# The development of open/distance learning in Finland and the UK

## A comparative case study

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**Abstract:** *This article is concerned with the provision of open and distance learning by the higher education sectors in two countries, the UK and Finland. The central contention is that more strategic thought must be given to this issue if the potential benefits of such learning are to be maximized. The article considers in detail institutional practice in one UK university and compares it to practice in a Finnish institution to ascertain whether procedures and practices adopted in Finland might inform policies in UK universities. By way of conclusion, it is suggested that higher education institutions in both countries need to explore the importance of improved networking, develop better quality-assurance procedures and introduce changes in pedagogic practice.*

**Keywords:** *open/distance learning; strategic alliances; quality assurance; pedagogic practice; tariff structures; credit equivalence*

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In the last decade, a number of UK policy reports have considered the role that higher education might play in the provision of lifelong learning (Fryer, 1997; DfEE, 1998). These reports refer to open and distance learning packages as one important means by which universities can help to ensure the dissemination of new skills and knowledge. Against this background, this paper examines how UK universities could usefully develop strategies to maximize the potential benefit that open/distance learning might offer. A comparison with Finland is drawn in order to identify best practice. Finland was chosen as a comparator because it is widely regarded as an innovative country in open/distance learning (DfEE, 2001; Finnish Information Technology Development Centre, 2001).

Tulkki (2001) has argued that Finnish higher education has also had a clear role to play in increasing the use of distance learning materials in the country over the past decade. He goes on to cite evidence collated by an American market research company (International Data Corporation) which suggests that 'Finland is the second most developed information society in the world after the USA' (Tulkki, 2001, p 39).

In 1991, the UK's Employment Department offered these definitions of distance and open learning:

Distance learning is where tutor and student are separate, in space and in most cases in time. In order to achieve this, the content of the courses needs to be packaged in some form. How this is done will depend on a number of factors. In most cases, the package is text based, but it can include

video, audiotapes and computer assisted learning (CAL). When there is no time difference, simply a physical distance, then IT (Information Technology) systems are the most appropriate.

Open learning is a much more general term. It is very similar to flexible learning and can apply to a whole range of systems that allow the student choice as to the pace, place and time of learning. It can encompass anything from drop-in centres to stand alone multimedia systems to independent study. However, most of them require a package in order to provide the flexibility. Whatever the system, though, it normally offers some support for the student which is extra to the package. (Employment Department, 1991, p 1.)

In short, the differences between 'open' and 'distance' learning are less significant than the common features they share; in this paper the terms are used interchangeably. Moreover, although one might accept the *essence* of these definitions, they are, arguably, now somewhat outdated since there has there has been an important increase in Internet use during the past decade; indeed, most open/distance learning is now predicated on the basis of using a computer, as Pohjonen (1997) suggests. More importantly, Pohjonen points out that in practice it is difficult to think of open and distance learning as *entirely* separate from traditional modes of learning, as is implied by the above definitions. Like the Employment Department, she also stresses that we might use a space–time continuum as a useful means of analysing different types of learning. She outlines the taxonomy presented in Table 1, in which items 1 and 3 are campus-based (that is, students and teachers operate in one place) while items 2 and 4 are in the tradition of open/distance learning courses in that teachers and their students may well be operating in different places.

As Pohjonen rightly points out, those in charge of delivering a course may well use more than one mode of the four possibilities outlined in the table, but there has been a general trend towards possibility No 4. A similar point is made by van de Wende and Beerkens (1999), who argue that the distinction between campus education and distance education is becoming blurred.

They suggest that universities in the OECD countries are increasingly interested in open/distance learning and are using a 'pick-and-mix' or 'blended' approach to the four possibilities – that is, they will use elements of open/distance learning in their traditional, campus-based undergraduate and postgraduate courses. At the present authors' institution, the University of Central Lancashire, such a blended approach to teaching is used in the Faculty of Health. Another example of this mixed approach is presented by Dahlman and Rilling (2001). According to their description of a distance learning course aimed at teachers of English based in Finland, a traditional (classroom-based) mode of delivery was used at the outset to give students a one-week introduction to the relevant technology that was to be used on the distance course.

Analytically, though, it is clear that the possibility of having students learn in a different place from that in which the teacher is based is important. In general terms we can think of open and distance learning as having important characteristics that are different from the traditional campus-based model of teaching in which staff and students have to be in the same place at the same time (item 1 in Table 1); some of these differences are explored below. In the past there has been a tendency in some quarters to exaggerate the effect of open/distance learning in general and e-learning in particular, as Challis (2004) remarks. The picture that has emerged in recent years has been complicated in that the number of students doing pure open/distance learning courses has been very small, but the impact of the independent style of learning encouraged by the development of Web-based open/distance learning materials has been significant (Schuetze and Slowey, 2002). Indeed, Challis (2004) argues that the collapse of the UK's e-University in 2004 indicated some of the problems in marketing and supplying courses *purely* of an open/distance type. In retrospect, it would seem that there were a number of reasons for that failure, including pedagogic and administrative factors; it is important that appropriate strategies are developed to ensure that similar mistakes

**Table 1. Different types of interaction between students and teaching staff.**

|  | **Same place** | **Different place** |
|---|---|---|
| **Same time** | 1. Real-time encounter model (eg simulations). | 2. Simultaneously distributed learning model (eg audio and video conferencing). |
| **Different time** | 3. Independent study model (eg CD-ROM). | 4. Time-independent learning model (eg e-mail/Internet). |

*Source:* Pohjonen, 1997, p 369.

are avoided in the future and that the benefits of e-learning are maximized (BBC, 2004a).

The focus of enquiry in this article is on the development of open and distance learning, especially as provided by higher education institutions in the UK and Finland. The central contention is that, although both the UK and Finland have extended their delivery of open and distance learning materials over the past decade, more thought needs to be given to the strategic development of such materials if we are to maximize their potential utility, and this is especially so in the UK. To examine this contention in detail, we compared practice at two higher education institutions providing open/distance learning courses: the University of Central Lancashire (UCLan), located in Preston in the north of England, and Kajaani Polytechnic in eastern Finland, which is a partner institution of UCLan.

UCLan can be regarded as an innovator among UK universities in terms of e-learning (see below), and so it is tempting to suggest that many of the difficulties described in this article have been (or will be) experienced by other universities in the UK. Of course, the experiences described in these institutions are each contextualized in their national setting. An advantage of using this methodology is that it is possible to get inside the relevant organizations and to gain access to information that would otherwise have been inaccessible.

The paper is organized as follows. First, a policy context is described in which the reasons for government intervention are presented; in this section, a contrast is drawn between the European and US approaches to policy measures. Second, we explain why the UK and Finland were chosen for comparative purposes. This section is followed by a description of growth in the use of open and distance learning in the two countries. Then relevant education theory is examined, which further contextualizes developments in this area, and this is followed by a detailed comparison of the day-to-day reality of providing open and distance learning in the University of Central Lancashire and Kajaani Polytechnic. Finally, strategic issues are explored by way of conclusion.

## What has shaped government policy?

*The link between education and economic growth*

Broadly speaking it has been commonly agreed for some time among economists that those who are better educated will be those who are better paid (Blaug, 1970; Woodhall, 1990). As long ago as 1992, *The Economist* suggested that countries around the world had reshaped their education policies because they were aware that, if they did not do so, their workforces might be left with the relatively low-value-added, low-wage work that their competitors did not want. More recently, Osborne (2003) has argued that advances in global trading patterns and computer technology have been important drivers of policies to increase participation in continuing education for UK adults. It is in this context that open/distance learning programmes have a part to play in updating adults' skill levels. Moreover, according to Aldcroft (1998, p 252), a well-educated society is more likely to 'develop attitudes and aspirations to facilitate adaptation and change'. Aldcroft also points out that an associated risk for countries with low levels of investment in human capital is that they will attract little foreign direct investment.

The Finnish government has also been keenly aware for some time that there is a pressing need to ensure that workers access new knowledge and skills on a continuous basis (Finnish Ministry of Education, 1997). Indeed, the Finnish Education Minister, Tuula Haatainen (cited in BBC, 2004b), recently reiterated this belief: 'Education can pioneer new areas for jobs. We always need new skills for the labour force – so it means that we have to keep investing.' However, Finegold (1993; 1999) has suggested that various interacting factors make the issue of updating skills especially problematic in the UK. Essentially, Finegold argues, a number of institutional factors interact such that neither government, employers nor employees are willing to fund the extra instruction needed to increase skill levels significantly and to bring them into line with those in competing countries.

*Governments' desire for value for money*

One key issue for the development of education policies around the world concerns the extent to which governments are concerned to get value for money, as *The Economist* also noted in the 1992 report cited above. More recently, the Australian academic Candy (2000) has suggested that various governments have become concerned at the escalating costs associated with the rapid expansion of higher education and this has led them to try to ensure that the curricula offered by HEIs enable graduates to continue as independent learners after their formal, full-time courses have finished. Candy argues that the Australian government (*inter alia*) is rightly concerned that universities should not just arm their students with the necessary facts or theories required to perform well in assessments at the end of courses. Rather, they should aim to give students the skills to take responsibility for their own continuing professional development, much of which will take the form of open/distance learning. The alternative is to risk high levels of graduate unemployment, especially unacceptable given the escalating costs of higher education.

In Finland, present strategy in this area has been shaped predominantly by a 1995 Ministry of Education paper entitled *National Strategy on Education, Training and Research*. In this paper the Finnish government made it clear that it would be prepared to invest in workers' continuing education in order to ensure that average vocational skill levels were improved. Like other countries (such as Australia and the UK) it also saw as imperative a move away from the 'once and for all' attitude to education; in other words, it wanted to emphasize how important it was for workers to update their knowledge (via open/distance learning, for example) in order to combat the threat of obsolescence. It was no longer adequate to assume that a 'once and for all' attitude to education would prepare young people adequately to cope with the constant challenge to update their skills after they had left full-time education (whether as a 16-year-old school-leaver or a 21-year-old graduate). Moreover, it was obvious that the Finnish government also thought that the use of information and communications technology (ICT) was central to the cost-efficient realization of such policy goals (Tulkki, 2001). The Finnish government was aware that the traditional campus-based provision of teaching would form only part of the solution to this problem; to update workers' skills across the country, on a cost-efficient basis, implied that much of the teaching would have to be done via open/distance learning and would involve the use of ICT. Given that the government was explicitly concerned to ensure that everyone had access to developmental courses, it is perhaps not surprising that it should spend relatively large amounts of money in subsidizing access to open/distance learning courses using computer technology. In 1998 alone, it spent 44 million euros to this end (van de Wende and Beerkens, 1999).

*Educational provision to combat social exclusion*

Various authors, including Osborne (2003), have suggested that the UK might usefully learn lessons from Finland in terms of improving the take-up and dissemination of courses available to employees for their continuing education – and distance learning courses clearly fall into this category. It is interesting that both Finland and the UK have been concerned with the issue of social exclusion in this context; both countries are anxious to ensure that it is not only a minority of the population who enjoy access to continuing or lifelong learning. However, as Osborne remarks, such policies are often not as successful as governments would wish, and much of the increased participation in further and higher education has been limited to the middle classes. Both Finland and the UK have met with mixed success in encouraging the take-up of open/distance education across all sections of society, and in this respect their experience mirrors that of other European countries (EC, 2001).

In general terms, there seems to be a distinction between the US and European approaches to the issue of social exclusion. That the US government *is* concerned with this issue is evident from a number of reports – including, for example, that from the Department of Commerce (DoC, 1999). However, much of the policy discussion in the USA seems to revolve around the general concept of allowing market forces to reduce the scale of the problem over time, or removing regulations that might hinder such market forces. The Department of Commerce report, for example, suggests that the digital divide will be eroded over time because the costs of computer hardware will reduce and thus it will be possible for disadvantaged socio-economic groups to access information and products electronically. In the meantime, US academics such as Bates (1997) and Heterick *et al* (1997) argue that market forces have been impeded by the number of regulations in this area. If the US government were to do away with some of these regulations (such as those concerned with electronic delivery to certain social groups), then market forces would work more efficiently and disadvantaged groups would be more likely to use new technology to access open/distance learning. One obvious problem with this argument is its assumption that a decline in the cost of computers will lead to an increase in the take up of open/distance learning. This does not necessarily follow, and other factors, such as those associated with culture, are important – as Finegold (1999) has remarked.

By contrast, as van de Wende and Beerkens (1999) point out, the European Union has taken a more interventionist approach to the dissemination of open/distance leaning across all sectors of society. This approach is based on the precept that governments (including supra-national government agencies) could and should be active in expanding the use of open/distance learning materials and dates back to the European Commission's *Memorandum on Open and Distance Learning* of 1991 (EC, 1991). The real problem here, according to Osborne (2003), is to make sure that the funds are spent efficiently.

## Why compare the UK with Finland?

UK observers have been impressed with the take-up of educational courses in Finland (which are frequently taken *after* the completion of formal full-time education) and the associated use of computer

technology (DfEE, 2001; Osborne, 2003). It is tempting to suggest that a study of the Finnish model of open/distance learning may well yield important lessons for UK policy makers. Finland's expertise in this area has developed, at least in part, because of the sparsely populated nature of the country; it has many remote communities, such as Kajaani, north of Helsinki. Finland has a population of five million in a landmass that is greater than that of the UK, which has a population of 59 million. Given this simple demographic fact, together with its rates of computer literacy (see below), then it is perhaps not surprising that Finland is widely regarded as an innovative country in the area of open/distance learning (van de Wende and Beerkens, 1999; Parjanen and Tuomi, 2003).

However, authors in both countries have expressed concerns about the fitful way in which ICT has been used to aid the dissemination of open/distance leaning. The collapse of the UK's e-University has already been mentioned. Similarly, Tulkki (2001) suggests that the Finnish intention to use distance education as a vehicle for social change has met with difficulties. He argues that an unintended outcome of this 'adaptation-by-education' policy (p 50) has been an overly rapid expansion of higher education during the past decade. In describing a particular Finnish distance learning project, Pohjolainen and Ruokamo (2000) suggest that there are a number of problems associated with the dissemination of open/distance learning materials. Specifically, they highlight the real risk that a teacher interested in developing innovative ICT materials will leave a particular institution involved in a pilot project, with the result that the internal dissemination process will then flounder. Their concerns apply equally to the UK.

Another reason to compare the two countries is historical and relates to their respective Open Universities. Interestingly, as Piesanen (2003) remarks, the model for the Finnish version of the Open University was the one developed in the UK. Of course, these Open Universities are important exemplars of institutions involved in disseminating open/distance learning materials. Indeed, Hoare (2005) has suggested that the money spent on the UK's e-University would have been better invested in the OU, which already had significant experience in the area.

Inevitably, there are important differences between the two institutions; unlike its UK counterpart, the Finnish Open University cannot confer its own degree awards. Arguably, though, the key similarities between the two bodies outweigh the differences; both are involved in the business of widening participation in education and training and use open/distance learning programmes as their principal means of study.

## Growth in the use of open/distance learning

As various authors have pointed out (Pohjonen, 1997; Littlefield, 1994), there has been a tremendous growth in the use of open/distance learning, especially in the 1990s, in Finland and the UK (and elsewhere), but this has been from a very small base. Weller, writing in the *Times Higher Education Supplement* (2004), argues that the lecture is *still* the dominant form of learning experienced by university students in the UK. Nevertheless, it is important to recognize that there have been great strides and that the range of available programmes has increased dramatically in the 1990s. One estimate in Finland is that the number of students taking open/distance learning courses associated with the Open University attached to Oulu University doubled (to 6,000) between 1990 and 2000 (Pohjonen, 1997). This compares with Littlefield's (1994) estimate for the UK that open learning expanded at a rate of 20% per year from the late 1980s to the mid-1990s. Elsewhere, the UK's Learning and Skills Council (2004) predicts that over half of all learning in the UK workplace will be via open/distance learning materials in the next five years.

However, recent experience has suggested that we must treat ambitious targets and expectations for the future expansion of open/distance learning courses with caution. According to Challis (2004), some years ago there was a fear in the UK that 'pure' open/distance learning courses (via the World Wide Web) would supplant 'pure' traditional, campus-based courses. So far, this fear has proved to be unfounded. On the other hand, there is the possibility of a blended approach to teaching, as already described. Purcell (cited in Plimmer, 2005) suggests that a completely online approach towards the teaching of MBAs is not appropriate. Indeed, if we examine the record of the UK's e-University, it only ever attracted 900 students (from a population of 59 million) and was scrapped in 2004 (BBC, 2004a). Furthermore, according to Eisenbarth (2003), traditional universities (especially in the USA) have been slow to realize the commercial potential of offering open/distance learning via the Internet.

Finally, it is worth looking at the educational infrastructure of the two countries, particularly because levels of computer literacy will obviously affect the future ability of a country to take advantage of open/distance learning packages, which are increasingly likely to be computer-based. According to the World Economic Forum (2004), the UK has slipped from seventh position in the Network Readiness Index (in 2002/3) to fifteenth (in 2003/4); 120 countries were featured in total. By contrast, Finland was first in this

index in 2002/3 and now ranks third. On this basis, Finland can expect faster rates of growth in this area than the UK. Certainly, the data featured below suggest that the recent growth at Kajaani Polytechnic in open/distance learning has been faster than that experienced at UCLan.

## Underlying theory: andragogy versus pedagogy

The UK academic Howard (1993) has drawn an important distinction between 'andragogy' and 'pedagogy'. She describes andragogy as the education of adults and pedagogy as the education of children. She was writing about the training of nurses, and the fact that in the 1980s and 1990s the UK's National Health Service had taken an increased interest in open/distance learning programmes in light of the national shortage of trained nurses. Howard's suggestion was that the traditional campus-based system of education would not be able to cope with the demands placed on it by the need to recruit large numbers of nurses and arm them with all the required knowledge and skills. Item 1 in the taxonomy in Table 1 (traditional campus-based education) requires that student and teacher are in the same place at the same time for education to occur. Howard's important contribution was to point out that implicit in this model is the idea that the educational process is controlled by the teacher; that is, the students are treated as children in that the content and pace of what is delivered is determined by the adult (the teacher/lecturer). By contrast, open/distance learning (Nos 2 and 4 in Table 1) requires the learners to act as adults, in that they decide at what pace they will learn and they have to discipline themselves to access the relevant material and learn from it.

   Of course, the traditional model of education has held sway in both Finland and the UK for many years; the important challenge in this context is to decide *how* to use open/distance materials to best effect. This need has been recognized in both countries (see Challis, 2004, for the UK, and Pohjolainen and Ruokamo, 2000, for Finland). It may well be that an element of coercion will be needed to get UK academics to think strategically about the use of open/distance learning materials – that is, to think carefully about the most efficient way to incorporate such materials into traditional (pedagogic) teaching. This is certainly the view of van de Wende and Beerkens (1999) and Challis (2004), who suggest that the use of learning packages driven by ICT is too often a matter for individual preference in the UK. At the University of Central Lancashire, there is huge variation in the take-up by academic staff of e-learning facilities, but academics are under increasing pressure to make sure that they have some form of WebCT presence by the end of 2005. The university's Learning Development Unit has been charged with the task of ensuring that lecturers have the skills required to meet this objective. Other UK educational institutions are not so fortunate; one survey of teaching staff in FE (further education) colleges found that 75% of respondents felt they needed more help with ITC training and a massive 86% felt they had insufficient time to develop appropriate skills (Munro, 2003).

## Open/distance learning provision at UCLan

Founded in 1828 as the Institution for the Diffusion of Knowledge, UCLan has grown to become the sixth largest higher education institution in the UK in terms of student numbers. Students are spread over three campuses: Preston in Lancashire, and Penrith and Carlisle in Cumbria. In addition, UCLan has a network of 23 partner colleges in the UK and several franchised courses around the world in countries such as China, Oman, Hong Kong, and the Netherlands. In short, there is a pressing case to develop open/distance learning materials with existing students, quite apart from a desire to access new customers in new markets – in particular, policy makers at UCLan are interested in penetrating the lucrative North American market. It is also the case that the UK higher education market is set to become more competitive in 2006, when undergraduate fees are due to increase to £3,000 per year. In this context, students' expectations (of the service they get from universities) will probably increase; extra academic support via Web-based materials is one obvious additional supplement that could be offered.

   In March 1999 UCLan published a consultation document entitled *Access to Excellence* which set out an agenda for change. An e-learning strategy followed in November 2002. One of the main academic objectives for the university is to increase student numbers to around 50,000 by 2010 with a significant proportion (5,500) coming from open and distance learning courses. UCLan has high ambitions in relation to open/distance learning, crystallized in its statement that 'by 2010 UCLan will be one of the leading providers of e-learning programmes in the UK' (UCLan, 2002, p 1).

   With that aim in mind, over £10m has been invested in the university's general ICT infrastructure (that is, not just for e-learning) over a five-year period. A decision was taken in 2000 to purchase WebCT software, although this was to be used to support not just specialist distance learning initiatives but also to develop

support materials for all UCLan modules and courses. As argued at the beginning of this paper, it has become clear that developments in e-learning technology are impacting on general (campus-based) teaching.

Until now the university's level of specific financial commitment to e-learning has been relatively modest. For example, the sum allocated to e-learning initiatives in 2002–03 was about 0.13% of the total budget, while distance learning students accounted for 2.2% of UCLan's student body in 2002. It remains to be seen whether the targets for the future recruitment of e-learning students will be realized, but at present the university is on course to achieve them, given that growth rates have recently been around 33% per year (see below). The university's policy is geared towards providing e-learning courses with signs of perceptible (and strengthening) demand, even though present demand may be relatively small. At the same time, while there is a desire to expand future e-learning provision considerably, policy makers are understandably anxious to ensure that resources are not misallocated.

There are currently 33 specialist e-learning courses in a range of subjects that includes antiques, astronomy, construction law and nursing (reflecting considerable growth – as recently as 2000, UCLan had only a handful of open/distance learning courses). Some of these courses are developmental and are designed to culminate in a professional qualification or degree on a year-to-year basis, while others are shorter and more self-contained. The fees charged vary widely, from £270 for a typical undergraduate module to £2,000 for a postgraduate certificate in construction law. Many of UCLan's distance learning courses (for example, in antiques) have a tariff which roughly equates to that associated with undergraduate modules. At this stage in the university's development, there is a desire to strengthen expertise in distance learning and this is why a number of the specialist e-learning courses are allowed to run with as few as 7–10 students.

## Comparing experience at UCLan and Kajaani Polytechnic

Perhaps the most important feature of Kajaani Polytechnic's open and distance learning provision is the simple fact of its existence, given that the institution has only 2,200 students, a very small number by UK standards. In fact, the Polytechnic has been providing computerized distance learning materials since 1998. The software (WebCT) is the same as that used at UCLan (and many other UK universities) and the quality of hardware is comparable. However, it is worth noting that UCLan is 16 times larger than Kajaani

Polytechnic, and yet (perhaps surprisingly) policy makers there clearly feel that they have the critical mass needed to develop open and distance learning materials. This confidence derives from the fact that in Scandinavia there is an almost universal provision of open/distance learning across the higher education sector. Van de Wende and Beerkens (1999) note that 100% of Swedish universities are engaged in open/distance learning, compared to 75% of UK universities; anecdotal evidence suggests that the figure for Finland is likely to be closer to that for Sweden.

It is clear that there has been growth in the use of open/distance learning materials in both institutions, although, as mentioned above, this growth has been from a small base. At Kajaani, in 2003 there were some 37 students registered for open/distance learning courses and in 2004 there were 72 (estimates provided directly by colleagues at Kajaani Polytechnic) – representing a remarkable growth rate of 95%. If these estimates are expressed as a percentage of the student body at Kajaani, the increase is from 1.7% of the student population in 2003 to 3.2% in 2004. In terms of the proportion of the student body doing open/distance learning courses, it is remarkable how consistent these estimates are with the experience in Preston: in 2002 UCLan had 818 students registered on this type of course, 2.2% of the student body. However, it has to be admitted that annual growth rates in Preston have been far more modest, averaging 33% over the past two years.

There is a broadly similar comparison to be made regarding the cost of modules studied on an open/distance learning basis. In Kajaani, the charge levied for a module varies according to its academic credit rating. (It should be noted that full-time students at Kajaani do 35 credits per year for three years and a one-year work placement during a typical degree programme.) An open learning unit will cost 80 euros per credit, and so a six-credit course, for example, would cost 480 euros (roughly £340 at the current exchange). As described previously, costs at UCLan also vary, but according to which department is providing the unit rather than its credit rating. Typically, though, an undergraduate module at UCLan would, if pursued solely by distance means, cost about £270. (To put this into context, UCLan students would normally study six modules per year for three years to gain an honours degree.) In broad terms, one degree-level module at UCLan would translate as six credits at Kajaani; thus the costs of undergraduate-level open/distance learning units are broadly comparable.

However, there are important differences between the institutions that point to a potentially higher take-up rate in the future at Kajaani. It is significant that Kajaani's fees are flexible but essentially consistent

because they are output-related; that is, *all* units are given a credit rating and the charge varies according to that rating. This contrasts with experience at UCLan, where there have been considerable difficulties in determining the level of fees to be charged. In one example (from autumn 2002), a department announced two undergraduate-level open learning modules that were to be made available through WebCT and the courses were subsequently advertised in the appropriate professional journals. Initially, with a proposed fee of £400 per module, there were a number of telephone enquiries for the units but no *active* demand. The fee was subsequently lowered to £270 per module and the each unit was delivered to seven students. Such experience at UCLan illustrates that demand for open/distance learning is price-sensitive, as one might expect. This is not to deny the importance of other variables, such as the quality of provision or the reputation of the provider; but it does appear that the UK demand for open/distance learning is heavily dependent on price. To a large extent, of course, such experience reflects the fact that an innovator in this field will encounter difficulties that an imitator may not. It is worth reiterating the Pro Vice Chancellor's determination (cited above) to make UCLan a *leading* provider of e-learning programmes in the UK; in the area of e-learning provision it could be considered as an innovator. In this context, it is worth stressing that in 2002 the university already had 818 e-learning students, compared to the total of 900 recruited by the late national e-University. Furthermore, UCLan has a wider range of options in its e-learning portfolio than many other HEIs in the UK.

In the UK higher education system, the difficulties experienced at UCLan are by no means unique. Tysome (2001) suggests that there is a widespread problem in deciding on an appropriate fee structure for open/distance learning modules and in introducing the necessary administrative procedures. Not surprisingly, current administrative procedures associated with the funding and accounting processes in higher education are dominated by traditional campus-based students, who account for the majority of the student population. Given the concentration on these students, located on one campus and pursuing courses on a full-time basis, FTEs (full-time-equivalent students) form the staple currency of payment systems. Indeed, Tysome argues that many colleges in the UK do not *know* what the actual costs associated with open/distance learning are. Furthermore, writing about the European higher education system in general, Van de Wende and Beerkens (1999) suggest that funding should be based on output rather than class contact time, the latter system militating against open/distance learning

courses, which by their very nature have little or no contact time. It seems that in the UK administrative expertise will have to improve with respect to open/distance learning if it is to make a more substantial contribution to tertiary education. As a step in this direction, an online enrolment procedure has been introduced at UCLan, with effect from academic year 2004/05, which is designed to develop just such expertise. At Kajaani Polytechnic, online recruitment procedures for open/distance learning students have been in place for three years.

The course costing example cited above compares typical undergraduate modules, but in practice many of UCLan's open/distance learning modules are not studied in the context of a recognized degree or postgraduate programme; some final awards for the lifelong learning courses are 'stand-alone' certificates in a variety of subjects, such as computer literacy or astronomy. This raises another issue that might be expected to affect student demand for open/distance learning: credit recognition. Students might wish to study one or more open learning units and subsequently have them recognized as counting towards some vocational or other award. However, the question of credit equivalence has been problematic for some time in the UK, partly because of the confusing array of awarding bodies (Shackleton and Walsh, 1995). The National Vocational Qualification (NVQ) scheme was established in the late 1980s largely in response to this problem – under the scheme, different courses (or experiences) can be given equivalence on a 1–5 scale and then used to claim credit from various professional and other examination bodies. However, NVQ take-up rates have been disappointingly low; Shackleton and Walsh estimate that fewer than 10% of the UK workforce have made use of the system. In Finland, by contrast, the issue of credit equivalence is well established and widely understood, as the Finnish Information Technology Development Centre (2001) has suggested. This point is also made by Parjanen and Tuomi (2003), who suggest that Finnish distance learning is organized into modules with clearly established credit equivalence, and this helps to explain its popularity in the context of professional continuing education. Similarly, graduates of the open/distance learning units provided by Kajaani Polytechnic have a qualification that is widely understood across the Finnish labour market in terms of credit equivalence.

## Conclusions

### *Importance of strategic alliances*

In the UK, as elsewhere, it is likely that open/distance learning will become more important in the near

future; as mentioned previously, the Learning and Skills Council (2004) estimates that over half of all workplace learning will be via the use of distance learning materials in the next five years. However, policy failure in this area is very expensive; Challis (2004) remarks that the collapse of the UK's e-University cost £62 million. There were several causes for the failure of that institution, but a lack of demand was almost certainly not a prime factor. A recent Select Committee report (cited in Slater, 2005) highlighted the lack of a coordinated management strategy and suggested that insufficient attention had been paid to the issue of marketing.

In the meantime, many of the problems discussed in this paper are not peculiar to one institution or even to one country. Faced with a probable expansion in demand, it would seem wise for UK universities to think carefully about the importance of strategic alliances, not least because of the pace of technological change. One irony here is that institutions which have tended to regard themselves as competitors (for a given pool of students) now find themselves in a situation in which collaborative rather than competitive behaviour may be the more rational choice. Various Finnish and UK writers (such as Pohjonen, 1997, and Challis, 2004) have stressed the need for institutions to think strategically about open/distance learning. Indeed, to that end UCLan has already committed itself to the formation of alliances with other institutions as part of its e-learning strategy (UCLan, 2002). In the northwest of England, for example, UCLan is one of 13 institutions which have collaborated to purchase the largest e-book collection in Europe. For its part, Kajaani Polytechnic is part of the Finnish Virtual Polytechnic, which incorporates all 31 of the country's polytechnic institutions.

However, institutions in both countries would be best advised to pursue strategic alliances more proactively. Moreover, for EU countries such as Finland and the UK, an increasing number of these alliances will almost certainly be across national boundaries (van de Wende and Beerkens, 1999). Van de Wende and Beerkens make an interesting comparison between the types of open/distance learning alliances found in the USA and their European counterparts. In Europe, universities and polytechnics will often attempt to establish partnerships with other higher education institutions. The same is also, of course, true of the USA: there, however, universities are also much more inclined to forge links with commercial organizations, such as software developers.

### Quality assurance

Throughout this article Table 1 has provided a useful means of analysing the differences between traditional,

campus-based higher education and education delivered via computerized open/distance learning packages. In particular, it has been suggested that such differences extend to both pedagogic and administrative issues, the latter including policies for quality control. Clearly *within* a given country, the problems of ensuring that campus-based students receive high-quality education are quite substantial, but when one factors in the distinct possibility that open/distance learning students may come from another country, the quality-assurance challenge becomes even more difficult. As van de Wende and Beerkens (1999) have argued, existing quality-assurance systems tend to be skewed towards traditional provision, with visible (campus-based) enrolments. Indeed, this argument is consistent with the earlier suggestion that payment and accounting systems are also geared towards traditional students rather than their open/distance learning counterparts.

The need for agreement about the standards that should be applied to e-learning quality-assurance mechanisms was recognized at a meeting of the UK Open and Distance Learning Quality Council held in London in 2002. According to the Council, the UK is still some way off exerting rigorous quality control over all the e-learning resources used by its citizens. In light of this, the creation of a recognition scheme for distance learning materials was proposed; it was felt that such a 'kite mark' scheme would help to bring a sense of order to the market for open/distance learning materials (Leon, 2002).

### A change in pedagogy

As discussed above, using open/distance learning materials implies a change in pedagogy. The use of such materials suggests a level of andragogy that is not typically found in the more pedagogic styles of learning associated with campus-based education. Indeed, Challis (2004, p 16) argues that the UK needs 'a new cadre of learning specialists, academics and non-academics, expert in the new technologies'. Similarly, writing about the position in Finland, Sinko (1998, cited in van de Wende and Beerkens, 1999) suggests that various factors inhibited the development of open/distance learning in the 1990s, especially those associated with ICT, the use of which was becoming increasingly common. She found that the level of technical support was inadequate in many educational institutions and that teacher training needed to be improved in this area.

### Learning from institutions in other countries

As Osborne *et al* (2004) have pointed out, comparative studies face particular methodological difficulties, most obviously those that stem from linguistic

issues. Moreover, as those authors suggest, there is a real danger that the central questions explored by researchers reflect particular ethnocentric perspectives. Despite these difficulties, however, the comparative aspect of the present study helps to put the UK experience in context and provides useful exemplars of good practice.

Caution is also needed in drawing generalized conclusions from a small study such as this. Nevertheless, as Saunders *et al* (2003) point out, a case study approach can offer methodological advantages to researchers. In particular, this approach has enabled the authors to get inside organizations and to obtain data and explore issues that would otherwise have been difficult to investigate.

It is evident that more thought has to be given to the strategic implications of open/distance learning. In developing a long-term strategy it is sensible to consider the experience of other countries, especially those with an impressive level of computer literacy. In particular, UK universities could usefully look at detailed institutional practice in Finland to inform their future policy making.

It is interesting that evidence from Kajaani Polytechnic mirrors experience at UCLan in a number of ways (for example, the charge levied for undergraduate-level modules is broadly similar). However, a small institution such as Kajaani Polytechnic is probably in a better position to exploit the benefits of the future use of open/distance learning materials. In this context, it is instructive to consider differences between the experiences of the two institutions. It is noteworthy that recent growth rates at Kajaani have been substantially higher than those at UCLan. One important lesson to be learned from the Kajaani lies in the administrative procedures it has adopted – and in particular the flexible (but consistent) tariff structure described above. More generally, Tysome (2001) has been highly critical of the administrative procedures associated with open/distance learning in UK educational institutions, stressing the need to improve them.

The issue of credit equivalence is another area in which the Finnish and UK experiences differ. Since open/distance learning courses are not always given an explicit credit rating at UCLan (as elsewhere in the UK), it seems likely that this will constrain demand.

Finally, the UK's ranking in the World Economic Forum's Computer Readiness Index is falling. Unless strong counter-measures are put into immediate effect, there is a real danger that the UK will slip even further behind its competitor nations. This again will hinder its attempts to benefit from open/distance learning to the same extent as other countries (such as Finland).

Of course, the issues of credit equivalence and computer readiness are not confined to the particular institutions featured here; many differences between UCLan and Kajaani are microcosms of wider societal issues. Nevertheless, the specific experience at Finnish institutions such as Kajaani Polytechnic provides an interesting case for analysis.

Despite the concerns raised in this paper, the use of open/distance learning materials will continue to increase. While it is true that higher education institutions in the UK have extended and improved open/distance learning provision, much work remains to be done if the nation is to maximize the potential of such materials.

Finally, an important issue for further research is the efficiency of 'blended' teaching; we need to know more about ways in which traditional and distance education methods can be used jointly to enhance the learning experience.

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