



CHAPTER 2

THE KEY PLAYERS

Judith Calder

INTRODUCTION

Governments increasingly see education and, in particular, technical and vocational education and training (TVET) as having a key role to play in the economic success and social stability of a country. Corporate bodies, as consumers of skilled workers, are loud in articulating their need for trained staff as they search for new markets and increasing productivity. Individuals are becoming aware of the potential of TVET to improve their employment prospects and their future income. Against this growing perception of the importance of TVET by potential buyers and users, an increasing range of these agencies and decision-makers see open and distance education (ODL) as a realistic way of extending TVET to a much wider public.

At the same time, the outstanding business potential of education and training through ODL means it is now well recognised. For example, in April 2001, the investment bank Merrill Lynch estimated the global e-learning market as being currently worth US\$3.5 billion, growing to US\$25 billion by 2003 (Teather and Cassy, 2001), while the global market for educational materials is even larger. Entrepreneurial interest from every conceivable type of organisation and agency is flourishing. Global telecommunications and Internet/technology companies, education and training publishers and providers, service providers, national and supranational government agencies are all investing in this new industry. Household names such as AOL Time Warner, Cable & Wireless, Microsoft, British Telecom, AT&C and the European Commission are all increasing their stake in this market.

WHO THE STAKEHOLDERS ARE

Stakeholders are members of those groups with an interest in a particular activity, at any stage. Thus the interest may be associated with the design, development, production, marketing, distribution or utilisation stages of the process. The interests may also be primarily financial, political, social, developmental or community. The number and range of groups with an interest in the different stages of open and distance approaches to TVET is immense, and each of these stakeholder groups will have a different type of interest. Consumers will have different needs and aims and providers will see different opportunities in the development and provision of TVET through ODL.

Two key features which are important in determining the nature of the interest of stakeholder groups are the sector to which they belong (public, non-profit/non-governmental organisations or private/corporate) and the geographical reach of their interest (local, state-wide, national or international). Table 2.1 gives examples of the different types of stakeholders.

Table 2.1: Examples of stakeholders in TVET using distance education, by sector and geographical reach

SECTOR / GEOGRAPHICAL REACH	NON-PROFIT/ NON-GOVERNMENTAL ORGANISATIONS		
	PUBLIC		PRIVATE/CORPORATE
INTERNATIONAL	World Bank	COL	AT&T
	UNESCO	ICDE	British Telecom
	European Parliament	WorldSpace Foundation	Cable & Wireless
		International Extension College	BBC World Microsoft
NATIONAL	Government departments	SchoolNet (India),	Unext (USA)
		National Extension College (UK)	IBM Canada
STATE/REGIONAL	State Open Universities (e.g., PR China, India)	State Resource Centres for Adult Education (India)	Small enterprises providing training
		Scottish University for Industry (SUfi)	Places of employment
LOCAL	Local schools and training centres	Women's groups	Small enterprises providing training
		Local credit unions	Places of employment
INDIVIDUALS	Agricultural workers	Volunteer members	Employees
	Unemployed		
	Refugees		
	AIDS victims		

The reality, however, is somewhat more complex than Table 2.1. might suggest. For example, many international and national bodies work at state and local levels, and an increasing number of others are starting to recognise the benefits of doing so. Similarly, local groups and state-level organisations may be recognised and have a voice at the national level.

At the same time, the apparently clear distinction between public, private and non-profit sectors is, in reality, also blurred at the institutional level. The financial pressures on public institutions such as universities and charities has led to many of them setting up

departments or units which undertake “for profit” activities. For example, in India, State Resource Centres provide technical resource support to adult literacy programmes. They were set up and are financed by the Ministry of Human Resource Development, Government of India, but also raise both project-specific funds from other agencies and their own additional funds from the sales of publications and from consultancy work for other organisations. In Argentina, Educ.ar SE, a non-profit organisation founded by the Argentinean government, is designed to connect all educational institutions in Argentina via the World Wide Web, and to train every teacher in the use of new learning technologies. It is now considering the creation of a new company, Educ.ar SA, to manage its commercial activities such as selling content, connectivity and consulting services (Stokes, 2001).

Another example of an organisation undertaking cross-sectoral activities was illustrated in the announcement by the president of MIT in April 2001 that course materials would be made freely available on the Internet over the next 10 years. He made a number of statements about the aims of the programme (known as MIT OpenCourseWare), referring to MIT’s educational mission, to the idealism of its staff, to openness and outreach and to the desire to influence the world. In the same statement, however, he referred to his belief that revenue-generating distance education had a role in the world, for example for professionals learning about new developments in their field, and of the likelihood of MIT’s future activity in this sector (*MIT News*, 2001). This illustration is typical of the complex and often apparently contradictory nature of aims even within the same institution.

Conversely, an increasing number of private sector organisations include some “non-profit” activities, often as part of a stakeholder alliance with a local community or a trade union. For example, the form of Coca-Cola’s planned worldwide Coca-Cola/Harry Potter literacy programmes are to be left to Coca-Cola local companies in order to reflect variations in cultural tastes (*Guardian Education*, 2001). A rather different example is the non-profit national UK newspaper *The Guardian*, which now regularly publishes copyright-free learning resources in print through pages in the newspaper, on CD-ROMs and on its Web site.

Within the same organisation then, different areas of activity will often operate in different sectors. Thus while an organisation may at the corporate level appear to belong to a particular sector, at the activity level the picture is likely to be more complex, with cross-sector activity likely taking place. In effect, it is not the sector to which the organisation appears to belong, but the sector to which the *activity* belongs which is key.

TRAINING MODELS

The standard model of distance education is one in which the providing institution first develops the course materials and then delivers the course to the learners. The early distance education institutions — the first- and second-generation distance education colleges and universities — developed their own courses and delivered them directly to learners. With the increasing use of open and distance methods for TVET however, the situation has become more complicated.

The original model assumed a traditional relationship between the education and training provider and the learner. The learner registered with the provider and paid fees for the tuition. However, the appearance of intermediaries, such as employers, in the teaching-learning process has led to a growth in the split between the materials

development function of ODL and the course delivery function, with the intermediaries buying one function and, for example, providing the other themselves. Government bodies also saw distance teaching as a cheaper and more flexible method of providing education and training in shortage subjects. Thus in the UK, and subsequently in the rest of Europe, government provided grants to a variety of agencies to encourage the development of distance education and training materials separately from course delivery. New forms of course delivery were similarly encouraged.

However to provide good quality distance education and training, a provider needs:

- Content expertise
- Distance teaching expertise
- Realistic levels of finance to cover development and production costs
- Time for the materials development and production process
- A support/course delivery infrastructure

Where some or all of these are not available, then ways around the problem have to be found. The lists below show the options available to providers of TVET using ODL approaches.

1. Materials development and production

- Develop own (requires content and distance teaching expertise plus finance)
- Commission from elsewhere (requires reasonable level of finance plus knowledge of reliable organisations)
- Buy “off the shelf” (requires knowledge of availability and quality)
- Modify existing materials (requires knowledge of content and distance teaching expertise, plus agreement of copyright holder)

2. Course delivery

- Use own delivery system (requires expert supervision and monitoring to maintain quality plus sufficient learners to justify expense)
- Commission another agency to deliver course (requires knowledge of good quality agencies offering expert supervision and monitoring to maintain quality plus finance)
- Buy into existing course delivery system (may not cover appropriate geographical areas)
- Buy into modified course delivery system (requires clearly negotiated agreement with another agency)

Although there are many possible combinations in the lists above, certain combinations or training models do tend to be particularly popular, and these are discussed below. The advantages and disadvantages of each model vary depending on the circumstances of the providers and the consumers of the training opportunity.

Learning materials and course delivery bought from the same provider

A client buying from a provider who both develops its own material and delivers its own courses is probably still the most common training model. A typical example of such a provider is the National Open School in India (NOS).

NOS targets poor school-age children in rural and isolated areas, especially those who are already at work (Singh and Dipak De, 1999). Its enrolment is of the order of 130,000 students. Although its main aim is to provide opportunities for continuing and developmental education at the school stage, it also has about 6000 students enrolled solely for its wide range of vocational education courses, with approximately another 26,000 who are studying both academic and vocational subjects. These courses include subjects such as word processing, jute production technology, carpentry, solar energy technician, laundry services, furniture and cabinet making. The NOS supports learners through a network of study centres. Materials are primarily print-based, although an increasing use is being made of ICT and audiovisual media.

National Open School, India: Distance Agriculture Education

The Indian Council of Agricultural Research (ICAR), has a network of 281 agricultural centres — the Krishi Vigyan Kendra (KVK). These are grass-level institutions “devoted to extension education programmes including vocational education.”

Training is primarily through work experience, and there is no certification offered on completion of training. Singh and Dipak De suggest that best estimates of throughput indicated that distance education was the only feasible route to reach the optimum number

of rural workers within a realistic timespan. The NOS has established a number of certificate study programmes in agriculture using the KVK centres as study centres, together with multiple media such as print, audiovisual material, teleconferencing and counselling. Courses include subjects such as plant protection, water management for crop production, oyster mushroom production, poultry farming and the like. Over 2500 rural youth were reached over a five-year period (Singh and Dipak De, 1999).

The advantages of this model are that buyers can see the courses they are buying, the courses already exist and only the costs for individual learners have to be paid. The model also allows learners to study for a recognised qualification.

The disadvantages are that the courses available may not cover the training topics needed; they may not be available to learners in certain areas; they may not be of the right level, in the right language or of the duration and intensity wanted; and it may be expensive if the buyer is funding more than a few learners.

Providing organisation commissions an external agency to develop and deliver materials

A training model which is increasing in popularity involves the providing organisation — usually an employer — commissioning an external agency both to develop and to deliver a tailor-made course for its employees. One example is The Commonwealth of Learning (COL) course for UNHCR. This course, Writing Effectively for UNHCR, has been designed specifically to meet the needs of UNHCR staff. The delivery mode for

this training programme is a hybrid one designed to cope with the geographical spread of UNHCR staff and take advantage of their global e-mail connectivity. The study package is print-based and student support is provided via e-mail. Tutor support, assignment submissions and marking, student feedback and linkage with course administration are all computer-mediated. COL delivers the course from Vancouver by hiring local, qualified tutors. Tutor training is provided via videoconferencing with a trainer based in Canberra, Australia (Bentley, 2000).

A similar example involves the on-line training of staff with another global company, Microsoft. LaSalle University, based in Louisiana, USA, offers an online course in conjunction with Microsoft. The course allows Microsoft employees to upgrade their computer skills while working full-time anywhere in the world. They can also obtain course credits towards certificates in technical education to enhance opportunities for promotion (Farr, 1999).

The commissioning by global companies of training materials and the delivery of the training by a specialist organisation allows the company to achieve not only a tailor-made course, but a uniform standard of training for staff, regardless of their location. The advantage of this model is that buyers can specify precisely what they want in terms of content, level, language of instruction and duration. Thus it should meet buyers' training needs and avoid many of the disadvantages of the course bought "off the shelf." Also, the more learners there are, the more cost-efficient the model should be. At the same time, the infrastructure can be developed to include all the learners whom the buyer wants included. However, having a distance-taught course tailor-made to meet specific needs is expensive, at least in initial development and production costs. It also takes time to design and develop.

Providing organisation commissions an external agency to develop contents but delivers the course itself

While many distance teaching institutions use external consultants as content experts, some can also develop courses in partnership with centres of excellence that provide the highest-quality content. Take the case of Unext, an online business school backed by US business interests. Unext has used its own expertise in a particular delivery medium, but has drawn on the content expertise of other internationally recognised institutions, such as Columbia University, the London School of Economics and Stanford University, to produce its own online training course (Vekar, 1999).

The advantages of this model are that the provider can offer a wider and possibly more coherent range of courses without needing to recruit new staff with the appropriate content expertise. The reputation of the collaborating institution can be used to guarantee the quality of the content. This model also enables the provider to use the existing infrastructure more efficiently.

The disadvantages are that such types of collaboration can be difficult to administer and that the external content experts may not appreciate the need to work closely with materials designers in order to optimise the ways in which the teaching and the delivery media can be used.

Providers buy “off-the-shelf” courses and deliver them

A model with good prospects of success is the one where the provider buys an “off-the-shelf” course and provides the course delivery system for the learners. While the initial materials developer still risks the possibility of poor sales of the materials, the course provider, the learner and the employers have the benefit of a training model which is more likely to be successful, at less cost, and with more time flexibility than a traditional face-to-face course. A major advantage of this model is that a conventional training institution can offer specialist courses through the use of bought-in materials, using their own experienced tutoring staff to support the learners. This model is particularly appropriate for courses which lead to national qualifications and which need to cover a standard curriculum. However, from an employer’s perspective, such courses do run the risk of containing redundant material, or of excluding material which would be useful in the particular context in which the employer operates.

An example of this model is offered by the Hull College of Further Education in the UK. It offers a distance education training course in process plant operations. This three-year course is provided by the College for the employees of the local BP Chemical Processing Plant. The course is print-based, with a weekly supervision period provided onsite by college tutors. During this four-hour period, students may discuss study problems, paperwork for exam entry and hand over assignments to their tutors. Students are expected to study in their own time. The materials were developed by Cleveland Open Learning Unit and bought through the Open College (the successor to the Open Tech) (Calder et al., 1995).

The course delivery is very much a partnership between the College and the employers of the trainees. The course providers feel that the biggest challenge to the students in studying through open learning is self-discipline. They have, therefore, devised a tight system of support and monitoring of progress with clear deadlines and with the employer playing an active role in the process.

“Off-the-shelf” packages bought from either the producer or a supplier

Many open and distance training courses consist simply of making learning materials packages available to learners. These packages normally comprise components such as print, video, audio, and/or CD-ROMs. Many employers hold a small stock of such packages and assume that they are providing training by doing so. Even education and training institutions may hold a similar stock for their “distance learning” students.

During the mid-eighties, the British government tried to encourage new forms of technical education and training in the UK through the use of open and distance methods. The Open Tech Programme was a five-year initiative which was exhaustively monitored and evaluated throughout. Although many organisations with content expertise initially developed materials with the intention of selling them to other bodies who would be responsible for their delivery, they frequently had no clear idea of what the market for the new materials was likely to be. It became clear that the materials being produced frequently did not match what was wanted by the education and training consumers. Subsequently there was a change of emphasis towards delivery projects in order to achieve greater diffusion of the materials (Brown, 1987).

STAKEHOLDER ROLES

In addition to the roles played by materials developers, course deliverers, buyers and learners in TVET through open and distance learning, there are many other roles which can be identified:

- Provision of funding
- Policy-setting
- Strategic decision-making
- Regulatory — setting standards
- Monitoring and evaluation — maintaining and improving quality
- Provision of information/advice/guidance
- Mediation/facilitation
- Gatekeeping — controlling access to certain groups/networks
- Creating demand — PR, marketing, environment changing (perceptions of feasibility, success, relevance)
- Articulation of needs — employers' needs/learners' needs
- Provision of expertise
- Producer of learning/training materials
- Supply of services, equipment
- Consumer of services/materials/trainees

An example from Sri Lanka illustrates the diversity of the roles undertaken by different groups who can become involved in a new TVET development which involves an open and distance approach. Laboratory technicians there are employed in universities, schools, research institutes, analytical laboratories and production industries. These technicians had little if any practical work experience during their secondary education and, hence, had no theoretical or practical knowledge in laboratory practices, management and safety, in handling and maintaining instruments or in common laboratory techniques (Fernando, 1999). Neither was there any post-school training course for laboratory technicians in Sri Lanka. Although a specialised curriculum had been drawn up and agreed to by a committee of experts, supported by the University Grants Committee, attempts to introduce a laboratory technicians programme had failed as no Sri Lankan institution was willing to take on the task.

It was against this background that a regional five-day workshop was organised by The Commonwealth of Learning at Indira Gandhi National Open University (IGNOU) for South Asian Commonwealth Open Universities, sponsored by the Commonwealth Secretariat. COL had acquired the copyright to distance study material produced by Scitech Educational, a private company in the UK. Working groups of delegates developed an appropriate mechanism for the successful delivery of the material within the local context. The curriculum was found by the Sri Lankan delegates to be very similar to that already recommended for adoption within the Sri Lankan university system. The outcome was that, on their return, the Sri Lankan delegates to the workshop persuaded colleagues in the Natural Sciences Faculty of the Open University of Sri Lanka to pursue the initiative and offer the programme as early as possible.

Advanced Certificate Programme in Laboratory Technology, Open University of Sri Lanka (OUSL)

This is a one-year programme to train students in the operation and maintenance of scientific apparatus and instruments and to prepare them as “able personnel” in the functioning of laboratories. Delivery is through print material, day schools and a practical component lasting 40 days. Student progress is continuously monitored through assignments in theory and

through practicals which together contribute 30% to the final result. Three passes at GCE Advanced level are required for entry, or equivalent passes in Foundation Courses offered by the OUSL. The course is an adapted version of distance study material produced by Scitech Educational, a private company in the UK (Fernando, 1999).

In this example, there were a number of different stakeholders who were involved at different stages and in different ways in bringing this training programme to fruition:

- The UGC for Sri Lanka
- Sri Lankan universities
- “Experts”
- The Commonwealth of Learning
- IGNOU
- Members of other South Asian universities
- The Commonwealth Secretariat
- Scitech Educational
- The target group of trainees — those employed in laboratories

The need for training had already been recognised by employers in both the public and private sectors. The Sri Lankan UGC, Sri Lankan universities and “experts” were involved in agreeing on the curriculum. The Commonwealth of Learning, IGNOU, members of other South Asian universities and the Commonwealth Secretariat were involved in the workshop, while Scitech Educational, a private UK company, was the source of the study materials prior to modification. Also of note in this example are the different types of contributions made by each stakeholder group. Different stakeholders were concerned with:

- The articulation of the need for certain standards of knowledge and skills among the target group of workers
- The negotiation and agreement of a policy on the content of any training
- Information about and access to appropriate materials for adaptation
- The facilitation of the process of course development and provision
- The provision of sufficient resources to enable the training programme to be implemented

Examples of other types of TVET using open and distance methods reveal a similar picture of multiple stakeholders with different roles and degrees of involvement. In Zimbabwe, agriculture has been the most successful and dominant economic sector.

Creed (1999) reports that Agricultural Extension Officers (AEOs) operate as outreach workers, focusing on the small-holder sector, visiting farmers and setting up rural training programmes on different aspects of agriculture, shows, women's savings clubs and diagnostic surveys. While there is an emphasis on qualifications, there are few opportunities nationally for further professional development. AEOs tend to be non-graduates who took a one-year Diploma in Agriculture from Chibero Agricultural College in Zimbabwe. Selected students are funded by their employer, Agritex (Department of Agricultural Technical and Extension Services), to study the post-graduate diploma course in Agricultural Development from Wye College, London University, as part of a compulsory, rolling in-service human resource development programme. This programme is itself funded by donors such as NORAID and the Rockefeller Foundation.

Post-graduate diploma course in Agricultural Development offered by Wye College

This course was the first distance education course taught in the University of London's External Programme. It is produced, managed, examined and largely tutored in the UK. Modular one-off options are available in specialist areas of choice (e.g., Livestock Development). A high level of English language ability in reading, writing and study skills is required. Wye is part of the University of London and is a centre of excellence in

agriculture, horticulture, agricultural economics and the rural environment. The External Programme of the College targets learners from developing countries, has an established rolling programme and is also committed to increasing wherever possible the participation of women in their programme. Assessment is entirely on end-of-course exam results although there are non-compulsory TMAs (Creed, 1999).

The stakeholders in this example comprise:

- Agritex (Department of Agricultural Technical and Extension Services)
- NORAID and the Rockefeller Foundation
- The University of Zimbabwe
- The Agricultural College in Harare
- Wye College
- The AEOs
- The small farmers and others who are clients of the AEOs

Again, each stakeholder is involved with the training opportunity in a different way. Agritex, the employer, is not only aware of the need of its middle management staff for professional development, but has taken steps to ensure that the need is met in a way which enables staff to carry on working and to continue with their studies regardless of their geographical location. The quality of their training is ensured through the use of a distance-taught course offered by a college which is a centre of excellence in agriculture, horticulture, agricultural economics and the rural environment. NORAID and the Rockefeller Foundation are involved through their support of the aims of the Agritex programme in the form of financial aid. The University of Zimbabwe is an active participant in the delivery of part of the training through its communication skills unit, while the Agricultural College in Harare is also a partner through its organisation and hosting of the residential component. Wye College has designed, produced and delivered the course materials and the student assessment component. The AEOs themselves are not only the learners and the recipients of this training, but they also provide support for each other. They also use the knowledge they have gained from the course in their contact with their clients. This last group, the small farmers and others who are clients of the AEOs, are the key beneficiaries of the training programme. Other beneficiaries are the citizens who benefit from the increased prosperity which a more effective agricultural sector brings.

DISCUSSION

The range of aims and interests of the different groups of stakeholders in TVET using open and distance learning inevitably means that some will be in conflict some of the time. A major and obvious area of conflict is the degree of financial risk which groups are willing to take in relation to education and training activities. Activities which are funded with public money cannot operate with the same level of risk as those which are privately financed. This does not mean that there are no publicly financed innovations — far from it. But the source of financing does restrict the speed and scale with which an activity can be introduced. The payback for risk-taking is, of course, the level of profit. Thus the prices for innovative or specialist privately financed activities will be considerably higher than for those activities which are publicly financed or which do not seek to make a profit.

The balance, or frequently the imbalance, between public, non-profit and for-profit activities has associated effects on the quality of those activities and on their inclusiveness. In highly competitive situations such as in the provision of management training through ODL, an early casualty is quality. The rush to capture new markets by new and inexperienced providers can result in expensive and disappointing mistakes. At the same time, stakeholders with little money, for example in the developing countries, can be dismissed by for-profit providers as being of little interest. While the education and training needs may be both recognised and articulated, those needs will only be met by low-cost solutions. These will be either self-generated or be in association with stakeholders undertaking non-profit or publicly funded activities.

The value of collaboration in open and distance education and training has long been recognised by practitioners in the field. The examples in this chapter give a flavour of what can be achieved by different stakeholder groups coming together with a common purpose. However, successful collaboration is not an easy option, and institutions with big egos can find it just as difficult as individuals to put the achievement of a common aim ahead of personal achievement. Successful and unsuccessful examples of collaboration need further investigation to identify the key conditions needed for

successful collaboration. In the meantime, clarity of aims, honesty of purpose and inclusion of key stakeholders will increase the likelihood of the development of successful models of vocational education and training using open and distance learning techniques.

REFERENCES

- Brown, H. *Open Learning Developments and the Open Tech Programme in Further Education*. London: Tavistock Institute of Human Relations, 1987.
- Bentley, M. and D. Murphy. *A Course on Writing Effectively for UNHCR*. Vancouver: UNHCR/The Commonwealth of Learning, 2000.
- Calder, J., A. McCollum, A. Morgan, and M. Thorpe. *Learning Effectiveness of Open and Flexible Learning in Vocational Education*. Sheffield, UK: DfEE Research Series No. 58, 1995.
- Creed, C. *Towards a Framework for Addressing Diverse Learners in International, English-medium, Print-centred DE: A Zimbabwean Case Study*. Unpublished doctoral thesis. Milton Keynes, England: Open University, 1999.
- Fernando, J.N. Oleap. "Commonwealth of Learning Initiative to Empower Middle Level Personnel Through Distance Education: An Advanced Certificate Programme in Laboratory Technology at the Open University of Sri Lanka." Paper presented at the Pan Commonwealth Forum on Open Learning: Empowerment through Knowledge and Technology, Bandar Seri Begawan, Brunei Darussalam, 1999.
- Farr, M. "Non-traditional education and delivery." *Distance and Supported Open Learning*. London: Hobsons and The Open University, 1999.
- Guardian Education*. "Coca-Cola is it. And so is Harry Potter." March 13, 2001.
- "MIT to Make Nearly All Course Materials Available Free on the World Wide Web." *MIT News*, April 4 2001.
- Singh, R.S.P. and Dipak De. "Open Learning for Empowering Rural Youth through Agricultural Technology." Paper presented at the Pan Commonwealth Forum on Open Learning: Empowerment through Knowledge and Technology, Bandar Seri Begawan, Brunei Darussalam, 1999.
- Stokes P. "Educ.ar Brings ASP Solutions to International Markets." *Eduventures.com* 10 (2001). <www.eduventures.com>
- Teather, D. and J. Cassy. "How to Learn the Hardware Way." *The Guardian*, March 15, 2001.
- Vekar, J. "On-line Education: A New Arena for International Co-operation." *Distance and Supported Open Learning*. London: Hobsons and The Open University, 1999.