

A framework for open distance learning — organization and management

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Introduction

Distance teaching is spreading to almost all areas of education and training, as governments become aware of its potential to deal effectively with many of the problems they face. Governments have devoted significant resources to solving deficiencies and developmental needs using distance-education techniques in such high-priority areas as primary and secondary education and teacher education. They have also recognized that such techniques are often effective in meeting the education and continuing-education needs of such groups as professionals [1–3], the armed forces and prisoners.

The most prominent advances in distance education over the past 30 years have been in the university sector [4,5]. Open universities represent an attempt to establish a fully integrated distance-teaching system with subsystems for developing course materials and providing student support and instruction. Governments in industrial and developing countries alike have seen the establishment of single-mode distance-teaching universities as a means of addressing national education needs. Dual-mode universities too have flourished and grown in number. And as governments face growing resource constraints, they have begun to turn to the idea of adding distance-teaching components to existing universities. This organizational form has a far longer tradition than open universities.

A major problem in the design of distance education at dual- or mixed-mode institutions [6,7] is that sometimes we try to apply the traditional pedagogical tools into a technologically enhanced environment to deliver distance education (Table 1). Dual-mode universities have to acknowledge that their distance-education activities must be managed in ways that are foreign to most face-to-face teaching responsibilities. The autonomy of faculties, departments and teachers in their disciplines is a cherished university value. It is fortified by the ever-increasing specialization of knowledge as well as by the concept of academic freedom. But distance-education responsibilities cannot be thought of realistically other than in operational terms. Different forms of knowledge and expertise have to be combined through co-operative effort. This calls for long-term planning, concerted action across faculties and departments, and clockwork efficiency in the

Distance education in a single-mode system	Distance education in a dual-mode system
Industrialized teaching	Experimental or tailor-made
Large scale	Small scale
Focus on course development and production	Focus on research
Highly reliant on technology	Little use of technology
Technology used for delivery	Unusual to use technology for delivery
Most of the information is given in course work	Teachers carry most of the information

An overview of the differences between single-mode and dual-mode systems

development of programmes of study, the regular despatch to students of study materials, and the equally regular marking of assignments, tests and examinations. The challenge is to find ways of combining managerial and academic principles.

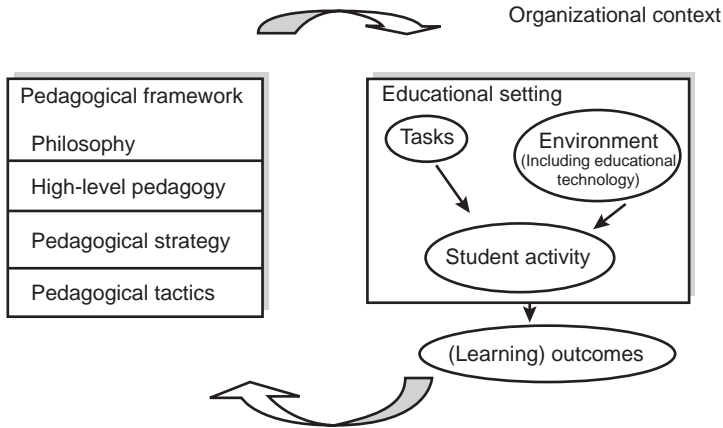
The work of single-mode institutions is commonly focused on packaging courses and design of delivery methods. Their main focus has been reproduction of knowledge rather than development of new knowledge, as in dual-mode institutions. Single-mode institutions believe that teaching and learning should be at the heart of the academic enterprise instead of scholarship and research. They advocate an inter-disciplinary, problem-solving or theme-oriented approach to curriculum development, which fits nicely with the concepts of course development by teams [8].

Universities, on the other hand, value autonomous faculty work in teaching, scholarship and research. Promotion decisions are never based on direct observation of teaching performance in the classroom. Academic freedom is one of the dominant norms of the universities. Its major emphasis is on independent work — teaching alone, planning curricula and courses alone and often researching alone.

The policy framework

The framework presented in this chapter is a result of discussions within the project supported by the European Union Socrates Program on Open Distance Learning (56605-CP-1-99-SE-ODL-ODL). Figure 1 falls into three main parts [9,10]. The *pedagogical framework* itself is on the left-hand side. It needs to be understood in relation to concrete educational activity in a real-world setting. On the right-hand side of the figure is what has been called the *educational setting*. This is a way of describing real-world, concrete activities, processes, people and artefacts involved in a learning activity. Both the pedagogical framework and the educational setting exist within an *organizational context*, such as within a university, a corporation or a virtual-learning institute. The organizational context exerts its influence mainly by conditioning (i) design and management of the educational setting and (ii) the processes through which a pedagogical framework feed into the design and management of an educational setting.

Figure 1



A policy framework

Organizational context

Depending on the organizational context within which the pedagogical framework and educational settings are created and developed, there are different factors influencing the design of the framework. For example, single-mode institutions will use different pedagogical strategies and tactics compared with dual- or mixed-mode institutions. Policy, resources and delivery mechanisms will differ [11]. There are both internal and external factors that influence the pedagogical setting. Internal factors are the attitude and environment within which courses are developed and delivered. External factors are the influence of culture and regulations.

National government is perhaps a major factor influencing the distance-education policy of an institute. Government plays a vital role by promoting information infrastructure and by regulating education policies. But in the past 10–15 years there has been an almost universal trend towards greater government emphasis on accountability by education institutions. This emphasis on accountability frequently comes from a felt need to use increasingly scarce resources more effectively. Governments demand that institutions demonstrate the relevance and quality of what they do. They require the development and use of indicators and measures of institutional performance, and try to ensure that institutions respond to the results of such measures. Similar principles are applied to both distance and conventional education, although some measures may be less appropriate for distance teaching.

Attempts to deliver courses and programmes across national boundaries have assumed that materials and delivery methods can be transferred from one place to another. But experience has shown that this is not necessarily so, even in subjects often assumed to be culturally neutral, such as technology and mathematics. Thus distance educators have been faced with a need to adapt materials for overseas use or to develop materials specific to the countries

receiving them. Issues that arise in cross-cultural delivery of distance education include:

- different assumptions about the length and form of courses;
- use of language;
- use of inappropriate delivery mechanisms and support techniques;
- cultural specificity of materials.

Overlying these is the issue of cultural imperialism — the risk that materials originating elsewhere, particularly when they go from industrial to developing countries, will be seen as an attempt to impose a stronger, alien culture. This is not just an international issue: it also arises in such areas as aboriginal education [12].

Single institutions and governments will continue to play a vital part in distance education. But with the growing potential, availability and use of Internet technologies, the development of distance education is becoming increasingly an international affair. Distance-education institutions have been among the leaders in developing and implementing schemes for institutional collaboration, often across national borders, and the trend towards such collaboration seems likely to accelerate. At the same time governments, particularly those in developing countries, have begun to encourage their institutions to enter into collaborative arrangements, as they recognize the possibilities of distance education as a mechanism for national and regional development. Contributing further to the trend of globalization has been the growing involvement of international agencies in the development of distance-education systems, particularly in developing countries.

But internationalization raises some complicated issues, and distance educators and policy makers have had to review and modify their practices. In doing so, they need to know what problems other institutions and agencies have faced in confronting these issues. And they need to address questions such as the following.

- What part has collaboration played in the development of distance education?
- What are the accreditation and certification issues in distance education?
- Are there cross-cultural issues involved in the internationalization of distance education?
- What jurisdictional issues are involved in the international delivery of distance-education programmes?
- What part should international agencies and the funds they provide play in the development of distance education?
- What important issues does innovation raise in international distance education?

All the effective distance-education programmes of a significant scale have had high-quality leadership. Unusual leadership is needed to ensure that the long-term investment needed for distance education is available and is effectively deployed.

Success in distance education requires leadership that can release an institution's creativity and entrepreneurship, creating a working environment in which individuals and groups can respond to emerging opportunities and

changing environments. It also requires building and sustaining organizational structures that will support appropriate responses to unexpected opportunities.

Successful leadership requires skills in managing change, managing resources, managing risk, managing people and costs, and effectively interpreting changes in the social, political, economic and educational environments.

The pedagogical framework

When governments establish single-mode distance-teaching institutions, they often provide a specific mandate. In dual-mode institutions the mandate of the new distance-learning component is usually integral to the mission of the institution as a whole. Mandates or mission statements in distance education usually encompass one of the following views.

- Distance education is a means of meeting changing government priorities more rapidly and flexibly than conventional institutions may be able to.
- Distance education is a means of providing increased access to students who are isolated or who missed the chance early in life to secure an education.
- Distance education is a means of filling significant gaps in the provision of education and training.

In both single- and dual-mode institutions it is important that the mandate is well defined and that the context in which it is to be carried out is articulated clearly. Thus the mandate for a distance-education institution needs to state clearly and precisely the institution's place within the existing system and its relationship with other institutions that provide the same or similar kinds of programmes.

Different policy considerations come into play in dealing with competing educational interests within a country or within an institution. National policies focus on resource management, particularly setting up procedures for rationalizing the use of technologies as a distance-education resource. A perennial concern focuses on the quality of programmes and is manifested in policies regarding regulation, monitoring and accrediting of distance-education delivery systems.

Within distance-teaching institutions there is a similar range of policy issues, including questions of balancing the resources allocated for distance education against those of conventional provision, and the different roles of teaching faculties [13–15]. One of the most sensitive policy issues of the present day concerns the role of distance-teaching institutions in teaching in foreign countries, and the response of national educational authorities to this encroachment.

Philosophy

In distance-education systems institutional policy provides the basis for almost all activities associated with providing education and training to students. These policies are normally framed within national or regional policies and an institutional mandate or mission. But the policies that govern an institution's relationships with its main components — faculty and students, for example — are usually established by the institution itself, as in conventional education. Such policies must recognize that the nature of distance education — with the physical gap between an institution and its students — often necessitates a view of teaching

and learning and of supporting activities that is very different from that adopted by conventional institutions.

A key to ensuring that mandates or missions are carried out and that institutional policies are implemented is the development of a strategic plan. This plan becomes one of the primary instruments of institutional policy and provides the framework for allocating and managing resources and for accommodating institutional change and development. Discussions of institutional policy issues need to address such questions as these:

- What are mandates and mission statements in distance education?
- What is strategic planning in distance education?
- What are the main faculty policy issues in distance education?
- What policies help in managing institutional change?
- What are the policy issues relating to resource allocation in distance education?
- What are the main student policy issues in distance education?
- What copyright and ownership issues arise in distance education?

Strategy

In strategic planning, institutions ask themselves three basic questions:

- Where are we now?
- Where do we want to be in a given number of years?
- How do we get there from here?

In answering these questions, managers need to consider the social, economic, geographic, educational and political environment of their institution or programme [16,17]. They also need to review the institution's internal situation, for organizations cannot respond to their environment without clear knowledge of their strengths and weaknesses.

Strategic planning is only one tool in the effective management of an institution or programme. Moreover, the need to plan strategically often conflicts with the need to remain flexible enough to respond to changing or unforeseen circumstances. This conflict may particularly affect distance-teaching institutions, since governments often expect them to respond to circumstances that conventional institutions might be too slow to deal with.

There are four main types of distance-education provider. (i) Single-mode institutions, where the management's sole responsibility is designing and delivering courses for distance learners. All planning, funds, staff and other resources are devoted to this purpose. (ii) Dual-mode institutions, which in addition to providing conventional teaching deliver distance-education programmes administered by a special management unit. (iii) Mixed-mode institutions, where distance-teaching programmes are designed, delivered and administered by the same people who provide conventional programmes. (iv) Consortia, in which arrangements of a nation's or state's distance teaching resources are organized under a single management unit, usually made up of representatives of the institutions providing the resources.

In all these, procedures will be needed for defining and reviewing the institutional mission, for allocating human and financial resources among competing student demands and markets, for selecting, appointing, training and monitoring teachers, for recruiting, registering and supervising students, for selecting and controlling the use of technologies, for controlling material-production systems and for managing budgets and finances. A planning system must be set up and maintained.

In allocating resources in distance-teaching institutions and programmes it is essential to devise a budgeting process based on a clear strategic plan, to balance the competing claims of components and activities and to carry out the first two steps in ways that ensure that the essential objectives of the strategic plan can be achieved.

The institutional or programme budget that comes out of this process must be designed so that, like the strategic plan, it provides for change and accommodates unforeseen situations. There are two important differences between the budgets of distance-education institutions and those of conventional institutions. The balance of allocation between, for example, teaching and other activities — such as development, materials production and student support — is strikingly different. Distance-teaching institutions normally have less need for capital funding in the form of buildings and equipment, and a much greater need for funds to develop and deliver course materials. The major funder of a distance-teaching institution, normally the responsible government, must recognize that the institution's needs are often quite different from those of conventional institutions. Failure to recognize this difference has often been a source of difficulty for distance-teaching institutions.

Educational setting

Faculty policy issues in distance teaching are often resolved more easily by single-mode than by dual-mode institutions [13,16]. In dual-mode institutions, where a faculty often works in both modes and where faculties performing markedly different tasks work side by side, the need to negotiate collective agreements may become a serious challenge. Some of the questions about faculty policy that typically need to be asked in a distance-teaching programme are:

- When and in what circumstances will a faculty be expected to prepare or revise course materials?
- What is the relationship between the development of course materials and a faculty's requirement for publication?
- How are faculty teaching loads to be calculated?
- What is the relationship between teaching and providing academic advice?
- What is the effect of having a significant number of part-time or contract instructors?

A distance-education system must manage resources efficiently [18]. That means scheduling the use of instructors, students, and technologies to ensure that all are fully employed at all times but not overloaded. This scheduling is carried out through a course development plan (as part of an operational plan), which lists

planning objectives, time frames and actions, showing who will do what and by when.

Effective selection, training and monitoring of design and instructional staff may be the most important factor in the success of distance-education programmes [19]. Recruitment should focus on matching designers and instructors to the needs of the programme and its students. Orientation should provide experiences that inform all staff about the distance learner and foster commitment to the process of distance teaching. Instructors with no distance-teaching experience will need instruction in the medium or media being used, and assistance in learning how to develop and sustain a dialogue with students at a distance.

The management of staff working in design and delivery teams can be challenging, since many educators are unfamiliar with working under these conditions [20]. Course teams must be set up and time and output schedules planned to ensure that promised courses come on-stream in time. The course team's weekly work of writing study guides, preparing video and audio scripts, making tapes and planning assignments, projects and teleconferences must be managed. And important staffing issues arise for an institution using part-time staff, relating to what proportion of its staff should be part time, and how it should supervise their work and control its quality.

Production activities must also be scheduled, particularly the production of video, audio and print materials. All these materials must be ready at the same time, although the flow of work to produce them may vary from programme to programme. Similarly, the recruitment, appointment, training and supervision of instructors must be scheduled to fit the arrival of materials and the enrolment of students.

Budgeting involves making certain that adequate funds are available to meet programme goals. Often a first step in preparing budgets is to determine the break-even point based on prospective enrolments and on projected expenses, including salaries for instructors and support staff, compensation for site facilitators, mailing costs, telecommunications charges, and, for technologically mediated courses, equipment purchases and maintenance. Most of the important distance-education institutions are publicly funded, but there are many that are run as private businesses. The role of profit in the education system is an issue for policymakers.

Management must decide (or at least create a system in which employees decide) what courses to produce, guided by the mission statement and by needs, usually determined by market research or public policy. It must then ensure and allocate adequate resources for course design, course development and delivery, learner support and administration. Here, adequate resources usually mean a full range of recorded and interactive technologies and such specialists as instructional designers, media producers, content specialists, instructors and learner counsellors.

The issues of ownership and compatibility are central to the successful diffusion of distance education, and several studies cited in this review confirm these as key issues in the adoption of distance-education methods (e.g. [21]). An academy must respond to the needs of the students it serves. As the needs of students change so do the roles of a faculty. The issue of ownership is crucial in the

development of distance education, for we should never allow technology to drive the content. Likewise, the academy has a responsibility to shift from a faculty-centred to a student-centred educational system. Studies of effective distance teaching (e.g. [13]) have found that those faculties who make this shift are not only more successful distance teachers, but also are more successful classroom teachers.

Institutions can take several possible approaches to copyright and ownership issues: (i) copyright in course materials may be assigned to the faculty members who develop them; (ii) institutions commissioning materials may retain sole rights; (iii) institutions may retain rights but provide for royalty payments to the developers or (iv) for materials developed collaboratively, one institution or all the collaborating institutions may hold copyright. Whichever approach is chosen, it is vital to ensure that the institutional policies are stated clearly and administered consistently. Copyright and ownership are primarily institutional concerns. However, the trend towards institutions delivering distance-teaching programmes outside the region in which they reside increasingly makes this a national or even an international issue.

Distance education depends on the effective use of communications technologies [22]. In a distance-education system the use of all human and technological resources is planned. Within the system are subsystems, the most important of which are the design subsystem and those for instruction and learner support, evaluation and production.

Only a certain number of courses can be designed, produced and delivered in a given year. So, there must be a systematic way to select the right courses, to bring together the right people in design teams, to organize their work so that it fits in with the output of publishing, broadcasting and telecommunications divisions, and to control and co-ordinate the many tasks required to produce a course of high quality, on time and at an acceptable price.

Every course is planned to relate to every other course, every piece of every course is designed to fit with every other piece, and every technology is used in harmony with all the others. The topics that an instructor discusses with students fit with the illustrations in the study guide. The learner support personnel have access to specialists in the organization to deal with the issues arising at each step of a course. And so on.

Courses are produced at all levels of distance education. A distance-education institution must have a system in place for deciding which courses to produce in a given year. Design has to be managed, either by single instructors, as is common in mixed-mode institutions, or by course teams, as in single-mode institutions. One decision relating to course creation might be to purchase materials prepared by other institutions as an alternative to producing them in-house.

Distance-education institutions face rapid and constant change in the methods of delivering education and training, the groups to which education and training must be delivered and the use of education technologies. Distance educators are no less prone than more conventional practitioners to the syndrome of “we don’t do it like that here”, so the effective management of change becomes imperative as new tools and new challenges emerge with great, perhaps alarming, frequency.

One way of ensuring effective change management is by developing quality assurance policies and practices that permeate the institution or programme. A continuous cycle of quality review helps ensure that all parts of an institution and all the people in it remain aware of the need to evaluate and improve what they do.

Student activity

In providing student support, distance-education institutions often face issues relating to the following: the idea of 'openness' in admissions; the special needs of distance students in such areas as counselling and advising, development of study skills, registration and other procedures; and transfer credit (particularly for non-formal learning), time limits for completing credentials, and the like. Issues such as open admissions and use of transfer credit will often affect the way distance-teaching institutions relate to other institutions in the same system or in others. Issues such as those listed here are likely to be easier to resolve in single-mode than in dual-mode institutions, where existing policies for conventional delivery may conflict with the needs of a distance-education programme.

The area of student-support services is central to the success of any distance-learning programme. Often overlooked, student-service policy issues directly impact on prospective and current distance-learning students. In particular, institutions need to develop distance-learning policies on student advice, counselling, libraries, marketing, materials delivery, textbooks, training and proctoring.

It is important that distance-learning student-service policies maintain the same student-centred focus as on-campus student-service policies, and it is critical that current student-service policies be reviewed with the distance-learning student in mind. It may be helpful to work through the steps that students must take to learn about, enrol for, participate in and successfully complete a distance-learning course.

Outcomes

People have taken a number of positions on the cost-effectiveness of distance education. Some argue that using communications technology requires too much capital investment, whereas others counter that technology is less expensive than conventional, labour-intensive methods. The middle position is that most programmes do not necessarily require high technology, and even those that do may still be cost effective if they deliver high-quality instruction in areas that would otherwise lack it.

International experience shows that distance education can be extremely cost effective as long as it is delivered on a large scale so that the costs of the technology and design time can be amortized. Issues that are to be considered are:

- What do we know about evaluating learning effectiveness?
- What are the main concerns about course evaluation?
- What are the issues regarding institutional evaluation and quality assurance?
- What is involved in cost forecasting and cost analysis?
- What is needed to make distance education cost effective?
- How may distance education be used as a means of economic development?

Barriers and opportunities

Concerning the specific functions that are required from a distance-learning system, in addition to those which are common to conventional classroom teaching, some emphasis must be given to the methodological (or pedagogical) aspects. Dedicated, single-mode distance-learning systems, relying entirely on the distance-learning methodology, are usually well aware of the need to cope with the actual absence of students and the lack of direct teacher–student interaction, by adopting careful teaching strategies based upon well-designed learning materials, a tutoring support system and through monitoring of all aspects of the system's operation, including students' performance. Staff training needs to take into account all these aspects and include all categories of personnel, from faculty members to technical and administrative staff [1].

It is much more difficult to introduce this kind of awareness and pedagogical focus in conventional universities: existing faculty members tend to have reservations about suggestions that their teaching competence may be incomplete and that they may require further training. From another perspective, academic freedom may be felt to be at risk by a requirement to stick to a more fixed and explicit course programme and contents, established well before an actual learning process begins [13,23]. The need to share 'teaching' responsibilities with instructional designers, media producers and publishers will be contrary to the previous experience of most faculty members, and may make them uncomfortable with the whole distance-learning operation.

Experience suggests that it would be desirable to nominate some of the more qualified and more prestigious members of teaching staff (both in terms of scientific and pedagogic competence) to be involved in distance-learning development, for it is likely that they would respond whole-heartedly to the new distance-learning challenge, and that they would lend their positive image and status to the new possibilities opened up by distance learning.

Perhaps the most significant difficulty in the introduction of distance-learning provision within an otherwise conventional institution is the availability of financial support for the very significant investments (both initial and on a yearly basis) necessary to install and maintain this kind of operation. Initial investments include good telecommunications and data-processing systems, dedicated to the distance-learning operation, and an adequate human and technological infrastructure able to conceive, produce, publish and disseminate quality learning materials of various kinds (books, video, audio, interactive and multimedia products). Included in these costs is a significant amount dedicated to specialized staff training. However, quality learning products that are a necessary component of resource-based learning have a limited lifespan, require regular updating or upgrading, and new fields of scientific and technical knowledge will require new products to be conceived and produced. This is, from all accounts, an expensive process.

Within a non-distance higher-education institution aiming at launching distance-learning initiatives, more conservative members of academic staff may frown upon the idea of significant resources being allocated to a different way of

teaching, instead of being earmarked to improving current academic working conditions, equipping new laboratories or reinforcing research budgets.

For dual- and mixed-mode institutions it is important that distance-education programmes are developed as an integral part of the university's teaching mission, not in a separate division devoted to the teaching of off-campus students. At most partner universities, distance education has developed outside of the mainstream of higher education's strategic approaches to learning and has no central advocate to bring it out of the fringes of activity and into that mainstream. The distance-education method remains relatively under-utilized given the universities' resources, experience and highly developed infrastructure. The universities must take that necessary first step of making leadership in distance education a priority in their strategic plans for the future.

In distance-education systems institutional policy provides the basis for almost all activities associated with providing education and training to students. These policies are normally framed within national or regional policies and an institutional mandate or mission. But the policies that govern an institution's relationships with its main components — faculty and students, for example — are usually established by the institution itself, as in conventional education. Such policies must recognize that the nature of distance education, with the physical gap between an institution and its students, often necessitates a view of teaching, learning and supporting activities that is very different from that adopted by conventional institutions.

Teachers in a university's teaching departments should be the primary resource for writing and revising the academic content of course materials for distance-education programmes. In doing this, they should work with members of a distance-learning centre that would be the university's repository of current knowledge of the theory and practice of distance education, have relevant expertise for the planning and production of distance-education study programmes, and have administrative responsibility for the effective conduct of the university's distance-education activities.

Institutions need to create an administrative and organizational structure that encourages and facilitates the use and development of distance education in all areas of academic pursuit and endeavour. Distance education, unlike many other means of educating, requires the participation of several and sometimes many partners to create and deliver instruction to students. For most faculties interested in creating distance-education courses or developing distance-education versions of existing courses, the mechanical process of taking an idea and moving it forward to programme status is, presently, time consuming, confusing, cumbersome and frustrating.

Distance-education activities should be conducted in relation to plans and priorities and under policies and working arrangements that have the full authority of the university, are funded and monitored properly, and which are evaluated regularly. It is for the vice-chancellor and his/her management team to ensure that this is so.

Effective selection, training and monitoring of design and instructional staff may be the most important factor in the success of distance-education programmes. The management of staff working in design and delivery teams can

be challenging, since many educators are unfamiliar with working under these conditions.

In the absence of regular contact with a teacher or a trainer, students must find their learning materials to be user-friendly, easy to read, study and comprehend; these are qualities that may be compromised should there be frequent cultural dissonance and confusion. This implies some limitations on the possibility of using imported materials without careful scrutiny of their cultural compatibility with the learner. On the other hand, there may be some added value in establishing awareness of cultural differences, and opportunities for this must be allowed for.

Once priorities are set, funds allocated and responsibilities assigned, administrative and financial responsibility for the development of materials, the organization of study programmes and the conduct of the university's annual offerings for off-campus students should be delegated to the appropriate operational level with clear requirements for individual and/or collective accountability.

As and when required, all university teachers should be expected to participate in distance as well as campus programmes, contracts of appointment should be written accordingly, and applicants for teaching positions should be fully informed of the range of teaching duties they might be expected to perform.

The contributions that a university's teachers make to its distance-education programmes should be planned and administered as a regular part of their teaching duties. There should be university rules for moderating teaching loads so that (as far as this can be done using rules) teachers are not penalized by the nature of their teaching, whether it is face-to-face, distance, or a mixture of both.

Teachers should be inducted into their role and responsibilities as teachers in distance-education programmes and there should be a continuing programme of staff development relating to distance education. As part of a wider policy of giving recognition to excellence in teaching, the university should ensure that its criteria for the purposes of staff assessment and promotion allow its teachers to include their contributions to distance education among their claims for consideration.

The university's policies for improving the effectiveness of its teaching, including distance teaching, should be set in a context of research development and evaluation.

Looked at another way, these propositions are an agenda of the concerns, frustrations and complaints that university teachers and administrators typically raise when they talk about the aspects of their work in distance education that they would like to see changed. A university that works its way through that agenda and devises policies that give reasonable satisfaction to its teachers, students and the communities it serves will be creating the basis for the development of an appropriate institutional culture.

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