Overview of the UK's Teaching and Learning Research Programme work-related learning research and plans for a web-based platform for sharing expertise on research in work-related learning

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Note: at the time of the conference this work will have been advanced further and David Guile (Institute of Education, University of London) will also illustrate in more depth how researchers within and beyond TLRP are using different theoretical bases to underpin their research on work-related learning.

Abstract

This session will provide an overview of the UK's Teaching and Learning Research Programme (TLRP) work-related learning research and plans for a web-based platform for sharing expertise on research in work-related learning. The TLRP work-related learning researchers are participating in the development of a custom-built web-based environment for sharing expertise on work-related learning research with the collaboration of five other national educational research programmes and the support of two European educational research organisations (EARLI and EERA). The session will include a demonstration of the site, with a particular focus on a number of theoretical frameworks used in researching work-related learning.

Introduction

Fifteen projects in the UK Teaching and Learning Research Programme (TLRP) involve substantive research on work-related learning. Six of the projects are presenting in this symposium and details of the other nine projects are given in the appendix. The primary focus of this paper is upon the development of a custom-built web-based environment for sharing expertise on work-related learning research. Members of the group working on structuring resources on 'research on work-related learning' are principally researchers working on projects in the UK's Teaching and Learning Research Programme, with support from University of Warwick researchers from IER and SKOPE. However, this is an inclusive activity and we would welcome contributions and ideas from others too. The previous developments on the site demonstrated the potential to cluster issues related to work-related learning. See http://www.guidance-research.org/EG/LLLtop/workplacelearning/

However, this section was developed from a singular perspective and the intention was to provide those principally interested in careers guidance with an introduction to a number of key developments relating to workforce development. It covered a range of issues on policies promoting learning at work (including key extracts from the Skills White Paper (2005), the Skills Strategy White Paper (2003) and comment on

the Cabinet Office Performance and Innovation Unit's project on workforce development (2002); two significant Government interventions in support for workplace learning (Union Learning Representatives (2003) and the Skills for Life programme); the outcomes from a series of seminars to investigate issues relating to workforce development; developing identities at work; commentaries on the likelihood of realising visions of 'high skills' societies; and the role of employer collaboration in skills development. We still believe it provides an interesting introduction to a number of work-related learning issues, but the purpose meant that the approach was rather eclectic: essentially this was 'stuff' that the development team from IER thought would be of interest to the intended audience.

So, if the purpose of the website was to be broadened to include representation of the achievements of the TLRP work-related projects and the intended audience was to be widened to include those with a primary interest in work-related learning then the approach to representation of work-related learning research had to be more coherent and collaborative. To this end a number of workshops were convened involving 21 researchers from TLRP projects; 4 researchers from University of Warwick and 2 software developers. From a TLRP perspective the group felt that it would be important to produce some narratives that through hyper-linking allowed users to go in different directions and also allowed for different perspectives. It was felt that the initial clustering was important as this needed to support investigation of theoretical and methodological issues as well learning processes and to allow switching between different levels of analysis.

In order to allow for different lenses with which it would be possible to view research on work-related learning the group felt that 12 - 20 branches might be about the right number for ease of organisation and bearing in mind navigation issues. After further discussions in small groups at two meetings the group as a whole came up with the following ten categories as the basis for organisation of material:

- Research Methodologies / Strategies
- Theoretical bases
- Learning contexts and settings
- Organisational learning and work design
- Strategies for enhancing learning
- Factors affecting learning
- Policy (national / regional / organisational)
- Learning processes
- Knowledge at work
- Learning trajectories and transfer

These topics are under active development at present and the rest of this paper will outline the approach being developed in a number of these areas and an illustration of the type of content being developed in one area (theoretical bases).

Topics under development

Research methodologies

This section will allow entry into the range of methods, methodologies and strategies that have been and are currently in use or being considered to study learning at work. It identifies a range of methods in use. It also gives links to the epistemological and theoretical positions that can underpin their use. Some methods (which are often used in combination) include:

- Observation (participant/repeat/non-participant)
- Interviewing
- Use of technology (e.g. email, computer assisted interviewing, video)
- Instruments and tools (e.g. questionnaires, diaries and learning logs)

A case study approach is often used, which frequently draws upon a mixture of methods. Consideration also has to be given to:

- Decisions about which methods to use (e.g. epistemological positions)
- Methods in action (adapting and using methods in context)
- Data handling, reduction, analysis and synthesis (e.g. validation, tracking, coding, etc)
- Ethical concerns
- Scope of the study (e.g. longitudinal, snap-shot)

Of course methods are not used in a vacuum. They are used in accordance with theoretical/epistemological perspectives, which can be found under theoretical bases.

Theoretical bases

Theoretical bases involve a consideration of how they predispose people to look at research on learning in and through work. Some theoretical bases it may be fruitful to explore include:

- Activity theory;
- Actor network theory;
- Socio-cultural practice theory;
- Multi-lens perspective;
- Labour process theory;
- Socio-cultural linguistics;
- Organisational learning;
- Knowledge development/management;
- Socio-psychological constructivist;
- Gender;
- Post-structuralist.

Consideration will also need to be given to the grouping of concepts; the relationship between perspectives and concepts. The power of this type of approach is, of course, best demonstrated through the web itself, but an illustration of how material will be built up is given in the final section of this paper with a consideration of poststructuralism as a theoretical base for research in work-related learning.

Learning contexts and settings

This section will draw together materials which analyse the social practices oriented towards learning within different settings. Topics include opportunities for learning, spaces for learning, expectations for learning and creating supportive learning contexts. Other key areas include:

- use of and access to artefacts, information, knowledge;
- pressure of work;
- expectations, rewards and punishment;
- availability and nature of feedback;
- challenge and value of work;
- organisation and nature of work;
- group learning: culture of setting and relationships.

Additionally, contexts for learning include schools and colleges, workplaces, training centres, networks, communities and families.

Contexts for learning at work include:

- Meeting context;
- 'on the job' context;
- 'working alongside' context;
- 'work encounter' context.

Other papers in this symposium will expand on these issues in much greater depth.

Organisational learning and work redesign

This section will include materials which examine how organisations learn and, for example, respond through the (changing) design of work. Topics include how job and task design are orientated towards workplace learning, how organisations and systems accommodate new tools, how organisations are managed as environments for learning by enhancing productivity through knowledge development. Key issues therefore revolve around the following:

- relationships/ culture;
- flows of people and work;
- experiences and engagement (of individuals and groups);
- organisational policies and influences;
- couplings between learning and work;
- 360 degree learning;
- learning as an organization;
- roles and influence of tools and technology.

Strategies for enhancing learning

This section focuses on and develops our understanding and knowledge of the ways in which learning can be improved. This includes understanding individual approaches to learning, learner needs and engagement in activities that allow them to learn, learning resources including ICT, the role of feedback and assessment to support learning together with the ways the curriculum can be developed. It will be important to pay attention to pedagogies for developing learning and learning identities. Topics include modes of interactive support, for example direct teaching and more informal mentoring. Some of the key issues are outlined below:

- Addressing factors that hinder learning;
- Developing capabilities (of learners and those who support them) for enhancing learning;
- Creating contexts that facilitate learning.

Factors affecting learning

Distinguishing between working and learning through work is difficult. It is similarly difficult to separate factors that affect learning at work because in many cases they interact strongly. The distinctions made below particularly in the main headings should be understood as analytical aids rather than distinctly different categories. Note also that factors affecting learning emphasises the relational aspects of learning at all levels. It is a dynamic rhetoric.

Individual

- life history
- current position
- hopes
- dispositions
- attitudes to career

Group/community

- availability of support
- informal communication
- occupational positioning
- presence or absence of learning culture
- the nature of team-working

Wider organisations

- the nature and challenge of work
- the kind of mentoring available
- patterns and management of work
- HR systems
- quality of feedback
- purpose of product and service strategy
- corporate structure

Macro (labour market): structures

- Globalising tendencies (how to translate policy through intermediaries)
- MNCs
- Third and First world
- American hegemony
- ICT
- Workforce mobility/migration (illegal workers)
- Performance discourses

Also attention has to be paid to the way influences such as the labour market; gender; ethnicity and class affect learning.

Knowledge at work

Some of the key issues to consider here include:

- Formal knowledge;
- Informal knowledge;
- Technical knowledge and skills;
- People skills;
- Tacit knowledge;
- Procedural knowledge;
- Process knowledge;
- Knowledge of the organisational culture;
- Collective and organisational knowledge;
- Knowledge transfer;
- Emotional labour?;
- Emotional intelligence?

Illustration of type of content being developed in one area (theoretical bases): Post-structuralism

Now when developing content it is important to bear in mind that the dominant intention is to 'add value' to the vast amount of material that is available through the web through the exercise of judgement. For example, a Google search will reveal over 510,000 hits on 'post-structuralism' and while it might be useful to signpost some introductory material, what is important is to develop a commentary that makes sense in the particular context of work-related leaning and, in particular, what it might mean to use this as a theoretical base to research in this area. What follows therefore is an introduction to this area from the IER team, which will be challenged and/or developed by those with experience of using post-structuralism as a theoretical base for their work in this area.

Our initial commentary

When looking at post-structuralism it probably makes sense to say something about first about how structuralism, used mainly in a literary context, drew attention to how much of our imaginative world is structured in a binary way. A focus upon current

binary views can be challenged in two ways. First, the binary oppositions can be overturned and replaced by new structures that are themselves binary. Second, the limitations of binary views can be exposed by saying there are a much wider range of ways to look at things. Foucault (1972a) outlined the idea of how one system of thought, with dominant ways of thinking, replaced another in periods of revolutionary cultural change. He also analysed the range of ways knowledge and power operated in modern society. Sarup (1998) points to the similarities between Foucault's ideas, applied to culture as a whole, and Thomas Kuhn's concept of paradigm shifts where stable established scientific ways of thinking are interrupted by periods of scientific revolution. Within social science, structuralist views emphasised how certain ways of thinking were dominant and constrained how people viewed the world, with culture offering a degree of agency and choice but also circumscribing the range of possibilities.

In contrast, post-structuralism sees a much wider range of possibilities, and questions the extent to which people can be represented as sharing one of a relatively small number of ways of thinking about society and culture. The much wider range of options is coupled with a view that cultural 'scripts' are much more open to individual influence. Post-structuralism is concerned with breaking down over-arching narratives, concerned with the 'big picture', into a series of smaller narratives that deconstruct the 'structure' as a whole and thereby release more ways of making sense of particular parts of the bigger picture.

In some senses therefore post-structuralism is a tool to sensitise the researcher to the possibility of multiple meanings and narratives associated with discourse and action in the particular contexts under investigation: it also has the potential to throw light upon aspects of society that could be overlooked. In this sense, depending on the nature of the topic and the intention of the researcher this perspective may be useful as a frame for investigation. Ironically, the more often this approach is used the less useful it may become: whether the focus upon discourse and meaning is illuminative partly depends upon how many previous studies there have been adopting this approach and the extent to which it does indeed generate new insight.

The interesting thing for me is that you can, of course, use other frameworks to achieve similar effects. So personally, while occasionally drawing on insights from theorists associated with post-structuralism I have never used the framework to underpin my research. I also often find the work rather dense and so tend to prefer other ways of achieving the same ends. Indeed I wonder whether you can use Foucault's (1972b) own idea of discourse existing within a complex web of meanings affected by shared, but changing, understandings of the 'rules of exclusion' to apply to much of this work: many of us are excluded from discussions on this because the ideas are not clearly expressed. However, it may be good to hear from those with more familiarity with some of these ideas, especially if they can communicate in a less exclusive way.

Conclusion

This paper has sought to give an overview of how researchers from the Warwick Institute for Employment Research and the UK's Teaching and Learning Research Programme (TLRP) are working together to construct a web-based platform for sharing expertise on research in work-related learning. By the time of the conference this work will have been advanced further and David Guile (Institute of Education, University of London) will be able to illustrate in more depth how researchers within and beyond TLRP are using different theoretical bases to underpin their work. This is another type of activity that is rarely undertaken even though it demonstrates how to 'add value' to existing research through the exercise of researcher judgement. Please join us in this endeavour!

References

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Appendix TLRP projects on workplace learning and professional learning

Improving Incentives to Learning in the Workplace: Rainbird, Evans, Hodkinson & Unwin (2000-03).

This network comprised five projects that looked at:

- the regulatory framework of the employment relationship;
- **the role of tacit skills in workforce re-entry programmes** (presenting in this symposium);
- key skills in older and younger workers;
- apprenticeship models in contemporary industrial society;
- the school as a site of work-based learning for teachers.

http://www.tlrp.org/proj/phase1/phase1csept.html

Early Career Learning at Work: Eraut, Maillardet, Miller & Steadman (2001-04) (presenting in this symposium) http://www.tlrp.org/proj/phase11/phase2d.html

Learning as Work: Teaching and Learning Processes in the Contemporary Work Organisation: Felstead, Ashton, Clarke, Fuller, Butler, Lee & Unwin (2003-07) (presenting in this symposium) http://www.tlrp.org/proj/phase111/felstead.htm

Understanding the System: Techno-mathematical Literacies in the Workplace: Hoyles & Noss (2003-07) (presenting in this symposium) http://www.tlrp.org/proj/phase111/hoyles.htm

Enhancing 'Skills for Life': Adult Basic Skills and Workplace Learning: Wolf, Evans, Bynner & Jupp (2003-07) (presenting in this symposium) http://www.tlrp.org/proj/phase111/wolf.htm

Learning in and for Interagency Working: Daniels, Edwards, Creese, Leadbetter & Martin (2004-07) (presenting in this symposium) http://www.tlrp.org/proj/phase111/daniels.htm

Learning in and for Interagency Working: multiagency work in Northern Ireland; Gallagher, Daniels, Kilpatrick (2005-2007)

The aim of this project is to enhance the interaction between agencies dealing with young people at risk of exclusion from school. It builds on and extends an existing TLRP project on interagency working based in the University of Birmingham. The rationale for a Northern Ireland extension is that problems in interagency working are as relevant to Northern Ireland as other parts of the United Kingdom and that it provides a different context in terms of the range and responsibilities of agencies, and greater community sector involvement.

http://www.tlrp.org/proj/gallagher.html

Globalisation and Skill Formation Strategies of MNCs: A Comparative Analysis; Brown, Lauder, Ashton (2003-2006)

The project is investigating the skill strategies of multinational companies (MNCs) (in seven countries – Britain, China, Germany, India, Singapore, South Korea and the United States) in a context of increasing global economic integration and examining

the extent to which leading MNCs from different business sectors are developing global skill formation strategies.

http://www.tlrp.org/proj/phase111/assoc_brown.html

Competence-based Learning in the Early Professional Development of Teachers: McNally, Boreham, Cope & Stronach (2003-07)

The project seeks to improve the learning of new teachers and other new professionals by developing, evaluating and disseminating a research-based, practical model of early professional learning.

http://www.tlrp.org/proj/phase111/mcnally.htm

Vicarious Learning and Teaching of Clinical Reasoning Skills: Cox, Lee, Varley & Morris (2004-06)

The project focuses upon the value of vicarious learning through the development of multimedia databases of learning experiences which can be made available to other learners. A web-based multimedia database shell makes 'virtual patients' available to trainees, educators, clinicians and researchers in various clinical professions and cognate academic disciplines, and is in use in over 25 UK university departments. The project focuses on the training of speech and language therapists, particularly their learning of diagnostic skills.

http://www.tlrp.org/proj/phase111/cox.htm

Learning to Perform: Instrumentalists and Instrumental Teachers: Mills, Williamon, Welch & Hargreaves (2004-07)

This project examines learning in performance across four musical genres – popular, jazz, western classical and Scottish traditional. Specifically, it brings together rich, detailed information from the training of adult musicians in FE, HE and private practice, and searches for similarities and differences in the building of expertise. This approach allows for the development of basic theory and practice for expertise development in music performance, with the aim of translating this into basic theory and practice for expertise development in other fields.

http://www.tlrp.org/proj/phase111/L2P.htm