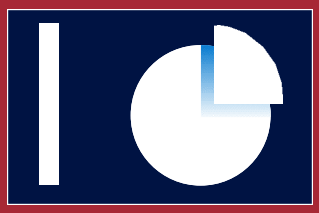

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Higher Education Authority
An tÚdarás um Ard -Oideachas

OSCAIL

Report on Symposium on Open and Distance Learning

29-30 March 2000
Hodson Bay Hotel
Athlone

Higher Education Authority

Report on Symposium on Open and Distance Learning

July 2000

Higher Education Authority
An tÚdarás um Ard-Oideachas

3rd Floor, Marine House, Clanwilliam Court, Dublin 2.
Tel: +353 1 661 2748 Fax: +353 1 661 0492
website: www.hea.ie
email: info@hea.ie

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Foreword

It was my great pleasure to chair the Symposium on Open and Distance Learning which was jointly hosted by **Oscail - the National Distance Education Centre** and the **Higher Education Authority** held in the Hodson Bay Hotel, Athlone, on 29/30 March 2000.

We greatly appreciated the enthusiastic participation of those who attended the Symposium. I am confident that the Symposium has helped us to clarify our view of Open and Distance Learning, taking into account changing individual, societal, and economic demands. We can, I believe, build on this to develop Open and Distance Learning.

Specifically, I wish to thank all of the guest speakers and, in particular, Professor Jørgen Bang. Jørgen provided an important international perspective for the proceedings which increased the value of the debate on the second day of the Symposium.

Professor John Coolahan acted as rapporteur for the Symposium. His inputs during the Symposium were, as always, insightful and fruitful in moving the debate forward to conclusions. His report is included in this publication and adds greatly to its value.

A number of staff members of the Higher Education Authority and Oscail, the National Distance Education Centre, were involved in the organisation of the Symposium. I would like to thank Professor Dennis Bancroft, the Director of Oscail, for his partnership in hosting the Symposium. We have got to know Dennis well since becoming Director in September 1999 and we know he will ensure that Oscail will play a key role in the development of Open and Distance Learning in the coming years. Particularly, I wish to thank two of Dennis's colleagues in Oscail for their splendid efforts in organising the symposium – Susan Farrell and Deirdre Mooney – and also Maura O'Shea, Gerry O'Sullivan, Orla Christle and Seán Ó Foghlú from the Authority staff.

In publishing this report, we are ensuring that the conclusions of the Symposium will contribute to the future policy of all the partners in higher education and particularly to the development of open and distance learning in the Irish higher education system.

John Hayden,
Chairperson of the Symposium
Secretary/Chief Executive of the Higher Education Authority
July 2000

Open and Distance Learning in Higher Education - Educational Perspectives

Jørgen Bang
Aarhus University and Jutland Open University, Denmark

The European Scene

When we look at the European scene of higher education we find, on the one hand, institutions working in a single mode, e.g. traditional universities with campus-based students and dedicated open universities serving home or work based students, and, on the other hand, dual mode or mixed mode institutions offering programmes for both campus-based full-time students and off-campus part-time students.

Since the Middle Ages the traditional universities have offered structured educational programmes supported by lectures and/or seminars aiming primarily on young people taking their first education. At the moment this model is challenged due to a growing pressure from an increasing intake of students, and the societal move towards an information society.

Dedicated open universities are a rather new phenomenon beginning with the creation of the Open University, UK, in 1969 and followed by the opening of UNED in Spain in 1972, FernUniversität in Germany in 1975, the Open Universiteit in The Netherlands in 1982 and Universitate Aberta in Portugal in 1988. Their main contribution to the development of higher education has been openness – the offering of second chances to people that didn't have the opportunity to achieve a university degree in their youth or as their first education. Sometimes the open university model is referred to as an industrial model due to its ability to deal with large groups of students – and the model certainly is efficient in giving educational upgrading. This is possible primarily because the open universities have developed a pedagogical model for the production of educational materials to support self-studies. The learner is placed in the centre of the operation, which is also reflected in the motto of the OUUK: *"not to teach but to facilitate learning"*.

Parallel to the creation of open universities many higher education institutions in Europe began to offer their degree programmes or single courses to off-campus students. Especially during the late 1980s many universities influenced by the new options available through communication technologies such as e-mail and computer conferencing, turned into dual or mixed mode institutions. In the Nordic countries, Belgium and France the dual mode solution has been supported as the national educational policy towards open and distance learning, and it looks like the central and east European countries are moving in the same direction. The difference between dual mode and mixed mode is a rather sophisticated one with 'dual mode' referring to institutions offering campus-based education and ODLin totally separate programmes, while 'mixed mode' refers to an educational setting in which ODL is mixed with a certain amount of face-to-face seminars.

Between these main trends in European higher education Ireland has chosen its own way by setting up OSCAIL/NDEC – the National Distance Education Centre. Seen from outside it looks like a convincing model for handling the needs for open and flexible learning in a small country - combining the flexibility and collaboration from dual mode institutions with the student support structure of the dedicated open universities. Personally I would have liked to see the same model applied in Denmark – a country of similar size as Ireland with a population of approximately 5 million. What fascinates me are your opportunities for institutional collaboration in course development as unfolded in the BA-programme for the arts (humanities) and, at the same time, taking the advantages of centralised course delivery and course administration to secure an equal high quality support structure. Furthermore the model offers good opportunities for information-gathering on student behaviour and evaluation of courses to support research and development in ODL. Last but not least the model seems to be an economical one giving value for money.

On-going tendencies

European higher education is in a period of transition with several on-going developments in play at the same time. I will just focus on three of them:

- merging of campus-based teaching and ODL
- shift of ODLmission from second chance provision to further education
- market competition vs. collaboration.

Merging of campus-based teaching and ODL

This recent development has turned the web into an efficient educational tool offering both distribution of interactive multimedia based learning materials, open discussion facilities for exchange of viewpoints between learners and tutors/teachers and among learners themselves, and handling of course administration on the teacher/tutor level.

Many dual or mixed mode institutions have taken over the well-prepared educational materials developed to support self-studies at a distance and use them for campus-based students following regular face-to-face lectures and seminars. Very seldom the reverse operation is seen.

As on-line access to the university server is provided for part-time ODL students the full-time campus-based students start pressing for similar facilities allowing them to work from home as an integrated part of their studies. At the moment the prices of computers, of Internet access and, not least, of the telephone charges are prohibitive, but prices are rapidly coming down as the capacity on the net is growing.

In a few years I expect university education will be based on high quality interactive multimedia materials available on-line from educational databases. On top of these materials the institutions will offer a variety of support functions for different groups of learners, using, e.g. face-to-face lectures and seminars, video lectures and video conferencing, on-line virtual seminars, computer conferencing.

The impact of these changes will be radical. Teachers need to be offered further education to participate in the development of new interactive educational materials and to reorganise their teachings habits to a more learner oriented approach, but even more important are the changes of curricula, examination formats and administrative procedures which will follow as a consequence of on-line learning.

Shift of ODL mission from second chance provision to further education

Let me briefly illustrate the shift of ODL mission from second chance provision to further education by referring to the Danish situation and my own institution. In 1982 the Jutland Open University was set up as a joint venture between Aarhus University, Aalborg University and South Jutland University Centre in Esbjerg. The implicit goal was to become a new dedicated open university offering second chance education to the adult population. In 1989, the parliament decided that the Danish model for ODL should be one of dual or mixed mode institutions offering degree programmes and courses for part-time students parallel to offerings for full-time campus-based students. This decision was taken, partly, for economic reasons, the Government not being willing to pay for the research and administrative part of a dedicated open university, partly, because the majority of students attending open university courses already had a BA/BSc. or an education at a similar level.

At the moment the government is taking the full consequence of this recruitment structure and proposing an alternative qualification structure parallel to the traditional one from BA/BSc. via a candidate degree to a possible PhD.

THE TRADITIONAL UNIVERSITY DEGREE STRUCTURE:

- High school degree
- BA/BS 3 years
- Candidate degree - 2 years (often thesis within the same area as the BA/BS + a supplementary degree of 1 year)
- PhD. 3 years

THE ALTERNATIVE DEGREE STRUCTURE:

- High school degree
- Short or middle levels further education - 2 or 4 years

- WORK PRACTICE (normally 3 years)

- Diploma degree 1 year (compulsory for students with a short further education of 2 years)
- Master degree 1 year (only offered by universities)

The Diploma and Master degrees are only offered as ODL. In some cases students are allowed to study full-time, but normally the programmes will be on a part-time basis. The higher education institutions may still offer full degree programmes or part of programmes as ODL, but interest is expected to decline rapidly when the alternative system is in place. Only a relative high price level for the new degrees – at least seen from a Danish point of view - may delay this development.

What I want to stress by this example is, of course, the rationale behind the proposed law: to create a life long learning system in which people during their adult life move between working and learning in a planed and integrated way. To meet this challenge the universities will have to develop new programmes adapted to learners coming with qualifications achieved from working experiences and studying on a part-time basis.

Market competition vs. collaboration

Just a decade ago to attend a foreign university usually meant moving to another city and living there during the period of study. Nowadays ODL technologies make it possible to take courses at other universities through virtual mobility. The student may move intellectually to a foreign learning environment without having to move physically. For universities and other higher education institutions virtual mobility brings competition with other institutions right into their backyard.

Some institutions like the big European open universities see this development as a challenge to move into foreign countries and offer their courses supported by newly established study centres or on-line tutorials. For the moment the learners are mostly expatriates living across Europe in the major cities, but a number of local citizens are attracted, too, and as language competencies improve these numbers will increase. When the market

is right we may also expect private North American providers of educational programmes to appear on the European scene offering their courses and degrees.

Whether this development is good or bad, of course, depends on the quality of the educational programmes offered. Nevertheless there is an obvious danger of 'Mac Donaldisation' of European education similar to the trends in European commercial television which is dominated by American B-movies, television series, game shows and talk shows. If market conditions are setting the main parameters for educational offerings, education may turn into a commodity you buy or sell, not a public good offered for the benefit of society.

The alternative for small institutions – and especially public funded ones – is to establish co-operation and collaboration on a European scale. Through networking the institutions might enhance the quality of their programmes, add a European dimension to their offerings and establish attractive virtual and physical mobility schemes for their students.

This collaborative approach is also stressed in the Bologna declaration signed by the European ministers of education in June last year when they talk about 'constructing the European area of higher education' with 'the objective of increasing the international competitiveness of the European system of higher education'. Significantly they also stress a 'full respect of the diversity of cultures, languages, national education systems and of University autonomy' – because as they have noted earlier in the declaration: 'Universities' independence and autonomy ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge'.

Creating virtual European seminars

To make the vision on collaborative learning and co-operation among European universities more concrete I would like to comment on experiences from two SOCRATES supported projects in which I have been involved:

- HUMANITIES
  - **H**istoric **U**niversities **M**ultimedi**A** **N**etwork for **I**nnova**T**ion **I**n **E**ducation **S**ystems
- CEFES
  - **C**reating a **E**uropean **F**orum for **E**uropean **S**tudies.

To enhance the learning process we have tried in both projects to establish a dialogue between students scattered in different parts of Europe and attached to different institutions:

- Dialogue offers an opportunity for the learner to go beyond the boundaries of the learning material though discussions with fellow learners and with teachers/tutors.
- Dialogue enhances the learning process by stimulating the 'negotiation' with the learning material through the formulation of ideas and view points.

The HUMANITIES Project

In the period 1995-98 the Coimbra Group of universities ran a project under the ODL-line of the SOCRATES programme called HUMANITIES - **H**istoric **U**niversities **M**ultimedi**A** **N**etwork for **I**nnova**T**ion **I**n **E**ducation **S**ystems.

The main goal was to utilise modern educational technologies, normally used in distance education, to add a European dimension to students working within the same subject area in the same semester at traditional universities.

The technologies used in this project mainly supported synchronous communication – satellite-television, audio- and video-conferencing, combined with e-mail and web, because the audience was campus-based students organised as face-to-face classes. The themes discussed were within the subject areas: mass communication (European television news & AIDS campaigns in Europe), literature and environmental law.

Concerning viability and learning outcomes the HUMANITIES' conclusions are

- that telematic based communication supports the contact between students scattered in different universities, adds a European dimension to their understanding and enhances the learning process, although technical problems are the order of the day.

In addition the project also dealt with the perspective of implementing new ODLbased learning approaches into traditional learning environments. Here the conclusions were:

- that the closer ODLmethodologies and new technology can mesh with standard mainstream teaching provision the greater their chance of success
- if new developments - such as those involving the application of new technologies - are seen as a means of challenging rather than supporting existing arrangements then resistance will be the order of the day.

These warnings have to be taken seriously, not least among dual-mode institutions trying to integrate ODL and traditional university teaching into an ICT based learning environment.

The CEFES project

Similar results have been achieved in another SOCRATES supported project (also within the ODL line) called CEFES – **C**reating a **E**uropean **F**orum for **E**uropean **S**tudies (1997-2000).

The main goals of this project was to set up a European discussion forum for students in Europe taking courses within European Studies in the same academic year. The context - involving academic discourse in seminar situations - was traditional, almost classical in European universities, but the delivery mechanism - utilising computer conferencing and the Web - was new.

The assumptions behind were, on the one hand, that European Studies might be enriched by trans-national exchanges between students and tutors, and, on the other hand, that new technology might be successfully deployed in facilitating trans-national exchanges, providing there is an awareness of cultural differences in approaches to teaching and learning and a differentiated learning environment is constructed.

Discussions were organised as asynchronous discussions on a First Class server operated by EADTU (European Association of Open Universities) in Heerlen, The Netherlands. Three themes were picked, each running for three weeks + one week of preparation leading in and one week of final evaluation leading out:

- The Identity of Europe: A Historical Phenomenon,
- The Europe of Identities: A Political Phenomenon,
- Globalisation and European Identity.

Moderation of the discussions was shared between the project partners. The project was carefully monitored and evaluated, and the conclusions were very positively described in the mid-term report:

- Communication among students and tutors via electronic technologies is not only feasible, but also a highly appropriate teaching/learning strategy to adopt in the field of European Studies
- The European Forum enables students to expose their knowledge and beliefs to those in other national/cultural groups, to challenge one another, and to transform their understanding of the subject.

Collaboration as a challenge

The challenge to collaboration is pedagogical rather than technological and economical! What we are not able to do today with the available technology, we will be able to do tomorrow, and the prices will continue to fall. But to develop new ways of learning and to utilise the potentials of interactive net-media to support self-studies and collaborative learning are tasks universities have to solve within the next few years.

Networking is one way to meet this pedagogical challenge, and the concept of virtual seminars or open discussion fora is one attempt to set up a framework or a model for institutional co-operation.

The virtual seminar model is based on joint collaboration on equal terms among European academics and institutions, rather than on export of already produced courses or course units. At the same time the autonomy of the institutions and the characteristics of national curricula are respected, but also challenged in academic discussions.

Open discussion fora/virtual seminars respect the close integration of education in everyday life and take advantages of the differences in local/national cultures by making these differences the starting point for exchange of ideas and discussion of viewpoints. Through open dialogue national and institutional chauvinism and narrowness are challenged.

The new technologies reanimate the old university tradition in which dialogue is the proper way to acquire knowledge and carries the best of the old qualities from universitas litterarum into the digital age.

Conclusion

The real beneficiaries of collaboration among European universities are the learners. They will obtain a flexibility in the learning process, not previously known to them; they will get access to courses and educational materials outside their own institution, not previously within their reach; and they will be presented for cross-cultural viewpoints and given possibilities to discuss these viewpoints with fellow learners from other countries. In short, they become part of a European learning environment.

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Dr. Don Thornhill,
Chairman, Higher Education Authority

Introduction

Together with Oscail - the National Distance Education Centre, the Higher Education Authority is hosting this symposium on open and distance learning and I am delighted to have the opportunity to open this morning's session.

This Symposium is very important for the future development of learning in Ireland. Last night we were given an important international context on developments in open and distance learning.

Today, it is important to reflect on these international developments, consider their relevance to learning in Ireland and to look at the potential for the development of open and distance learning in Ireland.

Recent Irish Reports

As a first step, I would like to highlight two particular reports. The first is the **Report of the Review Committee on Post-Secondary Education and Training Places** – the de Buitléir Report, which was published in January, 2000. This report sets out a strategic aim for Ireland in terms of participation in higher education. Furthermore, the Report has recommended increasing the number of higher education places for mature students, with a particular focus on part-time students. It recommends an additional 10,000 places for mature students, which would be built up over a number of years. However, in advance of this, it recommends that the demand for these places should be validated by appropriate market research on the target population to determine the extent of demand, the courses sought and the most appropriate method of provision. The report further states that at present more than 80 per cent of places occupied by mature students are part-time places and that as a minimum the proportion of flexible places within any additional provision should be at this level. Arising from the publication of the de Buitléir report, the Department of Education and Science has requested the Higher Education Authority to undertake the necessary market research and to make recommendations for the increased intake of mature students.

This Symposium will make an important input into our consideration of this issue. Following the symposium, we will be commissioning the market research. Clearly, the outcomes of this research will have a key role in realising the potential for open and distance learning in higher education.

The second important report, which is due to be published soon, is the **White Paper on Adult Education**. The Green Paper on Adult Education was published in November 1998, and has recommended, inter alia, that universities and other institutions work towards "expanding their distance education provision in a collaborative, cost-effective way".

The Background and Issues Paper prepared for this symposium sets out a further number of relevant recent reports.

Development of a National Perspective

There are a number of important groups whom we can regard as stakeholders in the development of open and distance learning. These include:-

- the Government and the education authorities
- the education providers
- the wider community – at national, local and sectoral level
- and most importantly the users – present and future.

All of these have a real interest in the development of policy. Analysis usually precedes policy (or should do!). Interestingly, to date there has been no detailed analysis in Ireland of the potential of open and distance learning in higher education or of what the organisational implications would be for the higher education sector in realising that potential.

We start from shortcomings in the analytical base. We are also addressing an area where the potential effects of technology and changing social and personal choices are unclear. I don't find it surprising that there are more questions than answers. Hopefully, we can leave Athlone with clearer perspectives!

Building upon Existing System and Meeting the Needs of Learners

A national strategy should be responsive to the needs of learners and other stakeholders. Desirably it should also build on the existing higher education framework.

Many institutions have developed open and distance learning programmes and many have done so in co-operation with the National Distance Education Centre. In many instances, third-level institutions have undertaken such developments on a self-funding basis or with some limited support. There has up to now been little additional support from national policy-makers and funders for such developments.

That this has been the case is not really very surprising. Institutions, particularly universities, have considerable autonomy in allocating budgets, deciding on course structures, curricula and indeed timetables. Financial support structures are also important.

It is only to be expected that institutions would focus most of their attention on those parts of their mission where the State has focused most of its financial support. For example universities receive more per capita funding from the State for full-time students than for part-time students. Similarly, a university receives more funding from the State for every part-time on-campus student than for a part-time off-campus or distance education student.

I would expect that many here today would have views on how these issues arising from the present funding structures could be progressed. One possible approach would be to focus the support of the State on areas where particular needs are arising. This could potentially include the development of mechanisms of support to encourage institutions to develop suitable opportunities for disadvantaged learners or in areas where there are particular skills needs arising. A related approach could be to develop mechanisms to support institutions in working with business in the upskilling of those at work. Both of these are incremental approaches. Perhaps we should be braver in our thinking?

There is a need to develop a national strategy in relation to many issues relevant to open and distance learning in the future. There is much potential for co-operation between institutions and for the development of common approaches. We need to think about ensuring that the needs of all learners are met.

This raises another important issue – the tension here between collaboration and competition. I am not a believer in the so-called 'rationalisation of facilities' argument. I feel more comfortable with the notion that monopolies in education do not serve the public interest just as they do not in the other areas of life.

Yet clearly we want to avoid wasteful duplication.

There are also the key issues of scale and impact. The potential from a number of third-level institutions working together to develop a programme that can be available on a national basis, or even on an international basis, is much bigger than from a single institution.

In addition, there is potential for increased collaboration between institutions in providing the support for open and distance learning programmes - for example, through tutorial support or study groups. This poses new challenges to our way of thinking. Can we entertain, for example, the notion of Cork based students attending tutorials in UCC as part of a TCD accredited programme?

The policy approach to the way forward needs to facilitate all higher education institutions in developing a policy on open and distance learning. The policy in each institution, would, of course, depend to a large extent on the institution involved and should have regard to the development of a national policy and to the usefulness of co-operation between institutions. The difficult issues to be resolved relate to how the policies of the institutions can be appropriately developed to ensure that the potential of the institution is realised and the needs of learners are met on a national basis.

Virtual or Internet-Based Education

The possibilities for virtual or internet-based education are of course exciting. There have been a number of recent important international developments in this regard and some of these are described in the Background and Issues Paper. Not least of these, is the recent announcement in the United Kingdom that the State funding bodies are to fund a consortium of universities to development appropriate internet-based programmes. Similarly, there are many developments in the United States in relation to virtual education and the potential of such education has been highlighted in many recent reports including the report by Forfás on e-commerce

I would hope that Ireland would take an innovative role in the use of the Internet in learning. As a country we are taking a leading role in the international IT industry and it would be consistent for us to play a major role in realising the potential of virtual learning. There is a real danger that if we do have a national approach on this issue, we will find that other countries have moved significantly and irrevocably ahead.

Do we need to determine our national objectives in virtual higher education? I do not think that we should seek to mirror our on-campus provision with virtual provision. Nor, is it as simple as developing all existing distance education programmes into virtual programmes. It may be appropriate to focus on niche areas? Possibilities in this regard could include the upskilling of those at work who already have computer skills and access to computers at work. Another possibility would be to develop a complementary approach to marketing a core number of virtual programmes internationally – and to delivering and customising programmes developed elsewhere. Co-operation, nationally and internationally, seems to be sensible if not essential.

On-Campus Open and Distance Learning

The extent to which open and distance learning can help in the development of flexible curricula in existing and future programmes run on the campuses of third-level institutions is also discussed in the background and issues paper.

This issue needs to be carefully considered. Any discussion of the potential of open and distance learning tends to focus on the potential for reaching new groups of learners who are not already studying on the campuses of third-level institutions. However, there is also potential to deepen the existing learning potential of existing and future on-campus learners. This is, of course, part of the debate about teaching and learning within higher education about the best ways achieving goals in these areas. This is primarily a responsibility of the institutions themselves and I would look forward to hearing your views today on these issues and whether you consider that there should be any input from the State into developments.

Information

From a national point of view, there is a need for learners to be able to simply access information about all of the open and distance learning opportunities that are available. I would hope that an outcome from this Symposium would be recognition of the need to develop a central information base where such information would be available. Even in preparing for this Symposium it has proved difficult to get clear information on the open and distance learning activities of our higher education sector. If it is so difficult for the HEA, I can imagine the difficulties facing individual learners!

The vast majority of full-time undergraduate students enter higher education courses following a single central application and information is available from the CAO about all available courses. I am not necessarily proposing a central applications system for open and distance learning third-level courses, but perhaps this could be examined? A more immediate practical and achievable objective might be a central repository of information and, perhaps, the publication of information on all options on an up-to-date website. This would be particularly useful if virtual learning programmes are being developed. Who would do this? And what would be its scope? Would it cover all levels of education?

Related to this issue is the consideration of the marketing of open and distance learning programmes. This would include, of course, any virtual programmes. There are marketing issues that arise on a national basis and there are marketing issues that arise on an international basis. The background paper suggests that the International Education Board – Ireland could potentially have a role here.

National Structure

A core issue that needs to be considered at the symposium is the extent and nature of a national support structure for open and distance learning. My own view is that there is clearly a need for a national approach to information and marketing.

At the same time there are other areas where a national approach is also worthy of consideration. This is particularly the case in relation to the development and diffusion of know-how on the development of open and distance learning programmes. These could include, for example, learning materials, examination materials, tutorial support and meetings of groups of learners.

Oscail, the National Distance Education Centre has played a key role in the development and co-ordination of open and distance learning in Ireland. There has been substantial investment from the State in the development of the Centre over the years and I think that we now need to consider how the Centre can develop in the future and whether some of the national co-ordination that may be needed in the future could usefully be undertaken by the Centre. Furthermore, the Centre has accumulated a substantial body of expertise in the development and delivery of open and distance learning programmes.

I don't have a pre-determined view on the role of the Centre. What I do think is that it is a national resource and has much potential for development.

The status of the Centre is an important issue in considering how it operates in the future. For many years an Advisory Council – the National Distance Education Council - was in place to advise the Centre on its activities. The Council had a broad representation of third-level education institutions and other interested parties. But it has not been in operation since 1991.

The Centre is located at Dublin City University. The Centre is not a part of the university, but its income, from fees and from State funding is managed by the university Finance Office.

I would think that the independence of the Centre could be underpinned through the introduction of a governance structure for the Centre. This governing structure could give the Centre the freedom to operate as an independent national body without any direct financial link with a third-level institution. I would expect that the governing structure could include representatives of third-level institutions, as well as of the State and other stakeholders.

If the Centre was organised in this way, it would continue to work with third-level institutions in the development of open and distance learning activities.

I look forward to hearing the views of everyone here today about the key issue of national structures. I can see that the issues are not ones that can be simply decided. There may be other options, which have yet to be discussed which would be worthy of further consideration.

In conclusion, there is a need to look at how we can realise a new era in open and distance learning. We have a base in place from which to develop. But the potential is so exciting and perhaps so profound that we need to ensure that our thinking is not restricted by existing boundaries and concepts. Each third-level institution needs to develop a policy on open and distance learning and all of these policies need to complement the development of a national approach to the issues involved. There are some national structures in place and these will need to be carefully examined and developed and there may also be a need for other complementary structures to be put in place.

We have an interesting day ahead.

Dr. Dennis Bancroft,
Director, OSCAIL - The National Distance Education Centre

Mission Statement,

Oscail's mission is to

'Make a significant contribution to tertiary education in Ireland by offering university qualifications through the provision of high quality Open and Distance Learning to adult students'

Structure of the presentation

(i) To begin with I would like to identify two general aims or themes. In the remainder of the presentation I will attempt to develop these themes.

(ii) Secondly, we would like to describe something of the background and present position of Oscail, the National Distance Education Centre now that we have reached our 18th birthday.

(iii) We would like to share some of the views we have about Open and Distance Learning (ODL) which are based on the experiences we have gained in developing and running a unique ODL system, unique in the sense that all our courses are the products of collaborations with our colleagues in the Higher Education Sector, many of whom are present or represented at this symposium.

(iv) We would like to highlight three points contained in the Background and Issues Paper.

(v) We would also like to share with you our current objectives and the various actions we have in mind to address these objectives.

(vi) Finally we would like to offer some proposals which we hope will be found to point to something of the way forward for Oscail as a national centre, and for ODL in Ireland at the beginning of this new century, hence our title, Oscail 2000.

Aims

(i) Oscail's aim is to be a national resource for Open and Distance Learning (ODL), able to make distinct and valuable contributions to the sector on the basis of its considerable collaborative experience of the development and delivery of high quality ODL courses.

(ii) Oscail wishes to respond to the needs of students, institutions, business, the professions and government and to offer leadership in those areas of education where it has the expertise to do so.

Background

Oscail, the National Distance Education Centre, based on the campus of Dublin City University, has a base of around 4,500 student courses (approximately 2,500 students, averaging two courses each). In addition, each year, there are around 900 students taking introductory modules (at a comparatively modest fee). Recruitment figures are stable, showing a slight increase year on year. The considerable numbers of students taking introductory modules is encouraging since it indicates continuing high levels of interest in Oscail courses. One area for concern is that Oscail's public profile is lower than it should be. We are in the process of appointing a person, part of whose role will be to develop public awareness of the 'Oscail brand'. We are sure that increased visibility will result in increased student numbers.

Oscail, as a national institution, receives government funds and income from student fees. The funding of part-time tertiary education is, of course, a matter being discussed on the national stage. At the moment, Oscail students pay fees. While a proportion of those in work may be supported by their employers, many other students (and potential students) must provide their own finance. There is little doubt that any moves to assist those wishing to pursue their studies would be most welcome to the student body and would make a significant contribution to widening access.

The role of the Council was crucial to the success of Open and Distance Learning in Ireland. The Council was the vehicle for the unique system of collaboration between institutions which characterises Oscail's programmes.

Current Provision

The National Distance Education Centre at present runs a number of programmes of study. The majority of the students are concentrated in two of these, the BSc in Information Technology and the BA in Humanities. The other programmes, while attracting fewer students, are nonetheless, making a significant contribution in their respective domains. The Bachelor of Nursing degree combines the professional and academic at undergraduate level, while the postgraduate courses, Management of Operations (MOPS) and Management of Information Technology and Accountancy (MITA) address some business priorities. A new development centres on the development of post-graduate (MSc) provision in Internet Technology.

The Humanities programme is a product of an extraordinary collaboration with the other HE institutions of Ireland and offers one model of future development, a model where the development of a distance education programme is seen as complementing existing conventional provision and not as a competitor.

Nursing , MOPS and MITA are models of a future where developments could address particular professional and business needs. *(see Table 1 for more detail on course populations etc.)*

TABLE 1
(Some Current Information)

	Degree/Diploma In Information Technology	*Bachelor of Arts/ Diploma in Arts*	*Bachelor of Nursing Studies*	*Management & Applications of I.T. in Accounting*	*Management of Operations*
Credit Modules					
Number of Students	1,250	1,000	180	220	80
Number of Modules of Text	17	30	10	*12	*12
Number of Study Centres	9	10	4	2	3
Number of Tutorial Groups	120	140	25	5	12
Number of Tutorials	8	8	8	16	18
Number of Assignments	12,500	8,000	300	1,570	390
Number of Graduates					
Degree	716	200	11		
Diploma	1,060	450			
Post.grad. Certificate				330	
Post-grad Diploma				220	1
M.S.c.				17	1

*Plus Dissertation - equivalent of three modules

Student Population

Open and Distance Learning of the Oscail model is an ideal mode of delivery for those who have professional and training needs but are not able to break from their careers or professional duties in order to attend conventional institutions. Open and Distance Learning also provides a means of accessing higher education for those who had not the opportunity earlier in their lives or whose geographical and personal circumstances prevent them from using the more traditional face to face opportunities available.

Relationship with Dublin City University

The campus of Dublin City University has been the home of Oscail since its inception in 1982. DCU, as are the many other institutions with whom we collaborate, is very supportive of Oscail. Like all of our collaborators, DCU provides access to its resources to students studying with Oscail without which the provision of Oscail's extensive ODLprogramme would be very difficult. In addition, DCU has provided the many necessary services needed by a small institution (e.g. the services of the Registrar's office, Finance office, Buildings and Maintenance and the Personnel department). Of course Oscail pays for the services it receives from DCU. Increased autonomy in some of these areas may bring advantages but would also involve costs.

In Summary

Oscail was set up almost 20 years ago with the aim of widening access to Higher Education in Ireland by the development of a distance education system. Distance education in Ireland is well established. There is a clear and continuing demand for Supported Open Learning as a complement to traditional provision. Oscail has, to date, met the aims of its founders.

Working description of Distance Education.

In this section of the presentation, I would like to make some assertions about distance education and about Oscail. These assertions represent our views about ourselves and about our experience of delivering ODLin Ireland for the last two decades. In the confines of a spoken presentation it is not possible to justify each assertion, however we have included appropriate supporting materials with the text version. There are, of course, a variety of ways to describe and delineate Distance Education, Open Learning, Supported Open Learning etc. In this presentation we use the expression Open and Distance Learning very much in the sense that it is defined in the Minerva project.

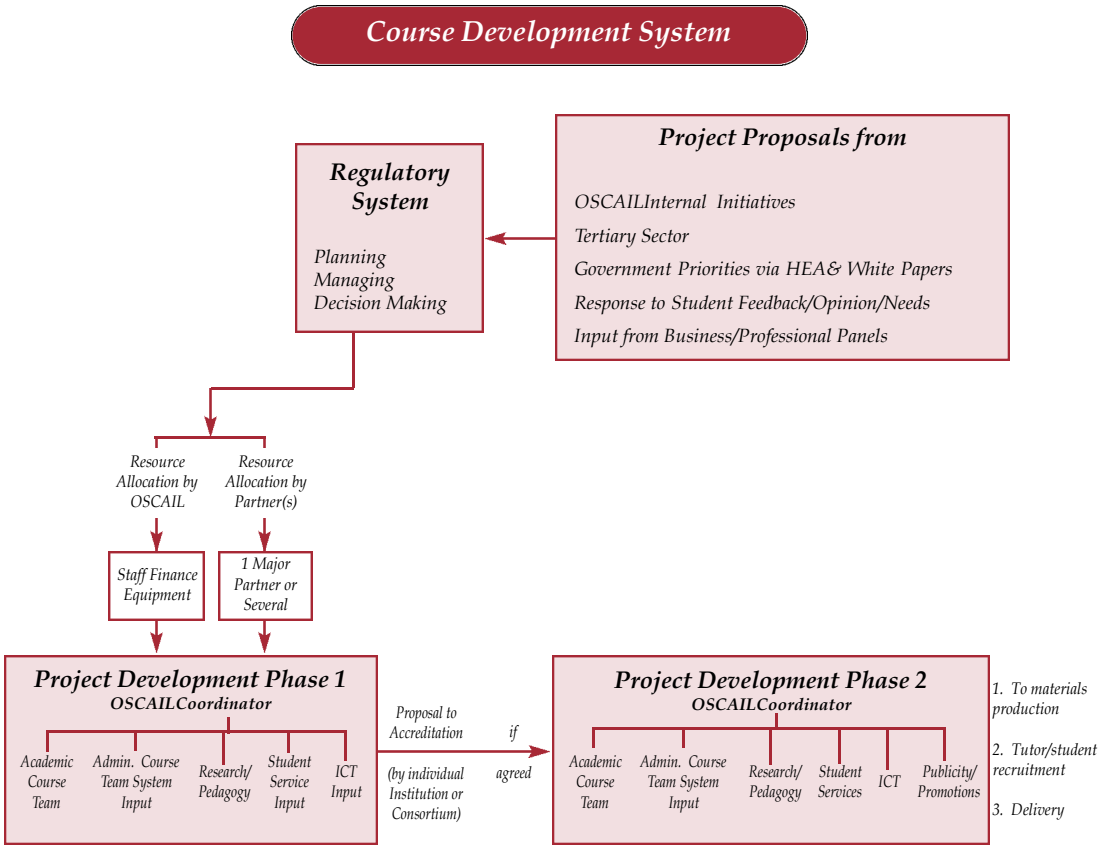
"Open and Distance Learning involves the use of new methods (both technical and otherwise) to improve the flexibility of learning in terms of space, time, choice of content, teaching resources, and/or to improve access to educational systems from a distance"

Assertions about Open and Distance Learning.

(i) ODLis best considered as a system for developing, producing, delivering and supporting student learning which is student focused not institutionally focussed. (see figs 1 and 2)

(ii) ODL requires specially constructed materials which actively engage students in the learning process and which are clear and self contained. These are not like conventional teaching materials/lecture notes but can be used in a conventional setting. *(see fig 1)*

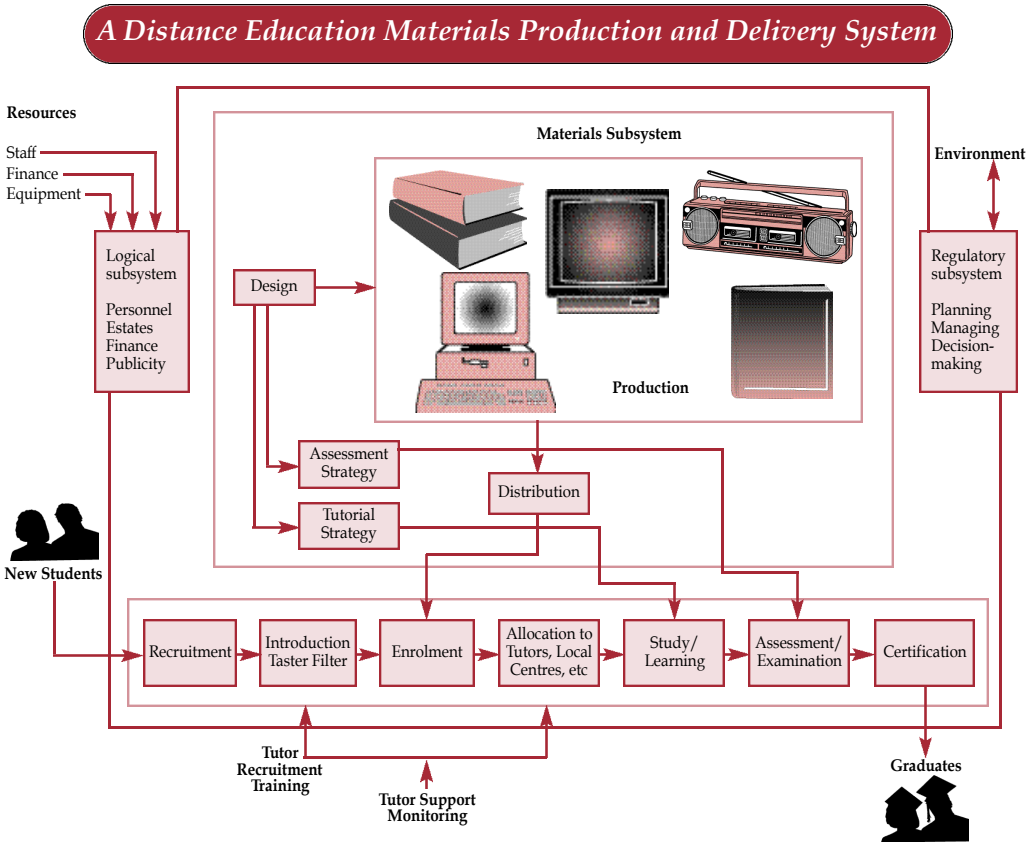
Fig. 1



(iii) ODL requires a considerable support structure to be in place. This will include trained and monitored tutorial support, a student advisory system, and effective system for the timely production and delivery of course materials, an effective system for dealing with large numbers of student assignments and examinations and a system for responding in a timely and accurate manner to large volumes of direct student contact by telephone, letter or email. *(See fig 2, based on Rumble 1997, p. 6)*

(iv) Successful ODL requires that an effective evaluation system be in place. Evaluations are needed of marking and assessment, tutor quality and service, the quality of administrative service to students as well as of the effectiveness of teaching materials (annual and mid-term reviews)

Fig. 2



(v) Responsibility for organising/timetabling learning activity rests with the student (and their circumstances, professional and personal) and not with Oscail. Students are tied only to organised tutorial sessions (optional) and to assignment and examination timetables. ODL is therefore flexible with respect to the location, circumstances and timing of study. This is what flexible means to us. In the jargon of the trade, as much activity as possible is 'asynchronous', i.e., student and teacher do not have to be in contact at the same time. Fixed points like tutorials, assignments deadlines and examinations are 'synchronous'.

(vi) ODL can be used for a range of educational/training purposes but the characteristics of the system will vary with the particular needs of the student body, one size does not fit all.

(vii) To be a successful student in Open and Distance Learning requires considerable skills of organisation, and personal management, in addition to energy, commitment and possession of preparatory skills.

(vii) Distance education is not a particularly cheap option. Developmental costs can be high (see Issues paper) as will course maintenance costs and the costs of the administrative, production and support systems that are needed. Distance Education can benefit from economies of scale and can reach student populations not otherwise accessible.

Assertions about Oscail

(i) Oscail has accumulated expertise in the production, delivery and support of ODLas a consequence of its collaborative activities since its inception.

(ii) Oscail continues to meet its original aim of increasing access to higher education. In addition to its range of courses in the Humanities (History, Literature, Philosophy, Psychology and Sociology), in Nursing, in Information Technology and in aspects of Management, Oscail continues to seek ways of increasing access for example through its current Access scheme for economically disadvantaged students (see report attached). Oscail has in place a student support system based on a team of Student Advisors and on Student Services Academic Coordinators. In our view, these teams make a crucial contribution to the quality of the student learning experience and to successful outcomes. Oscail's students come with a wide range of motives for study, but significant amongst these are the wish to access higher education for the first time for personal development and for enhanced employment prospects, the wish to update and develop skills obtained earlier and the wish to meet new professional challenges.

(iii) Oscail will utilise any form of media that is conducive to learning. This means knowing about content, media and ODLstudents. The means of delivery are student centred.

(iv) Oscail is an established and admired participant in the international distance education community.

Major Points from the Background and Issues Paper

I hope to address most of the points in the issues paper at various points in this presentation. However, there are three issues that I would like to draw particular attention to. They are, the issue of the use of the new technologies, the issue of collaboration, and the suggestion that Oscail could assume a role for the documentation and promotion of all ODLopportunities in Ireland.

1. The Use of Information and Communications Technologies for ODL.

The issues paper makes several interesting points about the use of ICTs to present learning opportunities. It seems that some ventures for which information is available have been much less successful than enthusiasts have hoped, while there are also examples of good practice to be found. (An extremely sceptical view is presented in a series of papers by Noble 1997, 1998 and 1999). A question for us is to be able to differentiate between the effective use of ICTs and ineffective use. Experience gained with our own students is consistent with some of the observations referred to in the Issues paper. We have concerns about the pedagogical appropriateness and effectiveness of much of the current uses of ICTs and we have concerns about the implications of the use of ICTs for access.

At present, the majority of Oscail teaching uses print based materials. Enthusiasts for the new technologies have imagined an educational future where the teaching would be entirely 'electronic'. Experience in distance teaching institutions of trying to use new technology exclusively has somewhat modified the 'enthusiastic' position. New Technologies have indeed shown some of the enormous potential promised, particularly in respect of greatly increased access to sources and deposits of information. However, it does seem to be the case even on IT courses that students much prefer to have printed versions of at least some of the teaching material. It is both time consuming and expensive to download and print large volumes of material. It also seems to be easier to annotate and mark up printed material.

Another relevant issue for distance educators is the pattern of distribution of technology. Some populations of students (for example professional groups and those on science or IT courses) are well equipped with modern technology. Other populations are less well provided for. Populations of students where computer access is, at the moment, more limited would include some of those with interests in the humanities and those in other countries where Oscail might become active in developing distance education provision. These circumstances may well change, but for the period of this plan, Oscail can anticipate the need for teaching materials of both the traditional and innovatory kinds (particularly Web based resources). That having been said, the Centre will continue to be at the forefront of development in using the new technologies to deliver high quality distance

teaching. The Centre intends to develop part of its new building as a multi-media suite appropriate to developing and delivering distance education. The facility is also intended to support the research activities of Centre staff and visitors.

In our view, it is essential that Ireland involve itself fully in exploring the educational possibilities of ICT's, however, a measure of caution would seem appropriate to ensure that new resources are deployed in a pedagogically effective manner. Learning from others and from our own experiences should allow us to avoid some expensive pitfalls.

I will conclude this section with a quote from Noble's 1999 paper 'Rehearsal for the Revolution.

"….(the) obvious fact, that the relationship between people is central to the educational experience"

…… And a quotation from 'Teaching at an Internet Distance: the Pedagogy of Online Teaching and Learning' The report of a 1998-1999 University of Illinois Faculty seminar

" The Seminar concluded that online teaching and learning can be done with high quality if new approaches are employed which compensate for the limitations of technology, and if professors make the effort to create and maintain the human touch of attentiveness to their students"

(and see also in appendix, Wickham A. 1998. 'Nursing, New Technologies and Distance Education in Ireland)

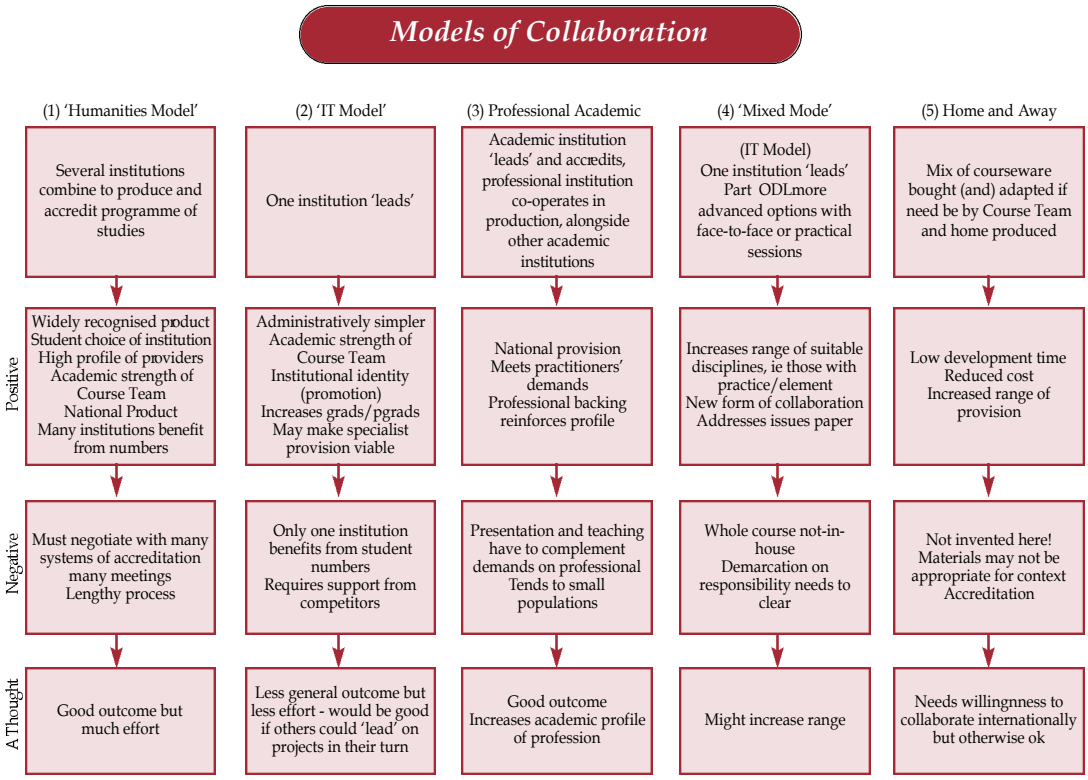
2. Models of Collaboration (see fig 3 for schematic version)

Collaboration between institutions is the unique characteristic of the development of Open and Distance Learning in Ireland. It is much admired by colleagues elsewhere in Europe as a very effective (and cost effective) system. In this section, I will outline some models of collaboration based on our current practice and the experience gained since Oscail was founded. In each case we would assert that Oscail contributes expertise in Distance Education pedagogy, the support of ODL adult students and experience in the systemic demands of ODL. It can be a significant task to modify materials developed for face to face presentation in order that they become appropriate for ODL use. It is much more cost-effective for ODL expertise to be deployed in the materials development phase.

Model 1 The 'Humanities Model'

In this model several institutions combine to produce and accredit a complete programme of studies. The BA in

Fig. 3



Humanities consists of around 30 modules divided between the disciplines of History, Literature, Philosophy, Psychology and Sociology. Since the programme is accredited by all the participating institutions, students can choose to take their degree from whichever institution they choose, so for example a person living in Donegal with strong family connections to Cork might choose to graduate from NUI Cork. Each of the degree awarding institutions has a strong public profile and is known for the academic quality of its courses and graduates. The various course teams benefit from the academic strength of all the collaborating institutions. Collaborations on this scale will involve a great deal of negotiation and discussion and can therefore make expensive demands on time in the attempt to ensure that the interests of all collaborators are accommodated. Asenior colleague from one of our partner institutions, intimately involved in the development process, observed that *"gestation and birth were occasionally difficult but that the infant thrived and had earned its place in the community".*

Model 2 The 'IT Model'

In this model, one institution takes a lead role in the development of the course although the course team will be drawn, as before, from the strengths of many institutions. Also in the model, one institution will accredit the programme. This arrangement has proven to be administratively simpler and less costly to manage. It is in the nature of this model that only one institution benefits from the numbers graduating from the programme. At the present time, where one institution has accredited a programme or course, that institution has been our host, Dublin City University. However, the model lends itself to much wider use. Oscail suggests that this model could be used by any institution which wishes to make available an element of its expertise on a national scale. One benefit could be that a course which might be on the limits of viability in terms of numbers could become more than viable if students could access the course from anywhere in Ireland. Another benefit would be to increase the accrediting university's recruitment of adult students. One should note that in practice many institutions have given of their efforts and resources to make the 'IT Model' practicable in spite of accreditation being offered by a 'competitor'. This is another indication of the uniquely co-operative environment for distance education in Ireland.

Model 3 The 'Professional/Academic Model'

In this model courses are produced in close collaboration with professional or business interests. The practice thus far has been to accredit these programmes through DCU although they could be accredited by any originating institution.

Model 4 The 'Mixed Mode Model'

It is sometimes the case that there are aspects to a discipline which are more easily (or perhaps only) addressed face to face or which are otherwise experiential. For example, it is possible to teach much Modern Language via ODL. Examples of successful courses abound for example those of the Universidade Aberta in Portugal, the Centre Nationale D'Enseignement a Distance in France and the Open University, UK.

In cases where there is an important practical element to a discipline (which cannot be addressed by the use of virtual environments) then one can envisage a model in which ODLcourses take students up to a point, perhaps to diploma level, with then an option for students to continue their studies in more conventional settings. In this case ODL allows a significant reduction in the attendance requirements without removing them all together. Those students unable to continue to graduate would be able to exit with a worthwhile qualification, while those who are able to remain in the system would be able to graduate. A 'Mixed Mode Model' of this kind would be simpler to manage if the ODL elements preceded the face to face elements. A parallel system would be more complex but could be managed.

Model 5 The 'Home and Away' Model

There are now a large number of ODL programmes in existence. In this model one might envisage buying in or licensing courses produced elsewhere and supplementing these with bespoke materials produced in the usual way. Once again Modern Languages might be an example of where this could be possible. Oscail could buy in basic level materials and resources from Language specialists in Europe, supplementing these with materials produced explicitly to address the Irish context. From time to time Oscail is invited to contribute to European developments. If staffing allowed, this would be a means of introducing Oscail's expertise to the development of materials which might later be of value in Ireland.

3 A role for Oscail as a co-ordinator of ODL information in Ireland

On page 30 of the Background and Issues paper, the suggestion is made that Oscail might, in addition to its role as a provider of ODL programmes, co-ordinate information relating to ODL courses and engage in promoting or marketing these courses both inside and outside the State. As noted above, Oscail is engaging more closely with the promotion of ODL courses than has been the case in the past. In addition, Oscail has in place a student advisory service with a staffing of three half time posts. One of the main functions of this service is to provide students with information about available courses and to provide other information which experience shows supports adult students in their studies. In short a basic structure is in place which could be developed to take on the role envisaged in the Issues paper. Oscail would very much welcome this new responsibility since it would be another opportunity to provide a national service for the sector as a whole.

Objectives

Over the last few months, Oscail has articulated a set of objectives in order to provide a strategic basis for planning the next 5 year period. To a great extent they appear to be consistent with much of the Issues paper. If it should be the case (as we hope) that a new Distance Education Council will be established, then one early item for discussion would concern the objectives of the National Centre. Our current objectives are included here, not to anticipate that discussion but as an indication of the present sense of direction of Oscail.

Objective 1 To address the national demand for graduates and post-graduates using ODL

Actions.
1. To maintain and expand our current range of ODLprovision in collaboration with HE Institutions and Government.
2. To increase public awareness of Oscail.
3. To actively engage in the establishment a Council for Distance Education.

Objective 2 *To meet individual needs for access to tertiary education.*

Actions.
1. To maintain and expand our current range of ODLprovision in line with individual needs and interests.
2. To establish student needs and aspirations by research and by maintaining effective systems of feedback.
3. To deliver courses matched to student needs in terms of subject matter and means of delivery.
4. To enhance current procedures for supporting disadvantaged students.
5. To use technology to make Oscail courses available to those with special needs.
6. To develop the Oscail Web presence in order to promote ODL provision.

Objective 3 *To develop course provision to meet the needs of industry, the public service and the professions.*

Actions.
1. To engage with professional, public service and industrial bodies re developmental needs.
2. To have a professional, a public servant and an industrial member on the Council for Distance Education.
3. To set up a 'panel' drawn from significant employers/professional bodies to be consulted by annual questionnaire about current and anticipated education and development needs.

Objective 4 *To explore new models of partnership with the HE institutions of Ireland*

Actions
1. To consult with colleagues in the HE sector.
2. To propose new models of collaboration in course developments.
3. To emphasise the collegial identity of awards.

Objective 5 *To develop Oscail as a national resource for ODL and Information and Communications Technology (ICT) based pedagogy.*

Actions.
1. To establish ODLand ICT research centre in Oscail. (ASpace Station model, i.e. a core of Oscail staff plus doctoral students and post-docs, plus docking opportunities for interested persons from partner institutions).
2. To deliver workshops/training sessions on ODLand ICT on a regular basis around the country.
3. To engage in research and publications in ODLand ICT.
4. To develop ICT pedagogy by experience of delivery and by research based on this experience.

Objective 6. *To address international opportunities and challenges.*

Actions.
1. To present current range of courses in Northern Ireland.
2. To explore collaborative possibilities with European partners.
3. To consider the delivery of ODLcourses in North America.

Object 7. *To maintain and develop Oscail's role in Europe*

Actions.
1. To continue with European research initiatives.
2. To continue collaborative ventures with European colleagues.
3. To continue and expand Oscail's contribution to European ODL committees.

Some Specific Proposals

I would like to conclude this presentation by offering some specific proposals to this symposium.

1. That we, as a community, argue that the present funding arrangements for part time students be reviewed to reduce inequality between F/T and P/T tertiary level students and to increase access opportunities for the economically disadvantaged.
2. That a new Distance Education Council be established.
3. That Oscail expand its current research activities into ICT and ODLpedagogy by establishing a National Research Centre for that purpose. One aim of the Centre would be to ensure that future deployments of ICT is pedagogically well founded.
4. That Consultative Panels be established from amongst the professional and business communities to inform the Council and Oscail of perceived professional and business needs.
5. That Oscail provide regular workshops and other staff development opportunities for the HE sector as resources permit.
6. That Oscail develop its Student Advice service and promotional activities in order to co-ordinate information for students about the ODL sector as a whole.

Conclusion

It is very heartening to see, by your attendance here in Athlone, the considerable interest in Open and Distance Learning in Ireland at the moment. Now that we in Oscail have reached the age of 18 we are looking for opportunities to respond to this interest and to enhance our contribution to higher education in Ireland.

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APPENDIX I - ACCESS PROJECT REPORT ON FIRST YEAR OF OPERATION

Background

This project originated with the many requests received by OSCAIL - National Distance Education Centre over the years for places on its programmes from individuals, who because of their circumstances, could not afford the fees charged on OSCAIL's programmes. The fees for OSCAIL's Programme are substantial – between £4,000 and £5,000 to complete an undergraduate programme. As one of the primary objectives of the National Distance Education Centre is to open access to third-level education. Attempts were made to secure external funding but these were not successful. Eventually in 1998, it was decided to introduce a limited scheme funded internally.

The scheme envisaged that twenty-five places per year would be made available free of charge on OSCAIL's BA/Diploma in Arts programme and a further twenty-five places per year would be made available on OSCAIL's BSc/Diploma in Information Technology programme to economically disadvantaged individuals. (The two programmes are OSCAIL's two main undergraduate programmes with enrolments in 1999 of almost 1,000 and over 1,200 respectively). From the outset, the scheme was envisaged as a free fees scheme i.e. the participants in the scheme would not have to pay the fees charged by OSCAIL for its programmes but that the students would have to meet the other costs associated with participation in the programmes (such as cost of textbooks, cost of travel to tutorials etc.). In fact, once students successfully apply for the Access Project, they were to receive the same services as all the other students on OSCAIL's programmes. (However, the Access Project students received additional support in the form of the services of a mentor for their first year of study. OSCAIL's experience indicates that, once the first year of studies are successfully completed, students are much more likely to stay in their programme). It was estimated that the scheme cost approximately £30,000 in the first year of operation and will reach a steady state cost of just under £120,000 when it reached a steady state after four years.

Operation

The scheme was first advertised in June 1998. Advertisements were placed in the national papers and information was sent to relevant people such as Adult Education Officers and VTOS schemes.

To be eligible for the scheme, applicants had to meet the following criteria:

- Demonstrate their *economic disadvantage* (such as being in receipt of unemployment assistance, non-contributory pension, disability benefit, etc or currently working on a VTOS, SES, or CE scheme)
- Provide evidence of participation in a relevant course, or other education or training programme, within the previous three years.
- Complete a 750-1,000 word statement outlining their reasons for seeking admission to the programme which they were applying to study.

There were over 250 eligible applications for the 50 available places. The successful recipients duly started the Introductory Modules of the Humanities and IT programmes in October 1998. The Introductory Modules are short ten-week courses whose main objectives are to introduce students to the subject matter of the programmes and to studying at a distance.

In common with all other students, the Access Project students received a Course Text, a Study Skills guide and a mandatory textbook. Also, in common with the other students, they were allocated to a tutor whom they met on three occasions in a local Study Centre and to whom they submitted their two assignments. As mentioned above, the only way in which the Access Project student are treated differently to non-Access Project students is that they have a mentor for the first year of study. They can contact the mentor if they have difficulties with their studies and the mentor checks in with them at regular intervals. The mentor works part-time (twelve hours per week).

Progress

Of the fifty students who started the Introductory Modules, forty students registered for the credit modules of the two programmes in February 1999. (Twenty students in each programme.)

The drop-out level (of 20%) from Introductory Module to credit modules is in line with the drop-out experienced with the other students on the programmes. (In fact, one of the reasons for the Introductory Modules is to allow students to experience learning via distance education without committing themselves to a year's study). The main reasons students gave for not completing the Introductory Modules were the travel costs to tutorials (even though attendance at tutorials is non-mandatory) and changes in their work situation.

One of the ten students who did not complete the Introductory Modules, two have returned to start the Introductory Module again in October 1999. (Under the terms of the scheme, students can have two attempts at each module).

Of the forty students who registered for credit modules in February 1999, there were twenty on the Humanities programme and twenty on the Information Technology programme. The twenty students on the Humanities programme took 47 credit modules and the twenty students on the Information Technology programme took 52 modules. (This gives an average number of modules per student of 2.4 and 2.6 respectively. The average number of modules for all students on the Humanities programme is 1.9 and for all students on the Information Technology programme, it is 2.4).

Assessment

Assessment on both the Humanities and Information Technology programmes comprises continuous assessment and end-of-module examination.

Of the 47 modules undertaken by the 20 Access students in the Humanities programme, 16 modules were successfully completed (i.e. the students passed both continuous assessment and examination in these modules) and for 3 further modules, the continuous assessment element was successfully completed but not the examinations. In addition, the Access students requested and were granted deferrals of 12 modules. (Students can request the deferral of some or all of the modules they are studying and this level of deferral request is not unusual). For the remaining 16 modules, the students were marked as absent. It is NDEC's experience that students who request a deferral are more likely to return to study in the subsequent academic year than students who are absent. To summarise, of the 47 modules undertaken by the 20 Access students in the Humanities programme: 34% were fully completed; 6% completed continuous assessment; 26% were deferred and 34% were marked as absent.

Of the 52 modules undertaken by the 20 Access students in the Information Technology programme, 25 modules were successfully completed and for one further module, the continuous assessment element was successfully completed but not the examinations. In addition, the Access students requested and were granted deferrals of 17 modules. For the remaining 9 modules, the students were marked as absent. To summarise, of the 52 modules undertaken by the 20 Access students in the Information Technology programme: 48% were fully completed; 2% completed continuous assessment; 33% were deferred and only 17% were marked as absent.

In terms of students, 10 Humanities students on the Access programme (i.e. 50%) passed at least one module (with 7 of these passing every module they undertook). From contact with the students, it is our estimate that 14 of the 20 students who started the credit modules in 1999 will return to study on the Humanities programme in 2000 (and one of the six not likely to return has secured a place on a full-time third-level programme and another successfully applied in 1999 for one of the places on the Information Technology Access Project). With regard to the Information Technology programme, 14 of the Access students passed at least one of the modules they undertook. It is our estimate that 18 out of the 20 students who started the Information Technology credit modules in 1999 will return to study in 2000.

Survey

The Access project students were surveyed at the end of the year to ascertain their views on a range of issues concerning the content and presentations of the programmes. 18 responses were received (9 from each of the two programmes). However, 16 of the responses were from students who passed at least one of the modules they undertook, i.e. 60% of all students on the Access Project passed at least one module while almost 90% of the respondents passed at least one module. Therefore, the results have to be treated with some caution. (Further attempts will be made to elicit more responses, particularly from the less successful students).

Of the 18 students who responded to the survey, 8 indicated that the cost (of books, travel and/or childcare) caused them hardship, while a further 8 indicated that they just managed to cope with these costs. As these were the more successful students, it seems reasonable to assume that the less successful students would have found it even more difficult to cope with the financial strain of participating in a programmes of this kind.

The average distance to their study centre (where students go for tutorials, library access, etc.) for the respondents on the Humanities programme was 37 kilometers and 67 kilometers for the respondents on the Information Technology. Seven of the eighteen respondents reside more than 50 kilometers from their study centre. This indicates the potential of distance education to meet the educational needs of those disadvantaged students who live a significant distance from third level institutions.

Students mentioned that they had difficulties making time for study and meeting deadlines (which are problems of students everywhere) and that they did find distance education quite an isolated method of study (which is a comment made by many distance education students). However, with one exception, they did not mention lack of tutorial support. It could be that this was because of the support offered by the mentor (which was rated very highly by the students). They will not receive this mentoring service in the second and subsequent years of their participation in the programmes. This will have to be monitored to gauge its impact on the students.

Conclusions

Overall, the first year of operation of OSCAIL's Access Project would have to be seen as successful for its primary goal of getting economically disadvantaged students into third-level education.

However, the non-completion rate still gives cause for concern. While non-completion is affected by a number of factors, it seems obvious that the costs of textbooks and travel (and for some students the cost of childcare) place an onerous burden on their resources. Steps should be taken to investigate alternative sources of funding to provide the Access students with some help towards alleviating these costs. It should also be noted that if recruitment to OSCAIL courses were improved, then one consequence would be an increased density of tutor provision (i.e. tutorials support for a larger range of modules at study centres). This should reduce the cost of travel.

Another issue, which deserves attention, is the number of modules per year taken by students on the Access Project. As noted above, this is higher than the average for other students on the programmes and there is some evidence to suggest that taking too many modules affected the overall success rate. (For example, of the 12 Access students on the Humanities who took one or two modules, 66% passed at least one module; of the remaining 8 students who took three or four modules only 25% passed one module). The Access students starting the credit modules this year (2000) have been strongly advised to limit the number of credit modules to two. For next year, it is intended that students be limited to two modules in their first year of study (unless they can give compelling arguments to the contrary).

APPENDIX II - THE BACHELOR OF ARTS IN HUMANITIES

Background

The need for a humanities programme was identified by the National Distance Education Council, which set up an inter-university working group in 1987. It was clear that no individual institution had the resources to launch a comprehensive programme in this area. The Working Group recommended in 1991 that a modular programme should be developed leading to the award of the Bachelor of Arts, to be accredited by one university. However, following eighteen months of intense discussion and many meetings, the universities agreed that accreditation should be non-exclusive and participative and that any university which wished to do so could accredit the degree. A formal agreement on operational procedures was negotiated, which covered such issues as validation procedures, modular structure, quality control and assurance, assessment, marks and standards, 'ownership of students', student support, management, and finance.

The degree programme is now accredited by Dublin City University, University College Cork, National University of Ireland Galway, National University of Ireland Maynooth, Trinity College Dublin, University of Limerick. The participating universities have nominated senior academics to participate in the Course Team which comprises over 40 members. A Subject Leader has been appointed from the universities to take academic leadership of each subject stream on a part-time basis. The Subject Leaders and Subject Group develop curricula, syllabi, nominate course writers, and review course evaluations. The Course Team meets three times a year to make recommendations to the Academic Liaison Board. This Board comprises the Registrars of the participating universities, Deans of the Faculties of Arts; Subject Leaders, the Director of the Centre, and the Academic Coordinator of the programme. The universities have agreed that the Board can consider on their behalf issues relating to the programme and to give approval in principle to proposals on behalf of the university. This leads to a reduction in delays in decision making, although the Board is by no means a rubber stamp on behalf of the universities. The Board operates by consensus. The overall programme is coordinated by a full-time member of the academic staff of Oscail.

The Curriculum

The programme is modular in structure, with each module given an ECTS credit weighting of 15 credits (equivalent to 0.25 of a full time years study). Students may select modules in History, Literature, Philosophy, Psychology or Sociology. There are six modules in each subject stream, and students must complete twelve modules to qualify for award of Bachelor of Arts. While at least five of the twelve modules must be in one subject to ensure depth of knowledge, students may design their own unique degree profile by selecting from a range of modules. All students are required to complete an Introductory Module prior to starting credit modules. The aim of the Introductory Module is to provide experience of study at a distance, to assist students in developing study skills and to provide an introduction in the main disciplines in the humanities.

Development of Materials

The Course Team nominates subject experts who are active in teaching and research in their own institutions to write course materials in accordance with the syllabus drawn up by the Subject Groups. Course writers are contracted to provide materials and are paid for their work by the Centre. Materials are edited by experts in open and distance learning and texts are processed in the Centre. Camera ready copy is provided to printers who produce sufficient quantities of texts required for each year. Course materials are updated and reprinted on an annual basis. To date, all course content has been provided in the form of printed texts, however with the wider availability of electronic media, the Centre is investigating the potential of the ICTs in enhancing course materials.

Students

Students apply to the Central Applications Office which handles all university entrants; they nominate the university with which they wish to register, however, from there all students study the same course materials and take the same examinations through the National Distance Education Centre. They pay their fees directly to their home university, which then passes the fees to NDEC; in turn the universities receive a percentage of the fees for their registered students.

The first students enrolled on the Introductory Module in October 1993. The first graduates completed their degree within three years. As students on average take two modules per year, most students will graduate within six years. Since 1996, some two hundred students have been awarded the Bachelor of Arts, and over four hundred and fifty have received the Diploma in Arts. Over 970 students are registered on the programme in 2000.

Student Support

In addition to course materials supplied students are allocated to a specialist tutor for each module. They meet the tutor at tutorials in study centres (there are eight two-hour tutorials per module). In 2000, credit module tutorials will be available in seven study centres (UUC, NUIG, NUIM, DCU, UL, TCD, and Waterford IT). Students may also contact their tutor for academic support by letter, telephone, or email. Computer managed conferencing will be introduced for one module on an experimental basis in 2000. There is also a student advisory service based in the Centre which provide support and advice on non-academic matters. As students are registered with individual universities, they are entitled to use the services of their home university library.

Subject Leaders

The Subject Leaders are as follows:

History	Dr John Logan, Department of Government, University of Limerick
Literature	Professor Brian Cosgrove, Department of English, NUI Maynooth
Philosophy	Professor Pascal O'Gorman, Department of Philosophy, NUI Galway
Psychology	Dr Gerry Mulhern, Department of Psychology, Queens University Belfast
Sociology	Professor Liam Ryan, Department of Sociology, University College Cork

APPENDIX III - BACHELOR OF NURSING STUDIES PROGRAMME

The BNS programme was established to meet the needs of registered nurses in the context of sweeping changes in the initial education and training of nurses within the Republic. The introduction of university based training for nurses in co-operation with the hospitals, but with nursing students as supernumerary to the hospital's labour force, was a radical move away from the traditional system of pre-registration training and education for nurses. In the traditional system the nursing student was an employee and part of the staffing complement of the hospital and training was based on instruction, both theoretical and practical, within the hospital setting. The introduction of the 'Galway Model' for pre-registration and training took the nursing students from the hospital staffing complement and placed them within the third level sector as students, the culmination of their education and training now being the award of both registration and a diploma. In addition students now had the opportunity to continue their third level studies for a further year and, on successful completion of that year, achieve the award of a degree. Nurses already in the labour force, having trained and registered through the 'traditional' system of nurse training and education were now to be joined in the work place by fellow nurses with a university diploma and often a degree. These registered nurses also operated in an international context where many other labour markets for Irish nurses, such as the USAand Australia had pre registration degree programmes, and where in the UK pre registration degree programmes had also been available for many years. The introduction of a distance education degree programme for nurses therefore recognised that many Irish nurses already in the workforce needed the opportunity to be educated to degree level and that their future individual development and the development of the nursing services would require the greater theoretical underpinning of clinical practice that degree levels studies would provide. This need to cater for those nurses already in the work force has been further emphasised by the government decision to act upon the recommendation that came from the Commission on Nursing in 1998 that in future the pre-registration education of nurses be based on a four year degree programme.

Lack of opportunity for those within the profession to gain degree level qualifications would therefore limit the career opportunities open to existing nurses in the future in the context of an all graduate profession and would limit the effectiveness of those changes in nursing that the move to a graduate profession is identified as serving. Whilst the institutes of technology and universities have rapidly expanded their own provision to meet the needs of these nurses it remains that many nurses are unable to take the opportunities of on campus programmes due to work, personal or geographical constraints. Nurses in old peoples homes, for example, may find it more difficult to get the time and support required for an on campus programme. Through the development and presentation of a distance education programme those nurses in this situation are enabled to gain third level qualifications.

The fact that the majority of nurses who apply for the distance education BNS programme are not only registered nurses but, in addition to their clinical experience, also have further educational qualifications has been acknowledged by the establishment of a distance education degree programme which gives advanced entry to these nurses. Unlike other National Distance Education Centre undergraduate degree programmes the BNS offers only those modules which are the equivalent of the final year of a degree programme. For the minority of applicants whose post registration experience is thought not sufficient in itself to allow easily for degree level studies an access programme is also provided. Successful completion of this access programme allows students to enter the degree level modules in full equivalence with the other registered nurses. In this manner the programme has been developed in such a manner as to acknowledge the various changes in pre-registration education and training that have occurred over the lifetime of the current labour force of registered nurses. It provides different entry points which support the students whilst allowing for their varied professional and education experiences and in doing so supports them to the fulfillment of their third level qualifications.

The programme took on it's first degree students in 1987. There are currently 180 students registered for the programme. Eleven students have just graduated. These students completed the programme in the shortest possible time it can be undertaken in (two years.). All students have between two and five years to work their way through the programme. The students are mainly female, between 20 and 45 years of age. Over half the students are clustered in Dublin and surrounding counties, suggesting the programme meets the needs of those who are unable to take the opportunities offered by on campus programmes. The rest of the students are scattered around the country and we present tutorials in Cork, Limerick and Castlebar for them.

APPENDIX IV - DEGREE/DIPLOMAIN INFORMATION TECHNOLOGY

Introduction

A detailed evaluation of the initial presentation of the pilot programme in BASIC clearly identified a demand for courses leading to qualifications in the area of Information Technology - almost 80% of respondents - and a very clear indication - 91% of respondents - were interested in following this course through distance education.

Course Development and Maintenance

In keeping with the co-operative principles established from the outset, a Course Team was established in 1985 with a remit to draw up a curriculum suitable for a broad-based qualification in Information Technology through the medium of distance education. The Course Team consisted of:

- Subject specialists from other third level academic institutions
- Subject specialists from industry
- Specialists in instructional design
- Specialists in distance education provision

In addition, an Academic Co-ordinator was appointed to manage the development and administration of the programme.

By late 1985 the Course Team had designed an innovative modular programme of study which would lead to two levels of qualification - a diploma, on completion of eight modules and a Bachelor of Science degree on completion of a further seven. In addition, students would take an Introductory Module which would introduce them to the content of the programme and to studying at a distance.

The overall aim of the programme was to equip students with Diploma/Degree level competence in information technologies, and with a critical appreciation of their potential application to the processes of innovation, management and administration. The programme was considered to be of particular relevance to those working in management, administration, enterprise or institutional development, and industrial training and teaching, and to those aspiring to positions in these areas.

The specific objectives of the programme were:

- To provide students with an understanding of the mathematical, physical, and management sciences relevant to the application of the new technologies.

- To equip students with an understanding of these technologies.
- To provide students with a critical appreciation of the relevance of Information Technology to the process of innovation, management, and administration, and to related institutional and societal change.
- To enable students to discriminate in the strategic application of these technologies.

Four main areas of study were identified:

1. Computing
2. Communications Technology
3. Management Science
4. Human Sciences

Each subject area to be presented at four levels, the combination of course modules at each level corresponding to approximately one year of study on a conventional honours degree programme. Since its inception the programme has been kept under constant review through student and tutor surveys and meetings. As a result of these reviews the content of the course has been continuously adjusted and up-dated to keep abreast of changes in the technologies. In addition, since its inception, the structure of programme has been modified to provide students with the option of specialisation in specific areas of Information Technology and to allow suitably qualified applicants to enter the programme at degree level.

Teaching Methodologies

The Course Team agreed that the main medium of instruction would consist of specially written texts, supplemented by audio-visual materials, where appropriate, and required readings from textbooks and journal articles. In addition, students would be expected to demonstrate practical computing and communications technology skills. Students would develop these skills by attending a convenient study centre for a specified number of sessions in each study year.

At the beginning of the programme, there was a high level of attendance at the practical sessions for computing. However, the increasing availability of personal microcomputers resulted in the reduced usage of this facility and now all students are required to provide their own computer.

Pilot schemes are now in place with a view to the introduction of Information and Communications Technology (ICT) as a formal teaching and support element within the programme.

Course Writing and Production

Once the course structure and content had been agreed, course writers were commissioned to write the course materials and editors were appointed to ensure the quality of the self-learning texts. The course writers and editors were academics from participating universities or were highly qualified freelance specialists.

Normally it can take up to two years to go from the initial specifications of a course to the distribution of final texts. In the case of the degree/diploma programme, course writing commenced in early 1986 and the first courses were presented in early 1987. One of the factors in reducing the time required to produce the courses from the more usual two years to one year was to have the writing and editing processes running in parallel rather than being sequential as was traditionally the case.

Prior to the development of this programme the centre had not produced any of its own course texts and needed to establish an efficient and optimal text production system. In order to shorten the production time, and to have as much flexibility as possible, OSCAIL initiated a programme to computerize, as far as possible, the writing, editing and production of texts. The stages in the production of course texts were identified and sub-divided. By analysing the processes in this fashion it was possible to plan for the introduction of electronic publishing and to identify the points at which the electronic route could be abandoned and resort taken to traditional methods should that be necessary.

As cost effectiveness was a key issue in the development and presentation of the programme, it was essential that there would be minimal over-production of course materials. Consequently course texts were produced in loose-leaf binders and in quantities which would meet expected student demand in a given year. In this way it was possible to review the courses every year and make any changes to the text that were necessary. Another advantage of loose-leaf production was that, should errors be found in the text, corrected pages could be issued to replace defective ones.

The complete degree programme was introduced over a four-year period.

Presentation

The first cohort of students registered for the Introductory Module in October of 1986 at four designated study centres. There are now some 1200 students on the programme and there are nine study centres in active use. The distribution of students between Dublin and the rest of the country is in the ratio of 55:45.

Conclusion

716 students have completed their degree studies and 1059 students have completed their diploma studies.

Apart from being successful in its primary objective of producing well-equipped graduates in the area of Information Technology, the development, production and presentation of the Degree/Diploma programme has provided a body of experience which has proved to be invaluable in the development and provision of all of OSCAIL's programmes.

APPENDIX V - MANAGEMENT OF OPERATIONS

The graduate programme in the Management of Operations offers participants an opportunity to study a cross-disciplinary range of modules, designed to develop an integrative and strategic perspective on the management of operations. The programme focuses on the dynamic nature of business organisations, product and process development and organisational renewal and change. It provides a unique opportunity for graduates of different disciplines to develop the hybrid, interdisciplinary knowledge and skills essential for modern business development and management. The programme aims to equip participants with the knowledge and skills required of business analysts and managers of operations in dynamic manufacturing and service environments and to develop the investigative and analytic techniques required for managerial or senior roles within their organisations.

The programme has been developed by OSCAIL in co-operation with the Dublin City University Business School and the University of Ulster and leads to awards at Graduate Diploma and M.Sc. levels by Dublin City University. The course team consists of representatives from NDEC, the Dublin City University Business School, University College Dublin, the University of Warwick and industry.

The programme normally takes about two to three years to complete on a part-time, distance education basis. The first year provides a foundation in business related subjects and in information and manufacturing systems and processes. The second year focuses on strategic and managerial issues related to product/process development, innovation and the management of change. The Graduate Diploma is awarded to students who successfully complete the taught modules only. The M.Sc. is awarded to students who complete the taught element of the programme and a dissertation.

The first intake of students was in October 1997, and the first graduates of the programme graduated in March 2000. Currently, there are over 70 students registered on the programme, with another group of students due to complete their studies in May 2000.

Management and Applications of IT in Accounting

The Graduate Programme in the Management and Applications of IT in Accounting has been designed with the accountant and business professional in mind, with the aim of developing core IS/IT competencies as a necessary and valuable post-qualification specialisation. Information Systems (IS) and the technologies that support them (IT) have assumed critical and strategic importance for the competitiveness of businesses, large and small. IS/IT are at the core of organisational change and renewal underpinning capability of responding to change. Accountants play a role that increasingly requires a significant input to the day to day management, security and control of all aspects of the IT function. Additionally, they may be required to undertake a role in relation to strategic policy and planning for IS/IT and to guide the decision-making process for systems design, procurement and implementation. This programme aims to address many of these issues.

The programme has been developed by OSCAIL in co-operation with the Institute of Chartered Accountants in Ireland, and academics from University College Cork and NUI Galway. The course team consists of representatives from University of Ulster, NUI Galway, University College Cork, University of Limerick, Sligo Institute of Technology, Cork Institute of Technology, the Institute of Chartered Accountants and industry.

The graduate programme consists of a taught element, which is made up of ten modules and a case study and a dissertation. The taught modules are divided into three strands:

- The Information Strategy Strand
- The Systems Design and Implementation Strand
- The Business Systems Solutions Strand

The focus of each strand is to act as building blocks for the student, so that by the end of the taught part of the programme, the participant will have gained an in-depth understanding of IS/IT.

The taught element of the programme will normally take three semesters to complete and the dissertation stage 6 to 12 months to complete. However, the flexibility of the modular system and of distance education means that students can take up to four years of registration to complete the programme. Participants, who complete the taught element of the programme and choose to exit the programme at that point, will be awarded a Graduate

Diploma. The M.Sc. is awarded to participants who complete the taught modules and a dissertation. A graduate Certificate is also possible. All awards are made by Dublin City University.

There are currently over 220 students enrolled on the programme. To date, there has been over 330 certificates awarded, almost 200 diplomats and 17 Masters of Science. Students take one award only, at the highest level at which they complete their studies.

APPENDIX VI - STUDENT SUPPORT SERVICES

Distance Education students often require greater levels of support than students in traditional academic environments. Apart from the shared learning experience of the tutorials, distance education students must rely on tutors and student advisors for guidance and support in the course of their studies. Students may, for example, have difficulties in understanding course content or in organising their time. As adult students who have other responsibilities in their employment or in their homes, their studies can also be affected by a number of problems outside the scope of the course. Students often need advice when selecting modules for the next academic year, both in terms of choosing the appropriate study path to their degree and in terms of judging the time commitment that would be required in studying a given number of modules. With all these issues, distance education students cannot readily turn to other students for information, as they would in conventional systems. Instead, more formal support structures have to be put in place.

Recognising these difficulties, the National Distance Education Centre has developed a support system for its students. While Course Tutors can assist with course content queries, Student Advisors are available to answer other student queries and offer advice on such issues as:

- Module choice
- Workload
- Leave of absence
- Deferral of studies
- Study difficulties
- Exam preparation
- Special needs

They can direct students to other agencies in order to secure medical, psychiatric, vocational and other services, and can also advise prospective students on the course best suited to them. As mentors to students on Oscaíl's Access Scheme, the Advisors play a crucial role in the support of economically disadvantaged who are usually entering third-level education for the first time.

The Student Services Co-ordinators administer such systems as are required to ensure continuing good practice in student support. Membership of the Course Teams means that the Co-ordinators can offer input on any issue affecting students. The administration of Student Support Surveys enable Student Services to remain attentive to students' needs around the country. The Student Services team also processes applications for deferral of studies and leaves of absence, and makes representations to Examination Boards on behalf of students with special requirements. Research into potential sources of funding for economically-disadvantaged students is an on-going concern within Student Services.

Surveys carried out by Oscail have shown that many economically disadvantaged students are deterred from enrolling because of the level of fees charged. The Oscail Access Project provides for an annual entry of up to twenty-five students on each of the Diploma/Degree in Humanities and Diploma/Degree in Information Technology. Those eligible for the scheme include the unemployed, those in receipt of disability benefits, those on FAS, VTOS, special employment and community employment schemes. In addition to the support given to all other students in their programme, participants on the Access Project are allocated a mentor who tracks their participation offering advice and support in areas such as study skills, continuous assessment and examination preparation. This mentoring is provided by the Student Services team.

Student Services also make a contribution to all materials produced by Oscail which are sent to students, such as brochures, handbooks, guidelines, information letters, and registration material. As Student Services deal with any problems that arise from this material, they are in a good position to suggest improvements where necessary. One of our aims is the fast and efficient dissemination of information to our students, and the on-going development of the Oscail Website is designed to provide students with up-to-date information about tutorials, assignments, exams, and other student information.

Use of Telematics to Enhance Distance Learning - The UCD Experience

Dr. Caroline Hussey,
Registrar, UCD

Introduction

During the past decade, University College Dublin has developed a number of projects using telematics (television and/or IT) to deliver new ODL programmes or to enhance conventional, on-campus programmes. This paper attempts to analyse some of our recent experiences with interactive developments in order to formulate some general principles in relation to the future use of telematics for the delivery of ODLprogrammes in UCD and to respond to the HEAdiscussion paper on the future of ODLin Ireland.

Some Case Histories

Certificate in Safety and Health at Work

One of UCD's earliest projects, the certificate programme, which was first broadcast from the UCD Audio Visual Centre (AVC) in 1993, is now in its seventh cycle and about 1,500 students will have received their certificates by the end of the current year. The project was technology-driven; EU Horizon funding was made available to the AVC to develop the programme as a prototype accredited course delivered EU-wide by satellite television. The UCD Centre for Safety and Health at Work (CSHWW), which delivers conventional part-time, on-campus degree and diploma programmes in Safety and Health, had at that time identified a market for a foundation course to serve the dual functions of providing basic training for workers and employers, and creating an access route to the diploma programme for students who wished to develop a career as safety professionals.

The conjunction of the AVC and CSHWW for the development of this project was fortuitous because it brought together elements which can now be seen as critical for success in this type of project:

- Technical know-how, facilities and enthusiasm
- Academics eager to experiment with new didactic technologies
- An identified (legislation-driven) market
- EU funding for start-up costs

Other helpful circumstances included:

- An academic Centre with a track-record sufficient to obtain quick accreditation by UCD for a "whacky" programme and, later, external validation by a (UK) professional body
- (Moral) support from a government agency
- Most students' fees paid by employees
- Partnerships with other third level institutions and with target companies
- Access/Progression to part-time diploma, primary degree and postgraduate courses

The course was designed to be accessible to the widest possible audience, including students with little formal education and those who had been out of the education system for a decade or more, and the format of the programme catered for the needs of such students by combining formal lectures (via satellite TV) received by students in learning centres with interactive sessions (by phone or fax) supported by face-to-face tutorials and a course manual. Assessment of students wishing to qualify for the UCD certificate was based on project reports and an MCQ exam. Perhaps because of this "belt and braces" approach, the programme has almost embarrassingly high success and retention rates, with 94% of students qualifying for the certificate each year.

However, while this course has a number of interesting features which have made it sustainable, there are also a number of weaknesses in the formula which render it unsuitable as a universal model for telematic delivery of ODL, including:

- High recurrent costs
- Time/space constraints
- A unique (legislation-driven) market

UCD Interactive – Telematic Teaching and Learning

This service, which was launched by the AVC in 1997, builds on experience gained from the OSH Certificate and introduces electronic strategies to overcome some the limitations of the OSH model. This approach is also based on illustrated lectures broadcast from the AVC's "Interactive Classroom", a studio designed to enable lecturers to broadcast live to remote learners and to interact with them electronically. The Adult Education Centre was the first UCD department to avail of the new service in order to broadcast a ten-week Foundation for Higher Education course made available through CableLink to virtually every home in the Dublin area. The learner could interact with the lecturer by phone or Internet and the course was supported by additional multimedia material available through the Internet.

This formula avoids some of the time/space constraints of the OSH model and has lower recurrent costs, because of the use of a cable system, rather than a satellite or a terrestrial TV up-link. However, since it is targetted at the home, the problem of the "lonely learner" persists. This course was not accredited, so there are no estimates of retention rates.

DeLLTTi – Lifelong Learning On-Line

This is a project developed by the Adult Education Centre based initially on an EU project - WEST and now on the WBT Topclass Internet software package. The main aim of the project is to highlight interactivity and

equality in learning. A wide range of courses have been developed by adult education tutors, specifically for the remote adult learner, mainly on topics in English Literature, History and IT. The course material is available on the Internet and is supported by electronic interaction with tutors and electronic discussion groups.

The project organisers are pleased with the successful application of internet technology to such a wide range of courses but, to date, are disappointed by the relatively low levels of take-up for most courses. They attribute this to a number of factors, including:

- Limited access to the internet
- Learners' lack of familiarity with internet technology
- Lack of cultural acceptance of the internet as a satisfactory alternative to conventional learning strategies
- Lack of face-to-face tutorial support.

Recently, the Adult Education Centre has collaborated in the EU project DERAL where focus groups of fifteen learners took two of its DeLLTTi courses in the ILAC Centre Library and Ballyfermot Library and then fully evaluated all aspects of the course. Their recommendations echoed the DeLLTTi team's own conclusions, and included the need for an induction module to familiarise learners with internet learning strategies, requests for regular face-to-face sessions with the course tutor, certification of the courses and restructuring of the course material to make it more adult friendly.

Some Issues

High Start-up Costs

The UCD experience reinforces the conclusion of research carried out in the UK by Hunt and Clarke that content development of technology enhanced teaching is the greatest expense involved in distributed and distance learning. The cost of producing educational material can be expressed as the ratio of the time required to produce the material to the student contact time. For example, on this scale face-to-face teaching, i.e. the conventional lecture, has a ratio of the order of 1 - 10 : 1, whereas a computer networked mediated communication has a ratio of 20-100 : 1, a video or telelecture has a ratio of 200-1,000: 1, pre-programmed computer-based training 200 – 1000 : 1 and multimedia material 1,000 – 4,000 : 1.

Incentives to Academics to Develop Distance Learning Materials

The cost of developing content is a manpower cost and the most talented academics will become involved only if financial or other incentives are available. Irish academics are already beset with the conflicting pressures of

research and publication, attracting research funding, teaching on-campus undergraduate programmes, supervising postgraduates and increasingly complex academic administration. If the development of telematic material is to be made attractive to high-fliers, excellent technical back-up must be available and the activity must enhance their academic reputations (perhaps by classification of telematic materials as publications) or additional payments made to reward the time consumed.

Certification

All Irish third-level institutions would agree that certification and progression are key issues for part-time, adult and continuing education students. The universities, through the Conference of Heads of Irish Universities (CHIU), are currently addressing these issues in the context of the Qualifications (Education and Training) Act, 1999 and the success of future distance education initiatives will, to a large extent, be dependent on the resolution of these issues. Certification of on-line courses poses particular challenges in relation to the feasibility of adequate and equitable on-line assessment or by conventional examinations.

Financial Support for Students

The high start-up costs of ODL programmes and relatively high recurrent costs, particularly where tutorial and other supports are required, imply that ODL is not a cheap alternative to conventional educational approaches. These costs must be borne either by the student, the Exchequer, in a few cases, by employers. UCD and the other universities support the strong recommendation of the on the Points Commission that all citizens should have an equal entitlement to higher education, whether on a part-time or full-time basis, and this has major implications for the funding of students taking ODLor other part-time options.

Tutorial Support for Remote Learners

The UCD experience suggests that, at least in the short term, a purely telematic approach to ODL may not be appropriate to all remote learners. Where the recipient has advanced independent learning strategies, e.g. postgraduate or continuing professional development programmes, on-line courses, unsupported by other learning materials or strategies, will probably work well. Ironically, recipients who, because of social disadvantage, may be most in need of remote learning opportunities may also be least able to benefit from unsupported on-line courses and will require other learning supports, particularly face-to-face contact with a tutor.

The Lonely Learner

There is increasing evidence that learning is fundamentally a social activity. Again, with the possible exception of advanced learners who wish to use learning simply to update their fact-files, there appears to be a great human

need to interact with others as part of the learning process. Courses which do not include interactive and/or tutorial components appear to suffer universally from poor take-up and completion rates.

Access to the Internet

Internet access in Ireland is still in its infancy. Recent data illustrate that access to the Internet at home or at work is very limited and has strong geographical, social and gender inequalities. The DERAL solution of using local libraries as on-line learning centres may go some way towards solving this problem and would also provide opportunities for learner interactions and tutorial support.

Markets

Because of high start-up costs, ODL programmes will be economically viable only when they are widely marketable and have a reasonable shelf-life. The two potential high-demand areas are basic education/personal development and work-related training. As the general standard of education of the younger components of the population rises, basic educational programmes will probably have a wide market only if financial support is available for those who wish to avail of ODL programmes for second chance education. Using ODL to cater for in-company training needs seems superficially attractive, but it must be borne in mind that most Irish companies are SMEs and their training needs are not homogenous.

Partnerships

Many of the issues discussed above support the need for partnership arrangements between course developers, probably third level institutions, and other organisations, including other third level institutions, companies and libraries to collaborate in content development, marketing and the provision of learning centres and tutorial support.

Conclusions

ODL programmes using telematic elements can be used to address some of the main educational challenges facing Ireland, particularly to provide second chance education and promote social inclusion and to meet some of the training needs and skills deficits facing the economy.

Experience suggests that the ideal technology-enhanced ODL programme should be:

- Certified with progression opportunities to further accredited programmes
- Accessible, in multimedia format, on the internet
- Interactive
- Supported by face-to-face tutorial support
- Developed by partnerships between third level institutions, industry and public agencies

The technology required to deliver such ODL courses successfully should mirror this collaborative approach and employ the best elements of broadband and narrowband technologies to deliver quality education in an accessible and flexible manner. Currently UCD is piloting this approach with the Advanced Broadband Course Delivery system. The ABCD system employs the Internet, video conferencing, digital satellite and analogue terrestrial broadcast systems, to deliver high quality sound, vision and large graphic and text files in real time. The ABCD system can be received not only throughout Ireland, but also throughout Europe and farther afield.

In addition to the development of appropriate technology, the success of telematic-enhanced approaches to ODL will also depend on social and infrastructural factors, including:

- Funding to support start-up costs
- Incentives for academics to develop learning materials
- Financial support for students
- Wider access to the internet
- Identification of markets

Summary

During the past decade, UCD has developed a number of projects using telematics (television and/or IT) to deliver new ODL programmes or to enhance conventional, on-campus programmes. This paper attempts an analysis of our experiences with these developments, on the basis of which we conclude that the following are the most critical factors for the successful expansion of such activities within UCD and in the wider context of Irish third level institutions:

- Support for institutions to provide suitable technology and to meet high start-up costs
- Financial support for students pursuing part-time and non-conventional (undergraduate) courses
- Certification of ODLprogrammes
- Development of programmes using a combination of telematic and face-to-face elements appropriate to the sophistication of the students' learning strategies

Mr. Pat McLaughlin,
Head of School of Engineering, Institute of Technology, Tallaght

Introduction

Good morning ladies and gentlemen I am here today to address you as the nominee of the Council of Directors of the Institutes of Technology. What I have to say is representative of a school of thought within our sector not the official position of the Council of Directors.

I would like to open my presentation with two quotes. Firstly, from Bob Perelman the academic and modern poet from Berkely who said "Learning is what most adults will do for a living in the 21st century". Secondly from Alvin Toffler the futurist and author of the "Third Wave" who said "the illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn".

I believe the quotes combine to reaffirm the need for life-long learning and in so doing challenge us to redefine how we design and deliver our education services. ODLsurely has a role to play in that redefinition.

I must emphasise at this stage that I believe that ODL will become an increasingly important feature of, rather that replace, the model for education in Ireland. Also, I recognise that we should not treat education as a commodity to be traded over the Internet. Rather, what I am going to talk about for the next few minutes is creating flexible learning opportunities for a range of learners.

It is important that we come together at this time to try and get some idea of how we might establish an effective ODL provision in Ireland to meet the needs of a number of constituencies. It is my hope that at the end of today we might have some vision of what needs to be done to establish an effective ODL provision to serve these constituencies.

While ODL has been around for a great number of years we are now witnessing the rapid growth of the Internet-based third generation of ODL that has started to supersede the old correspondence course and late night or early morning Open University television programmes. ODL provision over the Internet will probably change the distance learning landscape in much the same way as the video recorder changed television viewing habits.

Indeed the analogy is quite strong if you think of how broadcasters simply put programmes out in a viewing schedule and you switch-on and tune-in at that time or you miss the programme. The video recorder changed that and allowed us more flexibility and choice of how we structured our spare time and television viewing habits.

Our traditional courses generally work on the broadcast model but ODL delivered via the Internet owes more to the video recorder model - we simply need to ensure that we learn from the problems encountered by many adults when programming the video recorder and keep access to our courses as simple as possible.

So the focus for my presentation will be Internet enabled ODL. That is not to say that some of the content could not be applied to other ODLmodels.

When preparing the presentation I looked at the summary of issues arising as outlined in the "Background and Issues Paper" and have tried to address a number of these in various section of the paper.

2.0 *The Role of ODL in Irish Education.*

I believe that the debate as to whether we should embrace ODL as a core academic activity is all but finished. I say this based on well-documented international examples of ODL successes from America (e.g. Florida State Campus - a collaboration between the Florida Community Colleges and Universities), Britain (e.g. the Open University) and Australia (e.g. Open Learning Australia). This is not to say that there have not been some high profile failures in the ODL arena (e.g. York University in Canada and the Western Governor's University in America). However, assuming we in Ireland identify and adapt international best practice in all the constituent elements of ODLthere is no reason why we should not join the ranks of successful ODL projects.

Facilitating Learners

Outreach - extending the campus
Enabling flexible life-long learning - career development
Enabling ease of access - e.g. disabled learners

If we look at the role of ODLin the Irish education landscape we can declare at a macro level that it will fulfil the needs of learners by reaching out and extending the campus to new communities of learners who would not normally attend a college. In this category one example we could think of is women who currently work in the home. This group may not have the time, or possibly the means, to attend traditional part time courses on a campus but they may have periods of free time that they might want to use to study. ODL could offer them flexible and credible learning opportunities.

Additionally, if we think of the modern workplace where the pressure of change is constant and life-long learning is a necessity then ODL could play a central role in continuous workforce development. Often we associate ODL-based workforce development with large or multinational companies yet the need for workforce development is as pressing an issue for our indigenous companies as it is for the multinationals. Any national ODL provision must respond to the learning needs of our SMEs and not only the larger companies.

I wonder if we had had a national ODL system in place 4 or 5 years ago would we be experiencing the skill shortages that threaten the development of the economy at present.

Obviously, ODL also has a role to play in providing access to learning for disadvantaged groups in our society such as the disabled. Again, any national ODLprovision should address the real needs of this constituency.

Through experience we now know that each of these constituencies has very differing needs and characteristics and we must try to cater for as many of these as we realistically can in developing a national ODL capability. One way to ensure that this is achieved is to enable active participation from these groups at the development stage of any project that might be undertaken.

These are simply a few of the more obvious roles that ODLhas to play in Irish education there are others but time prevents me from dwelling on this topic any longer.

3.0 Why a National ODL Provision?

Threats & Challenges

Threats
Competition
- ***Public***
- ***Private***

Challenges
Influence policy makers
Finance, Ed, EU, etc

Change culture of Institutions
roles & responsibilities

Collaborate effectively
Resourcing
Complement & compete

If we do not provide ODL opportunities in Ireland someone else will. If we do not establish an Irish ODL presence we as providers will loose out to overseas providers, but more importantly Irish learners will loose out by not having courses available that are specifically designed and delivered to meet their unique needs.

Ultimately, we will all lose as ODL provision from overseas will not be aligned to the needs of the Irish society and economy. If we act independently we will not have as single institutions the critical mass of resources necessary to effectively establish ODLon a national basis.

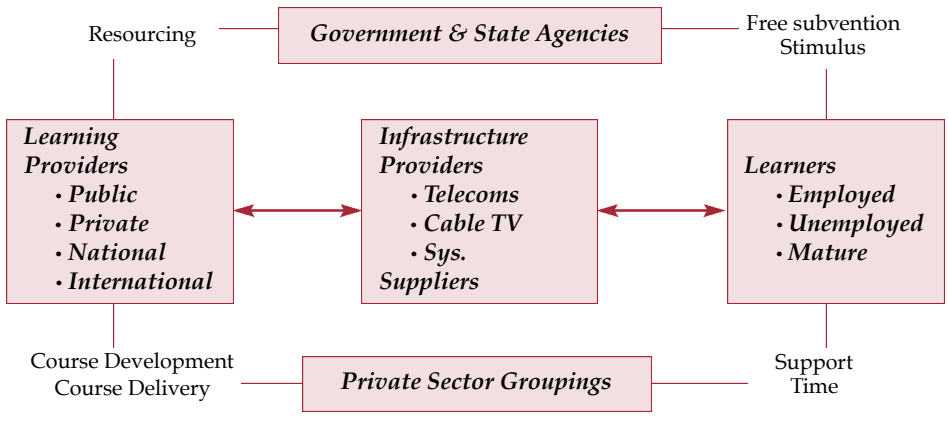
Most of us recognise the problems we face. They are quite daunting but nonetheless they are soluble. By acting in concert we stand a better chance of persuading the government to help us establish and maintain an Irish ODL presence.

In tandem with influencing the government we must actively try and change the predominant culture within most of our own organisations that sees ODL as an adjunct to core academic activity. We must put ODL on all our academic agenda as a matter of urgency. As I have already said we must collaborate if we are to succeed and there is probably grounds to extend our national collaboration into international collaboration if only for the reason to extend fee income to new markets overseas.

We must through our collaboration formally ensure that each academic institution has equal treatment and that no one institution dominates the scene to the detriment of others. We should collaborate by playing to our individual sectoral strengths.

Currently, co-existence does not limit the ambitions of any institution, the ODL project would in my opinion not change this situation.

4.0 The Stakeholders in ODL



If we look at the key players in the ODL arena obviously there are learning providers such as ourselves here today who are mainly public providers but there are also private providers. We should note that private providers are playing an increasing important role in ODL globally and that Ireland's open economy is not immune to their influence.

We already have the spectre of McDonald's "Hamburger University" on the horizon. However, we should also recognise and evaluate the opportunity that some private sector ODL learning offers. For example, Cisco Academy HP's Educators Corner and Microsoft's certified courses could have roles to play in any project we may embark on.

Learners are the key group in this arena and when we combine the content of numerous national and international reports with our own experiences we are told or know that learners in the ODL environment are generally employed mature students but that unemployed mature students also can benefit from ODL. So using these categories that means just about everyone in the country. I'm sorry for bogging you down in this level of statistical detail!

So we have learning providers and learners - how do we bring the two together? A key element in the ODL periodic table is the infrastructure providers. If we are to deliver credible and engaging learning opportunities using the Internet we are dependent on the ability of the infrastructure providers to supply bandwidth. Internet based ODL delivery will perish if the national bandwidth provision is not dramatically improved from the perspective of the average home user. In any project that seeks to address a national ODL provision we must have the infrastructure providers as key players in the project team.

These three, providers, learners and infrastructure providers together are the key factors in any ODL equation but they could benefit from the participation of other stakeholders such as the Government and state agencies and the private sector. When we represent all these stakeholders in an ODL model we have, I believe, improved the chances of success of any national ODL initiative.

Now what can the government and private sector do to help us establish a national ODL provision? At the provider side the government should be asked to provide funding to pump-prime the ODLproject. This funding would be used to create a true national ODL resource that could be utilised freely and equally by all the third level institutions in the state. At the learner side the Government can create the environment for and stimulate ODL activity by, for example, giving tax or social welfare credits to students who enrol on an ODL course and who wish to purchase a personal computer to enable them to study.

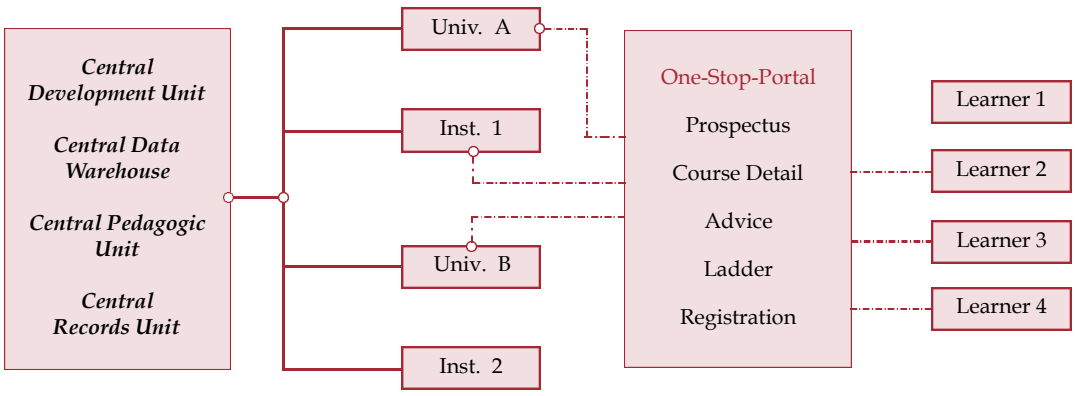
The private sector could play a number of roles. On the provider side they could become more actively involved in course design and delivery. In a design role companies or industry associations would sit on course boards to help design course programmes specifically tailored to meet company or sectoral needs. This already happens in the Institute of Technology sector. In the delivery role companies could provide mentors for their students on ODL programmes or provide ODL tutors. We have seen recent examples of companies providing their employees with home computers for Internet access. Why could we not make this a feature of a national ODL project?

On the learner side the most obvious role for the private sector is to facilitate the participation of the workforce in ODL. This facilitation could be in the form of time credit for study in the workplace and/or the provision of ODLlearning and support centres in the workplace. Additionally, a large computer manufacturer might want to be a partner in a national ODL project where they would provide hardware and/or software to ODL students at preferential rates.

I believe the only way we can get real commitment from the government and the private sector for ODL in Ireland is to propose a truly national project with clearly identified costs, roles responsibilities for all the players and with identified deliverables and benefits to all the stakeholders.

It would be a mistake for the government to fund any single institution purporting to establish a national ODL provision. One institution could never hope to respond to the spectrum of current learner needs in Ireland let alone future learning needs.

5.0 A Collaborative Model



For the sake of argument I would like to describe the key elements of one model that could deliver a national ODL capability while guaranteeing parity and autonomy to the institutes and better informed choice to the learner.

We have a number of institutions that wish to make courses available to learners via ODL. These institutions may or may not have the in-house capability to develop the ODLlearning materials in keeping with international best practise. We are not talking here about staff members putting lecture notes on the web we are talking about instructional design for an ODL delivery.

Additionally, very few of our institutions have ODLpedagogic experts that can train staff to undertake the role of ODL coach or tutor. Again, we are not talking about staff supporting ODL learners by responding to emails or postings on a bulletin board we are talking about staff changing how they view and interact with learners, we are talking about changing the very role of the lecturer.

From a resourcing perspective there is obviously no point in all of us trying to establish and duplicate such expertise on all our campuses. There is however an argument to establish a central course development unit that would take materials from lecturers in our institutions and liaise with these lecturers as their materials are transformed into an ODL format. This central development unit would ensure that international best practice was applied to ODL learning materials development in Ireland. Additionally, the central development unit would through liaison with infrastructure providers know what was feasible when it came to including audio or video in the learning materials and would have specific data on future infrastructural developments.

Alternatively, a central unit could develop "intelligent templates" for ODL provision that lecturers then populate with learning material that by virtue of the template is automatically ODL ready.

There may also be a strong case for central data warehousing where ODL learning materials are stored and potentially shared to limit duplication of development effort. Obviously, some arrangements would need to be made to recognise the effort of the originators of materials subsequently used by others. This feature would need careful consideration at the project planning stage but once operational would allow us to maximise our resource deployment and responsiveness to changing educational need.

If a case can be made for a central development and warehousing unit then it follows that a case can also be made for a central pedagogic unit to operate in a similar fashion by providing training and support to lecturers who are involved in ODLprovision.

There may even be a case for a central records unit that tracks the achievement of students to facilitate intra and inter sector transfer in recognition of the fact that a student could take modules or full courses from a number of providers.

If we look at the learner side of the equation a learner probably needs access to a central "one-stop-portal" where he or she can access details of all courses offered nationally via ODL. Each institute offering ODL could have on-line prospectuses mounted here for students to view. Additionally, course details could be included indicating issues such as module content, student workload, average time to qualification, etc. This facility would also allow the student to get independent advice about particular courses and study programmes that meet their learning needs.

The "one-stop-portal" could also highlight the progression and articulation mechanisms within and between the sectors so that he or she can get an idea of further study opportunities upon completion of the course of their choice. There is no reason why the portal could not also provide a registration system that caters for those from a range of socio-economic backgrounds by taking credit card or other methods of fee payment.

There is probably an argument to have the portal as a central facility representing all institutions and working in much the same way as the CAO system works for traditional courses.

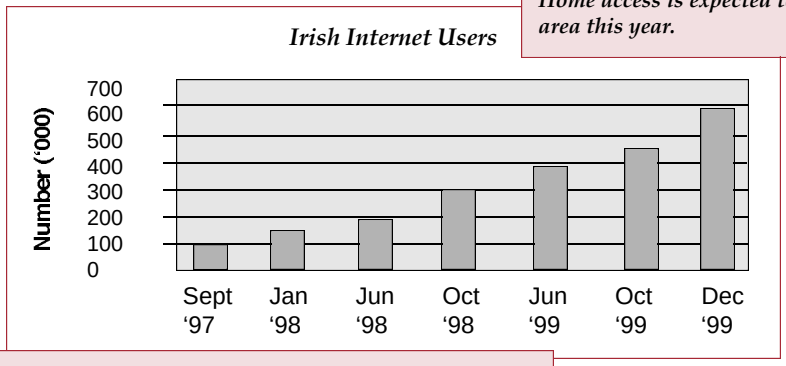
By establishing centralised facilities we not only have a better chance of guaranteeing equality of access and treatment for each institution we also have an opportunity to establish norms for course development and delivery that would facilitate quality assurance at its highest level. Obviously at the lower levels individual institutions would be responsible for their own quality assurance. The use of the central facility would provide us with the added opportunity to brand Irish ODL via a consistent look and feel to each unit of learning and course.

So this is **a** model not **the** model. I present it here to emphasise that we must collaborate as institutions if we are to be successful in ODL but we can only effectively collaborate if each institution has transparent access to what should be national resources such as the central units in the model.

6.0 Conclusion

Internet usage in Ireland is growing at a rate that creates a viable market for Internet based ODL provision. Looking at the figures we can see it has grown almost 600% in 2 years. According to Amarach research it will shortly become a mass market. I think that in the next few years as many houses will have Internet access as today have video recorders. Its up to us to ensure we use it as an effective channel for education.

According to Amarach, the Internet is about to become a mass market phenomenon in Ireland. Home access is expected to be the main growth area this year.



Half of all users, or 11% of the Irish adult population, go online at home, while 32% of users access the Net in work and 22% in schools or colleges. Friends' houses, cybercafes and public libraries are also used to access the Internet.

In conclusion I would like to reiterate the following points:

- ODLis here to stay and as such we should be more proactive in our institutions in promoting it as a core academic activity
- A national ODLprovision needs initial government funding to pump-prime the activity
- The alternative to collaboration, individual initiatives, will see all of us eventually face individual decline in the face of aggressive overseas competition
- The development of central facilities is a key element in any national ODLprovision but we must be careful to ensure that these facilities are not seen as being owned by one institution or sector simply because they might reside on a particular campus
- Formal enabling procedures should be developed to ensure parity of access to any central resources
- If we work together to complement each other our sectors can provide an ODL system that can cater for the complete spectrum of third level educational needs in Ireland
- We should as a matter of urgency seek to develop a proposal for government to consider. In this context government is not just the Department of Education and Science but also the Department of Enterprise, Trade and Employment

I would like to finish with a quote from John Chambers, CEO of Cisco Systems who said "Education over the Internet is going to be so big it is going to make current email use look like a rounding error".

Thank you for your time and I hope we can work together in the future.

HEAnet: Structure and Services

Mr. Mike Norris,
HEAnet

Context and role of HEAnet

HEAnet, the national research and education network, has been in operation since 1984. Beginning as a collaborative effort of the seven universities, it has grown over the years to include 37 institutions at present. These include the seven universities, the fourteen Institutes of Technology, the Higher Education Authority, National College of Art and Design, Royal College of Surgeons in Ireland, National College of Ireland, National University of Ireland, National Council for Educational Awards, Royal Irish Academy, Dublin Institute of Advanced Studies, Central Applications Office, Teagasc, EPA, Enterprise Ireland, the National Library, government departments and agencies. The total number of users in HEAnet is over 120,000.

It was formally incorporated in 1997 as a not-for-profit company to serve the wide-area networking requirements of its members. It is governed by a board representing its member institutions and the government.

From the start, HEAnet has worked to provide quality intercommunications between its members, together with strategic connectivity with networks and resources around the world. It has also provided ancillary services as appropriate, on a cost-recovery basis.

As a national organisation, owned by and dedicated to its member institutions, HEAnet has always operated on the basis of collaboration. The cooperative spirit was still very much alive in the Irish research and education networking community, and with counterparts in Europe and the rest of the world. While there was competition between the institutions in many spheres, this was somewhat orthogonal to, rather than at at variance with, the spirit of collaboration towards the common goal of excellence. Competition has been harnessed as peer pressure in meeting targets, adhering to standards and adopting common best practices.

Indeed, by their very nature, networks entail collaboration, as differences must be put aside in enabling intercommunication between institutions. Clients of HEAnet have entitlements to high standards of service; they also have obligations towards other institutions, in Ireland and abroad, in a common global endeavour; the Internet is enriched with the connection of each new network.

National broadband network

In 1998, HEAnet developed plans to provide a National Broadband Network, with a high capacity backbone linking remote nodes or Points of Presence (PoPs) to bring broadband access closer to institutions around the country. With grant aid from the HEA and with Structural Funds secured in a competitive bid along with partners Eircom, HEAnet began implementing this plan in 1999. Open competitive tendering was used to

procure the networking equipment and systems, while an open tender within the HEAnet community identified suitable managed PoP facilities in Cork, Galway and Limerick.

The transmission network is now almost fully in place, with a 34Mbps backbone linking the PoPs and institutions such as NUI Galway and the University of Limerick each connected at 10Mbps. Instead of maintaining expensive long-haul circuits to Dublin, institutions can now connect to their nearest PoP, each of which is ready for ISDN, leased line and ATM connections.

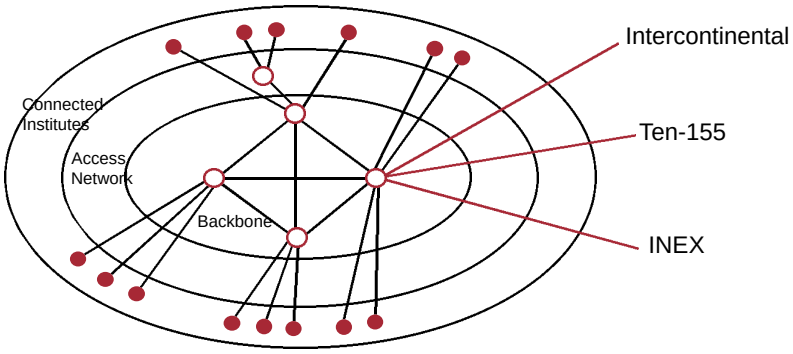


Fig 1: National backbone, schematic

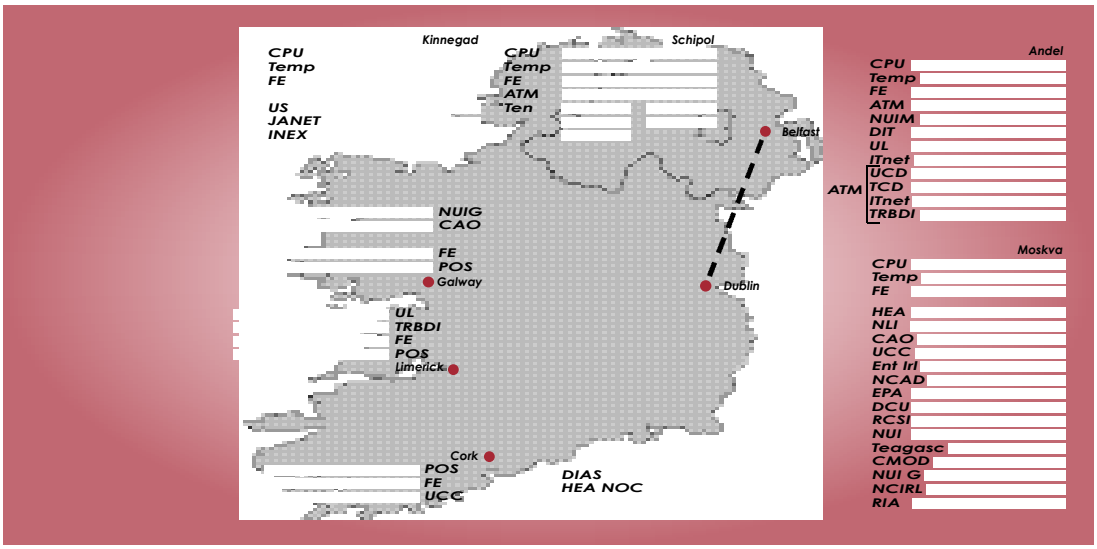


Fig 2: National backbone, topographical

External connectivity

In the past year, HEAnet has also increased its external connectivity. The INEX link to other Irish networks is now at 4Mbps (with an upgrade to 10Mbps in prospect), the 2Mbps link to Northern Ireland and Great Britain has been complemented with a 10Mbps connection (soon to go to 34Mbps) to the pan-European network, TEN-155. US capacity, at 6Mbps in1998, now stands at 34Mbps, having grown from 18Mbps at the start of the academic year 1999/2000. HEAnet is now planning further upgrades, notably to Internet 2 via a separate 155Mbps circuit to the USA.

HEAnet services

While wide area networking is HEAnet's core business, it also provides ancillary support services, such as DNS, address and domain registration. It also provides application services such as the National Information Server, Listserv, Net News, and web caching. More recently, it has begun to take advantage of the level of connectivity between members to provide hosting for key educational and research resources, such as the Web of Science database, and index services such as PADI and the Irish Business Index.

Associated with the NBN, several projects have been launched, notably those on video-conferencing and video streaming. These have generated a lot of interest and have already shown that the new network is capable of delivering quality video services nationwide and with networks in other parts of the world.

HEAnet contact: http://www.heanet.ie

HEA and OSCAIL/NDEC

Prof. John Coolahan,
Rapporteur to the Symposium

1. The Context of Symposium

The Symposium was jointly organised by the Higher Education Authority and OSCAIL, the National Distance Education Centre, with the aim of reviewing the role open and distance learning has been playing in Irish higher education provision, examining the possibilities which new technologies provide in this field, exploring possible ways in which such forms of learning could be promoted in the future and making proposals thereon. The approach being taken was in the consultative tradition which has been a distinguishing feature of Irish educational policy formulation throughout the nineties.

Many factors emphasised the timeliness of the Symposium. These included the fact that lifelong learning has, in recent years, been adopted by the OECD, the European Commission and the Irish Government as the animating principle of educational policy for the era ahead. A range of policy documents has emphasised this, including the Irish Government's Green Paper, **Adult Education in an Era of Lifelong Learning** (1998). Following a consultative debate on the Green Paper, the Government is shortly to issue its policy in the form of a White Paper, which is anticipated to include policy on open and distance learning. This added a particular timeliness to the deliberations at the Symposium. Lifelong Learning was also the framework within which the education section of the **National Development Plan** (1999) was set out and this dimension also featured in the recently concluded **Programme for Prosperity and Fairness** (2000).

In the context of the promotion of the learning society post-school educational provision is being re-conceptualised. A notable instance of this was the OECD publication, **Redefining Tertiary Education** (1998). This involves greater democratisation of such education, more flexibility in course structures and organisation, greater collaboration between institutions, the establishment of mechanisms for the recognition of varying qualifications and work experience, greater provision for mature learners and innovative processes of course provision. Within this changing scenario, there is a need for improved planning for open and distance learning.

The accelerated pace of development and the inter-penetrative character of information and communications technologies (ICT) are such as to involve a revolution in access to, creation of and dissemination of knowledge. The new technologies provide a spectrum of pedagogical opportunities never before available. The harnessing of the technologies opens up unprecedented possibilities for open and distance learning. The fact that the Irish Government has taken major policy initiatives in support of ICT in the industrial and educational life of the State is of major relevance to the planning of open and distance learning initiatives. In its concern to improve the quality of education within the adult population, it is likely that the Government would look favourably on coherent planning of open and distance learning, designed on best practice principles.

Irish tertiary education over the last thirty years can be seen as an admirable success story. Its expansion, diversification, adaptability, experimentation and range of achievement presented a remarkable contrast to the unimpressive profile presented by the Commission on Higher Education in 1967. The success which has been achieved should not be under-estimated but, rather, should serve as an encouragement and stimulus to plan forward with confidence. The current place of open and distance learning within post-school education allowed much scope for development.

The existence of the National Distance Education Centre (NDEC) was a valuable asset. Set up as a visionary, collaborative venture, it has worthwhile achievements to its credit and much useful experience of a technical, academic and organisational character has been attained. The Symposium provided a great opportunity for various stakeholders to assess how the NDEC might be further developed within the new circumstances which now exist. The imminent establishment of the National Qualifications Authority of Ireland has the potential to be a major force in facilitating the emergence of a new era in tertiary education. The legislation for its establishment is very much in harmony with progressive thinking on more flexible arrangements for learning and its certification throughout life.

Despite the existence of many favourable elements in support of open and distance learning, hitherto there has been inadequate public debate on this form of learning. In so far as such discussion has taken place it has tended to be within particular groups with a specialist interest. The theme has not been a significant one within the very wide-ranging educational debates which have been occurring within Irish society. As yet, it has not caught the public imagination with any real sense of excitement or heightened expectation. The Symposium provided an opportunity for energising a debate on open and distance learning. To this end, the Background and Issues Paper, prepared for the Symposium, was a major contribution to helping participants to focus on many features relevant to such a debate. The Paper quoted the definition of open and distance learning from the Minerva project:

> "Open and distance learning involves the use of new methods (both technical and otherwise) to improve the flexibility of learning in terms of space, time, choice of content, teaching resources, and/or to improve access to educational systems from a distance."

This was proposed and accepted as a working definition for the Symposium.

2. *Some Policy Issues from the Presentations*

The Symposium was an invitational one to which key stakeholders and interests were invited to nominate personnel with expertise and/or responsibility in the area of distance and open education. The Background and Issues Paper was issued to all participants in advance. This paper set out aspects of the recent Irish and international contexts and described some exemplar Irish activities in open and distance learning. It then highlighted a wide range of issues arising for reflection and debate. The Paper raised questions for debate and, helpfully, added some initial points of discussion to each of them. The themes were as follows:

1. Who are the potential learners for open and distance learning off the campuses of third-level institutions?
2. How can open and distance learning help in the development of flexible curricula in existing and future programmes run on the campuses of third-level institutions?
3. What is the potential role of virtual higher education in Ireland?
4. How can learners be certain of the quality of open and distance learning programmes?
5. How should Institutions be encouraged to involve themselves in open and distance learning?
6. How should third-level institutions co-operate in open and distance learning?
7. What roles might Oscail - the National Distance Education Centre play in the development of open and distance learning in higher education in Ireland?

The programme included inputs from an international and from a national perspective. Professor Jørgen Bang of Denmark informed the Symposium of the experience of Denmark with open and distance learning (ODL) and highlighted the trend to the dual, or mixed institutional mode of ODL delivery. In this context, if universities could use ODL to provide part of the teaching of on-campus students, this would allow them to have more students sharing the same facilities and to have more flexible timing and arrangements for their students. He also outlined some general European trends and drew attention to the Bologna declaration (1999) of the European ministers of education which sought to strengthen the European dimension of higher education urging co-operation of European institutions. He also dealt with the Humanities and CEFES projects, which were exemplars of such co-operation. Among key issues for policy consideration which he raised was the potential for dialogue in the learning process which new technologies allowed for in distance learning. He stressed that ICTs should not be regarded as supplanting traditional approaches but, rather, as supporting and supplementary to them. He also made the interesting point that the central issues in the use of ICT were pedagogical rather than technical. The new modes of open and distance learning allowed for much collaborative learning via the internet. Collaboration between personnel in different institutions was a highly desirable aim, but to succeed such collaboration should be

on equal terms between the institutions involved. Professor Bang urged that there should be respect for diversity. He concluded by stressing that the key beneficiaries, from a variety of perspectives, are the learners and that a learner-centred focus should be in operation in the design and delivery of distance education programmes.

Speaking from the national perspective, the Chairman of the Higher Education Authority, Dr. Don Thornhill, drew attention to the poor analytic base and inadequate debate on open and distance learning which had existed to date in Ireland. He also admitted that the area had been inadequately resourced in the past. If we were to make progress for the future and draw on the potential which existed for distance education it was necessary to devise a well-informed national strategy upon which policy and delivery could be based. A structure was needed which would facilitate all interested institutions to be engaged, with a sense of belonging and ownership.

In view of Ireland's national success in ICT related industries, Dr. Thornhill wondered whether there were niche areas with regard to the internet on which Ireland could capitalise. He also highlighted the desirability of intra-national co-operation as well as international co-operation in distance education projects. Ireland needs to build an information base on the provision of open and distance learning facilities. Reflecting on structural issues, he surmised about the most appropriate national structure for ODL. He raised the question as to what the future role of the NDEC should be. In particular, he wondered what was the optimal form of governance which would reflect the aim that the National Centre would be seen to be working with institutions. Individual institutions ought to be free to develop institutional policies which could be embraced within a national policy. Dr. Thornhill considered that the time was ripe for some in-depth planning which would help to ensure a new and invigorated future for distance education and the utilisation of ICT in its promotion.

There were three addresses by representatives of key providers of Distance Education as follows:

Dr. Dennis Bancroft, Director of the NDEC;
Dr. Caroline Hussey of UCD giving a university perspective;
Mr. Pat McLaughlin, of Tallaght I.T., giving the perspective of an Institute of Technology.

As well as outlining the origins, development and mode of operation of the NDEC, Dr. Bancroft made the following points, relevant to future planning. He emphasised that the Centre was a significant national resource which should be regarded as such. To meet the challenges of a promising future, he emphasised his interest in promoting a greater sense of partnership which would involve new models of collaboration with higher education institutions. He set out a range of potential models. He thought that a reconstituted Council for ODL should be established. A key concern for the future would be proactive initiative in support of student needs. He considered that there was a need for a well organised advice centre for students.

The NDEC of the future should engage in wide-ranging consultation. The Centre ought to benefit from the support of panels of experts from different institutions focussing on areas of their specialist expertise. There was a dearth of research in ODL and a national research centre should form part of a restructured NDEC. Such a Centre should also be active and confident in exploring international opportunities for its products.

Dr. Caroline Hussey spoke on case studies of ODL which were provided by University College Dublin. Arising from such experience, she shared with participants some policy oriented perspectives. She pointed out the high start-up costs which often accompanied ODL programmes. She also highlighted the need to ensure that appropriate incentives were available with which to entice and reward academic staff to give the time and effort necessary for the production of high quality material for ODL. Her experience was that assessment and certification issues loomed very large for mature students and had to be dealt with carefully. Many students on distance education courses did so on a part-time basis and there were very inadequate financial supports available to them. Dr. Hussey also drew the attention of participants to the dilemma which often existed for "the lonely learner," and to the need for a good system of tutorial support. Not all students had ready access to the internet and this should not be ignored when planning. The marketing of ODL in appropriate forms also posed problems. In her view, there was considerable scope for the development of partnerships in relation to ODL provision between third-level institutions, industry and public agencies.

Mr. Pat McLaughlin considered that ODL was a necessity for contemporary Ireland. There were many new clients available who were keen to be involved. There ought to be both national and international collaboration in the provision of ODL. To foster such collaboration, it was essential that there be equal treatment of involved institutions and that individual institutions should have the scope to develop their own special areas of interest.

Mr. McLaughlin stressed the need for good liaison between stakeholders. These included the providers, learners, infrastructural personnel, Government agencies and the private sector. He stated that a new Central Unit for ODL should incorporate a developmental role. Among other roles it should operate as a data warehousing agency for materials. It ought to be in a position to promote best practice pedagogy. It needed to have an efficient registration and records section. It should set itself the target of being a "one stop portal" for providers and users of ODL. A national centre should also incorporate a quality assurance mechanism. Mr. McLaughlin stated that the time was ripe for movement forward but that there was no point in going to Government for assistance until a new national model for ODL was prepared. He hoped that steps would be taken to achieve this as a key outcome of the Symposium.

Mr. Mike Norris of HEAnet, the national research and education network, informed the Symposium about the development of the network since its establishment in 1984 and of the services it currently provides. HEAnet's capacity has increased 6,000 times in the last ten years. At present, there are 37 institutions attached to the HEAnet and the users number 120,000. He emphasised that as a national network owned by its member institutions it has always operated on the basis of collaboration. Mr. Norris explained how HEAnet has been developing a National Broadband Network over the last two years. He also described how HEAnet has been increasing its international connectivity. The network provides a very impressive range of services to its members with significant educational and research usage, such as the Web of Science database, and index services such as PADI and the Irish Business Index. Developments in video conferencing and video streaming have great potential in delivering quality video services throughout the country and in association with networks in other parts of the world. While emphasising the opportunities now available for ODL through the ICT developments, Mr. Norris also cautioned against an over-reliance on the internet when considering the provision of ODL.

3. *Issues Arising at the Discussion Fora*

A striking feature of the Symposium was the attentiveness of the participants to the presentations of the invited speakers. The sense of engagement was even more in evidence during the discussion sessions open to the floor. Within a constructive climate of debate participants raised questions, made proposals, reported on experiences, and expressed concerns. It would be difficult to do justice to the wide range of interesting topics which surfaced, but the following summary aims to capture the main issues discussed.

Collaboration

The issue of collaboration between institutions in the provision of ODL received a great deal of attention. The general view was that collaboration was a very good thing and it was agreed that Ireland had a valuable asset in the collaborative tradition which had been built up in relation to some of the NDEC courses. It was also pointed out that there were dangers in collaboration in that the work produced by individual teachers and institutions could, to some extent, be "highjacked," without their getting the appropriate reward or recognition. The value and difficulty of achieving cross faculty collaboration within institutions was also raised. It was recognised that risk was an unavoidable dimension of collaboration, but it need not be fraught with baneful consequences. The balance between collaboration and competition was a subtle one. It was possible to design arrangements within which the cutting edge of competition could be incorporated as a constructive element of collaboration. Collaboration without competition could give rise to a complacent consensus which might impede the search for excellence. Thus, collaboration and competition ought to be combined in a constructive relationship.

To ensure satisfactory and sustained collaboration a true partnership was required, built on trust and organisational structures which were agreed between the partners. A view was expressed, to which no objection was raised, that for contemporary Irish circumstances, collaboration by public institutions was the most desirable way forward.

The Role of a National Centre

The view at the Symposium seemed to be that there would be great value to society in having a genuinely collaborative national centre for ODL. The central model should be such as to work with and facilitate a variety of institutional providers rather than seek to establish hegemony in the field. The work of the NDEC was acknowledged but questions were raised about its governance. No answer was forthcoming to the question as to why the national advisory council to the centre had not operated since 1991. The view was that the national centre should be so structured as to allow for genuine involvement by collaborating institutions and other stakeholders, such as the social partners. A national centre needed to be independent of any single institution. A national centre for modern circumstances would also need a high research profile and be in a position to promote best practice in the provision and operation of courses. It would also need to raise the profile of ODL and act as an information base on ODL.

The Role of Teachers

It was recognised that skilled lecture-hall academics did not always have the accomplishments needed for high quality ODL. It was a medium which called for particular approaches and teaching styles. Interested academics should have ODL training courses available to them. There was also a great need to provide incentives for academics to give the time and effort to the preparation of ODL course materials, which can often be very demanding. At present, there was insufficient incentive either in financial terms or in credit for promotional purposes for academics to so engage. An over-reliance on the enthusiasm and public spiritedness of a small number would be insufficient for a serious expansion of ODL in the future. It was also emphasised that more attention needed to be given to the protection of the intellectual property rights of academics, as ODL was very open to the efforts of individuals being pirated or plagiarised.

The Position of ODL Learners

It was recognised that ODL often presented difficulties for learners unless they were well prepared and well motivated. For many second-chance learners considerable supports were needed. Provision had to be made so that ODL would not be a uni-directional process involving a take it or leave it style of presentation. Genuine efforts had to be made to ensure that the "dialogic" dimension of ODL would prevail. The "lonely learner" syndrome needed to be avoided. This involved the provision of tutors and opportunities for person-focussed

interaction. It was pointed out that one of the successful developments of recent times was the expansion of community education, particularly among groups of women learners. The social dimension of learning was seen to be crucial to the success of community education. The question was raised as to how ODL could include provision for this.

Discussion took place about what ODL could be expected to achieve. One argument is that it can facilitate equality of access to third level education. However, it is likely that ODL is suited to the more autonomous learners (i.e. those in need of least support and guidance in their learning). When the material is delivered through technology, it is also likely to favour those with high levels of access to, and comfort with, technology. While levels of access to technology are increasing rapidly, there is consistent evidence that better off social groups have higher levels of access. ODL may overcome barriers of distance and working hours, but it is unlikely to address the social inclusion agenda unless there are developments in access and support.

The problem of access to varied forms of ODLalso presented problems for many adult learners. In the context of greater utilisation of ICT, it needed to be borne in mind that many adults did not have access to the necessary equipment nor have the skills or competence to engage with it. It was hoped that the forthcoming White Paper on Adult Education would incorporate imaginative policies with regard to this. Another problem affecting many adult learners was that, due to their part-time status, they were not entitled to any financial support to engage in tertiary education courses. Again, it was hoped that the White Paper would signal a breakthrough in this area. The term "open" within the phrase open and distance learning was questioned. In an era of transparency, accountability, and the assertion of learners' rights, it is likely that serious challenges would be made regarding the openness inadequacies of much current practice. The role of employers in taking a more proactive stance in support of the lifelong learning of employees through ODL was stressed by a number of participants. The national agreements were regarded as helpful in this context.

The issue of methodology was an important one for the learners as well as for the teachers. There needed to be a wide variety of teaching–learning methods employed in ODL. While utilising ICT as appropriate, not all methods should be conceived within an ICT framework. The view was generally accepted that the proposed new digital educational television station provided great opportunities for ODL. It was urged that now was the time for ODL proponents to establish contact with the television authorities and seek a role in planning for the station. The point was also made that ODLapproaches were also relevant for on-campus educational provision.

The Qualifications Aspect

A number of participants raised issues on the qualification or certification dimension of ODL. One speaker held the view that qualifications should be kept quite separate from the provision role of a National Centre. However, what seemed a prevailing view was that the Centre generally be involved in the provision of ODL in partnership with third-level institutions. The existing scheme whereby under the general framework of NDEC individual institutions recognised NDEC courses and gave awards was a satisfactory approach. With the probable expansion of ODL in the future the issue of certification would be more important and existing practices would benefit from up-dating. This could involve the development of new modes of co-operation with institutes of technology, for example.

It was generally accepted that ODL learners were keen on certification of their achievements and tended to be very alert to the certification practices which exist. The imminent establishment of a National Qualifications Authority would be beneficial regarding this dimension of ODL and new schemes could be devised to suit fast-changing circumstances. It was generally recognised that quality and standards in ODLwere an important issue. It was necessary to seek to ensure parity of esteem between the awards for performance in ODL and those achieved through more traditional programmes.

The International Dimension

Throughout the Symposium there was a clear realisation that we were operating within an international context for ODL and that this provided great opportunities as well as some dangers. It provides a possibility to Irish education providers of reaching international learners. Conversely, it opens the Irish education system to potential competition from competitors working with the advantages of much larger scale. A particular danger which was referred to was the hegemony which was being exercised through the media and ODL materials of English-speaking developed countries on third-world cultures. New forms of cultural imperialism could result. Among opportunities was the chance for international collaboration in the provision of ODL. With a notable sense of confidence and optimism, some participants referred to the opportunities for Ireland to make inputs through ICT to the international ODL market. Some courses and material could be readily transferable. There were also opportunities for worthwhile partnerships with other international providers. Such linkages would also have useful implications for research on ODL.

4. Towards Consensus

While differences of opinion on a variety of issues were in evidence at the Symposium, more striking were the underlying areas of agreement and commonality of viewpoints on many important elements of a future policy on

ODL. A very strong emphasis emerged for this reviewer of the deep belief of participants on the value of ODL. It was seen to have great potential for individuals and society. From time to time it was emphasised that ODL took many forms, including long established methods. Yet the prevalence and interpenetrating impact of ICTs on so many facets of contemporary living tended to emphasise that ICTs were integral to ODL. Certainly, planning for the future of ODLneeded to incorporate ICTs as a central element.

It was also the case that the Symposium was very alert to the problems which faced a breakthrough in the establishment of ODL as a central dimension of Irish life within the learning society. The articulation of these problems deepened the debate and led to the tempering of vision with reality.

It was also generally agreed that there was a need for more analysis, debate and research on ODLissues. As well as promoting new research, there was a need for better dissemination of information on current happenings and best practice. The lack of an overall data base was a disadvantage for society and an impediment to individuals. Greater research data would be a crucial ingredient for well-informed advance planning.

As indicated earlier, the issue of collaboration in the provision of ODL was a central theme of discussion at the Symposium. The outcome was agreement that collaboration between institutions was the way forward. However, it needed to be managed in a sophisticated way which, among other things, would allow scope for competition. It would need to be structured in such a way that a true partnership would exist between the institutions involved. As well as a commitment to collaboration within the national arena, it was also agreed that collaboration on ODL should be promoted within the international context and that Ireland was well positioned to develop such partnerships.

It was generally agreed that Ireland should have a national centre for ODL and that such a centre would have great potential. A national centre should be structured in such a way that it was seen to be independent of any one institution. Its mode of governance should include representatives of all key institutional interests, but also representatives of the social partners. The centre should be positioned so as to carry out a range of important functions. It should promote collaboration between institutions in the delivery of services and, in a sense, harvest expertise in the area. It should provide a national data base on ODL. It would need to have a significant research role and support appropriate research initiatives by other agencies. It ought to facilitate training and best practice in the delivery of ODL. It would also need to support ODL learners and offer advice services to them. A national centre ought also to be proactive in the protection of intellectual property. Thus a national centre would not be competing with third-level institutions but would be working with them in providing opportunities for learning.

There ought to be opportunities for ODL learners to have a role in the planning of the services provided. The human and social dimensions of learning needed to be provided for within ODL. This was particularly important for the adult learners who were most in need of access to education and training. Issues of information, motivation, access, perseverance, and counselling were significant factors in the prospects for success of such learners. Overall, it was considered that more attention needed to be paid to the problems and concerns of key categories of adult learners. There was a welcoming recognition of the potential of the imminent White Paper on Adult Education and of the planned National Qualifications Authority, with regard to some of the issues raised.

The Symposium also acknowledged that a better system of incentives and supports should be available for academics who involved themselves in ODL. If a more elaborate system of ODL is established then the availability of a large pool of appropriately skilled expertise becomes more crucial. There was also agreement that quality should be the watchword for materials and styles of pedagogy. Quality assurance procedures should also be put in place to ensure that quality would be a continuing and distinguishing feature of ODLin Ireland.

Some participants at the Symposium considered that we were at the early stages of a development which, over time, would lead to a radical, systemic change in the inherited education system. While such might well prove to be the case, the predominant view was that there was now an urgent need to prepare a national strategy on ODL. This strategy should set out the purpose and place of ODL within the evolving education and training framework of Irish society. It should also include a model of the institutional arrangements which should underpin the delivery of an ODL service.

The Symposium was well aware that ODL was not a cheap option, rather it realised that a quality ODL service would require very significant investment. The view was that such investment would be likely to pay valuable dividends. A national plan on ODLshould be a central plank in the Government's policy on lifelong learning. If a well devised strategy for ODL had the support of the relevant stakeholders, the view was held that the prospects of national financial backing were favourable.

Appendix 1

Background and Issues Paper

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Introduction

The Higher Education Authority and Oscail, the National Distance Education Centre, are jointly hosting a Symposium on the Future of Open and Distance Learning in Higher Education in Ireland in the Hodson Bay Hotel in Athlone on 29 and 30 March.

The symposium is being held at an opportune time in the development of higher education in Ireland. There is an increasing focus on lifelong learning in education and, indeed, within higher education. This has been highlighted by the publication in November 1998 of "Education in an Era of Lifelong Learning", the Green Paper on Adult Education.

A growing importance is being attached to diverse modes of delivery of third-level programmes so that the wide range of the needs of learners can be met. In particular, there is a general feeling that open and distance learning has the potential to meet the needs of diverse groups of learners whose needs are not being fully met by existing higher education provision. The traditional full-time model of provision of higher education clearly cannot meet the needs of all of the potential third-level students. There is now a recognition that the skill levels of the labour force need to be continually raised and updated. The use of technology in learning is also increasing.

Allied to this, distance and Internet-based learning is recognised as an issue to be considered in an international context. It is generally accepted that open and distance learning, including Internet based learning, has the potential for extensive use both nationally and internationally and it is appropriate to look at the extent and potential of its use in Irish higher education

Recent Irish Context

There have been a number of reports and papers published in recent years highlighting the potential of open and distance learning in higher education in Ireland and related issues. Some of these are set out below. In highlighting the potential of open and distance learning in higher education, none of the reports and papers have considered the related educational and economic issues involved in detail, nor have they addressed the operational and organisational issues that would arise.

The **Report of the Review Committee on Post-Secondary Education and Training Places** was published in January, 2000, and has recommended increasing the number of higher education places for mature students, with a particular focus on part-time students as follows:

"We consider that there is scope for increasing third-level participation for mature students. We recommend an additional stock of up to 10,000 places for mature students, which should be built up over a number of years. We recommend that before the places are provided the demand is validated by appropriate market research on the target population to determine the extent of demand, the courses sought and the most appropriate method of provision. At present more than 80 per cent of places occupied by mature students are part-time places. We consider that at a minimum the proportion of flexible places within any additional provision should be at this level. Institutions, including all those providing distance education to Irish residents, should be invited to submit proposals for the provision of additional places for mature students to the Higher Education Authority."

"**Education in an Era of Lifelong Learning**", the Green Paper on Adult Education was published in November 1998, and has recommended that universities and other institutions work towards "expanding their distance education provision in a collaborative, cost-effective way". A White Paper is to be published in the near future.

In July, 1999, the Information Society Commission published "**Building a Capacity for Change - Lifelong Learning in the Information Society**". The report highlights the potential role of distance education and flexible learning and raises issues about the additional cost to students of participating in part-time higher education versus full-time education. It recommends that "funding structures for the providers of higher and further education should be carefully examined to correct any inherent bias that favours full-time over part-time."

In Autumn, 1999, Forfás published a report on **E-Commerce – The Policy Requirements**. There are a number of relevant recommendations in section 2.6 on education and training as follows:

- Leverage - the strong reputation of Ireland's education system to develop on the Internet.
- Encourage overseas distance-teaching providers to locate their education support and tuition services in Ireland
- Encourage universities and institutions from other countries to locate their distance learning centres in Ireland
- Convert education and training provision to Internet based platforms for delivering the distance learning products
- Develop in-house corporate training programmes into specialist products marketed internationally and delivered over the Internet to companies with similar training needs.

In section 3.2 on skills in relation to distance learning it states that there is a need for third-level institutions to enhance their distance learning provision.

In December, 1999, the **Report of the Commission on the Points System** was published. The Report recommends that that "there is a need for greater opportunities for students to return to third-level education on a part-time basis." The Commission further recommends that the Department of Education and Science and the Higher Education Authority develop a fund to support part-time undergraduate third-level courses.

The Council of Directors of the Institutes of Technology, in making a submission on the preparation of the National Development Plan, proposed that a collaborative consortium of Institutes could support the development of remote and distance learning and multi-mode delivery of higher education. The proposal outlined that, in this way, new groups of students could be afforded access, particularly those remote from main campuses and those that are disadvantaged, such as students with disabilities.

Recent International Context

The international context in open and distance learning in higher education is most interesting.

The OECD publication, **Redefining Tertiary Education** (1998), identifies the possibilities for open and distance learning:

> *"Of great potential significance… is distance education. The costs of initial design and development are very high… but probably the greatest barrier… is that off-campus, part-time study is regarded as "second best" or even quite inapplicable in certain fields. Successful experience over considerable periods of time in several countries should be sufficient to refute these opinions, yet the spread of distance education… has not been rapid across the OECD area…"*

The issue of increasingly global trade in higher education services is very relevant. The GATT discussions on trade are being broadened to include services and this includes education issues as well. An international free trade market in education in the coming years is being developed and this will impact on higher education in Ireland.

SOCRATES is the European Community action programme for co-operation in the field of education. Open and Distance learning made its first official appearance in community educational programmes in this programme in 1995, building on the 1991 Memorandum on Open and Distance Learning in the European Community. The Socrates programme aims at developing the European dimension in education and at enhancing its quality, through partnership across national boundaries. Under the Socrates II Programme, the Minerva Action seeks to

promote European co-operation in the field of Open and Distance Learning (ODL) and Information and Communication Technology (ICT) in education. The Action has three main objectives, (1) to promote understanding among teachers, learners, decision-makers and the public at large of the implications of ODL and ICT for education, as well as the critical and responsible use of ICT for educational purposes; (2) to ensure that pedagogical considerations are given proper weight in the development of ICT and multimedia-based educational products and services; and (3) to promote access to improved methods and educational resources as well as to results and best practices in this field. The main focus of proposals has been to support the development of innovative practices or services.

The biggest international development in recent years has been in relation to virtual education. Speaking at a Conference in Dublin City University on 25 January, 2000, Professor Ted Marchese outlined the pace of developments in recent years, focusing principally on experiences in the United States. He highlighted, in particular, the major developments in recent years in the United States along the following lines:

- In 1997/98 the main focus was on converting existing distance education and other courses to web based programmes
- In 1998, the focus changed to the emergence of consortia of institutions developing virtual courses
- In 1999, major international firms with education/training-related branches have formed their own virtual third-level institutions. Consortia of institutions are developing partnerships/sponsorships with major companies to market and develop virtual education. There is an increasing focus on marketing modules of courses which have been developed by involving a high profile academic
- Now 44% of higher education institutions offer some courses at a distance and 2% of all students in the United States undertake courses at a distance.

In Australia, in 1998, the Department for Education, Training and Youth Affairs published "New Media and Borderless Education – A Review of the Convergence between Global Media Networks and Higher Education Provision", a study undertaken by their Evaluations and Investigations Programme. The report focuses on a sample of corporate universities by examining and testing the available evidence for the interest and involvement of global media and communication networks across borders. The report concludes that "while there is a good deal of hype relating to the involvement of global media networks in higher education, there is currently little evidence of this involvement, and, at least in the declared strategies of the media networks, little evidence of involvement beyond current interests in the carriage of educational content produced and controlled by other providers". The report adds that "the use of technology and new media is in many cases still in its experimental stages. While it is facilitating expansion into distance education by many providers (including traditional

universities) and brokers, such as the Western Governors University in the United States, and the rhetoric is global, the focus is in most cases at this stage on a local or at best national market. This may well change in the future, as programs become established and appropriate technological infrastructure becomes more widely available".

In the United Kingdom, the Higher Education Funding Council for England, working in partnership with the other UK higher education funding bodies, launched a collaborative project on 15 February, 2000. It is designed to give UK higher education the capacity to compete globally with the major virtual and corporate universities being developed in the United States and elsewhere. The project aims to expand the UK's share of the overseas higher education market, and increase the range of continuing professional development and vocational courses in the UK.

The key characteristics of the project are:

- It will establish a new vehicle for delivering higher education programmes through web-based learning.
- That vehicle would be jointly owned, established and operated by a consortium of higher education institutions, working with private sector and overseas partners. The project is not designed to set up a new, self-standing institution, but will draw on the expertise of existing institutions.
- It will focus on meeting expanding demand for higher education programmes both in the UK and overseas.
- It will be established on a scale that will enable it to compete internationally.
- It will be established with a central core of founder members, but also involving other higher education institutions who wish to take part and who can demonstrate that they have a high quality contribution to make.
- It will be identified as a provider of the highest quality, both in its programmes and in the student support structures that underpin them, maintaining and enhancing the international reputation of UK higher education.

In Volume 11, No.2 of Higher Education Management (OECD, 1999), there is an interesting article entitled "The Virtual University and Educational Opportunity: Panacea or False Hope?" by Lawrence E. Gladieux and Watson Scott Swail of the College Board. The article concludes that "the virtual campus may widen opportunities for some, but not by and large for those at the low end of the socio-economic scale who have traditionally been underrepresented in higher education. Virtual space in infinite, but it does not promise universality or equity, nor is it appropriate for many students whose experience with technology is limited - and who might benefit far more from traditional delivery systems".

The case of California Virtual University is an interesting one. It opened in September of 1997 and with much fanfare, launching a website which would feature the online and distance education offerings of all California accredited colleges and universities. Having initially received extensive State funding to be set up, State funding was withdrawn in favour of a self-financing approach and the University itself does not operate as an independent organisation, although it maintains a presence on the Internet.

Description of Some Irish Activities in Open and Distance Learning
Oscail - the National Distance Education Centre

Oscail - the National Distance Education Centre was established in 1982 with the aim of widening access to programmes of study leading to qualifications at diploma, degree and postgraduate level, has now been operating for nearly 20 years. The annual budget for the Centre is around Ir£2.2m., including a grant from the HEAof Ir£600,000.

The Centre has worked in co-operation with third-level institutions in the development of a number of programmes. For example, the Bachelor of Arts/Diploma in Arts is the outcome of such collaboration. The programme, which was started in 1993, is accredited by six universities - Dublin City University, NUI Maynooth, Trinity College Dublin, University College Cork, NUI Galway, and the University of Limerick. In addition, the Centre has benefited from considerable support from the technological sector. The institutes of technology provide study centre facilities, tutors and examination facilities on the IT degree and other programmes of the Centre. Appendix A sets out more details on the Centre's programmes.

Current enrolment on programmes is as follows:

Enrolment on Credit Courses 1999

BSc. Information Technology	1,205
BA. Humanities	963
BNS. Nursing	150
MSc. IT for Accountants	198
MSc. Management of Operations	57
Total	2,573

The following table sets out information on awards made following completion of programmes up to the end of 1998:

Cumulative Awards (Initial Year of Award) up to 1998

	BSc. Information Technology (1990)	663
-	Diploma (1988)	983
	BA. Humanities (1996)	100
-	Diploma (1995)	281
	MSc. Information Technology for Accountants (1997)	8
-	Post-graduate Diploma (1992)	194
-	Post-graduate Certificate (1995)	331

Some information on the profile of the students and graduates of these programmes is available. The mean age of all students on the BSc programme in 1999 was 29 (it was 34 in 1998 and 36 in 1997). On the BA programme the mean age of students was 42 in both 1998 and 1999. 20% of students on the BSc programme in 1999 were female, compared with 71% on the BA programme in the same year. The Centre is presently engaged in a research project one outcome of which will be to obtain more information on students.

In addition to credit programmes, the Centre has in the past provided a range of Continuing Education courses, to update the skills of managers and other workers (e.g. more than 7,000 professional accountants have completed courses). More than 1,000 students each year enrol for short non-credit introductory or bridging courses, prior to enrolling on credit modules leading to diploma and degree awards. Total registrations in 1999 - credit and non-credit - exceeded 3,500.

For many years an Advisory Council – the National Distance Education Council was in place to advise the Centre on its activities. The Council had a broad representation of third-level education institutions and other interested parties, but has not been in operation since 1991.

The Centre has played a key role in developments at European level. It is a founding member of the European Association of Distance Teaching Universities, its staff have taken part in consultation processes leading to the preparation of the Memorandum on Open and Distance Learning in the European Community (1991). This

Memorandum was instrumental in having a commitment to supporting open and distance learning inserted into article 126 of the Maastrict Treaty. The Centre regularly hosts study visits by senior academics and national policy makers interested in its model of distance education. The Centre has carried out research on the information and communications technologies, policies, cost-effectiveness and the role of EADTU Eurostudy centre concept. At present, in addition to continuing with established programmes, the Centre is bidding for funding under the Minerva scheme both as a partner with others (Brunel, UK and Tiblisi, Georgia), and as a project originator.

Examples of Activities in Third-Level Institutions

Some third-level institutions have open and distance learning programmes in place which operate independently of the Centre. Some examples are set out below.

The School of Pharmacy in Trinity College Dublin introduced a two-year distance-learning course leading to the Diploma in Pharmaceutical Manufacturing Technology in 1990. The course is aimed at non-Pharmacy graduates working in the Irish Pharmaceutical Industry who wish to satisfy the educational requirements defined in EU Directives. The course is a two-year distance learning course running from January to December each year, comprising eight modules with parallel assignments per annum. Students are required to attend practicals, review sessions, manufacturing site tours and complete a project. Assessment is by continuous assessment and annual written examinations in December of each year.

The Centre for Project Management (CPM), a constituent unit of the University of Limerick, was established in 1991 and is the only centre of its type in Ireland. The CPM is classified by the University as a 'centre of excellence' and endeavours to bring excellence to the learner by providing high quality and relevant postgraduate and post-experience education in the area of Project Management. The CPM provides a Masters course in Self-Directed Learning which is primarily a self-study course. It is organised in a modular format and can be completed in a minimum of two years. Students are arranged in groups with each group assigned an experienced tutor who is someone living within, or close to, the groups regional area. Students then attend Tutorials and Examinations in an appointed centre that will be managed by the tutor. The appointed centre will be as close as possible to the learner's home base and within the learner's regional area. A similar web-based programme is to commence in 2001. Paralleling this, a diploma in the same area has also been developed.

Virtually all of the Institutes of Technology are involved in open and distance learning with delivery modes including correspondence, WWW, video-conferencing and satellite. In some instances, the programmes are

specially funded for a limited duration. For example, in Cork Institute of Technology, the DEIS Department, which was established in 1996, has a mission to innovate in education for quality and access. DEIS operates to support and assist the Institute and its Departments in developing the pedagogical and general educational aspects of its provision to meet the changing needs of its client group and in making this provision available to an increasing range of clients. Among the goals of DEIS are:

- to develop and produce resources which enhance the learning experience & enable the dissemination of information, via both traditional and ICT modes
- to research and develop new methods of delivery and support for increasing access to the education provision of the Institute.

DEIS has undertaken a number of projects in relation to these goals and these have included:

- Development of materials in open learning format for National Certificate in Electronic Engineering
- Development of a web-based open learning guide for staff and students in planning, realisation and certification of transnational placements
- development workshops in open and distance learning, material preparation and video-conferencing for staff of the Institute
- pilot delivery to Clonakilty Agricultural College of Teagasc course materials
- Co-operation with Sheffield-Hallam University in satellite delivery of course material.

A further example is Institute of Technology, Tallaght, which has developed, in conjunction with Intel, modules of the National Diploma in Electronics that is being piloted with tutor/student interaction via videoconferencing. Training programmes have also been developed in Pharmaceutical Manufacturing.

The Dublin Institute of Technology is involved with the African Virtual University. The aim of the African Virtual University is to deliver degree standard and specialised courses via satellite uplink into various participating sites in Africa. It is a partnership project involving the World Bank, the DIT, two third-level institutions in the United States and the sites in Africa. The DIT has been involved in the delivery of Physics, Introduction to Statistics and Introductory course to the Internet.

The Distance Learning Unit in the Dublin Institute of Technology was established in 1991 to deliver distance learning as required to industry/services nation-wide. Its prime objective is to create a more flexible approach to providing education and training. The Unit offers sixteen modules appropriate to Healthcare Management and offers a joint certificate in Maintenance Technology with City and Guilds to upgrade skills and knowledge for technical personnel with an emphasis on maintenance and production personnel.

To date six Irish led projects have received funding under the open and distance learning action of the Socrates programme, of which two were at third level. The National Distance Education Centre carried out case studies on the sustainable use of technology in open and distance learning and University College Dublin produced a multimedia educational product in chemistry in co-operation with a publishing company. Irish partners have also participated in over thirty projects led by partners in other countries. Examples of these projects include Trinity College Dublin, which participated in the development of a distance education post-graduate programme in women's studies, led by Norwegian partners, and Waterford Institute of Technology, which produced a programme aimed at training pre-school educators.

Issues Arising

The Minerva project uses the following definition for open and distance learning in higher education:

> *"Open and distance learning involves the use of new methods (both technical and otherwise) to improve the flexibility of learning in terms of space, time, choice of content, teaching resources, and/or to improve access to educational systems from a distance."*

For the purposes of the Symposium, the aim is to take this broad view on the definition of open and distance learning in higher education. Traditionally, the view would have been that open and distance learning involved individual learning with pre-prepared materials, combined with some interaction among learners as appropriate. This would be typical of the type of courses with which the National Distance Education Centre is involved. Of course, open and distance learning also has the potential to be introduced as part of the learning process in campus-based traditional higher education programmes.

Given the context set out above and the provision that is already in place, the aim of the Symposium to look at the following issues:

- What are the potential roles of Open and Distance Learning in Higher Education in Ireland and the issues arising?
- How should these issues be addressed?
- What roles might Oscail - the National Distance Education Centre play in the development of open and distance learning in higher education in Ireland?

Following this, the key issue arising is how should the potential of open and distance learning in higher education in Ireland, including specifically the role of Oscail – the National Distance Education Centre, be progressed.

These issues are being considered in an Irish context. There is an increasing international debate about many of these issues, some of which is outlined above, and increasing discussion in Ireland about the potential for developments here.

Clearly there are threats and challenges arising for third-level institutions in the context of open and distance learning. There are challenges internal to each institution in terms of facilitating existing staff and students. There are challenges at a national level in developing a national approach. This raises the important issue of competition versus collaboration for institutions. If we are entering a new market for new types of learners, there will indeed be competition among institutions to meet the needs of learners. At the same time, from a national perspective, it is legitimate for the State to expect some co-operation among institutions. The difficulty lies in trying to balance these competing tensions.

Further opportunities and challenges arise at an international level. This is most apparent in virtual and Internet-based education where there have been many recent developments, some of which are outlined above. It is also the case in other forms of open and distance learning – for example, the (UK) Open University is clearly providing a service to many students here.

The Symposium must aim is to identify the potential roles of open and distance learning in higher education. There are many possibilities arising in this regard and the Symposium will need to address a number of related questions. A key question is to consider the development of a national approach to these issues.

Who are the potential learners for open and distance learning off the campuses of third-level institutions?

As the context sets out, possible groups of learners have been identified as potential beneficiaries from the development of open and distance learning include mature students, those at work seeking upskilling, those seeking to enter the work-force and disadvantaged students. There may also be a potential market for international students.

It is not clear how potential providers of open and distance learning can identify the market for such learning among these groups. The traditional approach has been to identify a given market through consultation with business and research and to aim to provide a programme to meet that need. This approach can work well in specifically defined areas such as where skills needs arise in a particular industry. Continuing education and training in such cases can be either full-time or part-time, but would be predominantly part-time. Much of it is

postgraduate and can include continual upgrading and updating of professional and technological qualifications to maintain relevance to workplace.

It is of note that the **Report of the Review Committee on Post-Secondary Education and Training Places** has recommended increasing the number of higher education places for mature students, with a particular focus on part-time students and has specifically recommended that before the places are provided the demand should be validated by appropriate market research on the target population to determine the extent of demand, the courses sought and the most appropriate method of provision. It is apparent that a principal gap for the adult population is at the upper secondary level. As the Leaving Certificate is still a crucial gateway into much post-secondary education, those without a Leaving Certificate face a huge hurdle.

The issue of the relevance of open and distance learning to the disadvantaged in society is relevant. "**The Virtual University and Educational Opportunity: Panacea or False Hope**?" by Lawrence E. Gladieux and Watson Scott Swail, is quoted above. It states that "Virtual space in infinite, but it does not promise universality or equity, nor is it appropriate for many students whose experience with technology is limited --and who might benefit far more from traditional delivery systems". The extent that this applies to other areas of open and distance learning is relevant. It is of note that the National Distance Education Centre introduced a free-fees scheme in 1998 - the OSCAIL Access Scheme, through which twenty-five places were made available on each of the two degree programmes linked to the Centre to economically disadvantaged individuals. Indications are that the completion rates for these students are similar to those for other students on these programmes.

Clearly, an issue in identifying the potential students for distance and open learning programmes is the financial support available to students on such programmes. The present student support system does not support part-time students, other than tax relief for undergraduate fees and as a result of the Finance Bill, 2000, there will be tax relief for post-graduate fees. Students on part-time and open and distance learning programmes have to meet the normal costs associated with participation such as the costs of textbooks and travel as well, as the course fees. These can be substantial. The question arises as to whether the potential student population for distance and open learning programmes would be different if different financial support was in place.

The OECD publication, **Redefining Tertiary Education** (1998), notes that "funding policies in some countries have been less favourable to part-time than to full-time students. In the perspective of lifelong learning for all, it is essential that part-time study and various combinations of work and study be given greater encouragement".

The Steering Committee on the Future Development of Higher Education (1995) pointed out that in 1992/93, for instance, almost 90 per cent of part-time students were in employment. About 58 per cent were on certificate or diploma programmes, 25 per cent on undergraduate degree programmes and 12 per cent on post-graduate courses. There is little or no data on the extent to which those at work have their fees paid by their employers. A strong equity argument has been forthcoming from those favouring free fees for part-time students, as they feel that they do not have access to higher education on the same terms as full-time students. On the other hand, were free fees to be introduced, it is likely that the State would be displacing some investment by business in higher education.

There would probably need to be detailed analysis of the potential learners for open and distance learning. Furthermore, the question arises as to how third-level institutions should address the needs of such potential learners. If all institutions focussed on the needs of a particular group of learners, other groups may be excluded. Consideration needs to be given to the best ways of addressing such issues.

How can open and distance learning help in the development of flexible curricula in existing and future programmes run on the campuses of third-level institutions?

Why would institutions consider having elements of open and distance learning within programmes run on their campuses? The principal reason why this could be considered would be that it might be of benefit to the students on the programmes through expanding their learning potential. If open and distance learning is to become a real part of lifelong learning, it would also assist such students in realising their potential choices in education at a later date. Consideration of this issue would also be most helpful in moving along a debate in higher education about teaching and learning in higher education and the need to consider the best ways to achieve goals in these areas.

Many existing programmes in third-level institutions could be developed so that part of the learning on the programme is based on open and distance learning. There are a number of ways that this can develop, for example, it could involve the development of learning materials for students on the Internet which mean that the students are not required to attend the institution as regularly as at the moment. It is interesting to note in this regard that the State of Washington in the United States has set, as a strategic objective, that "by 2010, the average full-time equivalent student will receive 1.5 lecture contact hours per week through e-learning".

In terms of the continual development of new programmes, it is possible that as these courses are being developed and renewed regard could be had to the potential of part of the programmes being developed on an

open and distance learning basis. There is potential for access to third-level institutions to be expanded if there was a reduced requirement for presence of students on the campus of third-level institutions on a daily basis. Even where there are elements of open and distance learning in a programme, there would probably need to be significant opportunities for groups of students to meet and discuss ideas and to be facilitated in this. Furthermore, there would be suspicion if the use of open and distance learning as part of the traditional on-campus education of students was being encouraged, not for its potential in assisting students to learn or in widening access, but rather for the purpose of increasing the intake into third-level institutions.

Other issues arise such as the need to ensure that courses which include an element of open and distance learning are developed in a way which has full regard to the appropriate pedagogical use of open and distance learning. It is likely that this may be more expensive and time-consuming than the development of typical face-to face courses that do not involve open and distance learning at present.

Staff in third-level institutions would need to develop the appropriate skills in order to help them in the design, development and delivery of courses that involve more diverse types of provision. A further issue is that open and distance learning programmes may require higher levels of administrative support than is the case for traditional face-to face- programmes.

What is the potential role of virtual higher education in Ireland?

Related to the questions that are addressed above is the question of the potential of virtual education in Ireland. Essentially, virtual or Internet-based education is one of the various modes available for open and distance learning and most of the issues raised above apply to virtual education. There have been many international developments in this regard in recent years and it is appropriate to consider this issue in an Irish context.

It is not clear at this stage that international developments in virtual higher education would have an immediate impact in Ireland. However, it is most likely that there will be an impact in the medium term and with increasing access in Ireland to the Internet, clearly there is potential for development.

While this is an issue for individual third-level institutions to consider in their own right and for possible action among groups of institutions, from the State's point of view, it is appropriate to consider whether national objectives need to be defined. Should initiatives be undertaken by institutions, it would be appropriate to expect some co-ordination of these so as to facilitate access by learners to programmes. There have been calls for the establishment of collaborative initiatives in virtual higher education in Ireland. If no actions take place in Ireland,

it is very likely that the international developments will ensure that there are still increasing opportunities for virtual learning in Ireland. Much of the activity in virtual education is based in the United States and clearly, through the use of the English language, much of what is available there is potentially available here. However, it would also be the case that such material would not also be tailored to the specific needs of Irish learners.

Based on international experiences, there clearly is potential for some partnerships between third-level institutions and industry in the design and delivery of virtual education programmes. A relevant issue to be considered is whether Irish third-level institutions should seek out such opportunities.

There would, of course, be pedagogical issues to be addressed in the development of virtual education programmes or in the development of programmes with an element of virtual education. It may be useful for institutions if such issues did not need to be addressed by each institution in isolation and if mechanisms were put in place to enhance co-operation and the spread of expertise in this regard.

Of course, there are also clearly cost issues arising in the consideration of developments in this regard. Learners would need access to up-to-date facilities. There would be a need for resources to develop appropriate new programmes or to build upon existing ones. There would be a need for tutorial support, as with open and distance learning generally.

How can learners be certain of the quality of open and distance learning programmes?

The quality assurance system that is developing in higher education in Ireland is underpinned in legislation particularly in the Universities Act, 1997, and the Qualifications (Education and Training) Act, 1999. These provisions apply to the programmes of the universities, the institutes of technology and any other programmes certified nationally.

Mechanisms will need to be developed by the appropriate providing institutions and awarding bodies to ensure that the quality assurance procedures are up to date with the diverse modes of the delivery of courses. There have been many international developments in this regard and there will be a need for institutions and the new bodies that are to be set up under the Qualifications (Education and Training) Act to be cognisant of these developments and to ensure that appropriate procedures can be developed for implementation in this State.

A recent article in the Chronicle of Higher Education has indicated that open and distance learning is as effective as classroom instruction:

"Is distance education better or worse than traditional classroom instruction? Neither, says Thomas L. Russell, who tracks studies of distance-education methods. Most studies he's seen show no difference in the effectiveness of the two media.

Mr. Russell, who is director emeritus of instructional telecommunications at North Carolina State University, had hoped to find scientific backing for his initial hunch that distance education is superior to traditional methods. Though a few studies showed just that, the majority found that the results were about equal, no matter what kind of gadgets or tools were used to teach students."

It is most important that there is no perception that the status of an award is in any way linked to the mode of delivery of a programme and the confidence of learners in this regard will be most important in the development of new programmes and modes of delivery. International experience in virtual education appears to show that the learner's familiarity and confidence in the providing and awarding body is a key issue and that the involvement of high profile academics in the development of programmes is becoming more common.

How should Institutions be encouraged to involve themselves in open and distance learning?

In the HEA sector, the recurrent grant allocation recognises on-campus part-time higher education students, although not on the same basis as for full-time students. However, continuing education and training is expected to be self-funding to a large extent, e.g. through company sponsorship of employees, and HEAsupport has been geared towards assisting with start-up costs for innovative approaches. A big issue for the Institutes of Technology is the self-funding requirement for all part-time education and the extent to which this may constrain development.

The Commission the Points System has identified a number of relevant issues in this regard:

"The definition of part-time education needs to be revisited. In the context of promoting lifelong learning and addressing skills needs (of individuals, the economy and society), there should be a move away from a focus on employment status to define whether a person is a part-time or full-time student. Instead, the focus should be on equipping those without qualifications or with inappropriate or inadequate qualifications. Policies currently based on what seems to be an imperfect definition also require review. These policies include the differential provision of resources to institutions and within institutions and of support to students depending on the classification used. The review should take account of factors such as continuity, the promotion of equity, the integration of part-time students into third level and the benefits of part-time education for the economy."

Clearly, third-level institutions will naturally focus on the programmes for which the support from the State or from other sources is maximised and this raises the issue of how the State should encourage third-level institutions in developing their provision in open and distance learning. If it is appropriate that certain modes of delivery need to be encouraged, it is appropriate that consideration be given to mechanisms to do this.

The issue of how institutions can encourage their staff to be innovative in open and distance learning is also relevant. Staff need to be encouraged to be innovative in the diversification of learning methods and open and distance learning is one of these. However, it is the case, that much of the potential tutorial contact time may be at evening times and at weekends, which is outside of the normal working hours of many staff in higher education institutions.

How should third-level institutions co-operate in open and distance learning?

There are a number of factors relating to open and distance learning where consideration of co-operation between institutions is relevant.

There are pedagogical issues to be addressed in the development of such learning. It may be useful for institutions if such issues did not need to be addressed by each institution in isolation and if mechanisms were put in place to enhance co-operation in this regard.

In relation to accessibility to learners, it would clearly be useful if there was a way for learners to be informed of all of the open and distance learning opportunities available in the State, rather than needing to check with each institution on an individual basis. Indeed, the co-operation of institutions in designing and delivering programmes would also be useful. Such co-ordination may also be useful in marketing programmes outside the State. The International Education Board – Ireland could potentially have a role here. It would be a duplication of resources if a number of institutions were all designing related courses that are to be available to students throughout the State. In addition, there are opportunities for collaboration between institutions in providing the support for open and distance learning programmes when they are running. The location of the many third-level campuses in the State provides for an opportunity for learners on various programmes to meet and discuss issues of relevance to programmes.

These issues also raise the potential for regional alliances in Ireland in relation to open and distance learning. Higher Education alliances on a regional basis are now developing in Ireland and the potential role of open and distance learning within these alliances is relevant.

Accordingly, issues arising include how institutions should be encouraged to co-operate in the areas that are discussed. From a national perspective, it would be necessary to avoid duplications of effort and any consideration of incentives to institutions could have regard to such issues.

What roles might Oscail - the National Distance Education Centre play in the development of open and distance learning in higher education in Ireland?

The National Distance Education Centre has played a key role in the development and co-ordination of open and distance learning in Ireland. The issue arising for discussion is how the roles of the Centre might be developed in the future. Clearly, there has been substantial investment from the State in the development of the Centre. There is a need to ensure that the Centre has a role in the development of open and distance learning as it has accumulated a substantial body of expertise in the development and delivery of open and distance learning programmes.

The Centre clearly has potential to continually involve itself, in co-operation with third-level institutions in the development and delivery of open and distance learning programmes. The manner in which it will co-operate with third-level institutions is one that needs consideration. In addition to its role as a major provider of open and distance learning programmes, the Centre could develop a role where it co-ordinates the availability of information on open and distance learning opportunities in the State. It could involve itself in marketing open and distance learning programmes both inside and outside the State. Potentially, it could develop a role in working with institutions to identify possible areas for the development of future programmes and assist in the development of programmes. The Centre could continue to co-ordinate the development and delivery of some open and distance learning programmes themselves. At present, for example, the Centre does not make awards itself nor does it seek the validation of its programmes from other validating bodies. Rather, it operates in co-operation with third-level institutions that make the awards in respect of the courses. The Centre seeks accreditation of programmes through the procedures of particular institutions, e.g., the BSc in IT leads to an award of Dublin City University and the BA in Humanities leads to awards each institution which recognises it and has contributed to its development. In the past the Centre has also engaged with a professional body (the Institute of Chartered Accountants) in order to ensure that relevant courses meet professional requirements.

The possible development of the Centre as a resource base which third-level institutions could draw upon would need to be considered. A rationale for this is that it could be appropriate to have a central or national expertise in relevant areas so that all of the issues do not need to be reconsidered each time an institution begins to work on the development of open and distance learning. Expertise is already available or could be expanded in the

Centre in a number of areas such as open and distance learning (including virtual learning) pedagogy, delivery of programmes, support for learners, tutor induction, training and support and monitoring of quality. Indeed, the Centre could potentially expand its research role in some or all of these and related areas. The potential role of the Centre in the development of virtual education, based on the experience gained from its new Internet-based MSc, would also need to be considered.

The status of the Centre is a key issue. The Centre is located at Dublin City University and its income, from fees and from State funding is managed by the university Finance Office as part of the services provided for the Centre for which the Centre pays the university. Other services provided by Dublin City University include the services of the personnel department, the library and estates and maintenance. Consideration could be given to changes in the organisational links of the Centre to ensure that it could further develop to assist all third-level institutions.

One way this may be achieved could be through the introduction of a structure to oversee the work of the Centre or an advisory body. Either of these could involve representatives of third-level institutions. Previously there had been a large advisory Council in place, at this stage there may be a need to consider if there should be a less-unwieldy mechanism in place.

The status of the Centre is also relevant to the ability of the Centre to actively respond to issues as they arise, for example, should the Centre employ staff directly and make independent decisions on such matters? Another possibility would be to retain a small core staff and to have regular secondments from third-level institutions to work on specific initiatives. The issue of the financial support for the Centre is also relevant in this regard.

If the view is that the Centre should have an expanded role, to assist in the co-ordination and development of open and distance learning, the issue arises as to what the appropriate level of State assistance should be for the Centre.

A further relevant issue is the possibility of collaboration between the Centre and other international providers of open and distance learning programmes, such as the (UK) Open University and Internet-based providers of third level programmes in Europe or North America.

Summary of Issues Arising

- What are the potential roles of open and distance learning in higher education in Ireland and the issues arising?
- What are the threats and challenges arising for third-level institutions in the context of open and distance learning?
- Who are the potential learners for open and distance learning off the campuses of third-level institutions?
- What is the relevance of open and distance learning to the disadvantaged in society?
- Is the financial support available to students on open and distance learning programmes appropriate?
- Where can the balance be found in collaboration among institutions and competition among?
- How can open and distance learning help in the development of flexible curricula in existing and future programmes run on the campuses of third-level institutions?
- What is the potential role of virtual higher education in Ireland?
- What is the potential for partnerships between third-level institutions and industry in the design and delivery of virtual education programmes?
- What pedagogical issues with open and distance learning?
- How can learners be certain of the quality of open and distance learning programmes?
- How should institutions be encouraged to involve themselves in open and distance learning?
- Is there a need for the development of mechanisms for the resourcing of institutions to develop open and distance learning programmes?
- How can institutions encourage their staff to be innovative in open and distance learning is also relevant?
- What are the policies and structures that should be put in place at national level?
- Is there a need for co-ordinated marketing?
- Is there a need for the co-ordination of provision?
- Is there a need for a national resource/support centre for open and distance learning?
- What roles might Oscail - the National Distance Education Centre play in the development of open and distance learning in higher education in Ireland?

Conclusion

This background and issues paper has been drafted to help in ensuring that there is a full debate at the Symposium. The paper is being circulated to all those who are attending the Symposium and is available at the website of the Symposium which is linked to the website of the Higher Education Authority (www.hea.ie).

In advance of the Symposium, comments on the issues raised in this paper would be welcomed. In particular, if it is considered that there are gaps in the issues that have been identified in the Paper, comments would be welcome. Any comments made on the paper will be available to all. Please send any comments to Maura O'Shea, Higher Education Authority (phone (01) 6612748, fax (01) 6610492, or, preferably, email maura@hea.ie) by Friday 24 March, 2000.

Arising from the symposium, it is the intention to publish a report on the symposium which will include the formal presentations made to the symposium and a summary of the outcome of the Symposium.

It is the intention of the Higher Education Authority to consider the issues that are raised at the Symposium and, in consultation with the Department of Education and Science to develop an approach at national level in relation to open and distance learning in higher education Ireland.

Appendix A - Information on the activities linked with the National Distance Education Centre

Programmes

Details of the programmes offered by the Centre are set out below. The information given relates to enrolment in 1999 and awards made up to the end of 1998.

Bachelor of Science/Diploma in Information Technology

The aim of this programme, which was introduced in 1986, is to equip students with degree level competence in the new information technologies and with a critical appreciation of their potential application to the processes of innovation, management and administration. There are currently over twelve-hundred (1,200) students registered on this programme and, to date, there has been almost one-thousand (1,000) diplomats and over six-hundred and sixty (660) graduates.

Bachelor of Arts/Diploma in Arts

This programme is the outcome of collaboration between all the universities in Ireland, which came together for the first time to develop a common degree programme. The programme, which was started in 1993, is accredited by six universities - Dublin City University, NUI Maynooth, Trinity College Dublin, University College Cork, NUI Galway, and the University of Limerick. Modules in Literature, Philosophy, Psychology, Sociology and History are currently presented. It is envisaged that the other subjects will be added to the programme develops. There are currently almost one thousand (1,000) students registered on this programme and, to date, there has been almost three-hundred (300) diplomats and, since the first three graduates in 1997, there has been one-hundred (100) graduates.

Graduate Programme in the Management and Applications of Information Technology in Accounting

A graduate programme in the Management and Applications of Information Technology in Accounting was introduced in 1990 in co-operation with the Institute of Chartered Accountants in Ireland. The primary objective of the programme is to provide post-graduate level competence for accounting professionals in key areas of Information Technology. The programme is an example of how, through the co-operation of a distance teaching institution and a professional body, real needs for continuing professional development can be addressed. The programme is presented at three levels: graduate certificate, graduate diploma and masters. There are currently almost two hundred (200) students registered on this programme and, to date, there has been over three hundred and thirty (330) certificates awarded; almost two-hundred (200) diplomats and eight Masters.

Bachelor of Nursing Studies

In co-operation with An Bord Altranais (the Irish Nursing Board), a Bachelor of Nursing Studies programme was introduced in 1997. This programme offers registered nurses, with the appropriate prior learning, an opportunity to advance their knowledge of the profession of nursing in the context of changing definitions of health care. Distance education is particularly suitable for members of the nursing professions given their varied working hours and their geographical dispersion. This programme has currently some one hundred and fifty (150) students enrolled.

Graduate Diploma/MSc in the Management of Operations

A graduate programme in the Management of Operations was presented for the first time in Autumn 1997. The programme is aimed at managers in the manufacturing, processing and service sectors who come from either a business or a science/engineering background. The programme comprises a range of cross-disciplinary modules designed to equip participants with the knowledge and skills required in dynamic, technology-intensive business environments. This programme has currently almost sixty (60) students enrolled.

Introductory Modules

As entry to undergraduate BSc and BA degree programmes is open to adults aged over 23 years regardless of previous qualifications, the Centre has also developed short introductory non-credit modules to assist adults returning to study. These modules aim to develop study skills, to allow students to test the suitability of the distance learning method for their learning style, and to decide if the area of study is appropriate to their needs and interests.

Summer Courses in Information Technology

In Summer 1998, responding to a request from the Department of Education and Science (arising out of a recommendation of the Task Force on the Supply of Technicians), the Centre presented two modules in information technology to over 200 unemployed people and recent graduates in mixed mode format, in co-operation with the Institutes of Technology.

Appendix 2

Responses to Background and Issues Paper

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Helen Guerin,
Director, Audio Visual Centre, University College Dublin.

I put pen to paper to draw attention to the omission of broadband in the position paper set out by the Higher Education Authority "Symposium on Open and Distance Learning". While I agree to a greater or lesser extent with most of what has been stated in the above paper, I feel it would be a serious error to neglect the endless possibilities provided by the uses of broadband technologies. This is not to say that they are the only suitable mode of delivery for every subject matter, however, in certain fields, for example clinical medicine, broadband is the only realistic option.

There is a place for both broadband and narrowband, as there is a place for Institutes of Technology and Universities. One is not necessarily better than the other, but rather they serve different learning needs. This is also the case with different technologies, broadband do some things much better than narrowband. For example, broadband is the best option for delivering live sound, vision and data for teaching surgery, whereas narrowband is extremely efficient at searching data-bases, and asynchronous data retrieval. However, the beauty of broadband is that there is already endless capacity and it costs the same to reach 1 student as to reach 200 million. Promoters of the internet argue that more capacity is coming and that DSL, ADSL and xDSL have increased its functionality enormously. However, as internet capacity increases, so will its users, and the ensuing traffic jams will put the tailbacks on Stillorgan dual carriage to shame. While we await the promised developments in internet capacity, the AVC in UCD are currently by-passing the blockages in the internet by accessing the internet via satellite. This allow us capacity of up to 40 Mhz bandwidth, enabling us to download very large graphic and text files instantaneously.

One could argue the pros and cons of different delivery systems ad infinitum, however, when all is said and done, we come back to the real issue facing educators today, which is the quality of the teaching and the course content. Therefore, before we move away from the more traditional teaching styles and embrace educational technology there are a number of issues which must be addressed:

- time and costs involved in preparing technology enhanced materials
- quality of the teaching and content development
- most suitable delivery mechanism for the material and for the student
- support for teachers and learners using ODL
- individual universities and institutes style and approach to ODL.

Fortunately some research has been done on the above and this should inform our thinking. For example we know that the development of quality tele-courses and web-based training take between 200 and 1000 hours for just 1 student contact hour of technology based education.

This month our colleagues in EUROPACE have initiated a new course for educational institution entitled "Improving Quality Assurance of Open and Distance Learning" in order to improve the quality of teaching pedagogy and learning materials used in ODL.

Over the past 5 years the AVC, with the support of the European Commission has invested over 1 million ECUs in researching technology enhanced education and is currently piloting a delivery system that exploits the best of broadband and narrowband using an in-built PC card. We consistently harp on the need for the technology to be simple to use and accessible to all, yet the position paper above ignores the television as a mode of delivery. The AVC has been using television successfully for nearly a decade and has been delivering the Certificate in Safety and Health at Work to numerous ITs and private industry for the past 7 years.

In relation to supporting teachers and learners using ODL, resources must be made available, both financial and human in order to develop these materials. Also, tutorial support and technical support needs to be available to learners and teachers in order to effectively use ODL. It is not a cheaper option for second-class students. Moreover, lecturers must be given credit for producing these materials. Currently this is not the case in every institution.

Finally, individual universities and institutes must believe in ODL as a valid form of education and not consider it to be a second-class citizen. Until this attitude changes, lecturers will not be encouraged to invest time and effort in developing quality teaching materials to ensure the learner receives a quality education.

Pat Mc Laughlin BSc MSc CEng FIEI MIEE
Head, School of Engineering
IT Tallaght

One thought that struck me on reading the ODL "Background & Issues" paper is that there is no mention of strategic partnership with infrastructure providers such as Eircom or NTL.

In the area of ICT enabled ODL it is imperative that education providers partner (or at least regularly talk to) infrastructure providers as these companies control bandwidth availability, access pricing and other key elements in the ODL periodic table!

I would like to have seen an input from this sector at the symposium simply to let us know their plans for the future.

Kevin Hurley,
Director of Adult Education, UCD

Comments

Definition:

Open and Distance Learning (ODL) as a strategy for educational opportunity is often treated as synonymous with provision for adult learners. These comments come from this perspective. In this regard the Minerva definition is useful in relation to modalities but the reference to function or rationale is relatively incidental. The following attempt at an exposition seems more relevant to the challenges facing higher education in Ireland at this juncture:
'Open Learning is most frequently used to describe a type of education provision that Lewis (1986) characterised as being learner centred. By being learner centred individuals take responsibility for their own learning so they can study what and how they want at a time, place and pace suited to themselves. It is designed to remove the barriers associated with conventional education such as qualification requirements, location and time of courses, fixed start and finish times, cost of travel and fees (Lewis 1986). Lewis (1995) groups the freedoms made possible by the type of education provision under two headings: choices in access (time, place and pace) and choices within the curriculum or course itself (content, mode of study, and method of assessment). Open learning, therefore, is a method of education that gives flexible access, choice and control to the individual. Arfield (1994) states that as well as being an educational philosophy open learning denotes a set of techniques for delivering knowledge and skills. These include the use of supported open learning packages and other resource-based materials, learning workshops, flexi-study, study circles and computer-based training (Lewis 1986; National Extension College 1989). Distance Learning, where the student learns using packages at a distance from the teacher, falls into this category and can thus be thought of as a branch of open learning (Holland 1990)

Open Learning therefore, is both an approach and a system for delivering education (McManus and Lyne 1992). Kelly and Keely, however, state that 'too much emphasis is often placed on open learning as a mode of delivery at the expense of the philosophical principles' (1992:4). Regarding open learning merely as the production and development of learning materials fails to take account of other dimensions of flexibility such as access, cost, recognition of prior learning, selection of modules, accumulation and transfer of credits and choice of assessment and content.' Ayer S and Smith C (1998) *Consumer Preference for Flexible Education,* Open Learning (13) 1.

This clearly establishes that the audience for open and distant learning is quite alternative to that which has traditionally accessed higher education, particularly in Ireland. It is an absent audience and while its members

are not 'absentees' in the normal voluntary sense attached to the term their non-participation requires that open learning, in the fullest sense of the concept, inform attempts to engage them.

Recent Irish Context.

In the light of the foregoing the issues being addressed would surely benefit from other references e.g.

(i) **the NUI Senate Policy Document 'An NUI Qualifications Framework for Lifelong Learning:** Access, Transfer and Progression' which has greatly energised those who have been advocating such developments and, in tandem, the Act establishing the National Qualification Authority,

(ii) **the Programme for Prosperity and Fairness, especially 4.1 Paragraphs 25 to 27:**

25. Places will be provided to support access by mature students to third level education, allied with the promotion of "adult friendly" policies.

26. A Group will be established, with appropriate social partner involvement, to examine and report on barriers to participation by mature students in higher education. The Group will advise the Department of Education and Science on the development of a co-ordinated framework to promote access by mature and disadvantaged students to third level education, building on the experience of current initiatives.

27. Participation by disadvantaged groups in third level education will be encouraged through the provision of significant additional investment. Flexible entry, delivery and accreditation arrangements, linkages with second level schools, actions to promote mature student participation and outreach, community education and support programmes will form part of the approach. Access, transfer and progression will be actively promoted within the context of the National Qualifications Framework.

(iii) **the National Development Plan, 5.59 and 5.142:**

5.59. Training activities to support lifelong learning will involve the provision of more open, flexible, opportunities for acquiring skills. These will build on the following components which are already underway:

- Multimedia Learning Centres in Training Centres;
- Training delivered through the Internet;
- Funding of own-time, own-choice, training for those on Community Employment; and
- Accreditation of Prior Learning.

5.142. The National Development Plan provision for capital expenditure on education and training infrastructure is £1.624 billion (2.062 billion). This will cover investment in primary and second level

schools, further education centres and third level institutions in the education sector as well as FÁS capital stock during the period 2000-2006. Such investment is necessary to ensure that education and training programmes and services meet the changing skills needs of individuals, society and Irish industry. The investment will cover buildings, new machinery and equipment and the use of information technology. This investment, in new technology in particular, will facilitate continuing education and retraining programmes, the development of new open learning and distance education packages, outreach programmes, access for disadvantaged and non-traditional student and rural and community development. A requirement of all expenditure on premises is that it will take place in a cost-effective manner which will provide a safe and healthy environment and will lead to improved access for people with disabilities.

In the same context the work done by Amarach in monitoring the pattern of Internet penetration provides pause for thought about its potential as a medium for Open and Distant Learning e.g. Mark Henry of Amarach, at a conference in December 1999:

> *'Irish people Online do not mirror the broader population. Of Irish Net users 45% live in Dublin, 66% are employed, 42% are college graduates (yet only 18% of the population are graduates), 58% fall into the ABC1 classification. Just 45 are homemakers. Only 35% of the population use PCs at all.'*

Recent International Context

It would appear that, at this side of the Atlantic, the rush to Web-based ODL is by private companies e.g. Smartforce. This is borne out by Frederick P. Wheeler who, in reviewing 'Web-Based Training', (Colin Steed, Gower, 1999), comments 'one of the main impressions gained from the book is that, currently, most web-based training is related to IT training'. *Open Learning, (14) 3, 1999.*

Issues

A discussion of the issues involved would seem to require that the original 'charter' of Oscail be revisited to establish if this continues to shed light on the contemporary environment. The phenomenal pace of change which has occurred in the interval since its establishment is well illustrated by the attempt at setting out a taxonomy of ODLapproaches early in the 1990s, well after that event.

Table 5.1 *Distance education approaches from low to high levels of teacher-student interaction*

Category 1	**Correspondence-based distance education**
	• Correspondence study based on print materials supported by audiotapes and/or videotapes (higher interaction)
	• Correspondence study based on print materials supported by broadcast signals (radio or television) but with no 'real-time' communication
	• Correspondence study based on print materials only (lower interaction)
Category 2	**Telecommunications-based distance education**
	• Two-way voice link, two-way video (full-motion) link (higher interaction)
	• Two-way voice link, two-way video (freeze frame) link
	• Two-way voice link, one-way video (full-motion) link
	• Two-way voice link, one-way video (freeze frame) link
	• Two-way voice link only (lower interaction)

Distance Education: New Perspectives, Keith Harry, Magnus John and Desmond Keegan, Routledge, 1993.

Since 1993 distance education has been transformed by the development of web-based course-delivery systems such as Top Class (e.g. The Nasdaq-listed Irish company CBT has changed entirely from CD ROMs to Web-based training and, in the process, changed its name to Smartforce - WBT having already been adopted by the proprietors of Top Class). In 1993 the Internet didn't appear to even constitute a twinkle in the eye!

As far as the wider notion of open learning is concerned the central issue surely is where NDEC fits into the widely espoused aim of widening access to, and participation in, higher education by making it more representative of society and more inclusive of mature students. There are two inter-related challenges here. The first is achieving the cultural shift involving non-participating communities. The other arises from the new employment scenario whereby even the pool of long-term unemployed is shrinking daily, and thus a shrinking target audience, probably further marginalised by entry into low-skill occupations where the track record of participation in lifelong learning tends to be fainter.

This presents a real opportunity for proactive approaches by institutions of higher education, if deferred in the case of NDEC. Deferred because studies indicate, and the New Deal recognises, that the shift in question, whether in marginal communities or the undertraining business sector, will be achieved only through strategies involving "College-based outreach" and "community-based access initiatives", probably widely at access or foundation level.

Such strategies will entail partnership with a range of stakeholders such as community-based organisations, schools, senior colleges, VECs, area-based partnerships, trade unions and employers. This seems most appropriately a function of a regionally-based institution or consortium. A national body, such as NDEC, would appear to present most effectively when students are brought to the point of considering the degree-awarding alternatives available. (How NDEC presents - web-based or traditionally - is an issue for ongoing strategic evaluation).

It would appear as if there are significant prospects for this. To illustrate: as UCD increasingly involves itself in capacity-building outreach activity with adults the issue constantly recurs as to where sustainable opportunities for progression arise. Blanchardstown, where there are currently a number of such initiatives, is an example. A return journey from Blanchardstown to Belfield is costly both in terms of time and expenditure. Other opportunities also present, obviously, including the local IT (full-time and part-time) St. Pat's (full time), DCU (full-time), TCD (full-time), NUIM (full-time and part-time), and DIT (full-time and part-time). An award-bearing opportunity by distance education should present as very attractive at least to some candidates, freshly enthused and confident, but handicapped by distance or hindered by employment-based restrictions.

There merely remains the issue of fees and other supports.

Kevin Hurley
Director
24 March, 2000

Dr Desmond Keegan,
Director, Distance Education International Ltd

Distance Education International Ltd. regards the Background and issues Paper as a balance document situating distance education at higher education level in Ireland in the Irish University and international context. It presents reasonable analysis of the main issues

Please accept the following commentaries as a contribution to the development of virtual and distance education in Ireland.

Open and Distance Learning

The paper constantly uses the terminology Open and Distance learning. Although this is a frequently used term today, it does tend to confuse two differing sectors of educational provision.

Open and Flexible learning is best reserved for programmes in which the student is legally enrolled in, and attending a college or university but for which more open and flexible patterns of study are provided by the university authorities.

Virtual and distance education is best reserved for programmes in which the student is legally awarded a university degree or college diploma but without attendance at the college or university providing this award, or very rare attendance.

Dublin City University

The Paper gives a balanced presentation of the contribution of the National Distance Education Centre at Dublin City University since 1982, without underlining what some might see as the problems:

- Enrolment has remained in the two and three thousand areas. Why not 20,000?
- The list of seven programmes is given on pages 36 to 38. Why not 70?
- The ease with which the distance education programmes of the Open University of the United Kingdom and of other British universities, like the University of Leicester or the University of Warwick, have entered the Irish market is mentioned. After twenty years of reasonably generous funding from the Irish Government and taxpayers, could we not have had a more Irish distance education system in place before our market was opened up by EU regulations?
- Over complex structures are mentioned on page 32.

Research Queries

There is a rather bizarre reference to a University in Washington on page 23.

On page 26 Thomas Russell's web page The No Significant Difference Phenomenon, is referred to. It is stated that it indicates that open and distance learning is as effective as classroom instruction. This would be better presented, as distance can be as effective as classroom instruction.

Although scholars in this field have watched with interest the development of Russell's web page, the real research in this area was done by Dubin and Taveggia, in the 1960s, Schramm in the 1970s and Clark in the 1980s.

The data in the 1990s from the UK government Higher Education Funding Council on the measurement of academic excellence in UK universities has consistently shown the Open University in the top 10 of 12 out of more than 100 universities. This means that nearly 100 UK universities, using their full time Professors, Readers, Senior lecturers and lecturers with full time students, have failed to achieved the academic excellence of the Open University dealing with working tax payers.

One wonders how these other universities have the temerity to challenge the Open University in its own market, usually with a small distance learning department, staffed by consultants.

Conclusion

On page 8, the document correctly refers to the decision of the Blair UK government on 15/02/2000 to launch a Virtual Global Initiative, which was reported in the UK media, as selling Oxbridge degrees on the Internet. It seems a shame to sell Oxbridge degrees on the Internet but it is also certain that the Internet will not go away, nor will it go away from higher education.

Distance Education International Ltd has already suggested to the HEA that it is time to found a new Irish University. It is suggested that this should be a virtual university because:

- Of Ireland's recognised competence in technologies concerned
- Ireland's unique status in the world of higher education drawing as it does on the best of two university traditions, the university tradition of the English speaking countries (the United States, Canada, Australia, New Zealand, United Kingdom and Ireland) and the traditions of the European University World, (France, Germany, Italy, Spain)
- Ireland's competence in the theory and analysis of distance education – based on the only academic series of publications (the Routledge Studies and Distance Education Series) and because much of the theoretical literature has been developed from an Irish base
- Ireland's recognised global presence, non-threatening and non-colonial.

Dr Desmond Keegan
23 March 2000

Prof. Joyce O'Connor
President,
National College of Ireland

NCI: Current Activities on Open and Distance Learning

1.0 Introduction

The National College of Ireland is a keen supporter of open and distance learning and is actively involved in providing distance education as well as delivering education through 40 off campus centres.

The mission of the College is to make a difference in Irish society by championing the principles of access, opportunity and excellence in education. The College's philosophy and ethos is based on the belief that broadening access to education will make the difference, not just to the lives of the individuals, but to the overall social and economic well-being of their community

Within the context of its mission and operations, the NCI is supportive of the efforts of the HEA and Oscail, through the Symposium on Open and Distance Learning, to stimulate debate on the higher education market response to demands for open and distance learning.

Based on your invitation to comment on the agenda and the background and issues paper, this document sets out the following:

- NCI's activities within Open and Distance Learning
- NCI's future plans for Open and Distance Learning
- NCI's view of the changing education market and the role of open and distance learning within this market
- NCI'S Proposal to establish 'Knowledge Ireland – an e-Learning Consortium of Colleges

2.0 The NCI Model of Educational Delivery

NCI's innovative approach to education provision and delivery is unique in third level education. This approach combines academic excellence with a curriculum which is responsive to the needs of business and the community and with provision for multiple entry points and progression routes. This is consistent with the College focus on lifelong learning. NCI's approach to education is characterised as a long-term commitment to the development of awareness of education in the home, through the school, in the community and through

business. Its lifelong learning activities are not solely based on the provision of second chance places but builds on innovative learning methodologies developed by communities to assist in educational progression.

Open and Distance Learning forms a fundamental part of lifelong learning and is a key tool in its delivery. By increasing accessibility to education, Ireland can overcome the challenges presented by the booming economy and allow all members of the community to participate in the success.

2.1 NCI's On-Line Programmes

The College recognises the importance of the development of on-line learning as a key tool for the future of education delivery. NCI's vision for its new Docklands campus is a virtual "campus without walls", where students, the community, business and the arts can converge through the use of developing technology.

The College currently provides three stand alone on-line courses:

- NCI Certificate in Electronic Commerce for Managers
- NCI Certificate in Managing Teams.
- NCI Course in Motivation and Leadership

These courses are aimed at people working in industry who wish to upgrade their knowledge and skills in these areas. The courses have been running successfully for eighteen months. These on-line programmes use computer conferencing system to provide group learning that is independent of time and location. The College's developments in these areas have been widely received by learners and academics alike.

The College has also developed a graduate Diploma in Electronic Commerce which will be offered from September 2000. This is a one year part-time programme consisting of eight taught modules and a research project which is aimed at managers working in industry who wish to acquire the skills necessary to exploit e-commerce for competitive advantage. It is intended to initially offer this programme through a mixture of conventional and on-line delivery with two of the eight modules being offered on line. The plan for the future is to extend this method of delivery to a wider variety of courses, thus increasing accessibility to education while moving towards learner driven education.

2.2 NCI's Distance Learning Programme

In keeping with its ethos of accessibility and opportunity, NCI had provided a number of flexible delivery mechanisms which allow individuals all over the country to access the College's education programmes through the Off-Campus department and through offering the National Diploma in Personnel Management by distance

learning. The range of subjects on offer through this course includes Personnel Management, Finance, Management, Training and Development etc. Student attend the Ranelagh campus on a number of weekends to share their experience and to apply the skills learned in a practical setting. The courses follow the traditional distance learning model by providing students with course material for home based study with attendance at tutorials and workshops at regular intervals. NCI presently has 120 students taking programmes through this medium.

2.3 NCI's Off-Campus Programmes

NCI currently operates 40 off campus centres and the programme is being constantly developed in terms of the variety of geographical locations and courses on offer. This initiative has greatly improved accessibility to education for individuals in rural locations, with half of NCI's student body (2,500) studying at off-campus sites.

The College provides several courses through its off-campus centres including, First Line Management, Community Workplace Management and Management and Employee Relations. Social Studies and Cultural Studies. These courses are offered at NCEA Foundation, NCEA Certificate and NCEA National Certificate (through ACCS credit) level and provide a flexible mechanism for progression within the traditional higher education sector.

3.0 The Future of Open and Distance Education Within NCI

NCI recognise that the development of technology is a significant feature in the advancement of lifelong learning by increasing accessibility to education. The College is currently seeking to develop its e-learning capabilities in partnership with business, academic institutions, the communities and students in line with the mission of the College. In this context, the College is working with education providers North and South of the border and within the US to develop additional courses which may be delivered electronically. NCI is also working with technological partners on developing e-learning capabilities within the college to fulfil the virtual campus strategy. These developments are being championed through the International Advisory Committees on Business and Informatics utilising the NCI'S international contacts to develop NCI's capabilities in this area.

NCI anticipates that the current flexible learning, home study system will merge with e-learning through the advancement of technology and existing structures will form the platform for extending distance learning to global communities.

The education delivery strategy of the College is to create an on-line accredited learning environment which provides people with the skills to advance within a knowledge based society through an education system which is accessible to communities and business throughout Ireland. NCI will be in a position to deliver on-line degree programmes within the next 3-5 years.

NCI: Future Activities in Open and Distance Learning

Education in the 21st Century

The economic success of Ireland in recent years is creating a new set of challenges for government and policy makers. Ireland has never before experienced the challenge of effective full employment. Despite this there are sections of the community where high percentages of people have been excluded from the employment system as they are unable to meet knowledge requirements of employers as they left the education system at an early stage. The growth of the high technology based sectors of the economy and the presence of multinational giants in this area has caused a skill deficit in these sectors. This deficit is being resolved in the medium term by the creation of more high technology places in education system and in the short term partly by the recruitment of IT professional abroad.

These issues present a significant challenge to society in general. Their resolution requires a realignment of focus towards the issues of the learner and the true application of the principles of life long learning. Government spending through the National Development Plan on the primary and secondary education sector is welcomed. Existing policy on lifelong learning provides the framework to address these issues. The challenge now is to apply these principles to the informal education sector in the workplace and the community in an inclusive and integrated manner. A number of proposals for the improvement of the education system to meet the needs of learners are set out below.

NCI recognises the deconstruction of the formal methods of education delivery and has embraced change through the development of its e-learning programmes. The move towards lifelong learning requires a revolutionary look at access to and the methods of education delivery and will increase the importance of open and distance learning.

Outlined below are a number of concepts for the future of education which NCI would like to put to the Symposium for consideration and discussion as a means of advancing existing structures to develop a system of education which will meet learner needs in the 21st Century.

4.1 Community Based Education – The informal Education System

Informal education is the context for the future development of education. NCI recognises that there are significant informal learning structures within the community including community education, childcare learning and workplace learning. NCI believes that these structures should be developed as a fundamental

element of lifelong learning. The key informal learning structures in the community and their role in the future of open education are outlined below, together with their open and distance education implications.

Community education involves getting people into education at a time and place which suits them rather than the education provider. While progression routes between community and formal education exist in theory, there are difficulties that exist in practice. The form of education will become increasingly important as we try to fill skills shortages in the economy. NCI believe that a pilot study is required to understand the content, process and progression routes associated with community education to ensure the development of this sector is consistent with the aims of the providers and the learners.

Existing community-based education is successful as it involves the provision of education to people who are anxious to learn. However an innovative approach is required to attract people into the education system who have lost faith and interest in the concept of formal education. The National Plan for Education has recognised this group as a key element of the future development of education. NCI's Learning on the Streets Initiative is being established as an alternative means of providing learning skills. This scheme is based on empowering people to learn through the study of personal interest topics and thereby recognise that learning can take place. In this way the benefits of knowledge together with the techniques used to gain knowledge are provided to learners in a dynamic and informal forum. The objectives of such a scheme are to heighten an awareness of education, create a favourable attitude towards education and recognition of knowledge in this area.

Childcare should be formally recognised and integrated into the framework of lifelong learning. The first element of the lifelong learning education system should be the provision of a child care system that is based on education and development. In this way crèches would become the first phase of a child's education process. Existing policy on childcare focuses on health and safety aspects together with qualifications of the carer. While these are very important aspects of overall child care policy there should be also be a focus on what happens in the care. There are a number of examples of good practice both in Ireland and Internationally but a pilot study should be established to determine how these would operate in practice. The pilot would address the education of child minders together with standards in relation to how crèches are run and the education and development activities carried on in the crèches. These developments should be addressed while ensuring the supply of affordable, quality childcare facilities as proposed in NCI's new Docklands Campus.

Workplace based learning is fundamental to the advancement of individuals in the workplace and is seen by NCI as a key element of lifelong learning which could be provided by distance learning.

The College has developed links with the business community and is currently providing a range of courses to employees which have been developed with employers such as IBM specifically to address skills shortages in

their company. NCI believe that this type of education development and delivery is becoming increasingly important particularly in light of current skill shortages in certain sectors as the result of the booming economy. Partnerships between college and business must be developed to ensure that education delivery is relevant and timely. It is the view of the College that the development of open and distance education should also consider the informal education sector and not exclusively the existing formal education system.

NCI's Proposal: Knowledge Ireland

Knowledge Ireland: A Consortium of Colleges for e-Learning

The arrival of the knowledge economy has intensified the competitive pressures on higher education institutions. Learning has become a big business. So a new national initiative is needed to maximise Ireland's chances of success in this global environment and for us to remain an 'Island of Scholars – (whatever about Saints!). NCI would like to propose a new collaborative virtual venture - a consortium of 'e-colleges'. NCI wants to propose creating a new partnership between colleges which will develop a novel means of distance learning and take full advantage of the new information and communication technologies. It will concentrate resources from a number of partners on a scale which can compete with leading US and European providers.

NCI believes that if we are to become a leading knowledge based economy we must create new routes into higher education and new forms of provision.

Knowledge Ireland is the working title for a proposed consortium of which the National College of Ireland would be willing to be a Founding Member. The objective of the consortium will be to adapt and develop the new information and communication technologies to new ways of teaching and learning, including flexible distance learning, so that Irish colleges are well placed to compete in the growing global market for higher education.

Furthermore, an education system based open and distance learning will be the catalyst to merge economic development with the requirement to provide all citizens with the opportunity to contribute to and benefit from its development. The society that is successful in developing potential and knowledge based workers while also providing workers across the spectrum of employment needs will become an extremely competitive society. Ireland needs to develop the capacity to **bring everyone** into the knowledge-based society in **an inclusive** manner and thereby improve competitiveness. New methods of distance education form part of the solution to this issue.

NCI would welcome discussion of the following topics by the Symposium as a means of developing open and distance learning for the whole community as well as developing an education model for the 21st Century.

Appendix 3

List of Symposium Participants

Name	Title	Organisation
1. Bancroft Dennis Dr.	Director	OSCAIL- National Distance Education Centre
2. Bang Jørgen Prof.	Dept Information & Media	University of Aarhus
3. Byrne Mary Ms.	Special Education Section	Church of Ireland College of Education
4. Carmody Michael Mr.	Registrar	Institute of Technology, Tralee
5. Carr Peter Prof.	Registrar	National University of Ireland, Maynooth
6. Carroll John Prof.	Registar	Dublin City University
7. Cashel Pat Dr.	Assistant Registrar	University of Limerick
8. Collins Columb Dr.	Director	Institute of Technology, Tallaght
9. Collins Tom Dr.	Adult Education	National University of Ireland, Maynooth
10. Coolahan John Prof.	Education Deptartment	National University of Ireland, Maynooth
11. Coughlan Ray Mr.	Head of Distance Learning	Cork Institute of Technology
12. Coyle James Mr.	Registrar	Athlone Institute of Technology
13. Curtis Ruth Prof.	Vice President	National University of Ireland, Galway
14. Devine Jim Mr.	Registrar	Dún Laoghaire Institute of Art, Design & Technology
15. Tom Doyle Mr.	Head of Development	Institute of Technology, Blanchardstown
16. Farrell Susan Ms.	Secretary to Director	OSCAIL- National Distance Education Centre
17. Fenton Mary Ms.	Commercial & Industrial Services Officer	Institute of Technology, Tralee
18. Fitzsimmons Helen Ms.	External Officer	Athlone Institute of Technology
19. Fox Seamus Mr.	Co-ordinator Student Support	OSCAIL- National Distance Education Centre
20. Gallagher John Mr.	Director	Institute of Technology, Carlow
21. Goldsmith Brendan Dr.	President	Dublin Institute of Technology
22. Griffin Ray Mr.	Principal	Waterford Institute of Technology
23. Guerin Helen Ms.	Director	Audio Visual Centre, UCD
24. Guerin Michael Mr.	Acting Head of Development	Limerick Institute of Technology
25. Hallahan Kay Ms.	Enterprise & Trade Policy Division	Forfás
26. Hayden John Mr.	Secretary/CEO	Higher Education Authority
27. Hogan Roísín Ms.	Director	Dún Laoghaire Institute of Art, Design & Technology
28. Hosey Darina Sr.	Principal	Froebel College of Education
29. Hunt Nuala Ms.	Co-ordinator Continuing Education	National College of Art & Design
30. Hurley Kevin Mr.	Director, Adult Education	University College Dublin
31. Hussey Caroline Dr.	Registrar	University College Dublin

Name	Title	Organisation
32. Johnson Heather Dr.	Assistant Co-ordinator Student Support	OSCAIL- National Distance Education Centre
33. Keggan Desmond Mr.	Managing Director	Distance Education International
34. Keenan Pádraig Mr.	Head of Computing	Athlone Institute of Technology
35. Kelleher Pat Mr.	Director	Cork Institute of Technology
36. Kerr Mary Ms.	Deputy Secretary	Higher Education Authority
37. Kingston Rosemary Ms.	Assistant Co-oridnator IT Programme	OSCAIL- National Distance Education Centre
38. Laver Michael Prof.	Senior Lecturer	Trinity College Dublin
39. Laverty Eddie Mr.	Manager, EU Affairs & Policy Development	Dublin Institute of Technology
40. Litton Frank Mr.	Course Co-ordinator Distance Learning Programme	Institute of Public Administration
41. MacAuley Ian Mr.	Editorial Specialist	Institute of Public Administration
42. MacDonagh Pat Mr.	Director	Limerick Institute of Technology
43. MacKeogh Kay Ms.	Academic Co-ordinator BAProgramme	OSCAIL- National Distance Education Centre
44. MacMichael Gerard Mr.	Head of School of Engineering	Galway-Mayo Institute of Technology
45. Madden Philip Mr.	President	Union of Student in Ireland
46. Martin Venie Dr.	Head of Development	Waterford Institute of Technology
47. McConville Desmond Mr.	Head of Development	Institute of Technology, Sligo
48. McDonagh Sean Dr.	Director	Skills Initiative Unit
49. McGarry Joe Mr.	Secretary	Council of Directors, Tralee
50. McGarry Mary Ms.	Principal Officer	Department of Education & Science
51. McGarty Pat Mr.	Head of School of Business & Languages	Institute of Technology, Blanchardstown
52. McGrath Michael Mr.	Director	Conference of Heads of Irish Universities
53. McLaughlin Pat Mr.	Head of School of Engineering	Institute of Technology, Tallaght
54. McLoughlin Kathleen Ms.	Principal Officer	Department of Education & Science
55. McLoughlin Seamus Mr.	Principal Officer	Department of Education & Science
56. McMahon Frank Dr.	Director, Academic Affairs	Dublin Institute of Technology
57. McManus Stephen Mr.	Registrar	Dundalk Institute of Technology
58. McNutt Larry Mr.	Head of School of Informatics & Computing	Institute of Technology, Blanchardstown
59. Mooney Deirdre Ms.	Senior Administrative Assistant	OSCAIL- National Distance Education Centre

Name	Title	Organisation
60. Morrissey Anne Ms.	Academic Co-ordinator Post Graduate Programme	OSCAIL- National Distance Education Centre
61. Mulcahy Patricia Dr.	Head of Development	Institute of Technology, Carlow
62. Mulkeen Aidan Mr.	Education Department	National University of Ireland, Maynooth
63. Mulrennon Madeleine Ms.	Head, Home Economics	St. Catherine's College of Education
64. Norris Mike, Mr.		HEANet
65. O'Brien Con Mr.	Assistant Registrar	University College Cork
66. Ó Cáthain Ciarán Prof.	Director	Athlone Institute of Technology
67. O'Connor Joyce Prof.	President	National College of Ireland
68. Ó Croimín Peadar Prof.	Predident	Mary Immaculate College Limerick
69. Ó Fathaigh Mairtín Prof.	Director, Centre for Adult Continuing Education	National University of Ireland, Cork
70. Ó Foghlú Sean Mr.	Head of Policy & Planning	Higher Education Authority
71. O'Hara Bernard Mr.	Registrar	Galway-Mayo Institute of Technology
72. Ó Muircheartaigh Iognáid Prof.	Registrar	National University of Ireland, Galway
73. O'Shea Maura Ms.		Higher Education Authority
74. O'Sullivan Gerry Mr.	Senior Executive Officer	Higher Education Authority
75. Patten Ray Mr.	Business Studies	Letterkenny Institute of Technology
76. Patterson Vivienne Dr.	Industrial Officer	Skills Initiative Unit
77. Piercy Colm Mr.	Industrial Services Officer	Dundalk Institute of Technology
78. Pratt Albert Prof.	Director General	Dublin City University
79. Puirséil Séamus Mr.	Acting Director	National Council for Education Awards
80. Ralph Maree Ms.	Assignments/Exams	OSCAIL- National Distance Education Centre
81. Ryan Tara Ms.	Programme Specialist on Rural Development	Tipperary Rural Business & Development Institute
82. Saunders Ronnie Dr.	Academic Co-ordinator IT Programme	OSCAIL- National Distance Education Centre
83. Smith Howard Dr.	Dean of Arts, Humanities	Trinity College
84. Strunz Bob Mr.	Educational Technologies	University of Limerick
85. Thornhill Don Dr.	Chairman	Higher Education Authority
86. Tompkins Paul Dr.	School of Science	Athlone Institute of Education
87. Travers Pauric Dr.	President	St. Patrick's College, Drumcondra
88. Tubbert Brian Mr.	Head of Education	Froebel College of Education
89. Wickham Ann Dr.	Academic Co-ordinator BNS Programme	OSCAIL- National Distance Education Centre