

User-led design in e-learning

A new paradigm for resource development

John Worth makes a strong case for involving users of e-learning resources in their creation and development. The user-led design model he outlines presents publishers and software developers with a serious challenge to their traditional 'top down' thinking but contains the seeds of an important new content paradigm.

Author:

John Worth, founder and chairman, Worth Media

john.worth@worthmedia.net

Rethinking the development process

The high failure rate of e-learning projects and the limited success of ICT in raising standards in the classroom have led to some radical rethinking around the process of developing learning resources. There are indications that a user-led approach to content design can yield new and innovative e-learning products to support flexible learning and individual learning styles. Relevant stakeholders from the statutory, academic and commercial sectors have long supported the involvement of users in content development. The thinking around user involvement is steadily evolving and there is growing interest in the potential around user-led approaches where users are empowered to actively direct content design.

This debate is becoming increasingly important in respect of the government's commitment to supporting the transformation of the UK into a thriving knowledge community and ICT has been given a central role in tackling some of the major priorities, namely:

- Raising standards in education
- Increasing skills capacity through lifelong learning (for economic competitiveness)
- Modernising the NHS

As a result of the high level of public funding that has been committed to address these priorities we should begin to witness some dramatic and exciting developments in ICT and e-learning over the next few years. But the salutary lessons of the past five years or so tell us it will be much more than just money that will be needed to create the gains needed to meet these goals.

The hard reality is that to build the critical mass of users across these priority areas and increase their levels of ICT skills will take longer than hoped. Added to this, learning applications that are relevant, simple enough to use

and engage users interest are in short supply or have yet to be planned because of the lack of market capacity. And the lack of coherent standards and the wide range of learning management systems that have become available have not helped achieve the clarity of focus. So this is a chicken-and-egg situation. Although e-learning has certainly become an established principle and been designated as a driver for change, in many quarters it's still a concept that is being invented because not enough meaningful usage has been established and solid evidence of best practice is hard to come by. While e-learning projects continue to produce unpredictable outcomes we could be forgiven for believing we are part of some unwieldy social experiment. But then such is the nature of technology. The challenge of harnessing it has always been a contentious and expensive one.

It's a people thing

The problem with ICT is that commissioners or developers have traditionally viewed it as a 'technology thing' rather than 'people thing' and this has been reflected in the way it has often been planned and deployed. Despite the high value of an up to date ICT infrastructure, we cannot force people to do what we want with the technology. We can really only guide them. After all, most people mould the technology applications they use to suit them and will only use a fraction of the functions available to them, whether it's Microsoft Word or the control panel of their microwave oven. Not because they can't understand how to use the wider set of functions, but because they only use what is relevant to them.

The same principles apply in ever-sharp focus where online applications are concerned. Regardless of whether a single standard for e-learning is deployed or not, people will still only use what's relevant to them. What's more, they will often be creative in manipulating or adapting systems to suit their needs. Perhaps it is inevitable that any standards will become increasingly difficult to enforce and will only serve to confuse the market and waste time and money. What matters is our understanding of what people, individuals in the normal course of their lives, are willing to do with the technology. And increasingly what matters when developing ICT learning resources is not what the payer (organisation, teacher or trainer) thinks they need but the functions that end users help us evolve and mould as a result of their involvement with the technology.

So, in order that radical change is effected across all the government's key priorities, attitudes will need to change and in many cases a complete paradigm shift must take place. ICT needs to be recognised as a 'people thing' where the technology is a malleable concept to be adapted to people's needs rather than people being adapted to the expectations of the technology market. This is plain and simple logic but since we are so used to our collective psyche being led by technologists, whose focus is to sell faster and better upgrades, we are most often blinkered into thinking we need what, in reality, we could often do without. Which means that much of what is sold is soon redundant because it is irrelevant and this general principal applies as much to ICT as any other technology.

A bottom up approach

As a result of all the investment in ICT there has been a high increase in the number of settings in which it could be accessed, even within the most deprived communities. This higher level of access should now, in theory, lead to greater market opportunities for e-learning content and resources. In many areas, learning centres have sprung up where some innovative e-learning design projects are taking shape. With sufficient levels of professional facilitation, support and guidance, user groups within these settings are able to identify their learning needs and develop appropriate solutions to address them and a truly 'bottom up' method of development is being established.

There are indications that solutions developed through a 'bottom-up' approach are more effective than those 'imposed' by organisations upon their audience. This is especially relevant where resources are being designed for 'non-engaged' learners, in particular for basic skills programmes where individual programmes need to be deployed to appeal to different interest groups. For example, a group of 14-16 year old non-engaged boys will be motivated in entirely different ways to a group of adult Asian women. So a generic approach to the design of a basic skills resource is unlikely to appeal to either.

I want that and I want it now

The challenge is to develop ultimately desirable learning resources that users will self select and instantly respond to - the *"I want that and I want it now"* effect. To generate such a response from any 'non-engaged' learner the learning programme will need to have credibility. To gain credibility, the programme needs to be about 'them' and their peers, rather than about the expectations of their teachers and other figures in authority. For non-engaged learners it is often the case that something needs to be emotionally engaging, or at the very least grab their attention, and often the best means to do this is through entertainment ('entertainment' is not the same as 'games'). Emphasis needs to be placed on 'entertainment' and 'interest' rather than 'learning' because non-engaged learners will react most positively to resources where the learning content is not explicit. For example, research has shown that for many non-engaged Asian women, Bollywood provides an excellent hook to involve them in learning.

The key processes of user-led design help to achieve this effect. Course developers, programmers and designers will increasingly be led or even replaced by a fieldwork process of co-creativity that merges the professional skills of course designers with the interest and ideas of a working group selected from the target audience. The principles of user-led design should not be confused with focus group work or market research. It is about creating ownership and an equitable status for the working group in order to achieve a more effective and valuable outcome. User-led design is not a token experience and a bottom up approach can only really work if it places the learner in the 'driving seat' and presents a valuable opportunity for them to develop and publish content that will appeal to their peers. The benefit of

taking a peer-led approach to the development of learning resources is that it will lead not only to the delivery of innovative and effective resources but also to sustainable ones.

Quality facilitation is the key

The key to successful user-led design will be in the quality of the facilitators and the way in which they structure their relationships in the field. Professionally skilled facilitators (they could be designers, content specialists etc) will normally identify key catalysts within learning communities with whom to collaborate and form a working group. For the user-led approach to be fully effective all the relationships within the process must be equitable otherwise it will easily revert to a 'top down' token gesture.

An essential role of the facilitator is to assist the working group in developing their understanding of the challenge involved in reaching their peers, identifying any barriers to learning, identifying how they would like to learn and, through this, understanding how they can be engaged. Once inducted and the goals and objectives have been established, the working group enrolls on a programme of brainstorming, design and development. Alongside this the working group should be directly involved in the development of a business model and this is seen as integral to the creative concept. The business model cannot be considered in isolation and needs to be developed alongside content as part of the peer-led approach in an individualised way.

The way forward

The outcome is that because the entire process has been user-led, the business model will work in line with the way in which the specific group of learners choose to engage with the technology. The resulting product will be firmly based on their values and experiences, thus establishing relevance and promoting trust amongst peers. However, the initial signs are that the cost of developing and maintaining user-led designed resource will be high at the outset although, once key processes are fully established, they will inevitably become manageable. Successful user-led applications will need to be flexible and scalable and an ongoing process of development will need to be planned in order to sustain that relevance and trust and to guarantee the continued interest of the target audience group.

User-led design and strategies that involve users in co-operative learning programmes will become an increasing focus for government as the major programmes for change roll on. Not only has basic skills been identified as a key area of development for such approaches but also workforce development, particularly within the NHS. One example is the NHS University, which will eventually give access to a learning programme for every single person who works within the NHS (over a million people) as part of the modernisation process. Creating the capacity and relevance needed in order for this to happen quickly will inevitably involve some of the key processes of user-led design described here.

Clearly e-learning resources designed in this way could be deemed to pose a threat to the publishers and developers who rely on 'top down' publishing models. So a tremendous leap of faith will be needed if publishers and developers are to get involved. But the benefits to those who do take such a leap could be high. If successful, such initiatives will inevitably stimulate new markets for content outside the existing conventions of educational publishing and lessons will be learned that will inform new, possibly profitable, publishing opportunities that could be deployed outside of the public sector and even into the consumer space. The sheer scale of the government's drive and the absolute imperative to force change quickly will inevitably lead to new trends emerging for online content. By tracking the progress of user-led design and, in particular, studying the role of the facilitator we may get an early insight as to what those trends might be.

Author information

John Worth is the founder of Worth Media, a leading provider of research and digital services to the education and health sectors. He can be contacted at john.worth@worthmedia.net (www.worthmedia.net.)