing licensing requirements for EASA within the degree framework.

Figure 3: Aircraft Engineering: structure of the first two years



Content recontextualisation in the programme design process has involved selections and combinations of knowledge from disciplines (Physics, Maths, Law and Psychology) with work process knowledge, procedural and legal knowledge, recontextualised to the demands of professional and vocational practice and European Aviation Safety Agency requirements. Different knowledge logics have been brought into a new relationship which has changed the shape of the programme from the conventional 'pyramid' structure of broad base narrowing to, individualised project-based work at the apex, to the trapezium structure geared towards work in the operational environment shown in Fig 2

The programme is based on a rationale negotiated between KLM, UK and Kingston University. Initial scepticism on both sides reflected the different values bases that in

other contexts can lead to the disintegration identified by Allan (2008). Tensions were overcome by mutual recognition of expertise between members of the programme design group and by the careful articulation of the different knowledge requirements in relation to an agreed rationale. This negotiated rationale has four elements:

- -incremental steps towards working on aircraft as a whole system
- -academic elementals first
- -knowledge interdependency between the modules
- -safety: consolidation of learning at every stage to surface any gaps in knowledge.

The incremental steps towards working on the aircraft as whole system sequence modules to build and integrate knowledge and orient the programme towards the operational environment:

| Sequencing | Criteria | |
|------------------------|--|--|
| 'Academic elementals' | This knowledge underpins the programme and is recycled and | |
| first | developed in subsequent modules. | |
| | Low susceptibility to change | |
| Followed by 'Practice- | These modules build on the content of the Academic | |
| based + Academic | elementals. | |
| modules' | The modules are subject to change through the introduction of | |
| | new technologies or new materials: | |
| Followed by 'Systems + | These modules draw together and build on knowledge from | |
| Skills modules' | earlier modules: "All background material for this module will | |
| | have been covered in other course modules". | |
| | Increasing orientation outwards to the operational | |
| | environment. | |
| | The modules have to be 'continuously monitored for change'. | |

The pedagogic recontextualisation process then prioritises Maths and Physics in a way that provides time for understanding/connecting concepts and enabling teachers to demonstrate the use of Maths and Physics in aircraft maintenen problems. This involves teaching practice – based elements that have closest connections to Maths and Physics first by providing learners with experiences that enable them to make the theory-practice connections. Systems and skills modules then developed knowledge of the aircraft as system with simulated and 'real life' opportunities to put knowledge development to work.

Workplace recontextualization involves the 'gradual release' of knowledge and responsibility across two dimensions: predictability and time. (Aarkrog, 2003)

Learners strengthen their skill repertoires through extended exposure to tools and equipment with which they are already familiar:

"The level of work tasks and standards of workmanship expected will increase progressively as the course and this module are completed".

They learn by making mistakes in a controlled, closely supervised and sheltered environment, but one that progressively resembles the workplace itself: "The dummy plane stage is simulated – it's a safe, transitional stage".

They move from predictable to more unpredictable tasks where some of the complexities of real-life work (and its artefacts) are built into the learning experience: "Students will need to keep a logbook of all the practical work completed..."

In these ways they learn to operate under the pressures of the operational environment: "The operational environment is extremely daunting for some people – students' confidence can be destroyed in an instant if they go in too soon".

Feedback is tailored to workplace and academic criteria, with the aim of taking learners to the point where they are able to operate under the time and (un)predictability pressures of the operational environment. Key people occupying boundary roles, shadowing, 'mating-up', peer support; planning incremental responsibilities. Debriefing focuses on developing confidence in putting knowledge to work, a key role for the 'industry educator'. Learner recontextualisation takes place through assignments, articulating developing knowledge, stretching (working at next level); a process facilitated by learning conversations; inquiring approach from students, thinking and feeling the self into professional identity.

A key principle: 'gradual release'

The principle of 'gradual release' is not new. What is new is the way in which this principle has been deployed by practitioners in colleges and workplace managers, supervisors and mentors to:

- sequence the knowledge elements of their programme so as to develop learners' theoretical understanding alongside their skill development;
- support learners to move from a college to a practice environment via the gradual iterative release of responsibility from educator to learner in educational and workplace contexts.

Effective recontextualisation through gradual release does not always involve close interdependencies between all of the programme elements.. Parallel programmes of college-based and workplace-based learning that recognise different logics as distinct can also be made to work synergistically as another case has shown. Commerzbank in partnership with the European College of Business and Management has a programme 'Trainee Programme in Banking' for new entrants that embeds a Higher National Diploma in a company training scheme. Applicants need 250 UCAS points; BBC at A

Level including Maths and preferably an Economics / Business Studies-related subject. They participate in a 'real' banking job over two years with block release each month to study for an HND in Business and Finance. Trainees are on permanent contracts from day one but 'off the headcount'. In this sense they are supernumerary. Once they have passed the HND they are able to continue their studies and convert the HND into a BA (Hons) Business Studies degree. Whitehead (2009) reports from the Commerzbank perspective: 'We have a good post qualification retention rate; it is a real alternative to going to University'. Trainees are offered supportive environments for learning and working based on agreement between the college and company about respective areas of responsibility and clear college and work-based strategies to assist trainees to make iterative relationships between theory and practice. Recontextualising practices in this case lie in:

- use of 'industry educators' who can act as knowledge brokers (see below).
- the college role in designing assessment specifications that expand and contextualize content.
- a 'pedagogy of work' in the bank that goes well beyond business as usual, expanding capabilities through planned combinations of routine and non-routine activity
- motivation of learners towards self management and spirit of inquiry in seeking out resources and engaging in knowledge exchanges
- a 'recontextualisation link' at senior level, in the form of a senior workplace person charged with overview of all the trainees

Further principles emerge from the full range of exemplars, across a range of professional fields and levels of programme:

Enacting and developing new knowledge

One of the biggest criticisms of the use of 'reflective' strategies in work-based learning programmes is that they are primarily designed to assist worker/learners to gain accreditation/recognition for their existing knowledge, rather than to support them in generating and using new knowledge.

The 'learning conversation' approach offers a way to escape from this dilemma. Its key premise is that someone with extensive industry and facilitation expertise can design a conversational approach that not only recognises, but also expands employees'/learners' knowledge and puts it to work.

Utilising organizational resources

This is a generative pedagogic practice whereby company/organisational resources (documentary and human) are made available to learners, illuminating and exploring company practices and developing learners' 'essential skills':

Learners are of the view that there are 'fantastic resources' in companies that can be drawn upon and that the process is enriched if:

- Learners and mentors/managers are informed well in advance of programme details and resources required and available.
- Learners are allocated time during work to make the contacts and follow them up.
- The company sets up and maintains an intranet site in the workplace where some of the commonly-used resources are stored.
- Teachers use resources to *debate* theoretical concepts-in-action not as 'givens'.

Examples provider by learners include the following:

"I used historical data from claims systems at work when completing a risk survey at college - I used the data to assess risk measures, potential future risks, etc.

"My year group organised a meeting with a Commercial Property claims team to understand more about commercial insurance."

The following illustrates a 'double loop' where the company resource is taken over the boundary into the college and then back into the workplace:

"For one college assignment we had to present a problem in the workplace which had impacted on customer service and explain how we might resolve the issue. I selected a problem concerning a database which had many blockages. With the agreement of my manager, I was able to take screenshots of the database and collate user feedback in order to present the problem and some recommendations. Thereafter, my manager insisted that some of them be adopted; it was an excellent opportunity for me. It was a piece of work that I wouldn't have had the time to complete in the workplace but through investigation and concentration during college time I could complete the work successfully".

Using industry educators as knowledge brokers

Use of staff with up-to-date industry experience is a feature of every exemplar. Their role as knowledge brokers goes far beyond the standard use of 'Visiting Lecturers' in programmes. Industry educators are acknowledged to make a difference when they have experienced the same (or similar) qualifying pathway as learners; they are aware of the challenges learners face and will face in future and they understand the working cultures and circumstances of the sectors and particular institutions.

Evidence demonstrates the power of learning from others' experiences, including mistakes.

Industry educators gave examples of teaching and learning activities:

| "In a case study exercise I might bring the theory alive by talking about things that have happened in companies – for example Northern Rock" | Drawing on knowledge of sector circumstances and the nature of financial markets in the present moment (Commerzbank/ECBM). |
|--|---|
| "I try and paint a picture - I want the students to be there in that company, feeling the anger of the dispute with the other personthe only way is to live it and get a sense of the reality within it" | Injecting a real-world perspective by recreating the thinking of the finance person through visceral contextualisation and representation of interplays between forms of knowledge (Financial Services). |
| "We plan to take the role of Executive Producers in relation to the students' major projects" "Every part of a learning conversation is steeped in company life – it has to be like that, or it won't work" | The adoption of particular industry roles (Media Practice). The facilitator ensures that industry life is at the heart of learning conversations – he is fully conversant with the Glass industry (Glass). |

Industry educators, in short, use their experience to forge relationships between theory, sector-wide knowledge and the practices of particular organisations and particular people within those organisations. They become 'knowledge brokers'. Important as this is, it does not happen at the expense of academic and/or education-related qualifications and experience.

Relationships with professional bodies: dual accreditation

Dual accreditation requires practitioners with seasoned understanding of professional body requirements and regulations, Quality Assurance Agency (QAA) requirements, university validation processes and undergraduate modular schemes. Issues arising for partnerships include:

- tensions between the QAA's concern for a 'higher education' student experience and the professional bodies' concern for closeness to their immediate requirements
- how pedagogy can become a mutual concern for the programme team and the professional association/institute so that learners are not subject to clashes between narrow 'transmission' and 'inquiry' based approaches.
- can the professional body relax their requirements for assessment by examination and engage with the broader range of assessment methods?

There needs to be a critical mass of compatibility if dual accreditation is to be feasible. In Aircraft Engineering the decision was taken to keep the two forms of assessment separate largely because the EASA requirements are enshrined in law as is a pass mark of 75% and a commitment to multiple-choice examinations. This means that although the syllabi content are compatible, the assessment methods are not. Learners therefore studied one module but undertook two sets of assessments. In Financial Services dual accreditation took one of three forms: 1) module assessment may resemble the professional body specification; 2) professional body assessment may be 'softened' (in negotiation) so that e.g. shorter essays take the place of formal examinations and/or assessment rights are conferred to the provider (usually on a pilot basis for a number of years); 3) some modules are assessed using university methods and the professional body accepts this because the former is at a higher level.

Major Implications

Putting knowledge to work to meet educational, sectoral, organizational and learner needs depends on the quality of the relationships that are built between supply and demand, not on whether the programme is essentially supply-led or demand-led.

- Chains of recontextualisation can be forged by practitioners across all of these environments as a way of maximising the integration of subject-based and workbased knowledge
- Multi-faceted partnerships between the college, organisation and workplace sites can embed knowledge flows in and across programme design, teaching and learning and the facilitation of learning, workplace practices and the engaged learner
- Recontextualisation is assisted by 'gradual release' of knowledge and responsibility across two dimensions: predictability and time
- Using 'Industry Educators' as knowledge brokers supports the effective use of workplace and professional resources for teaching and learning, and development of new knowledge through learning conversations.
- Programme structures including assessment practices can be developed to achieve a critical mass of compatibility between employer professional body and course requirements

Building such relationships is facilitated by dialogue at the local level, involving stakeholders such as educational institutions, professional institutes, employers and

employer organizations, and requires government agencies to have the relative autonomy to vary targets and funding streams to support new initiatives.

Can the approaches be recontextualised to nursing education?

This paper has focused on the professional fields in which the original research has been carried out. Applying it fully to nursing would involve new research to recontextualise findings, in line with our underlying stance and argument. The ideas that this approach generates for restoring the fragmenting curriculum in nursing can be organised according the four expressions of recontextualisation, with a view to further research.

Nursing as a field entails the selection and organisation of subject knowledge for the demands of practice (CR) from social and psychological sciences as well as (predominantly) on medicine, pharmacology, microbiology. Some knowledges (e.g.biomedicine) are valued more than others depending on different tutors' preferences, and different university traditions; some forms of knowledge are privileged by government policy eg evidence based practice; and the ascribing of value to knowledge is gendered (Davies 1995).

Learning outcomes are overtly agreed by both education and practice in the PR process, but each have different agendas about the final outcome for students. For practice, a nurse ready to work as a registered nurse is what is wanted; for education, the student's learning has yet to be consolidated (Chambers 2007). The clinical areas are very busy in acute areas and therefore the patient takes priority not the learner. What does 'super-numerary' status really mean for learning in these settings? Issues for WR follow from these last points. The outcomes associated with LR centre on the identities that are so central to nursing, with their roots in gender, ethnicity and class (see Allan et 1 2004, Larsen et al 2005).

Overarching questions are 'can the student's learning be "progressive", has it ever really been so and is it legitimate to be so in the current climate?.'(see Spouse 1998) And whose voices are heard in the discipline when these too are fragmented. Arguably, steps can be taken towards restoring the curriculum from its current state of fragmentation and disintegration through the working of recontextualisation ideas into strategies and smart pedagogic practices.

Concluding observations

The longstanding language of 'transfer' hinders rather than facilitates the search for solutions to the 'theory-practice' gap. Using the concept of recontextualisation:

• explains the ways in which all forms of knowledge are tied to context (settings where things are done)

- identifies what actions assist people to move knowledge from context to context
- identifies how knowledge changes as it is used differently in different social practices (ways of doing things) and contexts
- identifies how new knowledge changes people, social practices and contexts
- identifies who and what supports recontextualisation process

The lens of *recontextualisation* focuses attention on processes involved in successfully moving knowledge from disciplines and workplaces into a curriculum, from a curriculum into successful pedagogic strategies and learner/employee engagement in educational institutions and workplaces. Some pedagogic strategies that facilitate these outcomes are 'smart' re-workings of long-standing pedagogic practices such as the 'gradual release' of knowledge and responsibility. Other strategies, such as the use of key professionals as intermediaries and knowledge brokers, supplement educational expertise while keeping academic requirements in view. The goals are best accomplished when a critical mass of compatibility is established between professional body, course and employer requirements. Furthermore, for large scale public services such as the NHS, putting knowledge to work more effectively may require fundamental shifts towards forms of organisation that foster cultures of 'working as learning' (Evans et al 2006, Felstead et al 2009) to support the achievement of organisational and public service goals.

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