Academics in Academia: the Forgotten Resource in the Rush to New Technologies

Tim S Roberts
Central Queensland University,
Bundaberg, Qld 4670, Australia
Tel: +61 7 4150 7057
Fax: +61 7 4150 7090
t.roberts@cqu.edu.au

ABSTRACT
Suffice to say that I'm leaving in large part because it's not much fun any more, and the directions of the university are not mine. I'm not the first, and I won't be the last. (Farewell Email from N.M., April 2000)

The rush to the use of advanced learning technologies has left many academics dazed and confused. The above excerpt, a direct quotation from a well-respected and admired academic, in many ways prompted the writing of this paper. Why isn't it much fun any more? What are these new directions currently being explored by many universities, and why are they not viewed favorably by many staff? And how is it possible for universities to explore these new directions, and yet still retain an environment that the majority of academics find professionally rewarding and enjoyable?

Keywords
Course delivery, Group work, CSCL, Learning technologies

Introduction

While there is a substantial amount of literature about the methodologies for so-called flexible learning, and the efficacy of different approaches, and the use of new technologies, there has been comparatively little written about the most important (and costly) resource of all, the academics. This paper attempts to address that imbalance, and put the people back where they belong: at the center of the issue.

Why do an increasing number of academics appear to believe that “it’s not much fun any more”? Anecdotal evidence would suggest the following factors predominate:

- increased workloads
- lack of rewards
- disillusionment with new directions
- inappropriate deadlines and administrative systems

To facilitate discussion, three hypothetical academics, Alex, Bernie, and Chris are introduced. While each represents a stereotype, their views and ideas will be familiar to most working in an academic environment.

Descriptions of the three types

Alex is a type-A academic. Type-A academics are likely to have spent the majority of their working life in academia in some form, most probably in one of the longer-established universities. Type-A academics value the qualities of logical thought, research, and scholarship above all others, and gain satisfaction and status from their peers primarily through publication in journals and conference proceedings. Expectations are placed on students to inherit an appreciation of these qualities and learn largely from traditional lectures and tutorials. Primary emphasis is placed on the organization of time and resources to ensure effective research.

Bernie is a type B academic. Type-B academics are more likely to have spent the majority of their career at a college or one of the more recently established universities, and their primary focus, along with the majority of their time, is likely to be spent on the teaching of undergraduate students. Satisfaction and status is gained by seeing students learn from the material presented, from direct expressions of appreciation, and from low attrition rates and high pass rates. Primary emphasis is placed on the organisation of time and resources to ensure effective teaching.
Chris is a type C academic. Type-C academics are likely to have spent significant portions of their career working for government or private industry. There may be at the same time a strong concern with ongoing consultancy opportunities. Their focus is on conveying practical skills and real-world expertise to students in the most effective and efficient manner, with less emphasis being placed on publication than would be the case for type-A academics, and less concern with pass rates than for type-B academics.

Views of the institution

The type-A academic is likely to view the University as primarily a place for intellectual thought, where original contributions to knowledge are valued for their own sake, rather than in terms of their application, or (horror of horrors!) in terms of their revenue-raising potential. In this sense, type-A academics are likely to be more conservative than their colleagues, and more resistant to change. In particular, they are likely to despise any intrusion of economic rationalist philosophies into the university environment, believing them to be ultimately antagonistic to the pursuit of knowledge and wisdom.

Post-graduate students are especially encouraged and welcomed by type-A academics. Research grants are actively sought and much time is spent preparing applications for research funding of all sorts. Administration and meetings in general are to be avoided wherever possible, as they are a non-productive use of time, which is in short supply. The emphasis of the institution on undergraduate students and retention rates is a nuisance; calls to assist in marketing or talks to local high schools are studiously ignored.

The type-B academic is likely to view the University as primarily a place for the vocationally-oriented instruction of undergraduates, to prepare them for subsequent careers outside of the university. The emphasis on research and scholarship, while understandable, is barely tolerated – doesn’t the institution understand that it’s bread-and-butter is undergraduate students? The lack of attention to retaining first-year students is particularly galling. The universities promotion criteria are a joke, and one in poor taste.

Undergraduate students are the focus of the type-B academic, but the marketing and selection of students does not enter the picture.

The type-C academic comes into academia with views formed from several years working in a government department, or in private industry. The seeming lack of effective administrative systems and standards is quite astonishing. How can the University expect results when there is a complete lack of accountability on the part of staff, and an apparent lack of understanding of even basic business principles from some sections of middle and
upper management? If education is now a business, why is it that so little attention is devoted to maximizing income and minimizing expenditure?

**Interactions between the types**

Unfortunately, Alex, Bernie, and Chris tend not to work together as harmoniously as might be considered desirable. Alex tolerates Bernie and Chris as part of the new breed, but regrets their apparent lack of devotion to research and scholarship. Bernie believes that Alex devotes too much time to writing articles, and too little to helping students, and that Chris does not understand the university system. Chris thinks that both Alex and Bernie live in an artificial world doomed to fail because of an adherence to practices dating back to the ’fifties, and a basic ignorance of what constitutes good business practice.

**Institutional rewards**

Institutional rewards for academic staff come in several different forms, the most important being the prospects for advancement and promotion. Here Alex enjoys a slight advantage over Bernie and Chris, since promotion is more highly correlated with doctoral qualifications and research records than with teaching ability or industry experience.

Many universities now require that a balance of skills across several areas – for example, research, teaching, community service, and administration – be demonstrated when applications for promotion are made. However, in practice, research tends to be the most heavily valued item, and promotion without an extensive publication record is the exception. Rarely are staff without doctoral qualifications considered for positions at senior academic levels, and a Masters degree is almost de rigueur for advancement beyond the most junior ranks.

**Internationalization, globalization, and the new technologies**

A large number of universities have long ago embraced internationalization - staff and students are drawn from all over the world, research quality is measured by international standards, and graduates are increasingly prepared to work in many countries beyond their own.

With the rise of the Internet, however, things have gone much further, and universities need to radically revise their offerings to survive in the new global market place. Students are increasingly able to take courses entirely online, which means that geographical location is now a minor concern. Potential students are likely to look for value-for-money, rather than for the closest campus. Online courses also open up the opportunity to study at any time of the day or night, thus enabling far more working people to study than has ever previously been the case.

Thus, the potential audience has shifted from one comprised predominantly of local school-leavers, to one which is truly global; where the age of the student is as likely to be 49 as 19; where the student is equally as likely to be in Sydney or Frankfurt or Hong Kong.

In the past each university has relied to a large extent on its local captive market. Marketing has been unnecessary, and even the quality of the courses has been shielded from the effects of market forces.

That this is no longer the case is evident. So, how should universities as a whole adjust to the new conditions?

**The way ahead**

In the new global world, increasing sources of revenue and decreasing expenditure are not options to be considered, but essentials vital to the very survival of the institution.

To increase revenue, quality of product, price, and marketing, are all equally important. Why should a student choose university A rather than university B? This is a question that most businesses have had to grapple with for decades, but is new to the tertiary education sector. The answer must be: *value for money.*
Quality of product involves the range of courses on offer; the curriculum of those courses; the products and the technologies used for delivery; and the assistance offered throughout the learning process. Price involves competitiveness with the marketplace, which means reducing expenditure wherever possible. Overpriced courses are feasible only with captive markets; in the global economy, they are fatal. And marketing involves identifying potential student groups and spending appropriate amounts to draw the courses to their attention, whether by road shows, email, advertisements, or other means.

Reduction of expenditure is essential if courses are going to be priced competitively. Many academics see reduction of expenditure as a threat – to their jobs, and to their conditions of service. In particular, many believe that because of the effects of globalization they will be expected to work harder and longer.

This paper argues that exactly the opposite is the case. Reduction of expenditure means streamlining of procedures so that academics need devote less time to systems and administration, and instead are free to devote their energies to those practices that earn income for the institution - the production and delivery of quality courses.

How can this be done?

Revisions to current modes of practice will vary from institution to institution, and will be highly dependent upon context. Therefore, any suggestions here will need to be viewed in the light of institutional objectives, resources, and current practices. However, four revisions to current practice are suggested as perhaps being fairly widely applicable in a range of contexts:

I - a complete re-think on what academics do

The majority of academics should be spending their time on curriculum development, devising new courses and revising old ones, and ensuring a high standard of course delivery, bringing to bear their expertise in research and scholarship. It is not sensible (nor cost-effective) to have senior, highly paid academics spending their time on essentially secondary tasks such as marking and assessment. Tutors and markers can and should be largely comprised of senior undergraduate and post-graduate students (very often, it is precisely these more recent students who are the most capable of empathizing with their junior colleagues and assisting them to learn the material). The utilization of senior students in such roles has been found to be successful in numerous instances; see for example (Beasley, 1997). Where suitable numbers of senior students are not available, casual staff should be employed as appropriate.

Upon entry into first year, students should be given the expectation that they will as a matter of course act as tutors in their senior year. Just as outside work experience is generally viewed as being beneficial, so too should on-campus tutorial work. A week of training of students to act as tutors should take place late in the second year (as a passing aside, it might be noted that a training period of one week is one week more than many academic staff have received in their entire careers).

II - a comprehensive revision of the methods of course delivery.

Wherever possible, courses should be designed and delivered in just one mode, rather than three. Currently, many institutions provide courses devised and written entirely in the form of printed materials, for the benefit of external students without access to computers; then again, in the form of lectures and tutorials for on-campus students; and thirdly, in electronic form for students with computers and access to the internet. If these three distinct delivery methods could be reduced to one, the workload of each and every academic would be greatly reduced.

How is this possible? To rely on printed materials is not suitable for most students, and is pedagogically the worst option. To expect all students to attend face-to-face sessions is impossible when one is talking about a global market. The best solution is to deliver courses entirely online. As the Internet inevitably makes its way across the entire planet, increasing numbers of people will soon have effective high-quality access. Students who have access to a computer but not the Internet can still be serviced by provision of a CD-ROM containing a mirror image of the web site. Students without even access to a computer - an ever-decreasing minority - should
be politely informed that, regrettably, they need to look elsewhere – there are sure to be many institutions who will make a deliberate decision to appeal to this niche market.

The quality of learning that occurs within courses based largely or solely on online delivery as opposed to those based on more traditional forms, has been widely debated in the literature. Interesting slants from both perspectives have been documented at (Russell 2002a, 2002b).

Once one has decided to go the online route, much else follows. Academics should be in charge of the web content, and should take ultimate responsibility for the effective and efficient delivery of the material, in consultation of course with instructional designers, where available. The role of the online instructor has been well described by (Berge, 1995) amongst others. Students and other casual staff should be used to handle the routine day-to-day tasks, such as answering questions to email discussion lists, marking, and other specific items.

The argument is often heard that many students – most notably school-leavers – are not suited to this form of delivery, and need face-to-face sessions. So be it. But that does not imply that there have to be several hours of such sessions each week for each course throughout a whole semester. Indeed, if the online material has been devised appropriately, and proper procedures are put in place in the first few weeks to teach students how to learn in the online environment, even the youngest and potentially least self-reliant students should need only the occasional face-to-face meeting. Once their confidence has been increased by successful contributions to email discussions lists, assignment submissions, and other online interactions, the need for regular timetabled sessions is likely to diminish over time, and perhaps disappear entirely by the start of third year.

While some may have doubts, two factors are worthy of consideration. Firstly, if institutions are to survive, the majority will have to reduce the number of modes of delivery, or else suffer the consequences of high costs and low staff morale. Some institutions will continue to offer regular face-to-face sessions; but this will be the small minority, perhaps one or two in each capital city, as demand warrants. Secondly, the youth of today are increasingly growing up with computers, and becoming adept at communicating effectively via this medium, in the form of search engines, discussion lists, chat rooms, etc. Therefore the demand for the old traditional teaching methods is likely to wane. Rather than clinging to them (at enormous expense), they should be quietly phased out, and allowed to go the way of blackboards and chalk.

III - a streamlining of administrative procedures.

A great deal of low staff morale can often be traced back to the effects of various administrative procedures, such as the handling of assignments, or the need to have course materials prepared months in advance for printing.

For example, the gaining of approval for the development of new courses and the revision of old ones is usually an exceedingly slow and painful process. But this need not necessarily be the case. Why should timelines for such procedures not be as they are in business, where proposals are made and decisions taken often within the space of days or weeks rather than months?

The usual reasons given for the inordinate lengths of time often applying in academia are twofold: educational issues and resource issues. With regard to the former, it could be argued that those best placed to make informed decisions regarding educational issues are precisely those academics working in the area, rather than more senior academics and administrators from other areas. With regard to the latter, online delivery of courses greatly reduces the reliance on resources – no longer do materials have to be printed in bulk, nor computer labs maintained, nor classroom space timetabled, nor even printed assignments handled. So reliance on central administrative bodies is greatly – very greatly - reduced. Thus, web-based delivery and the streamlining of administrative procedures go hand-in-hand.

IV - a much greater use of group work.

Much has been written about the use of groups as a way of learning, most of it positive. For example, group work has been seen to enhance critical thinking (Gokhale, 1995), and can assist in the retention of minority students (Berry, 1991). Group work particularly advantages below-average students within the group. Webb and Sugrue (1997) report that “amongst groups with above-average students….the higher level of discussion
translated into an advantage in the achievement tests for the below-average students (in those groups), both when they were tested on a group basis and also individually. On the other hand, “high ability students performed equally well in heterogeneous groups, homogeneous groups, and when they worked alone.” Both of these results have also been shown in different contexts by other researchers (for example, Azmitia, 1998, Hooper and Hannafin, 1998, Hooper et al, 1999).

On the contrary side, Salomon (1992) amongst others has pointed out that despite the mass of literature praising collaborative learning, teams very frequently do not work well, and lists as common problems the “free rider” effect (Kerr and Bruun, 1983), the “sucker” effect (Kerr, 1983), the “status sensitivity” effect (Dembo and McAuliffe, 1987), and the “ganging up on the task” phenomenon (Salomon and Globerson, 1987).

Collaborative learning is hardly a new idea. The importance and relevance of social interaction to an effective learning process has been stressed by many theorists from Vygotsky (1978), through advocates of situated learning such as Lave(290,723),(458,747) and Wenger (1991), and has been confirmed by many more recent researchers and practitioners. The use of collaborative learning techniques specifically within certain topic areas has not received much attention, though definite benefits have been found, for example, with their use in the teaching of a computer science curriculum (Wills et al, 1999). One particularly noteworthy case of implementing collaborative learning in an asynchronous learning environment is the so-called “radical model” (Roberts et al, 2000, Romm and Taylor, 2000), currently in use at Central Queensland University.

If courses are devised properly with the idea of group work in mind, not only is much of the responsibility for learning shifted from the academic staff onto the student group themselves, but students learn in an environment much closer to that existing in the outside world. The practice needs to be encouraged across a much greater range of courses than is currently the case.

This is, perhaps, the least urgent of the four revisions suggested. However, group work can be very beneficial not only for the students themselves, but also the academics involved in the course delivery. For example, extensive research projects can be set, which may be too large for students working on their own. These can provide the academic concerned with valuable new sources of information about the topics under consideration. As another example, the use of groups to comment and provide feedback on other groups’ work can significantly reduce the amount of input required from the academic staff.

**Return to the academics**

Let us come back to the people. What does all of the above mean for Alex, Bernie, and Chris?

For all three academics, “all of the above” implies greater job security and potentially higher salaries. Why? Because the switch to a predominantly web-based method of course delivery means that much of the money previously expended on printing (and associated staff), and timetabling (and associated staff), and assignment handling (and associated staff), and the provision of computer labs (and associated staff), can be redirected to academic salaries. At the same time, the stress caused by adhering to all of the associated administrative deadlines is reduced. The enhanced use of students and casual staff for some of the teaching duties ensures that a greater percentage of time can be devoted to primary activities such as course development.

For Alex, the benefits of the changes listed above are immense – less time devoted to undergraduate teaching and administration means more time for research, scholarship, and postgraduate supervision. This in turn boosts the reputation of the institution, and therefore also indirectly the income.

For Bernie, the majority of time can be spent preparing and delivering online materials of the highest educational quality. Promotion criteria should be rephrased so that the greatest rewards are available to those responsible for producing high-quality courses. Bernie should not be required to conduct research in order to be eligible for promotion to Professor. Indeed, Bernie represents in many ways the most important person in the organisation, since delivery of high-quality undergraduate subjects is precisely the core business of most institutions.

Almost all universities need to employ more people like Chris, with recent practitioner and business experience, to assist in the development of sound business practices and to ensure curriculum is up-to-date and relevant. However, for this to occur means that universities must give away the notion that all academics need to have Masters and Doctoral qualifications. Quite clearly, they do not. It is equally clear that many students greatly
appreciate being taught by those with recent commercial experience, and to be able to advertise that many staff have such experience is likely to prove a significant marketing advantage to most institutions.

Conclusion

This paper has suggested that because of internationalization, globalization, and the new technologies, market forces will play an increasingly important role in determining the success or otherwise of academic institutions; that academics need to be engaged primarily in course development and delivery, with secondary tasks being handled by senior students and/or casual staff; that the methods of delivery for the majority of courses need to be changed to those which are primarily web-based; that administrative difficulties will be greatly reduced by such a change; and that greater use should be made of group work for both educational and economic reasons.

It has also suggested that these changes will work to the benefit of academics of all types, including those currently bemoaning the impact of flexible learning generally, provided only that Universities appoint and reward staff based upon their contributions to the well-being of the institution as a whole. By streamlining procedures, and offering courses in a rational, cost-effective manner, universities can not only target far wider audiences, but they can also remake themselves into places where academics have more (not less) time to pursue quality research and teaching.

If those at the decision-making edge of universities do it right, it can be fun.

References


