

DISCUSSION

Creating virtual communities of practice for learning technology in higher education: a response by the author

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Cathy Gunn's response to the paper was highly gratifying and raises a set of interesting points that I welcome the opportunity to explore more deeply. There were many considerations too complex to address in the paper and we accept the danger of oversimplification. Our summary of the RESULTS Network development was effectively a first attempt to match human values and behaviours to technical systems. Gunn suggests that a key element missing from our scenario is in having 'a compelling reason for users to access the resources and participate in the communities provided'. The factors at play in terms of 'motivation to participate' were extensively researched in the user participation study. A full reading is available in Beetham (2001). Nevertheless, there remains an important question about the process of adoption and participation. I would like therefore to take up the challenge of considering further the idea that communities of practice must 'evolve' and cannot be 'created'.

Firstly, the issue of *access to technology for educational use* was raised, and in particular the need for *operational capability* as well as physical capability. One assumes that, for a facility designed for *resource exchange and support for users of learning technologies* (from whence the acronym RESULTS arose), most practitioners in this field would be expected to be familiar with a web environment. I would agree, however, that a lack of *competent interaction* is a highly significant factor in the early adoption and participation of RESULTS. There may well be huge variation in the levels of confidence and ability of potential users, not in terms of operating the technology itself but in negotiating the various modes of interaction with resources and with other

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users that the system affords. While the functionality was put forward by a wide range of potential end-users—and the authors represented four different ‘types’ of learning technologist—the technical manifestation of that functionality may appear overwhelming to even the most competent web users. We attempted to build in highly innovative features, resulting in a high level of technical wizardry (although I would argue that this was based on a set of quite unique portal concepts) at the cost of a weak level of participation. For this reason, I agree that a successful participation process is likely to be much more one of evolution than one of creation. The *environment* for a community of practice was created, but the *community* would need to evolve to take advantage of it.

Secondly I will consider *semantic capability*, that is, the ability of the portal system to accommodate the differences in language and practice inevitable in a community of practice as wide and with such varied expertise as ‘users of learning technologies’. There is a wide range of issues involved in how users can exchange and integrate both information and resources between databases, given that each may have its own structure or taxonomy. We have tackled this issue separately in a recently submitted paper (Richardson *et al.*, submitted), which clarifies the issues concerning interoperability of data systems and user-defined taxonomies and also provides suggestions for new technical approaches.

Accepting that the process of people using such a portal is one of evolution rather than creation, the rate of such evolution might depend on two key elements: firstly, the orientation to one’s own development (see Land, 2000) and, secondly, the luxury of time (which funded projects rarely have) for diffusion models of innovation (e.g. Havelock’s stepping stones approach; 1973). Both point towards the need to build in ‘a kind of accumulative osmosis via good contacts and personal contact, identifying champions or nurturing champions, bring others along’. Some transitional processes may have helped deal with the complexities of expert and non-expert levels of competence with portal environments, coupled with a scaffolding model of support for adding new users as part of the evaluation process. A national champion or home might have made facilitation of the process a longer-lived venture. I would question the extent to which induction, orientation and other such comfort-giving interaction by the project team might have assisted this journey for potential participators. Berg and Östergren (1979), for example, advocate that ‘innovations cannot be inserted from outside: they have to be created anew within the system, by those who are members of it.’

The debate around our paper serves the learning technology community well in that attention is given to the role of learning technologists (in the broadest sense) as important drivers in the development process. RESULTs built a learning technology portal to a well-researched, targeted and tested user specification. Response to functionality was very positive. But users came to the RESULTs Network much more as consumers (wanting access to resources) than contributors (wanting to participate in a community of practice). In this way, the learning technology community acted in much the same ways as academic staff do in relation to embedding change (Oliver & Dempster, 2003). Certainly, the importance and evolving experience of the

‘inter-relationship between expert and non-expert users and learning technology’ is an area worthy of further study.

Perhaps the learning technology community has not yet reached the point we had predicted in our proposal for this project. This indicated a gap in both relevant and valued resources and in opportunities to share practice and materials. In conclusion, we would agree with Gunn, recognising that you can create a ‘watering hole’ and possibly bring your ‘horses’ to it, but you cannot necessarily make them ‘drink’. At least not until they get very thirsty! (Is that a form of evolution or just a bad metaphor?) The point is summed up eloquently by Machiavelli:

It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system. For the initiator has the enmity of all who would profit by the preservation of the old institution and merely lukewarm defenders in those who should gain by the new ones.

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