

The use of an interactive learning environment to support learning through work leading to full university qualifications

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Abstract

Built on evaluative interviews with participants and analysis of detailed online exchanges between students and tutors, this paper, which is the first stage of a work in progress, explores an emerging typology of remote student / tutor engagement within the context of learner managed learning through work,

Through a range of case histories, the paper explores what it feels like to be a remote participant pursuing personally negotiated programmes to degree level and beyond, identifying and discussing issues raised, patterns and cycles of learner concerns and assessing what kinds of tutorial responses are helpful (or not).

Discussion leads towards an understanding of pedagogical and personal issues associated with online supervision in the emerging paradigm of self-managed Learning Through Work.

Context

The University of Derby is one of 8 UK universities which, in association with the University for Industry (Ufi), offers opportunities for people in the work-place to design, negotiate and complete online personalised programmes of study based on their everyday work and leading to full degree awards. The Ufi Learning through Work (LTW) programme is of particular interest to academics engaged in debates about different models of work-based learning, pedagogical aspects of online learning and more recently the combination of the two in the one model. Being online has meant that full transcripts of exchanges between students and tutors are available, with participants' permission, as a unique resource to improve our understanding of the learning and tutoring processes involved. This paper explores the issues involved, based on analyses of those transcripts and seeks to improve our understanding of learning-through-work as

a paradigm and online tutoring as a process

Background

Conceptually, LtW focuses attention on the informal learning through the work process itself (Eraut 2004) and enables the learner to engage purposefully with the social context in which it takes place (Billett 2002, 2006). The programme requires otherwise tacit learning (Polanyi 1967) to be planned and made explicit so that outcomes can be tested against criteria for certification (Evans, 2004). The LtW process helps learners to articulate what had been unseen and perhaps unrecognised up till the time of their engagement. Essentially, this involves learners analysing and critiquing their work-based and/or professional knowledge and locating it within higher education (in our case, aligning with QAA descriptors of achievement at appropriate academic level), using higher education reporting conventions.

Every time people engage with new challenges they have opportunities for significant learning (Cairns and Stephenson, 2002). Such learning: requires tutorial support to help students (a) articulate their learning from previous work experience and plan ways of making learning from current and projected work activities explicit; and (b) secure formal recognition for the achievement of that learning.

Much debate about the efficacy of online learning focuses on cost effectiveness (Moses 2001, Leck & Gram, 2002, Grant, 2002) rather than pedagogical effectiveness. More recently 'blended learning models' have become fashionable (Bonk et al, 2006). The central issue behind LtW is that any form of top-down online training, however blended, will be less effective than learning driven and managed by the learners themselves (Reeve, Gallacher and Mayes, 1998; Brink et al 2002; Woodall 2003; Cairns and Stephenson 2003). Martinez (2003) found that that personalized programmes, direct relevance to immediate work needs and opportunity for personal development are effective ways of reducing the high attrition rates associated with e-learning. The LtW programme is a response to the challenge of personal relevance and work-place effectiveness.

Role of Ufl LTW Online Tutors

Ufl recognised the importance of tutorial support from the outset. The LtW Student Handbook (Ufl 2004) states that university tutors will offer academic guidance and support in designing a programme, finalising a learning contract, securing accreditation of prior learning and feedback to help students judge progress and the suitability of their programmes. The underlying aim is to give students the personal confidence and understanding to accept responsibility and to navigate their way through the unfamiliar waters of higher education.

Research into tutoring and on-line learning

While there is a large and growing body of research about the use of on-line learning in higher education (Issroff and Scanlon, 2002), not much of it focuses on on-line learner / tutor discourse.

For instance, attention has been paid to the use of computer-mediated communication in fully on-line and primarily web-based courses (Booth and Hulten, 2003), as well as in conventional university courses where on-line tutor-student exchanges supplement lecturing and face-to-face tutorials and/or replace such methods (Smith, Whiteley and Smith, 1999). Most research has focused on discussion groups and group tutorials (e.g Booth and Hulten, 2003; Browne, 2003;) and the link between the use of e-communications and learning (e.g. Pachler and Daly, 2003). Other researchers have explored students' reactions to, and views of, the use of e-mail discussions (e.g. Smith, Whiteley and Smith, 1999); e-mail support (Le Cornu and White, 2000); and facilitators' experiences (Harlen and Doubler, 2003).

Research on Learning Through Work for University Qualifications

In a previous study of students' experience of LtW (Stephenson and Saxton, 2005), the quality of tutorial support emerged as a strong feature in 94% of the cases reviewed.

Features particularly appreciated were:

- 1 advice available at the time it was needed, mainly in response to queries
- 2 help in thinking things through;
- 3 help to adjust to the unfamiliar culture of higher education;
- 4 constructive feedback building their confidence in their ability;

- 5 sensitivity and responsiveness to the changing needs of the student's work-place.

Responsive tutorial support also emerged as a critical factor in candidates' success in a study of learner experience in another self-managed learning-through-work programme (Stephenson et al 2006). The authors concluded that:

“Support from tutors on the programme is particularly helpful when it
(a) is focused on generic issues relevant to programme procedures and criteria for success;
(b) helps candidates to formulate, articulate and justify their achievements and intentions;
(c) is responsive to candidate initiative and suggestions;
(d) is focused on helping candidates take themselves forward; and
(e) is readily available when required. “

The above studies focused on student reflections of the experience as a whole. Bosley and Young (2006) worked directly with actual transcripts of online exchanges between tutors and postgraduate students undertaking LtW programmes at the University of Derby in spring 2004. The exchanges were found to mirror those of effective face-to-face learning encounters in that on-line learners asked questions, reported on progress, sought feedback and disclosed personal information and feelings, while tutors gave direct answers, advised and made suggestions, explained, elaborated and offered signposts. However, significantly for a tutorial situation, the majority of discourses were initiated by the learners,

This paper takes further the work of all three studies by analysing and exploring the type and content of dialogues between tutors and a wider selection of LtW learners. The intention is to illuminate the actual pedagogical experience of online tutorial support for the benefit of other learners and tutors.

Aims of the study

- 1 to gain insight into student experiences of self-managed on-line learning-through-work programmes leading to university qualifications;
- 2 to prepare notes for guidance, based on those insights, to tutors on how best to

- offer support for students
- 3 to contribute to current debates on the nature of learning-through-work and the use of the internet .

Sample, Access and Ethics

We report on the online tutorial discourse of a sample of undergraduate students, representing the broad range of LtW learners, from mature students new to HE, to those with some HE experience but not a complete degree. Their HE programmes are learner-designed to reflect the workplace and professional interests and needs of the learners. As with work practices themselves, they are essentially transdisciplinary. All learners are adults (30+) who have at least two years experience of LtW and who have made significant use of the Dialogue function built into the LtW web site.

Tutors all work within the Learning Through Work Scheme at the University of Derby. They are all experienced HE lecturers with wide knowledge and experience of work-based learning and learner support at distance from a campus, together with a range of disciplinary or subject interests, so they are both generalists and subject specialists.

Analysis of tutorial exchanges is aimed at identifying generalisable features of those relationships that students regard as satisfactory. The transcripts give insight into the micro level of learner involvement in the LtW programme which we investigated. They also offer some insights into learner concerns and appropriate tutor responses in work based learning more generally. An earlier work (Bosley and Young 2006) focused on postgraduate learners, while a follow-up study will examine exchanges not regarded as satisfactory.

The eight tutors involved were asked to select, from their caseload of on-line learners, undergraduate learners with at least two years experience of LtW and who had made significant use of the Dialogue function built into the LtW web site. Learners were then approached and asked for permission to allow their anonymised tutorial dialogues to be used in the research. No one refused to participate, and there was no possibility of grading penalty or benefit in either agreeing or declining to take part, since the nature of the assessments is such that 'grades' could only relate to actual work submitted for

assessment and not to the tutorial process.

Method

We employ a qualitative methodology, drawing on features of grounded theory (Glaser and Strauss 1967) aimed at ensuring that concepts and insights emerge directly from the data itself, not from researcher pre-conceptions. The contents of all exchanges are disaggregated and each component is labelled and sorted according to its main focus. Each sorted collection of data is further reviewed to produce more generic labels for further grouping followed by another layer of abstraction. At each stage, grouped labels are checked backwards for consistency with the original data. The final stage is a synthesis of generic labels into emerging propositions for testing with other cases and for contribution to debates on wider issues. Over 1800 online exchanges between 33 undergraduate learners and eight tutors were included in the study. This is real, working data, not something collected for the purposes of this study. Indeed, students were not asked to provide anything other than permission for their tutorial discourse to be cited in the study. Further, the vast majority of the exchanges studied had been completed before the study began, as part of the normal tutorial process for LtW. The emerging categories were traced back to test whether they 'rang true' with the actual data itself.

Emerging themes

The following generic themes are emerging from the analyses of **learner initiated exchanges**.

- 1 **Learner Control**: showing the student seeking, taking, assuming, exercising or asserting control of the programme, its direction and progress;
- 2 **Focus On Work**: responses to conditions and opportunities at work; impact on work; changed or emerging work constraints;
- 3 **Initiatives**: decisions; actions; reasons for decisions: looking for affirmation;
- 4 **Seeking Reassurance**: of ability; 'on the right lines';
- 5 **HE Culture**: engaging with and understanding levels; programme structures; style of writing;
- 6 **Seeking Clarification**: of possibilities, plans, constraints etc.

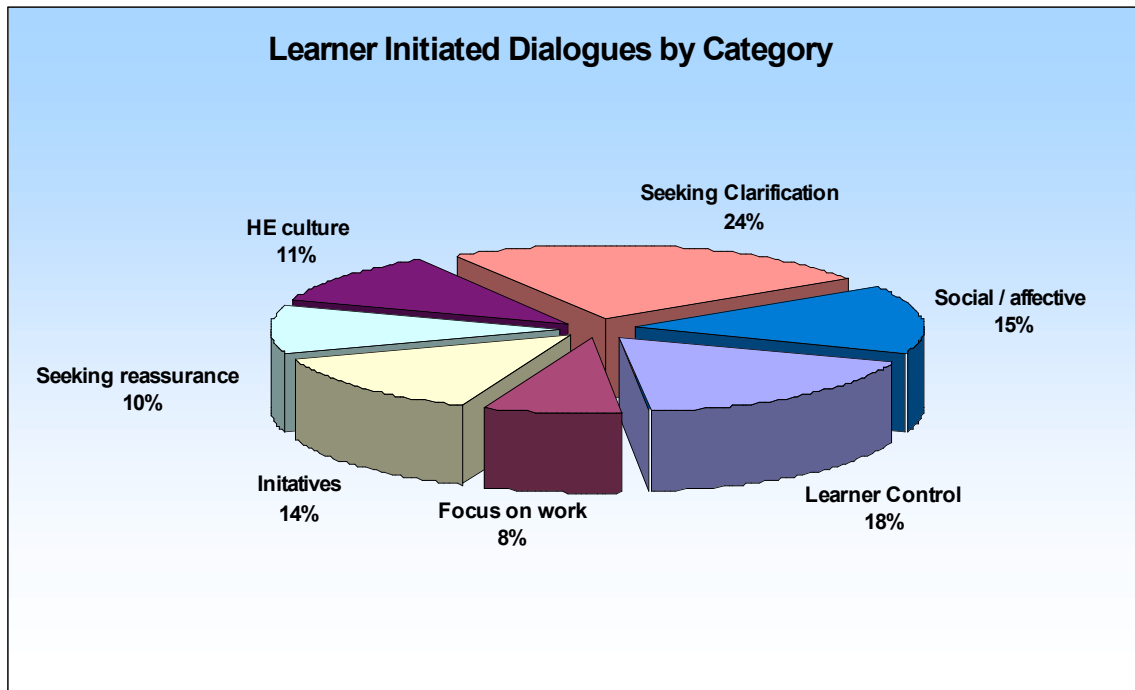


Figure 1

Exchanges about Learner Control

Strategic learner control is at the heart of the LTW programme in that learners themselves put together and negotiate approval for the programme as a whole. Analysis of day-to-day exchanges initiated by learners shows that learner control also extends to detailed scheduling of activities, monitoring of their own programme and negotiating help:

Scheduling

I thought over the Xmas period, whilst I have a little time off work I would start thinking about drawing up my prior learning module portfolio.

Monitoring

My tasks for the coming week are to ensure that: a. something is written in each relevant section of each component b. The appropriate level indicators are checked-off.

Negotiating help

I am ready to start my next module which is "Employment Law". Could you find someone to support me?

Exchanges about the Learner's Focus on work

Participants are required to develop their overall programmes in the context of their

work. However, workplaces are rarely static. New opportunities for learning can emerge mid-course, changing work-related constraints can affect the smooth operation of the programme and employers can be motivated to provide support for and be involved in their employee's programme:

Opportunities at work

I feel I could look at the way that my salon's environment is in a state of flux (alluding to my Marketing Plan) and critically analyse the ways in which the staff may respond to the change in the format of a report.

We have an excellent library at our research and development site which employs three staff who work to manage the literary information that our scientists use for their research. I think I would be fool not to use these resources.

Changing constraints at work

We have had some news at work that may affect the research component and I have been working on. I want to discuss a possible change of direction within this module to try and include how the removal of local doctors' surgeries to out of town premises will affect the pharmacy and the patients.

Employer support for the learner

Both of these components are now being partly sponsored by my boss (which may not be a bad thing), who may want to make some slight amendments.

I have a full time job in a school but they have allocated me time to do this course while I'm at work so I should be able to finish it by May.

Pressure from work

Work is hectic at the moment and I am struggling to get quality 'thinking' time!

sorry for the lack of activity on my learning contract, but it has been murder at work and I had an assessment to hand in for my open uni course.

Learner initiatives

The opportunity to design and manage their own programme encourages learners to take initiatives in both work and their studies.

Ideas for work

I have had an exciting idea concerning the development of a series of spreadsheets which salons could use to track "money" more effectively. I would use "new technologies" to develop this software.

Changes in programme

I have altered my timescale for completion of my final piece of work (Evaluation of T/O rotation) to December 2004 but I plan to work on this whilst I am on maternity

leave, time and energy permitting!!

Seeking reassurance

LtW learners do not have the benefit of shared learning experiences with peers from which they can acquire some understanding of how well they are doing. They seek reassurance on whether they are up to the job. They also require reassurance that decisions they have made about their programme are appropriate:

Am I up to it?

I'd be grateful if you could check over what I've written and to give me a 'morale booster' to, hopefully, get it finished in the next 3-4 weeks.

What do you think so far?

Have I made the right decision?

I have changed some of the components for this module. I hope this OK.

H.E. Culture

Being work-based, learners are often unfamiliar with university conventions and need guidance on fairly basic issues such as citations and differences between work and academic styles:

Thank you for your support. I feel I've learnt a lot from you about creating professional, academic work in the business area.

I have particularly noted your observations concerning the poor Harvard referencing and a lack of academic style in my writing, both problems I feel I can overcome with your help.

Clarification

Despite being responsible for designing their own programme, learners often need guidance on how to fit in with the university's academic procedures, and the processes that must be followed:

Academic

Do I need to be more specific (I am always worried about waffling on unnecessarily.)

Processes

Who shall I send finished piece to and do I need any pro-forma?

How do I proceed from this point?

Could you give me an idea of how things will progress from this point?

Social / affective issues

LtW learners develop a personal and social relationship with their tutors and are willing to share their feelings about how the work is progressing and to express appreciation for support they have received:

Appreciation

Thanks for the advice, I'm starting to get an idea how the independent learning thing works now.

Thanks for your support and guidance at present, I really needed those words of encouragement

Sharing confidences

Step sister aged 32 died leaving behind a 2 1/2 yr old and 4 month old baby and have had mega problems at work too! Not my month!

Tutor Responses

Students find tutor responses most satisfactory when the tone of the on-line support is informal and friendly, yet definitive and authoritative without being over-prescriptive.

Tutor responses are characterised by the following features:

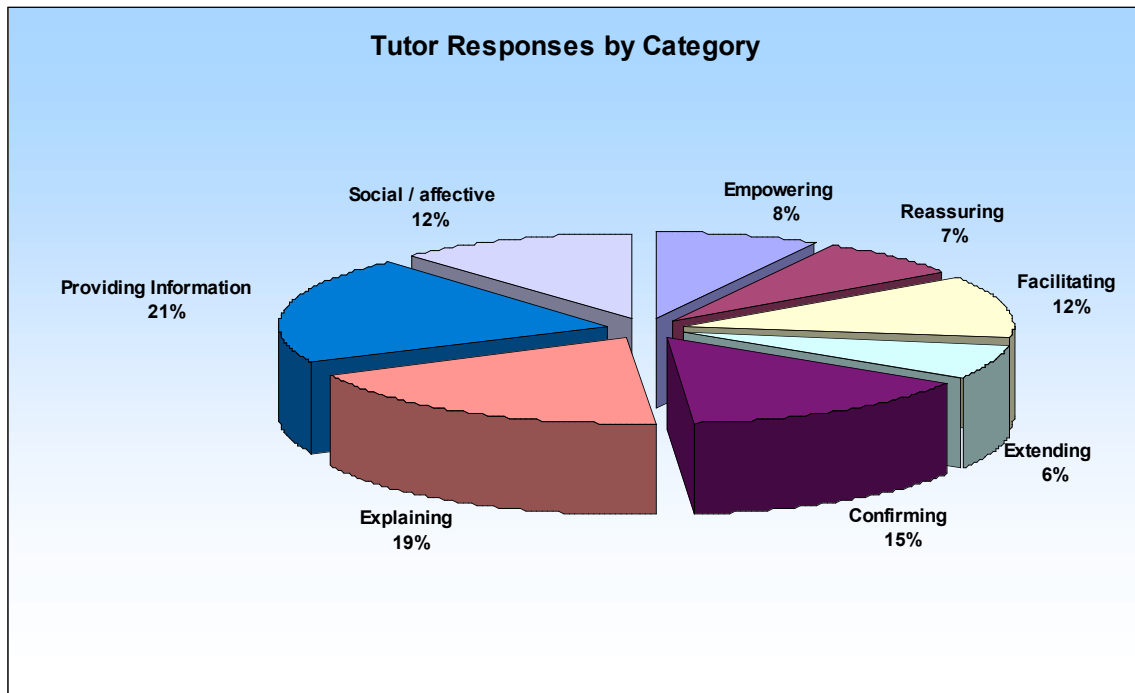


Figure 2

Empowering

Effective tutoring seeks to recognise the often significant quality of what learners have produced.

What you have done so far is terrific - you have actually started a much bigger process which is in effect the claim for Accreditation of Prior Experience and Learning.

Enabling

It is very noticeable that tutors frequently use modalities when offering advice. This is perceived as an enabling feature for learners.

I think you need to ... I suggest ... My advice is ... I do think it would help you ... I'd recommend ... My advice for now is ... I think you need to explain ...

Reassuring

LtW learners are not always confident. They appreciate reassurances like these:

Please don't worry about having taken some time out from study - LTW is designed to be flexible and to be available when you need and are able to use it.

just keep going; you are doing well!

Facilitating

Successful LTW tutoring points the way for learners to take ownership of their own learning, to access resources, or to provide alternative sources of specialist disciplinary support, as the following illustrate:

Do you want to have a chat about a final draft ...?

*... if you experience any problems with your account and need library access contact ***** and they should be able to help.*

****** is still away, so I've asked ***** to take a look from a clinical viewpoint.*

Extending

Frequently, tutors' experience can identify ways for learners to enhance their studies

You have been instrumental in implementing new initiatives in your (professional) area. It might be useful to think about whether or not it is time to review/audit/update

some of these.

Confirming

Yes, it's fine to make the changes.

Explaining

Clarity, detail and coherence are important:

Your learning contract is worth 15 credits of your award and is a component in itself. We have to build your learning programme (what you are going to study) component by component on the contract and then it is assessed and your programme of learning approved. (The learning contract) is generally the first component to be completed but as Working and Learning is an agreed component there was no problem in you completing this before the contract was completed.

Emerging propositions

This is an ongoing research project and we do not want to make too strong an assertion of what has come out of the study – this is work in progress and we have unearthed ‘emerging propositions’ that need further testing with other groups or a wider selection of students. However, on the basis of initial analyses of exchanges students generally regarded as satisfactory, tentative overall propositions are already emerging:.

1. students learning through work can be helped online by sensitive tutors to articulate, take responsibility for and pursue at HE level their own work-based HE programmes;
2. taking control puts pressure on the LTW learner who is seeking HE recognition to establish or confirm their personal credibility at their target academic level;
3. tutors are effective when they are committed to building and sustaining the learners’ confidence to be in control of their own programmes;
4. support is effective when it is informal and friendly, yet definitive and authoritative without being over-prescriptive;
5. readily accessible exemplars and help pages releases the tutor to focus on helping students engage key aspects of being responsible for their own programme.

In short, it seems, good tutor inputs to online exchanges focus on helping students clarify their needs, recognise the constraints, establish their credibility and build their

capability.

Re students

- LtW learners are likely to be the instigators of tutorial dialogue;

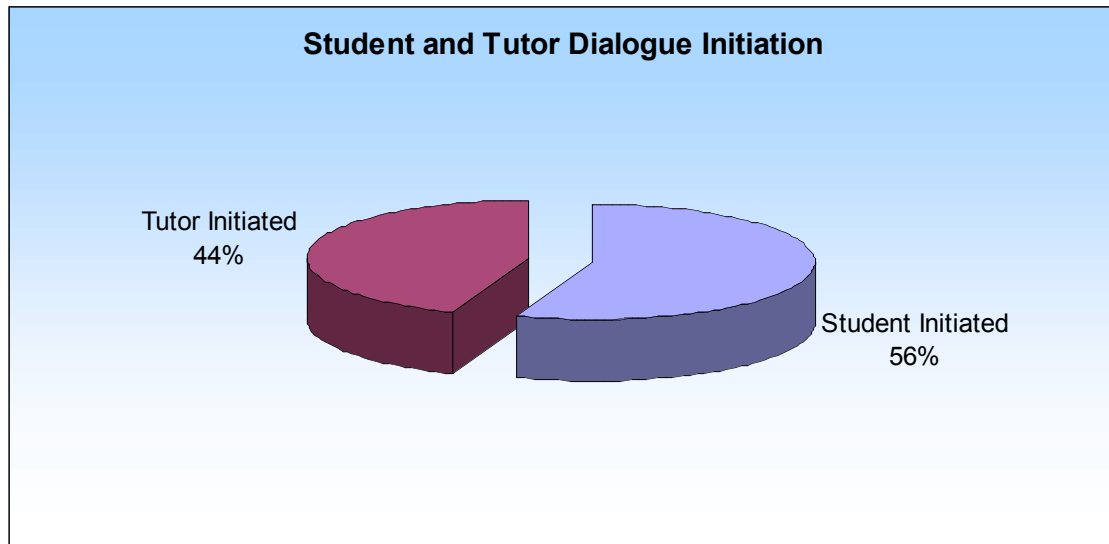


Figure 3

- formulating written communication potentially leads to more focused and productive exchanges;
- learners can access a wider range of tutor input /resources at the point when they identify a need for it, rather than when it might appear on a lecture or seminar schedule;
- tutors can potentially spend less time in giving effective individual service to learners than they would in more 'normal' lecture / tutorial situations;
- there is greater potential for pride in achievements through personal ownership of the programme.

Re tutors

It is emerging from the exchanges that in addition to having an empathetic yet rigorous demeanour, tutors are effective when they have

- 1 Knowledge of credit systems and academic regulations;

- 2 Confidence to support generic skills - academic writing, referencing, research, personal development planning, et.c.
- 3 Willingness to work outside subject comfort zones;
- 4 capacity to help learners maintain momentum and motivation.

Some wider implications

For students:

From our study we have learnt that students are willing and capable of taking responsibility for shaping and managing their own university programmes based on learning-through-work, that they can initiate and sustain academic discourse on-line and that they feel a sense of pride and achievement in doing so.

For tutors:

We would say that the tone of tutorial discourse is critical. It needs to balance friendliness and a degree of informality with clear and precise guidance. This guidance should be facilitative rather than directing and the tutor needs to be prepared to move in directions proposed by the learner, while maintaining a focus on the academic parameters within which the study is taking place. The above analysis can form the basis of some notes for guidance, based on real experience, for tutors new to this kind of work.

For on-line learning through work in general:

Our growing insight into the features of effective tutorial practice has the potential to shift the balance of debate about online supervision more towards its pedagogical stance and away from technicalities and corporate budgets. It also has potential to contribute to staff development for those planning to introduce similar schemes.

We anticipate our emerging propositions will be of particular interest to the growing group of academics exploring theoretical models of work-based learning in general and learning through work in particular. It adds a new arena, - higher education tutors and culture – to the social context within which learning through work can be supported, facilitated and tested. It facilitates effective collaboration between university and employer in response to the developmental interests and needs of individual learner-workers. The emerging propositions illuminate ways in which universities, via their tutors,

can help learners engage productively with learning opportunities at work, convert informal learning to formal programmes of study, articulate their learning aspirations and negotiate accreditation for their learning achievements.

Conceptually, LtW focuses attention on the informal learning through the work process itself (Eraut 2004) and enables the learner to engage purposefully with the social context in which it takes place (Billett 2002, 2006).

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