

The digital partnership divide: can eLearning pedagogical designers understand worker-learners?

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Introduction

Learn@Work is an EU Minerva Education Research Project 2005–2008 shared by a consortium of five European partners from Scotland (Glasgow Caledonian University), Denmark (Aalborg University), Belgium (AtiT: Audiovisual Technologies, Informatics and Telecommunications), Austria (Institute for Future Studies) and Ireland (Dublin Institute of Technology, or DIT). This symposium paper reflects the particular experiences of the authors from DIT in designing materials for the project, in piloting the materials and in evaluating their individual and collective experiences to date. As with any consortium or set of partners, we, the authors of this paper came to the project with three very different sets of experiences, performing different roles in the organization though we are spatially close in the workplace, probably held significantly different sets of expectations from both the processes and products of the project, and probably positioned ourselves quite differently with regard to our underpinning philosophies and values with regard to the nature of the project itself, and with regard to the implications for our separate worker identities. Arguably, the often unstated, yet apparent, divergent discourses at play among us as authors, and among other colleagues closely involved in the project, could be said to mirror the range of underpinning and often shifting positionalities related to notions of induction and support for worker-learners which unfolded among the partner institutions as a whole.

The paper is structured into three distinct parts, with each part written independently by the authors to reflect our own particular interpretation of the research process as it unfolded. That is not to imply that the views and interpretations of the individual authors were particularly conflicting. Rather, the structure seeks to offer maximum opportunities for divergence of discourses to be articulated at an interim stage of the project, with a view to future conceptual analysis at the end of the fieldwork stage and before the final evaluation report. This paper offers both an opportunity and a forum for us, the authors, to speak individually and to listen mindfully and critically to the nuances that will eventually frame the final products from the Dublin partners.

Part 1 of the paper is written by Anne Murphy from the perspective of an adult education practitioner.

Part 2 is written by Pauline Rooney an eLearning developer.

Part 3 is written by K.C. O'Rourke, DIT's head of eLearning Support.

Part 1: Description of the project: rationale, purpose, focus, definitions, policy context and competing discourses

The Learn@Work project brings together a group of experts in distance learning, eLearning, work-based learning and workplace learning, interested in using Information and Communication Technologies (ICTs) creatively to develop and refine approaches to workplace learning in a transnational and multi-cultural framework.

The project has three distinct, but overlapping, phases as follows: first, the establishment of an expert group to generate a review of the current 'state of the art' in relation to the status of learning at work in the partner countries; second, the design and pilot testing of a framework materials to facilitate induction and support for worker-learners, the materials to include a learners' guide, a developers' guide, a tutors' guide and ICT-based material; and finally, the implementation, evaluation and dissemination of the framework materials developed.

The particular focus of the Dublin Learn@Work project was the development of a locally-informed induction and support package for worker-learners with whom we currently work, including apprentices, adult learners in their community, workers engaged in continuing professional development, and part-time students, which would introduce them to the use of computers, to basic ICTs, to eLearning and to the academic study skills require for sustainable participation in formal work-related training and education. The team invited a group of academic colleagues, trainers and industry links colleagues to act as an outer circle of critical friends in the initial design concept and in evaluating the first iteration of the materials. This circle identified six sectors of worker-learners who might both authentically evaluate our materials through pilot testing and personally gain enhanced ICT skills in the process. It is anticipated that outputs from the Dublin project will include the outputs from the overall project as well as specifically tailored on-line resources which can be adapted for future use by colleagues in a range of work-based learning context and with a range of worker-learners. The materials developed will be made available to academic staff and to external colleagues and worker-learners who piloted the materials with us.

Defining 'induction' and 'support'

One of the initial challenges for the project was arriving at an agreed working definition among the consortium of the concepts of 'induction' and 'support' for workplace learning.

In the narrow definition, induction was defined as the training provided to new employees to acquaint them with the company structure, their specific job requirements and practical/organisational issues. However, the Learn@Work consortium agreed to enlarge this definition and to use it in its broader sense, with latitude between the concept of induction-to-the-job through ICTs and induction to learning-how-to-learn through the development of ICT competences. Essentially, Learn@Work decided to define induction as the transfer from a 'non-learning' situation to a 'learning' situation, regardless of the current position or status of the employee within the company and regardless the content of the learning. Induction, then, in this broad definition embraces both the concept of lifelong learning for individual enhancement as well as the concept of capacity building in ICTs for economic inclusion.

Learner Identity

Traditional pedagogical design in higher education assumes a profile and identity of learners which is generally epitomised by school leavers coming through the conventional progression routes, mature students who enter through specific access routes, or cohorts of learners for whom programmes have been specifically designed and who generally attend campus-based classes. As a system, higher education

cannot easily accommodate individualized learning packages, despite the rhetoric of self-directed and autonomous learning. Essentially, higher education designs work-related programmes in consultation, and sometimes in partnership, with industry, employers and sectors, rarely in consultation with potential programme participants, with assumptions made about the learner identity, and with pre-decided supports to enable successful learning provided at induction stage. However laudable this design is, it represents the continuing hegemony of the traditional paradigm of programme design and belief in the 'typical' or 'generic' adult learner. Putting aside these comfortable paradigms was challenging and risky for the Learn@Work Dublin team exposed to critical scrutiny by external partners in the pilot projects. Whether this risky approach will sustain to the final stage is as yet unknown.

But essentially the design of the package was predicated on the principle that it should have sufficient flexibility of design and sufficient complexity of possibilities to meet the induction needs, and indeed ongoing needs, of learners isolated in their workplaces without the taken-for-granted attendances of the traditional campus.

Contextual policy discourses

The development and implementation of our national framework of qualifications since 2003 and its associated ten identifiable levels of learning have significantly changed how learning is described, talked about and framed in programme documents. The proposed Common European Framework of Qualifications is likewise influencing how higher education conceptualises the 'generic' learner and how programmes of learning are described in terms of learning outcomes rather than in terms of content. Additionally systems of modularisation and of attaching credit at specific levels of learning are leading to considerable standardisation of systems and of programme design models. While these policy and procedural developments undoubtedly bring a degree of coherence and transparency to systems, they are also now exposing the complexities of designing for learning related to work. They are also exposing the challenges of orienting and supporting worker-learners within the expectations of a qualifications framework which claims to recognise all learning regardless of its site of acquisition (NQAI, 2005).

Within this policy and technical landscape, the L@W (Dublin) project committed itself to the development and pilot testing of a learning package which could be used by worker-learners regardless of their previous education levels, work contexts or learning plans without naming pre-determined learning outcomes, without credits, without a specific level, without assessment and without accreditation. This commitment gave rise to a set of initial questions, the most persistent of which were as follows:

1. What is the role of higher education in relation to developing the ICT skills of the workforce beyond embedding such skills in its programmes?
2. How can the designers of ICT induction and support programmes take account of the specific workplace affordance of each worker-learner in a generic model?
3. Will the acquisition of ICT skills become the responsibility of the individual worker – as self-work – rather than the obligation of workplaces and the education system to provide opportunities to gain such skills?

These questions variously challenged the designers of the ICT package and immediately exposed a range of positionalities among the team, especially with regard to the identity of the worker-learner, with regard to the potential of an ICT package to facilitate sustainable skills in 'learning how to learn', and with regard to the level of individual support an e-accompanier might reasonably offer to off-campus learners in the workplace. On a more philosophical level, the design task exposed considerable variations in philosophies of education generally, and diverse attitudes among the team and circle of critical friends, to the view of higher education as a partner in socio-economic development with direct responsibility for up-skilling the workforce – a responsibility traditionally the remit of the vocational education and training sector – and in radical education discourses regarded as a neo-liberal agenda from which academia should distance itself. Whether a consensus position is necessary at all has not yet been decided.

However, the State of the Art reports produced by each of the Learn@Work partners with regard to work-based learning in their countries concurred on the significance of the digital divide in sustaining social and economic exclusion for those on the less-favourable side. The reports found that the greater part of private training money is allocated to workers with skills already, and that national training budgets are generally allocated, with good reason, to the unemployed, leaving low-skilled workers, especially in traditional industries, at greatest risk of incremental exclusion and less likely to be offered learning opportunities at work. There is no definitive evidence among the reports that inequity of opportunity diminishes as economies become stronger, though the model of governance may indicate such intent.

The transformation of the Irish economy over the last decade is a phenomenon resulting, to a considerable extent, from investment in infrastructure and in education through a partnership model of governance between the government itself, the trade unions, employers, farming interests and the community/voluntary sector. This partnership has resulted in considerable investment in work-related training and in programmes for social inclusion, including schemes for information age towns, IT training and roll-out of broadband access. However, it is apparent from recent policy documents that there has been a considerable shift in policy away from social inclusion and towards sustaining economic growth and export of services, moving from the rhetoric of lifelong learning to the 'information society' and on to the 'knowledge society'. Within the contemporary landscape the categories of workers in danger of being left behind in a digital world include manual workers, service sector workers, early school leavers, workers in small enterprises and workers with physical disabilities. The ICT profile of the Irish workforce outlined in the CIPD reports: *Who Learns at Work in Ireland?* and *Who Learns by E-Learning in Ireland*, is broadly in line with the findings of the IDC EMEA White Paper (2007) and with the conclusion of the European E-Skills Conference Thessaloniki 2006 which recommend a structured approach to provision of ICT training for the workforce, not just as an investment in human capital, but also as an opportunity for citizens to engage in learning for a society increasingly dependent on technology. That conference recommended a long-term commitment to e-inclusion for sectors of the population at risk of technological marginalisation using foresight analysis as the basis for planning the e-strategy.

The designers of the Learn@Work (Dublin) package were acutely aware of the shifting, and often competing, discourses surrounding the role and remit of academia in fostering a knowledge economy. In this regard, the *E-learning Roadmap for Ireland* (2004: 45) identified three specific types of research vehicles, or project approaches, under three broad themes as follows:

Type 1: Empowerment for the knowledge economy

Type 2: Enriching the learning process

Type 3: Blue sky

The report suggests that these research vehicles should share the following common features:

“Design of environment and tools should be participative and learner orientated. Successful learning environments aim at today’s as well as the future needs of learners

- e-Learning products should be easy to use and enhance the learning experience. Successful learning environments must implement learning and teaching strategies, and at the same time incorporate high usability
- Projects should have a global dimension and include international partners. Successful learning environments take into account the differences and commonalities of cultures and attitudes across the world. They recognize the potential and benefits of global learning
- Products should have a social good and have benefits for developing countries, migrant populations and disenfranchised communities
- All projects should be evaluated thoroughly in practical ways with real students and interested educators”

Type 2 research vehicles, or projects, seemed to chime with the emerging positionality of the Learn@Work (Dublin) team and be close to its underpinning epistemology and pedagogical design principles, taking the best from liberal adult education traditions and from complexity and emergence theory in relation to knowledge production, as follows:

“The depth of learning is related to the depth of engagement with the content, the learning environment, and the community of learners The challenge is to provide technology that enriches and deepens the learning process with open ended, experiential learning environments. Research vehicles of this type will have the following attributes:

- A target audience of individual, family, and community

- Creative and innovative interaction styles
- Unstructured, creative, just-in-time learning
- No predefined learning outcomes, the learner will be responsible for their own learning and define their own personal learning goal”

(ibid: 46)

This type of research offered opportunities to view workplaces as complex adaptive systems which could be framed with their own internal logic regardless of their local variable, size, spatiality, affordances and structures.

Likewise, the L@W package designers welcomed the report from the Royal Irish Academy in 2006 in relation to the interface of academia with the workplace which urges a principled approach to research projects and to knowledge production based on clearly articulated expectations, strong personal relationships and a culture of trust and mutual understanding. The report urges academics to become more tolerant of risk, more adaptable and more nurturing of individual innovations.

More recently, the March 2007 report from the enterprise and development bodies, Forfas and ACSTI, explicitly emphasises the shift in policy discourse regarding the remit of higher education *vis-à-vis* industry, using the term ‘public knowledge institutions’ to collectively refer to higher education providers and urging them to make their research available for the benefit of society and the economy in a coherent and accountable way.

The Learn@Work team was also acutely aware that any package of resources offered to academics and to worker-learners would require credibility within the policy landscape outlined above, and that principles would need to be articulated regarding the team’s position on the remit of higher education and the management of its interface with the world of work. The principles which seemed to be tentatively emerging at the design of the pilot materials included the following:

Principle 1: the design of the package should be informed by an understanding of both traditional college-based learning and of emerging paradigms of learning through work

Principle 2: the pedagogical approach in delivery of the package should take account of motivation, self-efficacy, affordances and supports in relation to the specific contexts of user worker-learners

Principle 3: the design and delivery approach should be open-ended, loosely structured, adaptive, responsive, experiential and authentic

Principle 4: the design should be un-inhibited by technologies of modularisation, credit systems, assessment or certification

Principle 5: the package should be free from pre-determined learning outcomes pitched at particular levels

Principles 6: the language, style, images and general formatting of the package should take account of best practice in literacy practice

Principle 7: the package should include paper-based materials, CD material, computer-based and internet-based materials so as to minimise inequities of personal resources and work-place affordances

Principle 8: induction support should include face-to-face contact at a level appropriate to the needs of the particular worker-learners

Principle 9: activities within the package should be adaptable to the authentic context of the worker-learner.

Principle 10: the overall thrust of the package should be towards development of worker-learner capabilities to direct their own sustainable and independent learning and to decide their future learning careers.

Following from these initial, and perhaps only informally articulated, broad principles the team invited a range of groups to pilot the ICT package with team members acting as E-Accompaniers to the groups. The five pilot groups included lecturers in fine art in a Dublin college, independent trainers, manual workers in city parks involved in adult basic education, workers in training centres for adults with severe physical disabilities, and a skillnet of rural women involved in childcare activities. The numbers in each group, the e-competence of the group leaders and the level of involvement of the e-accompaniers is illustrated below:

Pilot Group	Number of Participants	Group leader's E-competence	E-Accompanier involvement
Lecturers in fine art	5	Basic ICT skills	Initial meeting and weekly follow-up
Independent trainers	4	Basic ICT skills	Initial meeting and weekly follow-up
Public park workers involved in adult basic education	8	Adult basic education tutor with ICT competence	Initial meeting and follow-up every two weeks
Training centre participants	8	ICT trainer	Imminent
Childcare workers	6	ICT competent	Initial meeting
	31		

Part 2: Rationale for the Learn@Work induction package

The use of information and communication technologies (ICTs) is now regarded as a means of enhancing both the learning opportunities and the effectiveness of learning for adults in the workplace (Admiral et al 2003). It has been found that work-based learning, which may or may not be related to a formal curriculum, can often be an isolated and unsupported activity for individuals, and that it is often difficult for individual, isolated adult learners at work to keep up their momentum and motivation. It is now considered useful for worker-learners to have support online from both peers and accompanying experts, so that their own isolation is reduced, and so that they can have opportunities to gain from collective learning opportunities.

ICTs have the potential to enable a richer combination of formal and informal learning, and can offer more options for group and individual activity. ICTs can

provide also more flexible approaches than formal, individual learning packages that are paper-based or that are confined to CDROMS/tapes/videos.

The aim of the learn@work pilot project was to explore the synthesis between theories, conceptual frameworks and practices of distance learning, eLearning, work-based learning and work-placed learning and in doing so, to design an online induction package for learners at work. It aimed to equip users of the induction package with a range of skills and techniques to use ICTs effectively for learning purposes, so that users are able to participate in structured learning activities that have an eLearning element.

Learning objectives

Before designing the Learn@Work induction package, in accordance with conventional curriculum design processes, a set of learning objectives was compiled by the project team. After extensive research and discussion with practitioners in the area of work-based learning, the following set of learning objectives was finalised.

On completion of the Learn@Work induction package, the user should be able to:

- use a PC keyboard to complete standard ICT-based activities
- produce and file basic MS Word documents
- send emails and attachments
- use email for group tasks
- search the world wide web effectively
- participate in an online group in both synchronous and asynchronous modes of communication
- use an virtual learning environment (WebCT) for formal learning

In addition, it was intended that the package should enable users to:

- become familiar with basic ICT components and equipment such as webcams, scanners, data storage devices etc.
- develop study skills for formal learning programmes
- develop reflective practice skills
- become familiar with the styles and conventions of academic writing.

Delivery platform and mediums

The delivery platform used for the project was WebCT (<http://www.webct.com>). WebCT is a virtual learning environment (VLE) used by many Higher Education institutions, including the Dublin Institute of Technology, to facilitate eLearning. It was adopted as the delivery platform for this project primarily because of its immediate availability and accessibility. In addition, WebCT provides students and tutors with access to a range of tools which, it was envisaged, would be a useful addition to the project. These include online communication tools such as chat rooms, email and discussions boards. From the tutor's perspective, administrative features of WebCT, such as student tracking facilities, allowed the project team to monitor participants' use of the package.

In order to provide participants with a range of options for accessing the induction materials, these materials were also provided in CDROM format and in hard copy format (in the form of a student handbook). CDROMs was provided in order to provide participant's with greater flexibility in the way they could access the electronic

materials. It was decided that a CDROM would allow participants to access electronic tutorial materials without having to connect to the internet. (For participants with dial-up internet connections, it was envisaged that this alternative would ease cost pressures. For those with limited access to the internet, it was hoped that this would improve accessibility).

It is widely recognised that many students prefer to read from paper than from the screen (Dillon 1992). For this reason, and to improve accessibility of materials, a handbook was provided for all participants. While this handbook could not replicate the interactivity of the online materials, it contained all text and image-based content.

Online curriculum

In order to enable participants to achieve the learning objectives detailed above, the curriculum for the induction package was drawn up through collaborative project meetings. The writing of individual parts was then assigned to project members according to their areas of expertise. The curriculum structure of the package is outlined below.

Part A: The computer, keyboard, screen, mouse and gadgets

As the title suggests, this part is more technology-orientated, aiming to equip users with a knowledge of basic IT components and equipment, such as how to use a mouse and keyboard to interact with technology. In addition, this part also provides tutorials on how to use various computer-based tools and facilities such as word-formatting (Microsoft Word) and file management. Finally, this part includes a section on the internet — this began with the basics of how to connect to the internet and progressed to using the internet to complete common activities such as searching (using Google <http://www.google.com>), adding frequently visited websites to a Favourites menu, and changing browser preferences.

Part B: eMail activities

As previously stated, one of the greatest advantages of ICTs are their ability to facilitate online communication and collaboration. In order to maximise this potential and develop participants' skills in this area, a section on eMail is included. This covers how to send an email, how to arrange an email inbox, how to send attachments and how to create and manage an address book.

Part C: Introduction to WebCT

Virtual learning environments are used by many institutions to facilitate eLearning and ecommunication. WebCT is one such VLE which was used to deliver and facilitate this project. It was assumed that most participants, and indeed most worker-learners, would not necessarily be familiar with WebCT. Therefore a brief section is included in the induction package. This part aims to provide an overview of the functionality and tools available in WebCT for worker-learners. In addition, as the project team had extensive experience of using WebCT with students, they were familiar with many of the queries that commonly arise from students using WebCT for learning. This expertise enabled the designers to include a section which provides answers and solutions to questions frequently asked by students/worker-learners.

Part D: Study skills, academic writing and using the library

The remaining parts of the induction package switches focus from ICTs used during the learning process to the learning process itself. As such, part D focuses on study skills and academic writing, ranging from areas such as organising study spaces and using library catalogues, to writing academic papers and referencing academic articles correctly.

Part E: Reflecting on your learning

The final part of the induction package aims to develop participants' reflective and critical skills. Thus this part covers the following areas: keeping a learning journal, reflecting critically on your learning at work and cycles of reflection.

Instructional design approaches

In order to maintain consistency and coherency across the induction package, each of the parts outlined above adopts a similar instructional design approach. This approach is based on a number of key principles in effective instructional design practice.

Research has shown that learners have multiple learning styles, and indeed multiple intelligences (Gardner 2000, Anderson and Adams 1992). In order to cater for this diversity in approach, each section presents content using a variety of media. This includes text-based content, imagery, video and audio (in the form of voiceover narration). This diversity in media also aims to ensure that the content is highly accessible to all participants, including those with physical and/or learning difficulties.

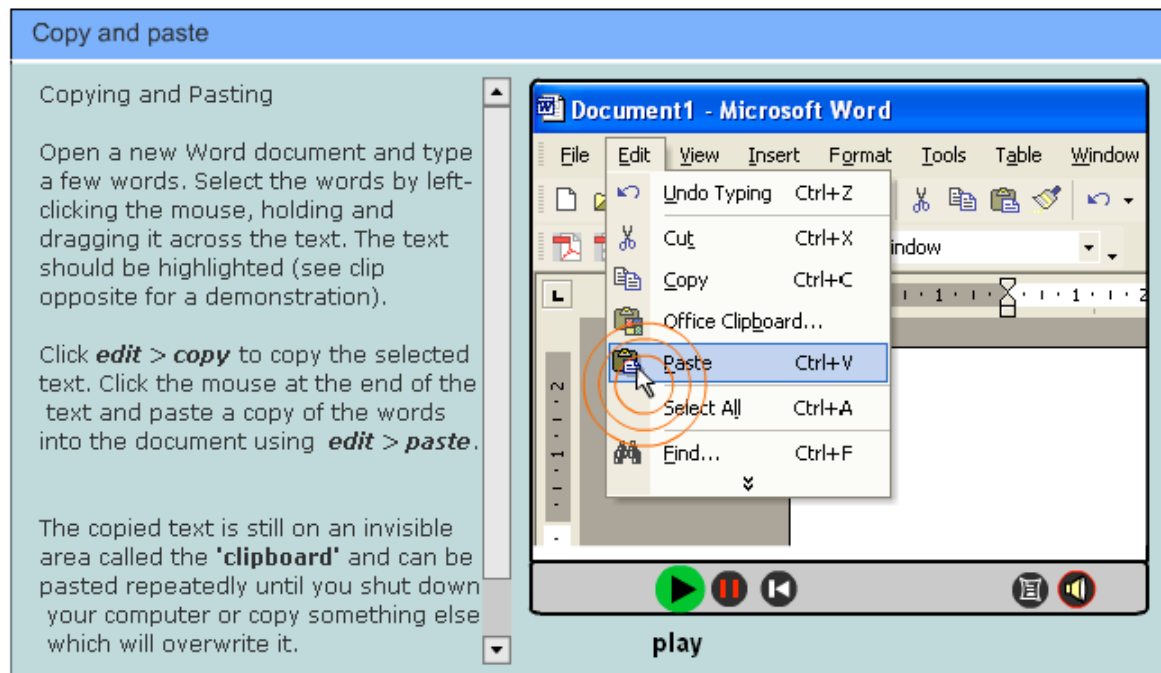



Fig 1. This screen shot from Part A illustrates how text, video and audio are integrated to create a multi-sensory learning experience.

In accordance with active, constructivist pedagogical strategies, contemporary instructional design strategies aim to make content interactive, encouraging participants/learners to put into practice key ideas presented in the content through “learning-by-doing” (Laurillard 2002). Thus activities are interspersed throughout the induction package, allowing participants to link theory to practice, and to reinforce concepts learned throughout each tutorial.


Part D: Study skills and academic writing

3. Using the internet for your studies

In any study programme you are likely to look for information on the internet. You might use a search engine such as Google for a general search. You might use Library catalogues for more scholarly research.

Activity 

Use Google to check the cheapest flight costs from Dublin to Cork on a Sunday morning

Activity 

Find the DIT site at <http://www.dit.ie>

On the DIT site go to the Library site and become familiar with its layout.

Fig 2. illustrates the integration of activities at key junctures throughout each tutorial.

In order to enable participants make the link between theory, as presented in the content, and real-life practice, worked examples of key concepts are presented throughout. Again this conforms to recommended instructional design strategies for effective learning (Chu 2005).

Part D: Study skills and academic writing

11. Supporting your ideas with references from literature

As both a reader and a writer you will get used to different referencing styles. The style of referencing you use will depend on your field of study or academic discipline. History writers use a different style to medics or scientists. The 2 styles selected for this workbook are: the Harvard Referencing System and the Referencing System of the American Psychological Association (APA). There are worked examples of these 2 referencing systems below.

Source	Harvard System	APA System
Book title, single author	Tennant, M (1988) <i>Psychology and Adult Learning</i> , Routledge, London	Tennant, M. (1988). <i>Psychology and adult learning</i> , London : Routledge.
Book title, several authors	Cohen, L, Manion, L and Morrison, K (2000) <i>Research Methods in Education</i> , 5 th ed, RoutledgeFalmer, London .	Cohen, L., Manion, L., & Morrison, K. (2000). <i>Research methods in education</i> , (5 th ed.). London : RoutledgeFalmer.
Book title, edition	Tennant, M (1997) <i>Psychology and Adult Learning</i> , 2 nd ed, Routledge, London .	Tennant, M. (1997). <i>Psychology and adult learning</i> , (2 nd ed.). London : Routledge.

Fig 3. The example above shows how theory is linked to real-life practice through worked examples.

A common practice in the design of eLearning materials is the streamlining of content into “core” and “supplementary” materials. This strategy aims to allow all students to digest key content, while providing opportunities for those interested to pursue further investigation or research. In order to provide the same flexibility for Learn@Work participants, the induction package adopts a similar instructional design strategy by providing “Tips” at various junctures. As illustrated in figure 4 below, these “tips” provide extra information which supplements the core tutorial.

Text in tables

Text in tables

To insert text into the relevant table text.

To change the text the **'align'** icon on toolbar.

You can also sort or descending order the **'sort ascend/descending'** icons.

For further details icons, click **'Tips'**

Sample tables and borders popup window

Tables and Borders

Split/ merge cells: Use this icon to split or merge cells in the table (click in table first)

Click on the icons highlighted in orange above to view their function

Close

Column 3

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The provision of references and resources throughout each part of the package (as shown in figure 5 below), also allows participants to pursue further independent learning in areas of interest to them. Such references include web-based references (e.g. websites, ejournal articles etc.) and paper-based references (books, journals etc.)

Activity

For more sophisticated mind maps log onto the sites suggested below

- <http://www.jcu.edu.au/studying/services/studyskills/mindmap/index.html>
- http://en.wikipedia.org/wiki/Wikw/Mind_map
- <http://www.mindtools.com>
- <http://www.mindjet.com/uk/>

Accessibility

As mentioned previously, accessibility in any online environment is very important. Within the Learn@Work project, accessibility was of paramount importance, particularly considering the underlying democratic agenda (information-for-all) of the project.

Part 3: Evaluation

From the beginning of the Learn@Work project, it was evident that devising an evaluation strategy for the project outcomes would prove difficult. This was not simply because the lack of a common induction package meant that different pilots were being undertaken across Europe, added to by the cultural context of each partner in the consortium, but also because devising a strategy to evaluate eLearning is in itself relatively new territory. Given the tendency of institutions to hold up usage volumes as success indicators, it can be easy to lean towards the idea that quantity equals quality (i.e. that frequency of use of online materials indicates that these materials are good). Moreover, knowing precisely what to evaluate can be difficult: whether a programme has met user expectation is often used as a starting point, but when (as was the case with at least one preliminary group) users have little or no idea what to expect from a programme, it can be difficult to determine whether anything useful has

been achieved as a result of completing that programme. Additionally, it falls to the Dublin partners of the project to act as evaluators for the project overall. It has therefore been important that we not only get the evaluation of our own pilots right, but are seen to get it right.

In October 2006, a preliminary version of the Learn@Work induction materials was released to two groups of online worker-learners as part of their general induction to their programmes (the subject matter of their online courses of study was engineering and architecture). One group, confident in their IT skills, expressed satisfaction at having such a package available to them, but made little or no use of it. The other, with a higher age profile and with poor knowledge of what was expected of them, displayed more hesitancy and a strong reluctance to provide feedback: one participant indicated that he did not himself intend to access the online elements of the programme but would have his son do it on his behalf. In both cases it was evident that participants saw the induction package as an optional add-in to the real business at hand, and therefore their engagement with it was minimal. From this it became clear that a more formal structure would be necessary in order to provide more meaningful data for evaluation.

With the identification of the five pilot groups in spring 2007 came the opportunity to impose a more structured scenario, with structured sessions as well as pre- and post-programme feedback. However, the downside to this was that in many cases participants were utilising the induction package without the context of a consequent online course, and in some cases regarded the induction as an end in itself. Following an initial face-to-face meeting with the group, at which the content of the programme was discussed, expectations were disclosed from both sides and an initial online session was held, each group was asked to meet online on a weekly basis to discuss progress and to bring back any issues encountered. In the case of one group, where IT-user skills ranged from totally unfamiliar to 80wpm typist, this was immediately regarded as problematic. Although during the initial meeting it was clear that all had a basic competence in the use of computers, they insisted they required a tutor to be physically present with them during the online sessions (such insistence has also been heard from undergraduates at DIT who, when polled, stated that they would like to attend online tutorials in a computer lab where the tutor was physically present). In this case, the issue is one of building confidence among the user groups: one person put it "A lot of people in 40s 50s and 60s who do not work in the IT area are afraid to touch a computer in case they make a fool of themselves or think they would break the computer. It sounds silly to users of computers but is real fear with people who do not know much".

From those who did meet online during the pilot, the feedback was especially useful, while the actual experience of using the online collaborative environment provided an opportunity to put into practice what was being learned from the online module (as one user put it in the context of deciding whether to meet face to face or online: "This is my first time in a chat room and I'm starting to enjoy it, it would be good to give it another try"). Many of the issues that arose at this stage were practical in nature (e.g. how to activate sound or to actually use the chat room tools in WebCT), but it became clear that the package was being viewed primarily as an IT primer and that the varying levels of IT competency meant that the package would benefit from assuming no relevant knowledge at all on the part of the user: "I was expecting a

basic introduction to computers, particularly when it is called an induction package and therefore I think the start of the package needs to address the needs of those people who may know nothing or very little, otherwise it may discourage them using the package". In this context, an integrated glossary of terms was suggested ("not understanding the terminology and buzz words" was a problem for some). Participants initially used the handbook in conjunction with the online elements, but indicated that they quickly moved almost exclusively to online use, where the integrated multimedia elements were regarded as extremely useful (requests that more of these should be included in the package were frequent). The CD generally remained unused: "[I] don't see any use really for the CD think on line, handbook and chat room support the way to go".

However, a feature of the pilots in action is that participants, although intending to participate fully, were not always as active as they might be. Mid-way through the pilots, almost half of those who agreed to participate did not utilise the online elements of the programme after the initial induction (although they may well have used the print and CD versions). As the pilots were run on a voluntary basis, it was not always easy to follow-up with such participants, although clearly such people could provide valuable information for the project should their inability to complete be a result of the quality of the materials or support available to them in the package. However, many of the initial indicators suggest that those who participated fully found the experience to be rewarding, and indicated a further desire to improve their computer skills in the manner provided by the Learn@Work package. On the downside, the fact that the package was not used as part of an induction to a fully online course meant that the sections relating to study skills, academic writing, reflecting on your learning and so on were under-utilised (the section entitled "Reflecting critically on your learning at work" was accessed by just one person in the online version). However, those who did access these pages tended to remain longer (people generally spent up to ten minutes on the page entitled "Common knowledge, plagiarism, copyright and ethics"). This indicates something which became clear in the course of the pilots, both through the formal feedback process and through the informal observation of the pilots: the best induction package will allow for a just-in-time training approach, so that support can be accessed by individuals when they require it. The task of those providing the induction will be to raise awareness of the support in advance, so that participants know where to go when they need support as their online programme advances.

Conclusion

As this paper is being written (late April 2007), many of the pilots are still ongoing and a full evaluation will not be possible for at least another month. However, it is clear that those worker-learners who have participated are seeking an induction that primarily builds confidence in the use of computers rather than an induction for work-based learning *per se*; again to quote one participant "users who hardly know how to turn on a computer but are hearing everyone talking about booking their tickets and sending emails and searching the web etc". Once that hurdle has been passed, the world of online learning becomes closer to them. The problems associated with learning online in the workplace could well be introduced in a gentle indirect manner and at a time when the user is ready to face them. Otherwise, the worker-learner may not proceed beyond the first hurdle of logging in.

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