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**Paper presented at the HETAC Conference:**

***Recognising Work-based Learning***

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**The interface between academic knowledge and working knowledge:  
implications for curriculum design, pedagogies and assessment**

**Introduction**

This paper considers some aspects of 'recognising work-based learning' that may be of interest to academic staff in higher education who have responsibility for negotiating, designing, delivering and assessing programmes for, and with, Irish workplaces, companies, organisations and sectors of the workforce.

Academics are well used to the concepts, theories and practices associated with curriculum design for traditional teaching, and indeed, the practice literature with regard to higher education pedagogies is vast. For the most part, academic staff development programmes related to teaching and learning operate from a paradigm of traditional, classroom-based teaching regardless of preferences for, variations on, or combinations of, behaviourist or constructivist pedagogical design. The inclusion of ICT-based

technologies in teaching methods is energising significant numbers of academic staff and attracting considerable funding in the recent past. Likewise the move to a learning outcomes approach is stimulating critique and discussion about the nature of learning at all levels. However, this paper argues that these changes operate predominantly within a traditional paradigm of teaching and learning, regardless of promotional rhetoric to the contrary, and that they do not fundamentally consider how adults learn through work, how curricula could be designed informed by a knowledge of the complexities of learning through working life, how learning outcomes can be negotiated and attained through work, and how assessment methods need to be relevant to learning through work. The paper distinguishes clearly between aspects of work-based learning which are integrated into traditional programmes, and programmes which are informed specifically by a paradigm of work-based learning, raising both theoretical and practice aspects of the latter, without privileging one form of teaching and learning above an other. The main aim of the paper is, in line with the title of the conference – to ‘recognise’ that work-based learning requires a different set of concepts, theories and practices – in fact a different paradigm – within higher education pedagogies.

### **Learning through work is nothing new in HE**

At the outset it is conceded that learning through work has always been ‘recognised’ in higher education in various ways. The most obvious vocational and professional relationships with the world of work practice at undergraduate level are through placements, apprenticeship, internships, sandwich courses, block release and so on. Postgraduate qualifications such as the Applied MSc., MBA & DBA, CPD courses, graduate diplomas, special purpose awards etc. generally respond to the needs of working life. It is not unusual for work-related elements of programmes to attract significant credits towards an award, often with grading. Nor is it unusual for such work-related elements to have formal arrangements for mentoring and supports in the workplace with academic ‘inspection’ that workplaces are indeed sites of learning.

Partnerships with the world of work are not new either in higher education. Traditional and contemporary arrangements for training of professional practitioners such as in law, accountancy, medicine, in the pharmaceutical industry and the IT industry, are well known. Off-campus and/or in-company delivery are now quite common. Negotiated programmes for the public service, for the defence forces and for public employees generally, are not unusual. All of these have an element of 'recognition' of the significance of learning *at, through and from work*.

The question, then, is: is it legitimate to argue that we require a specific paradigm of work-based learning to inform the business of higher education, other than within the context of 'recognising' prior experiential learning (APEL)? It could be argued that mechanisms used to date for recognition of prior learning through work have centred more on making experiential *recognisable* within the traditional paradigm of learning in higher education rather than within its own paradigm. It could also be argued that the use of learning outcomes has had limited value in APEL since the construction of those outcomes is informed by a traditional learning and teaching paradigm, and factors out any learning that is not articulated in those pre-scribed learning outcomes! This paper, then, tentatively suggests that there is an obvious relationship between the concepts, theories and practices of work-based learning and those of APEL since both 'recognise' the legitimacy of working life as a locus of legitimate, higher level learning in its own right. They represent an emerging paradigm, or worldview, that higher education needs to seriously consider if it is to further extend its relationships with working life in a more philosophically empathic manner.

### **Features of a paradigm or worldview**

A paradigm, based loosely on Kuhn's original definition, is broadly defined as a set of practices underpinned by shared epistemology, values and beliefs, habits of reasoning, patterns of judgement and working techniques, with broad agreement on theories and concepts. A paradigm may emerge from an earlier one, may displace an earlier paradigm, or exist alongside a different one. At the macro level of **metaphysics**, a paradigm defines what can be known and understood. At the meso level of **epistemology**, a paradigm determines what counts as acceptable, or legitimate, knowledge. At the micro level of **ethics and praxis**, a paradigm mediates the practices of its own community.

### **Shifting paradigms and worldviews**

Circumstances, events and actions cause paradigm shifts in how higher education organises itself and positions itself within the world. The process of paradigmatic change requires that a new paradigm becomes generally accepted by the power elite as well as by the general body of practitioners, if it is to be sustainable. Paradigms become accepted in higher education generally when the following happen:

- professional bodies give them legitimacy
- dynamic leaders adopt and promote them
- specialised journals and books emerge
- conferences of like-minded thinkers are organised
- government agencies grant funding
- educators include them in their curriculum content
- they become popular in the media
- they are no longer regarded as deviant

- research gives them 'scientific' legitimacy
- they feature in policy documents.

### **Impact of a new paradigm in HE**

There is a broadly similar pattern in how new paradigms become accepted, integrated and subsumed, often with features as follows.

Communication among practitioners and explicit practices ensure that the 'rules' of the paradigm become tacitly known. Soon new theories emerge from practice within the paradigm, often resulting in a general shift in worldview. These changes in worldview can impact differently on different academic disciplines both in timescale and extent. It is not unusual for initial resistances to identify anomalies in the old and new paradigms.

When a paradigm becomes entrenched it too begins to resist challenges to its assumptions, values and theories. On the other hand, paradigmatic changes can blur boundaries and sometime generate border-crossings among paradigms, thereby making resistance less necessary.

Crises in paradigms can result in paralysis, resistance, or passive acceptance of new paradigms.

A new paradigm may not be a cumulative outcome of earlier paradigms, but can represent an entirely different worldview which needs mass persuasion for acceptance.

Acceptance of, or surrender to, a new paradigm frees practitioner from continuously examining the assumptions underpinning previous paradigms.

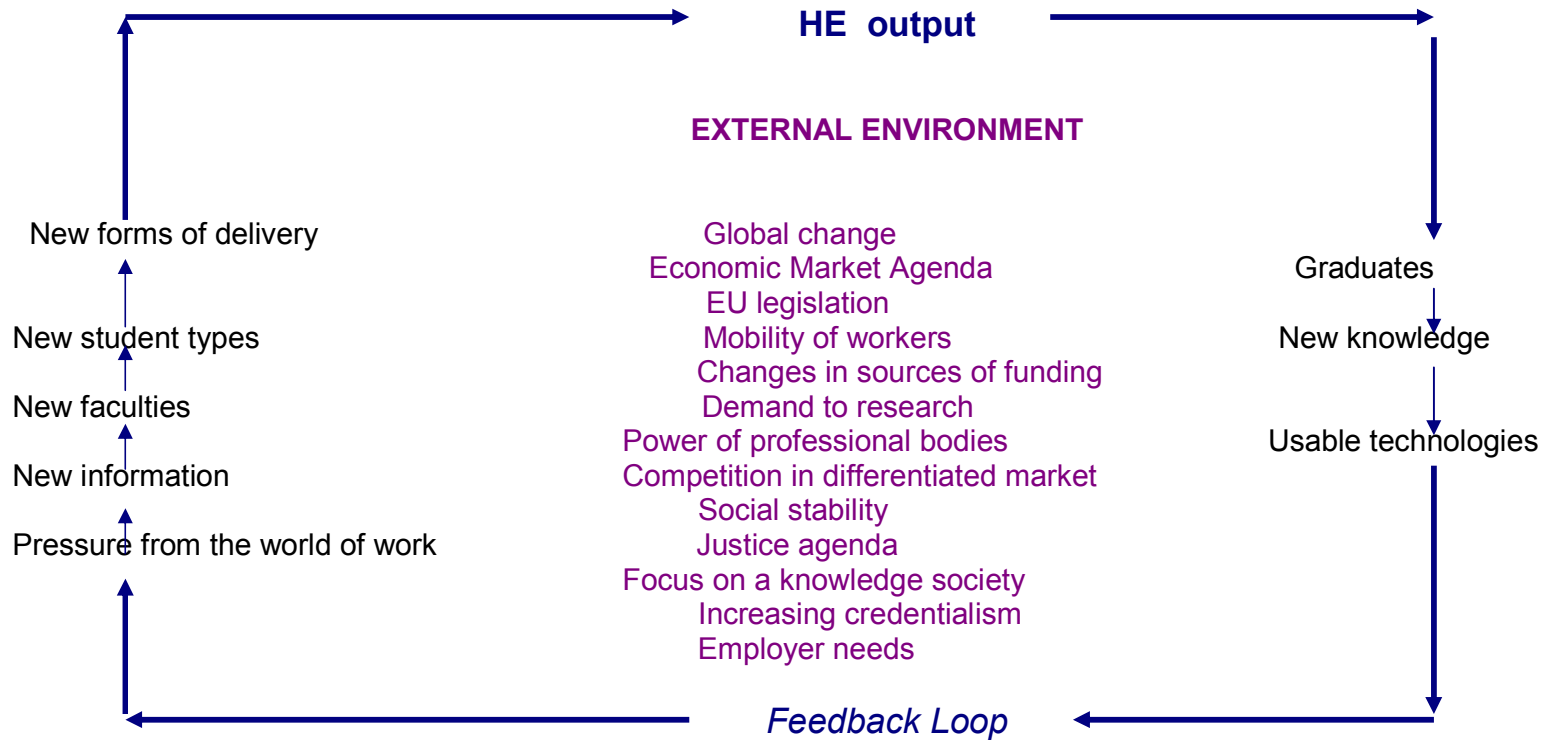
### **Drivers of paradigmatic change in Irish higher education in relation to WBL**

Contemporary drivers of structural and political change in higher education in Ireland, and in Europe generally, are identified as two-fold, as illustrated in Figure 1 below: firstly, the need to maintain and enhance economic progress through generation of new knowledge through research and the application of that new knowledge in the world of work, and secondly, the need to facilitate social stability and democratic cohesion. As a broadly publicly funded institution, higher education is expected, in such an open/neoliberal model of the academy, to be responsive to the needs of the economy and of the labour market, while at the same time affording citizens their right to appropriate levels of education to sustain economies in stable societies. Thus the growing interest in the interface between traditional higher education and the world of work at OECD, EU and national levels manifest through the myriad of research project, incentives and initiatives which have a labour market focus.

Higher education is being increasingly pressurised to adapt its cultures, policies and practices to this agenda, and indeed the growing number of qualifications and credentials are testimony to the growing marketisation of education generally within a European Qualifications Framework distinguishable now by diminishing differentiation among higher education providers or among their awards.

Where individual academics position themselves with regard to these changes in the remit and function of higher education is a matter of some importance where the paradigm of work-based learning is concerned, since positionality will determine one's philosophical, ethical and practice attitudes on many levels. There is no doubt that scholarly opinion is quite divided in this regard.

**Figure 1: Emergence of WBL in an Open/Neo-Liberal Model of HE as a Public Knowledge Institution**



**Scholarship of the WBL Paradigm**

Emerging international scholarship related to work-based learning ranges over all aspects, though with less emphasis on pedagogies of WBL appropriate for higher education than one might expect. This deficit could, of course, be explained by the tendency to regard WBL as ‘training’ in the vocational training and education or further education sectors. The literature on ‘adult learning’, much valued in higher education, however, does not readily transfer from its marginal, liberal humanism, or critical theory roots, to scaled-up pedagogical practices across all higher education. Thus, it is not surprising that a paradigm of WBL with its own discrete scholarship is emerging across all continents, including aspects of worker/trade union and indigenous knowledges. An indicative table of WBL scholarship and scholars is offered below in Table 1 with the caution that it is highly selective to include writers who focus on philosophical and theoretical aspects rather than on specific pedagogical practices.

*Table 1:*

<b>Aspect of WBL scholarship</b>	<b>Selected Contemporary WBL Irish and international ‘Scholars’</b>
<i>Ontology and Epistemology: The nature of working knowledge</i>	Hagar, Boud, Fenwick, Eraut, Schön, Brown and Duguid, Sfard, Engeström, Fuller
<i>How people learn at work</i>	Billet, Solomon, Mills, Illeris, Evans, Felstead, Unwin, Eraut, Lave & Wenger, Bandura, Rogoff, Guile
<i>Partnerships between HE and the world of work</i>	Brennan and Little, Gallacher and Reeve, Fisher, Field
<i>General and Postmodern Critique</i>	Coffield, Fenwick, Kincheloe, Fuller, Usher, Edwards, Lynch, Mills, Kenny, Murphy, O’Rourke

### **Emergence of a WBL paradigm in relation to learning theories and attitude to learners**

Any paradigm of curriculum and pedagogical design will be underpinned by a philosophical stance with regard to the nature of learning and the appropriate means of teaching, as well as by a specific view of the role of the learner. A WBL paradigm, as illustrated in the timeline overview in Table 2 looks significantly different to a traditional paradigm with regard to the locus of learning. A WBL paradigm will regard the exigencies of work as central to the curriculum and to the level, pace and intent of the learning. While some traditional academics may find this unsettling, it could be argued to be merely an extended articulation of many pedagogical approaches listed earlier, such as apprenticeship, internship, placements etc.. What is significant in WBL and in APEL, though, is the acceptance that all knowledge need not necessarily be codified in the concepts and terminology of the traditional higher education curriculum to be regarded as legitimate for working life.

**Table 2**

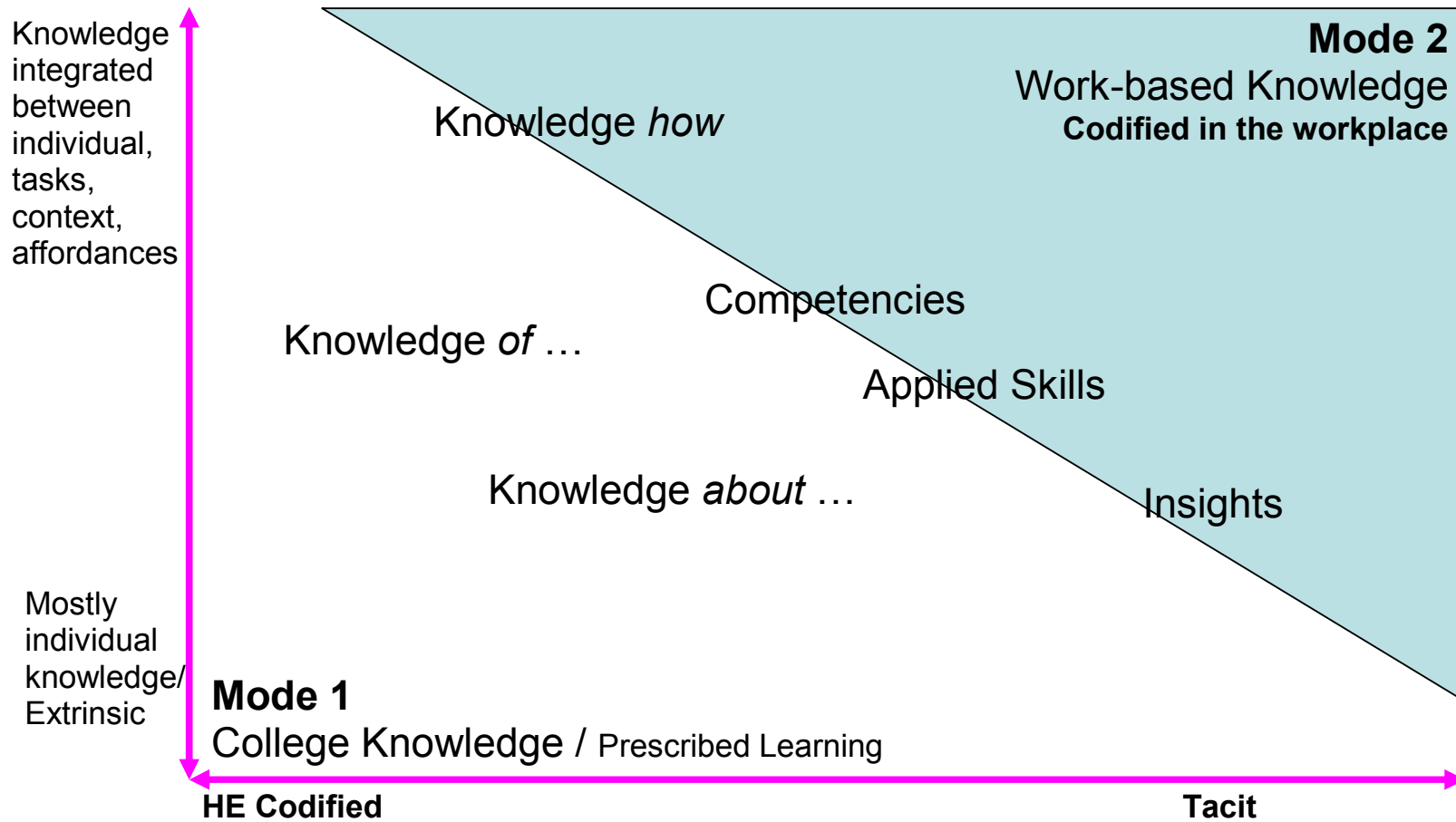
<b>Stage</b>	<b>Innovation in HE curriculum design and pedagogies</b>	<b>Theoretical basis</b>	<b>Centrality of the learner</b>
<b>1950s &amp; '60s</b>	Programmed learning, open learning	behaviourism	Learners control the pace of learning
<b>1970s &amp; '80s</b>	Adult learning methods, self-directed and negotiated	humanism	Learners negotiate the pace and content
<b>1990s</b>	e-learning, group project-based learning, PBL	constructivism	Learners collaboratively focus on what is needed to be learned
<b>Late 1990s</b>	Work-based learning partnerships	eclectic (situated, distributed, complex)	Learners negotiate programme activities from the exigencies of work

### **The interface between WBL and college-knowledge**

Ways to clearly and simply articulate the differences between dimensions of what could be described as the 'college-knowledge' paradigm and the paradigm of learning through work are now well published in international literature. Widely known ideas of Model 1 and Mode 2 knowledge are a useful starting point. For the purpose of our discussion here, we could describe Mode 1 as the codified knowledge of the academy which is articulated in its curricula, pedagogies, scholarship and awards. This form of knowledge is mostly extrinsic to the knower, with its own academically-defined codes. Its acquisition is an individual act aided by teaching of a prescribed curriculum. It is mostly knowledge *of* and knowledge *about* for application in a notional context in the future. Model 2, on the other hand, could be described as emerging from collaborative work, codified through work practices and distributed through both work practices and worker activity. It depends to a great extent on workplace affordances and opportunities in real-time. It is mostly knowledge *how to*, and knowledge *why*. It may be tacit rather than explicit, with insight a significant factor. The emphasis is on understanding learning as distributed among tasks, people, contexts, time-space and affordances, as illustrated for discussion purposes in Figure 2 below.

Designing and delivering a curriculum which 'values' this kind of distributed and situated learning is challenging for the academic practitioner who may have little freedom to operate outside the traditional paradigm of programme design and quality assurance practices, mindful that any threat to the predominant paradigm may be hotly resisted by internal cultures.

**Figure 2**  
The interface between *College Knowledge* and *Working Knowledge*



Murphy, A. (2007) elaborated from Campbell, D. (2007) 'Bachelors and Employability', presentation to BeSt Graduate Fair Seminar, Vienna

### ***Atomistic Pre-scribed Traditional Curriculum or Holistic WBL Learning Contracts?***

Design challenges for the WBL curriculum require the academic practitioner to re-consider the rationale for the traditional curriculum and its many unquestioned assumptions about the validity of a pre-scribed learning outcomes approach, about fundamental constructive alignment of learning, teaching and assessment, about static semesters and rigid timetables, about linear learning, and about static assessment models, as tentatively illustrate in Table 3 below.

More fundamentally it may question the basis of the codified knowledge of the academy and its preference for disembodied, de-contextualised and abstract curricula that favour forensic and atomistic attention to the minutiae of programme documents. It may instead promote a reasoned consideration of WBL programmes operating within their own paradigm of holistic learning where learning outcomes are broadly defined at the appropriate level in relation to the work context, where the curriculum is integrated and relational, where assessment activities are authentic and negotiated, where the learning tasks are designed as real-world challenges with the appropriate level of theory-in-practice, and where the assessment criteria are negotiable, weighted in relation to the tasks, and fit for purpose, as illustrated in the Tables 4 and 5 below.

**Table 3**

<p style="text-align: center;"><b>ATOMISTIC</b> Pre-scribed curriculum</p>	<p style="text-align: center;"><b>HOLISTIC</b> Learning Contract with work as the curriculum</p>
<ul style="list-style-type: none"> <li>• Pre-determined Learning Outcomes at unit or module level</li> <li>• Alignment of curriculum content, learning activities and assessment methods</li> <li>• Teaching hours, learning hours and assessment hours mathematically determined</li> <li>• ECTS formulae determine programme design and pace of learning achievement</li> <li>• Static timetabling of learning progress</li> <li>• Semester-based calendar structures</li> </ul>	<ul style="list-style-type: none"> <li>• Learning Outcomes broadly defined at level in context</li> <li>• Integrated and relational curriculum</li> <li>• Negotiated assessment activities</li> <li>• Scale of learning negotiable</li> <li>• Challenges of learning tasks determine the pace and extent of learning</li> <li>• Work-place timelines dominate</li> <li>• Negotiated weighting of assessment criteria</li> </ul>

**APPENDIX 1: WORK BASED CPD COURSE: SELF-ASSESSMENT, LEARNING PLAN AND POSSIBLE LEARNING CONTRACT ASSIGNMENT**

<b>Learning Outcomes</b>	<b>What I currently know/do</b>	<b>What do I need to know/do</b>	<b>Opportunities at work to apply knowledge/skills for work based assignment</b>	<b>Ideas for Assignment</b>
1. Articulate an understanding of the differences between a traditional higher education paradigm of learning and teaching and a work-based learning paradigm				
2. Design a teaching and learning approach appropriate for a work-based learning programme/module				
3. Mentor work-based learners in relation to their academic studies				
4. Negotiate learning contracts with worker-learners in relation to sets of learning outcomes				
5. Design and implement work-related assessment mechanisms				
6. Develop appropriate WBL materials for own teaching needs.				

**Table 5 Generic Assessment Criteria adapted from Glasgow Caledonian University/Scottish Centre for Work Based Learning documents**

NB: The descriptors set out the characteristic generic outcomes. They are intended to provide a general, shared understanding of each level and to allow broad comparisons to be made between qualifications and learning at different levels. They are not intended to give precise nor comprehensive statements and there is no expectation that every qualification or programme should have all of the characteristics. The descriptors have been developed through a series of consultations and are offered as a working guide only to be adapted, reduced or elaborated by programme/course/module teams as appropriate.

Scholarship, knowledge and Understanding	Application of new knowledge in work practice	Higher level cognitive skills	Written presentation, communication and ICT skills	Self-directed and autonomous learning
<b>Characteristic outcomes of learning at each level include the ability to:</b>				
<p>Demonstrate and/or work with:</p> <ul style="list-style-type: none"> <li>• a broad and integrated knowledge and understanding of the scope, main areas and boundaries of a subject/discipline</li> <li>• a critical understanding of a selection of the principal theories, principles, concepts and terminology</li> <li>• knowledge that is detailed in some areas and/or knowledge of one or more specialisms that are informed by forefront developments</li> </ul>	<p>Use a selection of the principal skills, techniques, practices and/or materials associated with a subject/discipline</p> <p>Use a few skills, techniques, practices and/or materials that are specialised or advanced</p> <p>Practice routines methods of enquiry and/or research</p> <p>Practice in a range of professional level contexts which include a degree of unpredictability</p>	<p>Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues</p> <p>Identify and analyse routine professional problems and issues</p> <p>Draw on a range of sources in making judgements</p>	<p>Use a range of routine skills and some advanced and specialised skills in support of established practices in a subject/discipline, for example:</p> <ul style="list-style-type: none"> <li>• make formal and informal presentations on standard/mainstream topics in the subject/discipline to a range of audiences</li> <li>• use a range of IT applications to support and enhance work</li> <li>• interpret, use and evaluate numerical and graphical data to achieve goals/targets</li> </ul>	<p>Exercise autonomy and initiative in some activities at a professional level</p> <p>Take some responsibility for the work of others and for a range of resources</p> <p>Practice in ways which take account of own and others' roles and responsibilities</p> <p>Work under guidance with qualified practitioners</p> <p>Deal with ethical and professional issues in accordance with current professional and/or ethical codes or practices, seeking guidance where appropriate.</p>

### **Some Critique of WBL Pedagogical Design**

It is reasonable at this stage to concede that work-based learning as a political or policy position that works its way into higher education practices is not without its critics, whose academic right to remain critical is not questioned in this paper. Inevitably there are critical voices from within the traditional academy which resists diminution of its powers to decide its own role and remit in society. There are critics who fear the growth in interference by the state-as-paymaster in academic matters generally.

Additionally there are scholars who write from the perspective of critical theory who fear that work-based learning represents yet another means of colonisation of the lifeworlds of workers and they lament the growing emphasis on performativity at work. They fear that higher education is becoming too-close to market needs with too-much demand for the 'flexible' and 'mobile' worker.

Traditional scholars often dismiss work-based learning because it lacks sufficient theory, is too-subjective, too-generalist, too-contextual.

Practitioners often dismiss it on the grounds that it is procedurally too-difficult and pedagogically too-time-intensive.

All these are legitimate criticisms in their own ways, no doubt, though the traditional paradigm is rarely critiqued in equal measure!

## **Back to the Conference Title: Recognising Work-based Learning**

### ***Unresolved Issues***

#### **'Recognising' con-current experiential learning**

This conference is one of the first opportunities at a national level to invite practitioners and policy-makers in Ireland to seriously consider articulating and debating an indigenous scholarship of experiential learning in higher education, whether it is prior experiential learning that is presented for 'recognition', or current experiential learning from working life.

#### **Acts of legitimation? Whose codes and accreditation are more powerful?**

The positive response to the announcement of this conference indicates the desire of academics to underpin the technologies of WBL and APEL practices with clearly articulated positionalities in relation to knowledge and learning: without that underpinning such conference could become mechanisms for compliance and control through legitimation of preferred worldviews and policy positions, which may indeed become the imposed 'legitimate' paradigms of the future.

#### **The power to regulate what is know?**

There is indeed an interesting mix of responses to the increased surveillance of learners and workers through common frameworks of qualifications and through mechanisms to 'value' non-formal and informal learning in terms of such frameworks only. Such surveillance could well serve the needs of individuals, and equally well serve the needs of economies and nation states in terms of

mobility of workers. How far framework authorities will intrude into workplace learning is yet to be discovered. It is refreshing that this conference is not a rallying call for ever-greater regulation and more intrusive surveillance!

### **Eliding WBL and AP(E)L as epistemological twins?**

By far the most challenging and most promising outcome of this conference might be at the level of articulating the assumptions and theories of knowledge underpinning policy intentions with regard to the interface between the academy and working life, especially in the contemporary context of activity by both the OECD and the NQAI to develop strategic positions with regard to the 'valuing' of non-formal and informal learning in relation to traditional learning in higher education. Perhaps the stasis in this regard over the past decade and a half has been because of the lack of shared epistemology in this regard, and because of the obsession with 'mechanisms' and research case studies of mechanisms in action? Perhaps an outcome of this conference might be to contribute to scholarly debate on the core issues around the codification and legitimation of learning in working life, unencumbered by the theory-free 'what tools work' approach which has bedevilled progress to date?

### **The *learned* curriculum versus the *taught* curriculum?**

Again, on the level of the nature of learning through working life, it is unlikely that one conference would disturb several decades of academic traditions with regard to the assumption that one needs to be taught in order to learn. It is perhaps less likely that the rush to modularised, semesterised, and learning-outcomes based curricula will be reviewed any a time soon, given its painful recency on the landscape. However, the growth of private, corporate providers who can now by-pass higher education providers may force a serious consideration of *why* we are being bypassed as legitimators of curriculum design for working life?

**WBL as ‘collaborative co-creation’?**

There is some merit in taking a fresh look at knowledge creation past and present in order to gauge the actual value of higher education in economic, scientific and technological progress and perhaps thereby enhance the position of the academy as a partner in collaborative co-creation of knowledge with the external environment through a work-based learning paradigm of curriculum design and pedagogical approaches.

**‘Static’ or ‘emergent’ learning?**

Perhaps the most significant feature of this conference is as a forum for the higher education sector to present aspects of emergent learning about its own role and its practices in relation working life which is not simply a forum to disseminate practice or to inform its community about current and likely policy directions.

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### Suggested Initial Readings related to the content of the paper

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