
Expertise Centrum Allochtonen Hoger Onderwijs, Utrecht (Netherlands).

1997-00-00
185p.

Collected Works - Proceedings (021)

Academic Persistence; *Access to Education; College Curriculum; Comparative Education; *Diversity (Student); Foreign Countries; Government School Relationship; Higher Education; International Education; Regional Characteristics; School Holding Power

This proceedings presents papers given at a 1996 European conference on access to higher education. Following two introductory papers are the following 13 plenary session papers: "A European Perspective" (James Wimberley); "An American Perspective--Diversity in American Higher Education and U.S. Federal Policy" (Tom Wolanin); "An Eastern European Perspective--New Study Patterns and Dropout in Estonian Higher Education" (Olav Aarna); "Non-Completion in European Higher Education: Report of a Survey Undertaken on Behalf of the Council of Europe's Project on Access to Higher Education" (Jean-Louis Moortgat); "An Examination of Federally Supported Retention Models in American Higher Education: The Policy and the Politics" (Arnold Mitchem); "Overcoming the Barriers" (John Lilipaly); "A Student Perspective" (Marieke Rietbergen); "Universities Working Together on Learning Environments which Meet the Needs of a Student Diversity" (Francien Wieringa); "Managing a Cosmopolitan University" (Geoffrey Copland); "Meeting Regional Needs for Higher Education in the Russian Federation" (Valentin Batukhtin); "Universities as Employers Achieving Diversity Among Staff" (Monica Armour); "Diversity, Employability and the Curriculum" (Peter Stewart); and "Diversity and the Labour Market: An Employer Perspective" (Fabienne van 't Kruïjs).

Part 3 presents work group and panel reports and conclusions. Part 4 includes the following 10 papers: "The Impact of Foundation Studies on the Retention Rates of Women" (Allen Barlow); "Don't Call It 'Drop-out': The Danger of the Discourse of Deficiency" (David Crosier and Maggie Woodrow); "Beyond Access: Curriculum Must Provide Both the Course and Compass to an Effective Career Route" (Pamela Houghton); "Career Identity as a Form of Empowerment" (Frans Meijers); "A Study of Student Equity in Australia--Some Preliminary Findings" (Glen Postle); "Epistemological Approaches to Cognitive Development in College Students" (Paul I. Hettich); "Women Compared" (Antoinette Taille); "Guidance and Learner Support--Empowering the Student" (Geoff Layer and Len Spriggs); "Promoting Wider Access through Special Initiatives--A Funding Council Perspective" (Gerald Madill); and "Language, Information Technology and Diversity" (Peter Stewart). (Individual papers contain references.) (DB)
BEYOND ACCESS
Diversity and Opportunity in Higher Education

Proceedings of the fifth annual European Access Network (EAN) convention, 1 July to 3 July 1996, the Grand Hotel Krasnapolsky, Amsterdam. A convention hosted by the Expertise Centrum Allochtonen Hoger Onderwijs.

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The Issue of Access in Europe

The accessibility of higher education for under-represented groups (ethnic minorities, women, the physically disabled) is widely recognized as one of the greatest challenges of present-day European society. It is of vital importance for the development of our continent that as many people as possible are able to take part in further education, and to exploit their potential at that level. Only in this way will Europe be able to find solutions for the various social and cultural problems with which it is nowadays confronted.

The realization that diversity within higher education is important for the development of our multicultural society is luckily beginning to gain increasing acceptance. There have already been several conferences at both national and European levels organized around the theme of accessibility. However, the definitions of the subjects of these gatherings usually has taken place in terms of problems and disadvantages. It appears that little emphasis is being laid on revealing what diversity has to offer higher education: diversity within the student population, within the lecture staff, within the educational organization, and within the curriculum.

How to present Diversity

When we as ECHO were asked by the European Access Network to organize the 5th Annual EAN Convention, we tried to find a different way to consider the question of accessibility; a way which did more justice to the abilities of under-represented groups and to the conviction that diversity is more a question of opportunities than of problems.

In our opinion there are three aspects which are of importance:

In the first place there is the aspect of perception: the way in which minority groups are perceived and approached by the majority.

Bringing the dominant majority perspective and the bias of further education towards the 'average student' up for discussion became the leitmotif of both the preparations for and the execution of the conference.

Both the way in which education is organized and the curricula are based on the average student. This is usually an able white male. The curricula do not usually take minority groups into account. In addition, a certain perception of their knowledge and abilities is assigned to them from above, as it were. Generally speaking, the perception of minority groups in Europe may be called problematic. In this connection, one of the speakers at the conference, John Lilipaly, used the metaphor of two fish who make drawings of each other, the Tuna and the Trunkfish. A negative, 'Trunkfish'-like perception of minority groups stands in the way of the manifestation of a position of equal standing, and thus also diversity.
We therefore also thought that it was important for the programme to pay attention to how under-represented groups themselves view or would like to view their position in higher education.

The second aspect is that of demonstration: making what diversity implies and provides both tangible and manifest.

Diversity in further education is a wonderful ideal on an abstract level, but actually bringing about that ideal leaves a lot to be desired in many cases. Good ideas often come to grief due to a lack of money, vision, support, motivation, and creativity. This is why a great deal of attention was paid during the conference to what diversity now means, and to the kind of processes government, institutions, students, and employers must work out together in this connection. The demonstration of the variety of examples of ‘good practice’ by various speakers as well as interaction with the audience has been crucial for this.

The third aspect is the aspect of communality: what is the common denominator among the wide variety of participants?

More than 100 people took part in this conference, working on various levels and coming from different parts of the world. The interpretations of diversity and the ways in which they must be expressed differ from place to place, from situation to situation, from person to person: in Washington D.C. people face different challenges than those in Chelyabinsk, in Lodz a university holds different opinions than in Sydney, a lecturer deals with a different context than a ministry, a student counsellor has different aims than a student. For us, one of the greatest challenges was getting the participants onto the same wavelength by finding a common ‘framework’ for the diverse interpretations about and the processes behind diversity in higher education. Thus the conference was actually also a kind of search for a common language.

Conference themes

The themes of the 5th Annual EAN Convention were:
- Demonstrating the merits of diversity,
- Overcoming barriers,
- Meeting a diversity of student needs,
- Higher education, under-representation and the labour market.

These themes reflect the concern of the conference: to go beyond the propositions contained in access policy, philosophy and practice. These issues have been widely explored in past conferences and no longer hold great surprises. Past conferences and research have outlined the goals of equity and access and the strategies for their realisation. It is acknowledged that equity goals cannot be global, but rather that they must be specific to the institution of higher education. What this conference explored is the extent to which principles of process can be established. Underlying the conference was the search for commonality in process.

Attention to the possible outcomes of access, of going beyond diversity, invited the scrutiny of retention, progression, graduation and labour market outcomes. This confe-
rence brought together representatives from many areas to consider the application of an integrated approach to the issues associated with quality and successful outcomes for heterogeneous societies. It was recognised that heterogeneity is a common characteristic of the contemporary institution of higher education, importantly the elements of this diversity vary from place to place.

The Aim of the Convention

The panel findings, workshop reports express the issues, ideas and response to the themes. They form the evolution of the conclusions. Why beyond access? The title as mentioned below comes from Paul Taylor's paper and proved to be a stimulating focus and one broadened by the quality of interaction and information sharing that characterised this conference. The plenary papers and session papers provide an interesting cross section of perspectives and an exploration of the themes. There was a conclusion that the issues are often very specific to place but there are also many widely shared themes at the international level. The focus was during and after: retention, graduation and labour market outcomes for students in Higher Education. It was also considered that this focus was complementary and interactive with access.

The objectives of the convention were to exchange perspectives, collaborate in reflecting on this experience and to develop ideas relevant to particular national and institutional higher education environments. The question of demonstrating the merits of diversity remains a policy issue in a world of change. This conference provided the opportunity for participants to consider the disparate ways policy and practice may be approached.

The dominant theme of the conference was a consideration of integrated strategies, strategies that link policy, management, information systems and the requirements of a learning environment. Labour market outcomes were provided with a plenary session and were not seen in isolation from these topics. The relationship of these issues to student aspirations underlies this theme. As each institution and country need to address situational needs and possibilities the framework for discussion is how to develop common processes to develop local strategies that take into account the diversity of factors affecting success. These factors include the following:

- social and economic frameworks
- policy
- registration and monitoring
- merit
- labour market outcomes
- curriculum
- teaching methodology and the changing character of the learning environment
- the theory and practice of managing diversity
- meeting a diversity of student needs
- achieving diversity of academic and other university staff.
Word of Thanks

We were profoundly impressed by the way in which, soon after the start, the participants at the conference in all their diversity wanted to merge together to form a whole, succeeded by forcing their way through to the above-mentioned communality, and on that level exchanged interpretations, experiences and expertise. This was possible thanks to the expertise and dedication of the 'plenary speakers', the chairpersons of the plenary and group sessions, the 'paper presenters', and the other participants. We cannot thank them enough for their efforts.

We would like to dedicate a particular word of thanks to the speakers, chairpersons and participants from the US and Australia, who had to come from so far away to attend this conference, and who have inspired us and other European colleagues with their ideas and experiences.

We also would like to thank the Steunpunt Educatie Molukkers which has given its permission for using Mrs. Lilipaly-De Voogt's illustration (De boom vol schatten, SEM, Utrecht, 1993).

Finally, we would like to thank the other members of the organizational team for their cooperation and for putting their abilities at our disposal, which in our view helped to make this conference a memorable occasion:

Bart Bruggink, for all his work behind the scenes;
Maggie Woodrow, for her contribution as director of the EAN;
Peter Stewart, for his expert preparation of the work groups and the panel session, and for writing this report;
Mary Tupan-Wenno, for her dedication, good ideas and indefatigable energy.

Marloes de Bie
Bas Derks
ECHO
Introductions
Welcome from John Lilipaly
Chair of the board of ECHO, Member of the Netherlands Parliament.

This year, which the European Community proclaimed the year of life long learning, we gather for the fifth convention of EAN. On behalf of ECHO, a host organization for this conference, I warmly welcome you all, Western Europeans, Eastern Europeans, Americans and Australians and also of course and particularly the Dutch members here.

In Amsterdam where east and west south and north meet within its boundaries we talk about communication between people of different cultures we often think of tools to get across cultural boundaries, simple additions to what we already have. And instead I think that once again it is one of being rather than having. Cultural literacy comes at a price of course, traditional structures hold the building but they also prevent the building from what it might also be. Maybe it is time to tear it apart and get to know its piece, to carry as we walk through the wilderness of tomorrow to the future, easy to reassemble, like Bedouins who link the people of the shore and the green, endlessly without walls. I wish you all a pleasant stay in Amsterdam.

Welcome from Michel Feutrie
Co-Chair of EAN, University of Lille.

We have decided this year not to focus our attention on access but to post-entry groups, to emphasize the responsibility of Higher Education institutions to ensure effective career routes for students from a diversity of backgrounds.

European Countries, to maintain their economic position in the world, have no alternative choice - they must invest more in knowledge. The building of the learned society. Greater is the risk when the population is in two parts; those who can understand, interpret, organise and use information and those who are not able to.

EAN was born out of the meeting of people who could not be satisfied with this situation. It was launched in Lille, France by academics coming together from Belgium, France, Germany, the Netherlands, Russia; all engaged in activities to assist people meeting with difficulties in entry and participation.

We thought it was necessary first to better understand our national contexts, what the under-represented groups in each country were, and the specific restrictions they experience.
European Access Network objectives:
1 to promote effective policies for wider access to HE at local, national and internal levels,
2 to increase understanding initiatives of access in different countries,
3 to exchange information and mutual support for access developments
4 to share pedagogical practices and multi-cultural approaches to the curriculum
5 to co-operate with other national and European bodies to promote wider access
6 to stimulate joint research programs and exchange research findings
7 to promote schemes and exchange programs to gain recognition for access students and staff

We are proud to be with Dutch educational authorities and universities who got involved in our business from the beginning and with the leaders of ECHO. I would like to thank them for the important job of organising this convention.
THE FIRST PLENARY

Perspectives on the merits of diversity in higher education
I bring the greetings of our Secretary General and the Council of Europe which now brings together in education and culture, 44 member states and that is why I can no longer present a Western European perspective.

I think I can tell you I know why the Netherlands do have this commitment to diversity and tolerance. I think this goes back to the very birth of the Dutch Republic in its 50 year war of independence against authoritarian Hapsburg Spain. The survival of this tiny state involved finding a solution to religious diversity between Catholics and Calvinists and the solution was not the usual one which we still see now, one of persecutions, expulsions leading to a homogeneous religious state but the revolutionary concept of tolerance, and the Dutch republic was the first state in Europe to build in tolerance and diversity, not just into the daily practice of people, but as a matter of state policy. The rest of Europe, the authoritarian Absolutist Monarchs, watched in fascinated horror in much the same way that China has had for Hong Kong and for much the same reason, it was spectacularly successful on the economic front. Holland was also successful in military and political terms.

The Netherlands have played, since then, an important role in developing the concept of pluralist democracy, human rights and the rule of law which are the core values of the Council of Europe. The Council emerged from a meeting in Den Haag in 1948 as did the Convention on Human Rights.

The Council of Europe aim is greater unity between the member states, exactly as the objectives of the European Union, ever closer union. So where is diversity in that? The problem was seen indeed as too much diversity in Europe, the adversarial system of nation states, and it is this factor that gave a moral force to the impulse for harmonisation, for convergence, for removing barriers. But there was a second factor in the emergence of the European movement and institutions and that was the terrible lesson of Nazi ideology which was a deep rejection of human diversity; an insane lust for racial purity and order.

So the European Convention on Human Rights established the notion of diversity and protects at a European level; freedom of religion, freedom of expression and the freedom of association - the cornerstones of diversity. Over the years the Council of Europe has done some rather concrete things that take forward the idea of protecting the right to be different. These include the charter on regional and minority languages, the convention for the protection of national minorities, the latter includes a specific obligation on the member states to ensure equal access to all levels, including Higher Education, for persons belonging to national minorities. So our project on higher education that has been running for 3 years builds on an important tradition. The final conference is in Parma on September 18 - 20. You are all welcome if there is room.
The project is presenting a strong packet of recommendations, including controversial recommendations. The core idea is that the concept of Quality in Higher Education must include a dimension of equality and fairness. These things must not be seen in opposition and the slogan of the conference is quality and equality. The project is not aiming to a significant extent to harmonise practice as we are faced with 44 different national systems, perhaps fairly homogeneous within themselves but not between themselves, yet there is a slow process of convergence between them.

There is a common problem to all European countries and that is that simple expansion which is underway does not solve the problem of access in terms of diversity and in terms of opportunity.

Now, I would like to say something more about the senses of diversity. The first is the diversity of the HE community as a group of people and the second is the intellectual diversity of the higher education process of teaching, learning and research. Now most of the project has been about the first aspect, about the diversity of the community of the people and our obvious finding has been inspite of the patchiness of the data, the data all points in one direction.

Even after this terrific expansion of the first twenty years that is in Western Europe, and a parallel expansion is just starting up in Eastern Europe, HE remains largely under representative, there are three key groups:
- the educationally disadvantaged, as represented by parental level of education and parental income.
- people with disabilities.
- persons belonging to national minorities, immigrant ethnic groups, refugee groups - cultural communities.

The exception is the success in ensuring equal participation of women at the macro level even though there remains excessive under-representation, in access to particular programs.

How seriously should we take this situation? Now the Council of Europe convened its first summit in Vienna, October 1993. This summit didn't look at HE in particular but the general state of democracy in Europe and they were pretty alarmed; they thought there were rising threats to democracy, they looked in horror at the break up of Yugoslavia, they looked at the rise of racist and nationalist movements all over the place and they identified the protection of democratic security as a key priority for the Council of Europe.

If the aspirations of minority groups are not satisfied there is a threat to peace and democratic order in Europe. I very much like Michel Feutrie's image that there must not be a gap between the knows and the not knows, we used to speak of the "haves" and the have-nots. The "knows" and the "not knows" are now more important.

The inequality of income in most industrial countries has deep roots in changes in the economy and changes in family structure. But it is the case and historically rising in-
equality rising opportunities has been a dangerous situation for society. There are graphical reasons to pursue diversity and equity, therefore an organisation such as the Council of Europe in any case should pursue this agenda because it right but there is a political context which now makes it feasible as well.

What can be done? The project has identified three courses of action here:

1. Financial support
The first is that financial support for students must be targeted on the basis of need, this is not so evident in Eastern Europe where the collapse of the socialist ethic has been replaced with a no-holds-barred meritocracy and financial aid is often allocated on the basis of academic performance.

2. Admissions
The process of admissions must be adopted with more flexible criteria, transparent procedures, alternative entry routes, targeted catch up programs and all the rest of it. In other words we must come up with the gold standard for admissions.

3. Monitoring
There must be a commitment at national and university level to find out what is happening in terms of admissions, in terms of retention, in terms of progress of the student body. Monitoring in terms of progress of the student body

The Netherlands, with the UK, is one of the few European countries who do succeed in monitoring in any systematic way the participation, particularly of the ethnic groups, in Northern Ireland religion as well. Our project does include a small pilot for monitoring with partner institutions and we hope this pilot will continue after this project finishes as a whole.

In the European perspective this issue of diversity in the community has often been approached through attention to the needs of foreign students, the foreign students agenda was seen as important for mutual understanding, to increase the numbers of foreign students and staff abroad. This policy has generally been welcomed by institutions, perhaps unlike the recent proposal for access for the disabled which is seen as expensive, but it remains a challenge for organisations to find ways to facilitate equality of opportunity for foreign students.

I would like to finish with the proposition that if HE is to be reflective of society what does it mean for process and content?
‘Diversity’ in American higher education has at least two meanings. First, it refers to the uniquely wide variety of institutions of higher education in the United States. In the 1994-95 academic year there were 3,688 institutions of higher education in the United States. Of these 1,641 were public (state-controlled) including 605 4-year and 1,036 2-year institutions. The remaining 2,047 institutions were privately controlled and include 1,610 4-year institutions and 437 2-year institutions. Among these private institutions were 934 which were religiously affiliated including 251 with Roman Catholic, 88 with United Methodist and 71 with Jewish affiliation. Over 100 of these institutions (both public and private) were historically black, having been founded during the period of legal segregation. Nearly thirty two-year public colleges were controlled by Native American tribes.

While 56% of the institutions are private, enrolments tell a different story. Of the 14.3 million students enrolled in 1993, 78% attended public institutions, almost evenly divided between those in 4-year (41%) and 2-year (37%) institutions. The remaining 22% of the students attend private colleges and universities, almost all (94%) of them in 4-year institutions. Overall then, the United States has a large number of small 4-year private colleges and a large number of larger 2-year and 4-year public colleges and universities.

This large and complex array of institutions of higher education is either governed by the states or chartered by the states and governed by private boards of trustees. With only a few exceptions like the national military academies, the Federal government does not control or govern institutions of higher education. Federal law goes further and prohibits the Federal government from exercising “any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any educational institution”.

The second meaning of “diversity” in higher education is the degree to which the student body of each institution of higher education looks like America. Assuming that all are academically qualified, are those attending each institution proportional to the genders and representative of the range of races, ethnic groups, religions, family incomes and disabilities found in America as a whole? My focus in this paper is with this second type of diversity - the composition of the student bodies of institutions of higher education. But it is important to recognise that attempts to achieve this diversity take place in the context of the large number of institutions in the U.S., each having a unique history and traditions.

As noted above, there is an arms-length relationship between the Federal government and the governance of colleges and universities in the United States. Given this relationship between the Federal government and institutions of higher education, it should...
It is not surprising that the Federal government does not have a policy that requires diversity in institutions of higher education. It is not in the constitutional province of the Federal government to require that the student bodies of higher education institutions look like America. While the Federal government does not require diversity, President Clinton and senior members of his administration have endorsed the value of diversity in higher education, and there are Federal programs that support diversity under which institutions may voluntarily apply for assistance. More importantly, there are three realms of Federal policy and programs that have a significant impact on the diversity of American institutions of higher education. These are the programs for elementary and secondary education, the civil rights laws and the student aid programs.

As in the case of higher education, the Federal government also does not control or govern elementary and secondary education in the United States, and the prohibition against “direction, supervision and control” (quoted above) applies equally to elementary/secondary education and higher education. The Federal role in elementary and secondary education is one of supplementing the states and local school districts, which have principal responsibility. For the past three decades the Federal government has been the major provider of supplementary assistance to improve the educational opportunities for various groups of disadvantaged or high-risk students. These groups include educationally disadvantaged students (defined primarily as those attending a school with a high concentration of low-income students), students with limited English proficiency, students with disabilities, students from migrant farm worker families and Native American students. These Federal programs have contributed to significant improvements in the high school completion rates and the increasing enrolment by these groups in core academic subjects, particularly for blacks, Hispanics and Native Americans. The most dramatic change has been in the educational opportunities available to persons with disabilities. Before the Federal laws aimed at expanding their educational opportunities were enacted, millions of young people with disabilities were excluded entirely from public elementary and secondary education each year. These Federal programs have the effect of expanding the pool of students from low-income families and minority groups who have the scholastic preparation needed to make them available for participation in higher education. The number of students from underrepresented groups in the pipeline to higher education and thus the diversity of higher education have been increased.

The civil rights laws, most of which were enacted between 1964 and 1975, have a broad impact on American higher education. These laws require, for example, non-discrimination in access to academic programs and extracurricular activities (such as the participation of women in sports), in the awarding of financial assistance and in access to housing, counselling and employment. By improving the access to and quality of elementary and secondary education for minorities and women, these laws have also increased the number of students from underrepresented groups in the pipeline to higher education. The civil rights laws have their principal effect on diversity in American higher education through their impact on the admissions process - the decision of who will be admitted to attend each institution.
Generally, institutions of higher education which receive Federal financial assistance may not discriminate in their admissions on the basis of race, colour, national origin, gender, disability or age. Since almost all institutions receive some form of Federal financial assistance, these prohibitions against discrimination apply to almost all institutions. If an institution has discriminated contrary to Federal civil rights law part of the remedy may include affirmative action measures to recruit students from among the group which had been discriminated against. For example, if an institution discriminated against blacks in its admissions process, it could be ordered to make special efforts to recruit black students to remedy the effects of its past discrimination against blacks. Thus, unless an institution illegally discriminated against one of the categories of persons protected by Federal civil rights law, institutions are not required by Federal law to pursue policies to enhance the diversity of their student body.

Lowering the barriers of discrimination in higher education admissions pursuant to the civil rights laws certainly seems to have contributed significantly to the increased diversity of American higher education in the last three decades. For example, between 1967 and 1975 the percentage of black high school graduates enrolled in higher education increased from 23% to 30%. Women are now the majority of students in higher education and their enrolment gains in professional schools have been particularly dramatic. For example, between 1972-73 and 1992-93, the total number of medical degrees awarded rose by 51% while the number awarded to women rose by 536%.

While the elimination by the civil rights laws of many discriminatory barriers has contributed substantially to the increasing diversity of American higher education, many institutions of higher education have voluntarily and consciously sought to increase the diversity of their student bodies as an educational strategy. President Rudenstine of Harvard University notes that “student diversity has, for more than a century been valued (by many institutions of higher education) for its capacity to contribute powerfully to the process of learning and to the creation of an effective educational environment. It has also been seen as vital to the education of citizens – and the development of leaders – in heterogeneous democratic societies such as our own.” These institutions of higher education believe that students with a broad range of backgrounds in terms, for example, of race, religion, gender, family income and birthplace are likely to bring with them a wide variety of strongly held points of view. And, the clash of these points of view in the classroom as well as informally in the life of the college or university enhances and enriches the general quality of education and trains students to successfully fulfill their roles as future citizens and leaders in a democratic society.

Both the civil rights laws and the policies of institutions of higher education have reinforced each other and contributed to the increased diversity in American higher education. Currently, however, we are seeing attempts to turn these two sources of diversity in American higher education against each other. We have reached the ironic situation where the civil rights laws are being invoked to challenge the efforts of institutions of higher education to manage their admissions process in a manner that produces diversity in their student bodies. Opponents of the efforts of institutions of higher education to promote diversity allege that such efforts constitute “reverse discrimination” in violation of the civil rights laws. In particular, it is charged that attempts to attain racial diversity discriminate against white students who are denied admission.
This issue first came to the fore in the Bakke case which was decided by the U.S. Supreme Court in 1978. The Court held that the admissions process of the University of California at Davis Medical School was unlawful because it reserved a number of admissions places exclusively for racial minorities and used different standards for filling these places. However, the Court found that race could be used as one among a constellation of standards that were used to judge all students in the admissions process if the institution could show that using race as an admission standard was necessary to promote a compelling interest of the institution. The Court accepted the argument that the use of race as an admission criterion promoted diversity which contributed to the quality of the total educational environment and that this enhancement of educational quality was a compelling interest of the institution. In sum, the Court decided that it was generally not permissible to “set aside” places in admissions for members of a racial group, but that race could be taken into account as one factor in the admission process. The Bakke standard generally let institutions proceed with efforts to attain racial diversity in their student enrolments.

In March of this year the U.S. Court of Appeals for the Fifth Circuit (one of the lower Federal courts) ruled that the law school at the University of Texas “may not use race as a factor in deciding which applicants to admit in order to achieve a diverse student body...”. This case, Hopwood v. Texas, rejects the standard which the Supreme Court established in the Bakke case. The Clinton Administration and others have urged the Supreme Court to review this lower court decision, reject the position of the lower court and reaffirm the standard established in the Bakke decision. Clearly, if the Supreme Court agrees with the lower court, the ability of institutions of higher education to attain diversity in their student bodies, at least on the basis of race, will have suffered a major setback.

The third realm of Federal policy and programs that has an impact on the diversity of American institutions of higher education is student financial aid. By way of background, it is important to understand that all students in higher education in the United States pay a financial price (tuition and fees) in order to attend an institution of higher education. In addition, students must pay for their maintenance (housing, food, books and personal expenses). The sum of all these costs (tuition, fees, housing, food, books and personal expenses) is known as “cost of attendance.” The ability of a student to pay the cost of attendance at the institution of higher education is obviously one of the most important determinants of whether he or she will in fact attend. Of course, anyone can pay some or all of the cost of attendance on behalf of a student, including the student’s family and the Federal government.

There are numerous programs of financial aid to help students meet their cost of attendance, including programs offered by charitable organisations and foundations, by institutions of higher education, by states and by the Federal government. Most of the funds awarded by these programs are provided on the basis of financial need. (Financial need is the remainder after a reasonable contribution from the student and the student’s family is subtracted from the cost of attendance.) Financial aid funds not awarded on the basis of need are usually awarded on the basis of academic, artistic or athletic merit.
In the 1995-96 academic year, Federal student financial aid programs provided approximately $35 billion in loans, grants and work opportunities to students. Approximately 7 million students (or roughly 45% of all students) received Federal financial aid from one or more of the Federal programs. Since the creation of most of the programs beginning in the mid-1960s, approximately $350 billion have been awarded to about 50 million students. This Federal student financial aid also represents about 75% of the student financial aid available from all sources in the United States. With minor exceptions, this Federal student financial aid is awarded on the basis of financial need. Clearly the Federal government is the dominant partner in providing student financial aid to financially needy students.

Let me also note that in addition to the student financial aid programs the Federal government has another large and important group of programs to aid students from low-income families or who are the first in their family to attend higher education ("first generation in college students"). These programs, known as the TRIO programs, deal with the non-financial barriers to access and retention in higher education such as inadequate academic preparation, lack of information about higher education opportunities and problems in applying for admission and financial aid. Dr. Arnold Mitchem will describe these programs and their impact at the plenary session later today.

The policy purpose of the student financial aid provided by the Federal government has not been framed in terms of increasing the diversity of American higher education. As noted above, the Federal government has no policy to require diversity in higher education, except to remedy past discrimination. The policy purpose of student financial aid has rather been seen as promoting equal educational opportunity, providing to all who are qualified the opportunity to participate in higher education. The expected result is that the individuals who would not have otherwise attended higher education will through higher education develop their talents and abilities to the benefit of themselves and the nation.

Although this is not its explicit purpose, Federal student financial aid nevertheless plays an important role in enhancing the diversity of American higher education. First, since Federal aid is awarded on the basis of financial need, it has helped millions of low-income students attend institutions of higher education and thereby contributed to the economic and social class diversity of American higher education. For example, in the fall of 1973 20% of the high school graduates from families with incomes in the bottom fifth of all incomes enrolled in higher education. In the fall of 1992, 41% of the students in this category enrolled in higher education. In addition, since racial minorities in the United States, particularly blacks, Hispanics and Native Americans, are disproportionately low-income, student financial aid awarded on the basis of financial need also tends to promote the racial diversity of American higher education. For example, in 1992-93 29% of white undergraduate students received Federal student financial aid while 48% of black undergraduates, 36% of Hispanic undergraduates and 35% of Native American undergraduates received Federal aid.

The increases in student diversity at American institutions of higher education that are attributable to need-based Federal student financial aid are threatened by two trends.
First, higher education is becoming less affordable. In particular, the amount of student financial aid (75% of which comes from the Federal government as was noted above) has not kept pace with the increases in college costs. Over the last fifteen years (1980-1995) tuition at private four-year higher education institutions has increased by 89% and at public four-year institutions by 98%. In the same period of time, median family income has increased by 5% and student financial aid per student has increased by 37%\textsuperscript{21}. Clearly the ability of students and their families to pay for higher education has diminished significantly, and student financial aid has not kept pace with rising costs.

A second trend which also threatens the gains in diversity in American higher education is the changing nature of the financial aid which students are receiving. In the mid-1970s about 76% of the financial aid which students received from Federal programs was grants and 21% was loans. In the mid-1990s these proportions have been reversed with 26% of the Federal student aid in grants and 72% in loans\textsuperscript{22}. The result has been that almost all students with financial need must borrow to pay for at least part of the cost of higher education. Student loan programs that were once thought of as providing loans of convenience to assist middle-income families with managing the cash flow of paying for college have become loans of necessity for almost all needy students. There are a number of studies that indicate that grants are more effective than loans in encouraging access to higher education by low-income and minority students. It seems to be particularly important that low-income and minority students receive more grants than loans for their first year, when they are making the decision to enter or not enter higher education\textsuperscript{23}. In other words, if faced with the choice of starting off in higher education by paying the bills with a loan or not attending higher education, low-income and minority students are more likely than non-minority and upper-income students to choose not to attend.

There is, as yet, no clear evidence of declining participation by low-income and minority students in American higher education as a result of the decreasing availability of adequate student aid to pay for higher education and the shift from grants to loans in Federal student aid. There is, however, a deep and growing concern that these two trends will have negative effects on the opportunities for higher education of low-income and minority students. Such effects would also diminish the diversity of American higher education.

In sum, the U.S. Federal government has no policy to require diversity in higher education and, having such a policy would not be appropriate in the American constitutional scheme (except to remedy the effects of past discrimination). However, three sets of Federal policies and programs - support for elementary and secondary education, the civil rights laws and student financial aid - have a significant impact in increasing campus diversity. Many institutions of higher education also actively promote campus diversity as a pedagogical strategy. These efforts of institutions to promote diversity are being challenged by an interpretation of the civil rights laws that construes such activities as reverse discrimination. The impact of the student financial aid programs on increasing diversity is threatened by two trends - the declining value of student aid relative to college costs and the changing composition of student aid from grants to loans as dominant.
Notes

2. Ibid, Table 174, pp. 183-184
3. Ibid., Table 168, p. 177
6. See Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-4a) (race, colour and national origin); Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act (1990) and the Age Discrimination act of 1975. The prohibition against discrimination based on gender does not apply to admissions to undergraduate programs at private institutions of higher education.
7. Digest of Education Statistics 1995 Table 180, p. 189. The year 1967 is a few years after the adoption of the Civil Rights Act of 1964 which prohibits discrimination based on race and 1975 is prior to the large growth in Federal student financial aid. Thus increases in black enrolments in higher education in this period are likely to be due to the effect of the civil rights law.
8 Digest of Education Statistics, 1995 Table 167, p. 176
9. Ibid., Table 251, p. 278
12. Hopwood v. Texas, No. 94-50569
13. All recipients of financial aid are, of course, meritorious to the extent that they have satisfied the admissions standards of an institution of higher education.
14. US Department of Education. The Fiscal Year 1997 Budget, Student aid Comparison Table.
15. Ibid.
17. Ibid.
22. The Next Step; Student Aid for Student Success (Washington D.C. The Institute for Higher Education Policy, 1995 p. 8 The remaining aid in each year to reach 100% was awarded through work-study program.

26
An Eastern European perspective - New study patterns and dropout in Estonian higher education

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1. During Soviet rule higher education could be obtained along three strictly defined study patterns: full-time (day-time) studies, part-time (evening) studies and extra-mural studies (distance learning). Depending on discipline and type of programme, from 70 to 80 percent of full time students completed their studies inside a nominal study time of four or five years. Only for one to three per cent of the students, did the time needed to complete the studies exceed minimum completion time by one or two years. Therefore, the overall dropout rate for full-time students was from 20 to 30 percent.

Time spent at the institutions of higher education for graduates from part-time and, moreover from extra-mural studies, had a much wider distribution with an overall dropout rate from 40 to 70 per cent.

2. New developments in the organization of university studies occurred during the nineties: introduction of a three tier system of academic degrees (bachelors', masters' and doctors' degrees), and a significant increase in flexibility have led to totally new study patterns. Here, from the students' point of view, two major aspects of flexibility should be mentioned:
- freedom to build up an individualised study programme inside a general framework
- freedom to build up an individualised time schedule to implement the study programme.

As a result of these developments, the number of students who complete their studies inside the nominal study time has diminished to less than 50% for undergraduate studies, and even more dramatically, to less than 20% for postgraduate studies. These percentages reflect just average completion rates, whereas variations within disciplines are dramatic.

Due to the changes in the distribution of time spent at the institutions of higher education, and limited time-series available, it is difficult to give reliable estimates of the actual dropout rates. At least, in general overall dropout rates have remained inside the previous limits of 20 to 30 percent. An important new feature is that in many cases the reason for dropout is not inadequate academic achievement, as was the case in former days, but rather well-paid full-time job assignment. This is especially true for students in information technology, accountancy, business management, law and banking.

Depending on the institution, discipline, and type of programme, the number of full-time students who at the same time perform part-time or even full time work assignments varies between 10 and 80 percent. The percentage is highest among engineering and management students.
3. Recent developments show that the initial period of over-liberalisation in the organization of university studies is over and being gradually replaced by more strict rules governing the organization and financing of studies.

A study loan system, introduced in 1994, was initially accepted with suspicion by the Estonian student community. Gradually, however, the number of full time students taking study loan to cover their living costs has increased from 10 to 30 percent. Most probably, tuition fees will be introduced starting from the academic year 1997/98. This new development will certainly diversify study patterns even more.

4. Restructuring of the national economy, liberalisation in the organization of university studies, and rapid changes in the labour market have resulted in significant changes in students' study patterns. Mean value of the time spent at the higher education institution is increasing, whereas the irreversible dropout rate has practically remained unchanged. In many disciplines the difference between full-time and part-time study patterns has been wiped out.

The decreasing efficiency of the higher education system in Estonia has led to legislative and financial incentives from the government. Future changes in study patterns will probably proceed towards the patterns known from the seventies and eighties.
PART II THE PLENARY SESSIONS

THE SECOND PLENARY

Overcoming barriers to successful completion
Non-completion in European higher education, report of a survey undertaken on behalf of the Council of Europe’s Project on Access to Higher Education

Jean-Louis Moortgat, Advisor to the Registrar, University of Libre de Bruxelles, Belgium.

A propos de l’abandon des études dans l’enseignement supérieur en Europe Le cas de 5 pays: Dr Jean-Louis Moortgat

Rapport de synthèse

1 Introduction

Le rapport qui m’a été demandé par le Conseil de l’Europe devait porter sur une synthèse des données existantes à propos de la question de l’abandon dans l’enseignement supérieur dans différents pays d’Europe. Les données recherchées devaient porter sur 5 sujets majeurs :
- L’ampleur et l’évolution du phénomène d’abandon;
- Son impact financier et économique;
- Le profil des étudiants en situation d’abandon;
- Les facteurs d’abandon;
- Les mesures de remédiation proposées ou déjà mises en œuvre.

J’ai pu recueillir des informations jugées suffisantes et globalement cohérentes pour 5 pays, à savoir :
- La Communauté française de Belgique;
- La France;
- L’Italie;
- La République fédérale d’Allemagne;
- Le Royaume-Uni.

Les sources auxquelles j’ai eu accès sont soit de type « officiel » émanant des Pouvoirs publics, d’organismes parastataux nationaux ou d’instances internationales (O.C.D.E., Union européenne), soit de type scientifique ou spécialisé, soit encore proviennent des milieux académiques qui s’efforcent de définir une politique dans le domaine visé. Ces précisions sont importantes car elles permettent de tracer précisément les limites du travail qui a été entrepris.

Une première limite importante réside dans le caractère fondamentalement partiel des résultats que j’ai pu recueillir: des données mentionnées pour tel pays sont manquantes pour tel autre, leur qualité fluctue sensiblement.

D’autre part, bien que représentants une assez bonne diversité de systèmes d’enseignement, les pays retenus ici sont uniquement représentatifs de l’Europe occidentale. Il aurait été souhaitable, afin d’élargir le spectre de l’analyse, de porter aussi l’attention sur
d'autres régions d'Europe, centrale ou septentrionale. Force fut de constater l'effet des difficultés de communication, ou du manque d'une réelle attention apportée au problème, souvent neuf il est vrai, qui se soldèrent par le fait que mes correspondants dans de nombreux pays ne purent m'adresser les données demandées, ou communiquèrent des éléments trop incomplets pour être utilisables.

Mais il s'agit aussi d'un rapport inévitablement partial. Basée sur des éléments d'analyse issus des différents travaux que j'ai pu consulter, cette synthèse est tributaire des points de vue adoptés par chaque chercheur, groupe de travail et autre comité de réflexion. Je me suis d'ailleurs attaché à refléter aussi scrupuleusement que possible les options défendues par chacun. A l'inverse, je n'ai pu illustrer les idées, peut-être essentielles, des auteurs dont les ouvrages m'ont échappés.

Il faut également souligner que ce rapport, bien que s'efforçant de présenter les différents aspects examinés de façon uniformisée, n'a pas été établi dans un but de comparaisons transnationales. La forte disparité des informations recueillies, de même que les différences fondamentales entre les systèmes éducatifs rendrait d'ailleurs, à ce stade, toute tentative en ce sens caduque.

Enfin, dans le même ordre d'idée, une limite cruciale s'est rapidement imposée: il n'existe pas, à l'heure actuelle, de définition univoque du concept "d'abandon". Dans certains cas est considéré comme abandon le simple fait de quitter une filière d'étude (ce qui n'empêche pas une réinscription dans un autre cursus ou de passer de l'enseignement universitaire à l'enseignement supérieur non-universitaire, et donc de demeurer dans le système d'enseignement), dans d'autres cas la notion d'abandon est restreinte au fait de quitter l'enseignement supérieur sans avoir obtenu de diplôme (notons que cette approche ne tient pas compte du facteur temps et d'un retour ultérieur dans un cycle d'enseignement). Bon nombre d'études traitant du sujet qui nous occupe, restent ambigües à ce propos ce qui rend souvent malaisée l'interprétation des tendances qu'elles dégagent et plus spécialement des données chiffrées.

Enfin, ultime indication avant d'entamer une brève description des résultats obtenus, je voudrais préciser que j'ai volontairement écarté des considérations ci-après les données recueillies à propos des aspects financiers et économiques. Outre le fait que ces données sont manquantes pour deux des pays étudiés (l'Italie et la RFA), celles-ci présentent un caractère par trop disparate et sont trop étroitement liées aux conditions socio-économiques de chaque pays pour permettre une présentation synthétique pertinente. Les personnes intéressées pourront néanmoins se référer aux éléments mentionnés dans mon rapport ainsi qu'aux références qui y figurent en cette matière.

2 Ampleur et évolution

Bien que le phénomène d'abandon soit observable dans tous les cas étudiés, il présente des aspects variables selon les pays. Il est stable à un niveau relativement élevé :
- En Communauté française de Belgique où un taux de ±25% d'abandon en première année pour des étudiants de première génération inscrits à l'université se maintient
depuis 15 ans (sur l'ensemble des années d'études le taux d'abandon, pour les années académiques 1992/93 et 1993/94 était de 38% pour l'enseignement supérieur non universitaire et de 57% à l'université);

- En France où un taux de sortie sans diplôme de l’ordre de 30% est observé depuis 1984 (28% en 1993) avec un taux nettement plus élevé pour les bacheliers issus des filières technologiques engagés dans un cursus universitaire : 50% des entrants contre 20% des bacheliers « généraux »;

Il est stable à un niveau très élevé, plus de 60% d’abandon, en Italie (dans ce cas cependant une baisse de ce pourcentage est attendue suite à la mise en place d’un système d’accès plus limitatif);

Il est en progression nette en RFA où le taux d’abandon est passé de 14% (en 1974/75) à 30% (en 1991/92)

Il est moins marqué en Grande-Bretagne avec un taux oscillant, selon les sources, entre 6,2% et 13% (pour l’année 1995)

D’autre part, il est également intéressant de relever la vitesse de l’abandon. Là aussi les situations varient d’un pays à l’autre :

En Grande-Bretagne l’abandon est précoce et intervient le plus souvent avant la fin du premier terme 1, cette situation semble liée à l’organisation du système universitaire lui-même (à cet égard, il faut noter que 80% des étudiants diplômés terminent leurs études dans le délai normal, soit 3 ans pour le first degree);

L’abandon est par contre plus tardif en Communauté française de Belgique où il intervient majoritairement après 1,6 ans dans l’enseignement supérieur non universitaire et 1,9 ans à l’université (années académiques 1992/93 et 1993/94), et en RFA où la « durée de vie » des « abandonnants » dans le système d’enseignement est passée de +/- 4,6 semestres en 1974/75 à +/- 6 semestres en 1991/92 (il est à noter que seuls 20 à 30% des étudiants diplômés achèvent leurs études « à l’heure » et que la durée globale des cycles d’études à tendance à croître en RFA)

Enfin, ce phénomène est plus contrasté en Italie où une part des étudiants (soit 23%) quittent l’enseignement très précocement (avant la fin de la 1ère année), alors qu’un tiers des abandonns se situent beaucoup plus tard, soit après 4 à 5 ans de présence.

Je ne dispose pas de données à ce sujet pour la France.

Parallèlement à ces quelques données, un constat important s’impose pour tous les pays concernés, à savoir la nette massification et la profonde diversification des populations accédant à l’enseignement supérieur.

A titre d’exemple, notons que pour la Communauté française de Belgique, de 1961 à 1992, les effectifs d’étudiants dans l’ensemble de l’enseignement supérieur ont augmenté de 178% (207% pour les universités), ou encore que pour le Royaume-Uni le nombre d’étudiants dans l’enseignement supérieur a crû de 80% entre 1983/84 et 1993/94 dont 54% entre 1989 et 1994.

La diversification des populations étudiantes recouvre de nombreux aspects qui vont de l’extension de la pyramide des âges (une croissance de la proportion d’étudiants entrants de plus de 21 ans est notamment soulignée dans le cas de la Grande-Bretagne), à l’élar-
gissement des strates sociales ayant accès à l’enseignement, en passant par une plus grande diversité parmi les porteurs de diplômes d’enseignement secondaire (bacheliers « technologiques » en France, détenteurs d’un GNVQ level - Qualification nationale de formation professionnelle générale - en Grande-Bretagne).

3 Profil des étudiants en situation d’abandon

Les profils qui se dégagent pour chaque pays, à l’exception du Royaume-Uni pour lequel je n’ai pu obtenir de données suffisantes, sont évidemment essentiellement fonction du point de vue adopté par les études ou les rapports qui m’ont servi de référence. Certaines, de nature plus statistique, mettent surtout l’accent sur des données de type individuel (âge, sexe, etc.), d’autres, envisageant la question sous un angle sociométrique - voire sociologique -, s’attachent à des dimensions plus macroscopiques. Dans l’ensemble, il faut préciser que ces profils restent très flous faute d’études vraiment spécifiques susceptibles de délivrer des données cohérentes.

Quoi qu’il en soit il est intéressant de reprendre les profils obtenus pays par pays.

Pour la Communauté française de Belgique, la population présentant un risque d’abandon est plutôt féminine (surtout dans les cursus universitaires), présente, au moment de l’entrée dans l’enseignement supérieur, un âge plus élevé que l’âge habituellement requis (un âge plus avancé serait en effet l’indice d’un retard scolaire acquis dans l’enseignement secondaire et facteur d’abandon dans l’enseignement supérieur) et est plutôt issue de milieux moins favorisés (d’après une étude partielle).

Pour la France, on constate un fort risque d’abandon pour les étudiants détenteurs d’un baccalauréat technologique ou professionnel ainsi, mais il existe sans doute un lien, que parmi les étudiants issus de milieux moins favorisés.

En Italie, les « abandonnants » potentiels se recrutent semble-t-il surtout parmi des étudiants peu motivés par les études (notamment pour les hommes qui s’engagent dans un cursus en vue de retarder le moment d’effectuer le service militaire) et parmi les détenteurs d’un diplôme d’enseignement secondaire technique ou professionnel (une mention faible accroît le risque).

En RFA, les étudiants en situation d’abandon sont le plus souvent des femmes (qui renoncent généralement pour cause de charge d’enfants, ce qui n’est sans doute pas sans lien avec la longueur des études supérieures), sont issus de milieux ouvriers, ont obtenu une note faible au baccalauréat, ou sont - ont été - engagés dans une activité professionnelle.

On voit que l’origine social apparaît comme un élément récurrent du profil.

4 Les facteurs d’abandon

A cet égard, les données dont j’ai pu disposer m’ont permis de dresser une nomenclature assez générale de différents facteurs parmi lesquels on peut identifier :

Les facteurs individuels qu’on pourrait qualifier de « subjectifs » car liés aux caractéris-
tiques propres de chaque étudiant: il s'agit des variables liées à l'âge (comme pour la Belgique ainsi qu'expliqué ci-dessus) ou le sexe (cfr. supra), ou liées par exemple au manque de motivation pour les études entamées (Italie, RFA). Les causes d'abandon peuvent aussi relever d'autres « raisons personnelles » ainsi que le signale une importante enquête menée au Royaume-Uni qui signale cet item comme le plus souvent cité.

Les facteurs institutionnels sont fort diversifiés: ils peuvent tenir au manque de réponse adéquate des systèmes d'enseignement face à la massification et à la diversification des publics, défaut largement aggravé par le manque de financement (France, UK) et par une restriction de l'autonomie du secteur de l'enseignement supérieur (UK). L'indadaptation des enseignements aux attentes de certains étudiants, tant en ce qui concerne les contenus que les méthodes d'apprentissage ou d'évaluation, apparaît également comme un facteur d'abandon non négligeable (RFA, UK). Dans le même esprit, le manque de préparation dans le degré secondaire, plus particulièrement pour affronter un cursus universitaire, paraît souvent rédhibitoire (France, Italie, UK).

En ce qui concerne les facteurs socio-économiques, le rôle de l'origine sociale, quoiqu'encore mal étudié, a déjà été plusieurs fois souligné.

Enfin, il existe aussi des facteurs corréles comme c'est le cas en Italie où la cause principale d'abandon est fortement corréle au sexe: 45% des hommes qui abandonnent leurs études, le font pour des raisons liées à une activité professionnelle (pour 29% des femmes), alors que 39% des femmes renoncent aux études pour des raisons familiales ou matrimoniales (15% des hommes).

5 Les mesures de remédiation

Ici aussi, je voudrais tenter de regrouper les diverses informations recueillies au niveau national en des agrégats plus généraux.

Globalement, et sans simplifier outre mesure, on peut dire que deux conceptions s'opposent : l'une, tentant de gérer au mieux les flux d'étudiants sur base des moyens disponibles, préconise la mise en place ou le développement de mécanismes de sélection susceptibles de contrôler l'accès aux différentes filières, l'autre, face à la diversification des populations étudiantes, propose plutôt une adaptation de l'enseignement supérieur à ses nouveaux publics. Notons que les deux tendances peuvent se trouver dans un même pays.

En matière de gestion des flux d'étudiants, je voudrais attirer ici brièvement l'attention sur deux modèles mathématiques (adaptés l'un à l'enseignement supérieur non universitaire, l'autre aux universités) développés par deux universités de la Communauté française de Belgique et qui ont pour but de fournir un outil de prévision des évolutions des volumes d'étudiants et de diplômés ainsi que de créer des indicateurs d'efficacité des systèmes d'enseignement.

De tels outils pourraient permettre, en fonction des choix politiques, d élaborer, par exemple, un mécanisme de sélection des étudiants sur dossier à partir d'un ensemble de critères préédictis, ou de scinder les étudiants en deux cohortes : l'une admise directe-
ment sur base des dossiers, l'autre soumise à une épreuve d'admission, ou encore d'iden-
tifier les populations à risque qui feraient l'objet de mesures particulières d'accompagne-
ment.

En matière d'adaptation des systèmes d'enseignement, les actions mises en œuvre ou
proposées sont multiples et souvent ponctuelles. On peut les regrouper en plusieurs
grandes catégories :

L'orientation et l'information des étudiants du cycle secondaire (Communauté française
de Belgique, France, RFA);

La diversification de l’offre d’enseignement (France, Italie);

La restructuration de certaines filières d'enseignement supposant notamment l'adapta-
tion des rythmes d'étude par la création de modules (France), la réduction de la durée des
études (RFA) ou la modification du système d'évaluation (RFA);

L’amélioration de l’assistance offerte aux étudiants, ceci tant en ce qui concerne les con-
ditions d’accueil des entrants (UK) que les divers soutiens pédagogiques existant ou à dé-
velopper : guidance, tutorat, identification rapide des lacunes éventuelles etc. (Commu-
nauté française de Belgique, Italie).

Pour conclure cette partie il est intéressant de noter que certains auteurs proposent par
ailleurs un renforcement des mesures d’aide financière directe au profit des étudiants les
plus défavorisés (Communauté française de Belgique, France, Italie). Un tel renforce-
ment s’effectuerait au détriment de l’aide indirecte fournie par les pouvoirs publics par le
biais du financement de l’enseignement qui, en réalité, en vertu de transferts découlant
de l'imposition de tous les revenus, bénéficie le plus aux étudiants plus aisés lesquels sont
globalement les mieux représentés dans l'enseignement supérieur ou occupent préféren-
tiellement les filières les plus coûteuses.

6 Conclusions

En guise de conclusion, je voudrais me risquer à quelques constats globaux :

Un phénomène de massification de l’accès à l’enseignement supérieur qui touche mani-
festement la plupart des pays étudiés, accompagne l’existence de taux d’abandon jugés
importants ;

Ce phénomène se combine avec de fortes contraintes financières imposées par les Pou-
voirs publics, lesquels s’inscrivent dans un contexte général de désinvestissement vis-à-
vis des besoins collectifs;

Ces deux premiers points induisent, tant de la part des décideurs politiques que des au-
torités académiques, une demande en terme de gestion des flux d’étudiants et « d’effica-
cité » accrue des enseignements qui devrait ce concrétiser par une baisse du nombre des
abandons souvent considéré comme une sorte d’indicateur;
Cette double demande suscite deux types de réponses :
Les unes davantage basées sur l'idée d'une sélection des étudiants au moment de l'accès aux études supérieures, ceci par des moyens divers (recrutement sur dossier, examens, concours,...);
Les autres partant du principe d'une nécessaire adaptation des systèmes d'enseignement par rapport à de nouveaux contextes et à l'évolution ou la diversification des « clientèles » étudiantes;

Avec en toile de fond l'inévitable question de la démocratisation de l'enseignement. 
Dans une tonalité plus prospective, il faut constater que l'impact financier de l’abandon est encore très mal connu, notamment en ce qui concerne son coût social. Une recherche systématique serait sans doute à développer dans ce sens.

Enfin, la recherche d'une définition généralisable du concept d'abandon des études, notamment sur la base d'une étude approfondie des différents systèmes d'enseignement, s'impose absolument.

Si le rapport dont je viens de tenter ici la synthèse, pouvait se réclamer de quelque utilité, ce pourrait être celle de constituer un début de piste pour des recherches futures menées dans cette perspective globale.

1. Il s'agit de données extraites d'une enquête locale menée à la Sheffield Hallam Institute

'YOND ACCESS. Diversity and Opportunity in Higher Education'
An Examination of Federally Supported Retention Models in American Higher Education: The Policy and the Politics

Dr Arnold Mitchem, Executive Director, National Council of Educational Opportunity Associations, Washington USA

The National Council of Educational Opportunity Associations (NCEOA), where I serve as Executive Director, represents administrators, faculty, and counselors of American access programs, and advocates in federal policy discussions for low-income and disabled students who want an opportunity to graduate from college.

To better understand my outlook this morning, let me point out that persons from minority and low-income backgrounds, which form NCEOA's membership, were not involved, until fairly recently, in affecting American higher education policy on campuses or in government. The political success of these professionals is due, in part, to the national policy discussions of the 1960's; the Civil Rights Movement; and the egalitarian traditions within the United States which drove the establishment of land grant colleges and state universities in the nineteenth century.

So, on behalf of a movement that began over thirty years ago, I appreciate the opportunity that the European Access Network has given me to share our experiences and to hopefully make a modest contribution to your discussions on how to widen the participation and success of students from underrepresented groups in your various systems of higher education. From our perspective, "overcoming barriers to successful completion within higher education" underscores, in a certain sense, the dilemmas and challenges which democratic societies face in a post-industrial society.

In 1965 in the United States, the federal government embarked on a strategy to use higher education as a vehicle to equalize opportunities in America. Ironically, thirty years later, some observers now argue that low-income students may actually be ill-served when access policies are put in place without regard to completion, or what, in current American policy jargon, is often referred to as 'outcomes' or 'quality.'

This rethinking of educational opportunity policy should not be construed as the abandonment of a policy that failed. It did not. The emphasis on access improved the quality of American life by promoting greater social cohesion and bringing our nation closer to its historic ideals. Instead, the shift in emphasis from access to retention should be seen as a maturing of American social policy based on decades of concrete experiences and current realities.

There is a growing recognition that federal higher education policy has focused too much on loans as a means of providing access, with little concern for supportive services, retention strategies and grants. This has adversely affected the ability of many low-income students to succeed in college.
I am encouraged by the possibility that the recent shift in public policy emphasizing retention will lead to a greater appreciation of the class and cultural barriers that underrepresented Americans face in their quest for a baccalaureate degree. This shift should also provide the basis and impulse for re-examining the relationship between students from under-represented groups and the colleges they are entering in terms of climate, curriculum, and structure. It might also bring greater recognition and importance to the work of access professionals.

Now, before I discuss the specifics of three federally-supported models in the United States that focus squarely on retention as opposed to access, I want to take a moment to describe how access programs are organized at the federal level within the United States. The principal set of access programs or strategies in the United States are the Federal TRIO Programs. Nearly a half-billion dollars has been appropriated by the Federal government to support 1,900 TRIO programs operating in 1,100 colleges and universities and 150 community agencies, serving 680,000 students in this school year. Since 1965, the federal government has invested a total of $5.3 billion dollars in the TRIO programs, to serve over 10 million students.

These programs draw their authority from the Higher Education Act of 1965 which, as Dr. Wolanin discussed this morning, also provides authority for student financial aid programs. TRIO is integrally related to student aid. While the student financial assistance programs address the financial obstacles low-income students face in attaining a college degree, TRIO addresses the class, social, and cultural barriers to access and completion.

Conceptually, TRIO must be seen as one program which incorporates four distinct strategies to achieve the goal of collegiate access and completion. Three of the TRIO strategies—Talent Search, Upward Bound, and Educational Opportunity Centers—are pre-collegiate. These strategies serve students of different ages with different levels of intensity. Students learn about college and are prepared for enrolment. Talent Search works with children as young as 11; Upward Bound focuses on more intensive academic services for high school students under the age of 19; and Educational Opportunity Centers provide information, counselling, and other services to adults. Over 700 Student Support Services projects, which will be the central focus of this paper, are designed to assure that low-income and disabled students already enrolled in college are retained through graduation.

The contributions of TRIO to higher education can be understood in two ways. First, TRIO has played an important role in the development and application of educational methods and services that have led to greater numbers of low-income, minority, and disabled students succeeding in America's colleges. It is estimated that at least two million students—most of whom would not have attempted college—have earned baccalaureate degrees because of these federal initiatives. Secondly, TRIO has been the impetus for the formation of a politically active coalition that includes ethnic, racial, and socio-economic groups that had not fully participated in American higher education before 1965.

By the mid-1990's, this coalition had successfully advanced the interest of disadvantaged students in federal higher education policy discussions and protected the values and
goals inherent in the original TRIO legislation. They effectively combatted the resistance and scepticism TRIO engendered from certain segments of American society who have benefited, and continue to benefit, from the traditional conceptions and practices of higher education. Combat was waged around the annual appropriation bills for federal education programs; and around four of the six re-authorisations of the Higher Education Act of 1965. This required the TRIO leadership to use each annual appropriations bill and each of the four re-authorisations as a springboard to energise and educate the TRIO community about the intricacies of federal education policy.

Influencing Congress

Clearly, the development and growth of the TRIO community’s capacity to influence the federal government, particularly the Congress, is ironically intertwined with the evolution of federal higher education since 1965. In 1974, the federal government froze the appropriation for TRIO funding. Public support for equal educational opportunity and the efforts of opportunity programs like TRIO were beginning to wane. On campuses, concerns surfaced over attempts to make college opportunities available to the “new” student. Some faculty argued that such efforts were responsible for lowering standards, or, as some put it, causing a “dumbing down” of curriculum. TRIO and TRIO staff were to a large extent being swept up and undermined by the backlash against the goals of President Lyndon Johnson’s Great Society of the 1960’s. TRIO staff’s initial attempts to respond politically to this backlash—usually by adopting the slogans and tactics of the Black, Brown, and Red Consciousness movements of the 1970’s—were feeble at best. They often served only to further isolate and marginalize TRIO staff on campuses and in the national policy debate.

While the conservative backlash grew, TRIO languished without a funding increase for three years. Meanwhile, the United States Office of Education continued to bring staff together to promote professional development and to orient TRIO personnel regarding compliance with the regulations governing the use of these federal funds. At these government-sponsored meetings, activists searched for and found a set of principles upon which they began to build a cohesive community—incrementally transforming grantees with no common identity, nor allegiance to one another, into an organised interest group. Together they constructed a professional identity which emphasised their commonality of functions. As a profession, they had to subordinate their ethnic and racial identities and redefine their purpose in terms of their commitment to low-income students.

However, it was not until the late 1970’s that this loose conglomerate of state and regionally-based TRIO associations galvanised into a national group. The establishment of a national organization happened in the process of developing a policy consensus in preparation for the Higher Education Amendments of 1980—the fourth re-authorisation of the 1965 Act. Consistent with their commitment to disadvantaged students, the group recommended to Congress that TRIO eligibility should focus on just three categories:
1. low-income students,
2. students whose parents had not received a baccalaureate and
3. disabled students.
Congress's adoption of this policy recommendation had several significant benefits. First, it gave Congress a clear picture of who was served by TRIO. Since the eligibility criteria did not include race- or ethnic-specific language, it disassociated TRIO from the emerging affirmative action debates and controversies. At the same time, it affirmed the TRIO community's focus on economically disadvantaged students as opposed to students who were disadvantaged by their minority status. This had the political effect of giving TRIO a moral claim that resonated beyond the classrooms and the halls of Congress.

United by their successes during the 1980 Re-authorisation and challenged that same year by the election of a conservative President, this national group moved quickly to establish a Washington headquarters. This action was fortuitous because the new President sought to dismantle TRIO and for eight years aggressively attempted to destroy the program. The TRIO community was able to defeat this assault because the Washington headquarters provided up-to-date information about the timing of key decisions. The TRIO constituency was always well positioned to bring concerted and intense pressure on the decision-makers in Congress. Barrages of calls, letters, mailgrams, faxes and meetings with Members of Congress kept Congress well-informed about the merits and successes of TRIO. These actions effectively countered the aims of the conservative Administration.

By meeting the challenges of the 1980's, the base of support and interest in TRIO grew within higher education. TRIO was now an integral part of the federal higher education strategy to equalise educational opportunity. The TRIO community pressed for ever larger funding increases to serve even greater numbers of disadvantaged students. In fact, funds appropriated for TRIO grew by 40% during the 1980's. Since 1989, the TRIO appropriation increased one hundred and fifteen percent (115%).

Three Models

While these policy battles were being waged, TRIO professionals improved and strengthened their access and retention strategies. Today, when we look at the Student Support Services strategy, which, as I noted earlier, speaks most directly to the theme of this conference, there are three models that are the most dominant. I am going to refer to them as the special enrolment model, the developmental education model, and the laboratory model.

The Special Enrolment Model

The special enrolment model is found more often in four-year selective colleges and universities, particularly those where the percentage of low-income and/or minority students enrolled is small compared to the total undergraduate student body. In such cases, the institution chooses a group of students upon whom to concentrate services, based upon a number of factors ranging from internal or external political pressures to an analysis of institutional retention and graduation data. Typically, institutions adopting this model focus on minority students or students from certain secondary schools with weak academic programs.
In the most comprehensive of such special admission projects, the Student Support Services staff is involved in the decision of the institution to admit a student and in the amount of financial aid that a student receives. Special recruiters visit secondary schools to explain the advantages of Student Support Services participation to students and to discuss their success in college. A student's admission to the institution is usually contingent on their participation in the services offered by the Student Support Services project.

This model recognises two sets of related obstacles which may impact a student’s ability to continue in school and graduate. The first set of issues relates to perceived weaknesses in the student, such as their academic preparation, time management skills or familiarity with academic expectations. The second set of issues relates to the limitations of the institution itself. Student Support Services staff recognise the institution as a somewhat hostile and alien environment, and work to establish a peer and professional support system which assists students in coping with this environment.

For institutions which have adopted this approach, the majority of students accepted for a given academic year are expected to participate in a summer program. During these sessions, students receive a combination of remedial and regular university course work. Student Support Services staff use this opportunity to develop personal relationships with these students. Student advisors drawn from previous Student Support Services classes work with entering students and serve as a network of support.

Following the summer session, students enrolled in Student Support Services utilising this model are expected to maintain regular contact with the staff. In the most comprehensive efforts, staff members also extensively monitor each student’s academic performance throughout the year, and serve as the primary academic advisors for first-year students. Other staff contact might be structured in academic supports such as special remedial course work, attendance at skills laboratories or workshops which supplement regular course work, or tutoring attached to specific courses. Typically, entering students are also assigned an upper division student as a mentor or tutor who is expected to monitor that student’s progress, provide an additional warning when the student experiences difficulty, and generally provide appropriate encouragement, advice and support. Students might also participate in cultural or recreational activities which are designed to reinforce the student’s identification with Student Support Services and the campus.

Unlike the other two models which I will discuss, students typically receive support from a Student Support Services project of this type through graduation. In general, upper division students receive significantly less support and have significantly less contact with the staff.

**The Developmental Education Model**

While a special enrolment model is more typical of four-year selective colleges with smaller percentages of low-income or minority students, Student Support Services strategies following a *developmental education model* are found in both two- and four-year colleges. The *developmental education* approach tends to be found in institutions with wide
variances in the numbers and percentages of low-income and minority students enrolled.

While special admission projects are built on a conceptual framework which recognises both student and institutional weaknesses, developmental education methodologies, by their nature, focus more narrowly on the students' lack of academic preparation. Typically, students are selected for these Student Support Services projects on the basis of admissions test scores. Students then enrol in a group of interrelated transitional courses which bridge their entry into the institution. Such courses are most often offered in composition, algebra, and reading and study skills with the goal of building students' competencies in one or more areas.

Although these developmental courses might be offered either in the summer or in the regular academic year, the latter approach is more common. Most often, Student Support Services projects which utilise a developmental instruction model complement these course offerings with other services, particularly academic advising and tutoring. Programs which employ a developmental education model are likely to focus almost all of their services in the student's first year.

The Laboratory Model
A third approach, the laboratory model, relies on self-selection as a means of identifying students. Generally, individuals who meet TRIO's low-income, first-generation, or disability eligibility criteria are sent invitation letters to take advantage of the services made available by the Student Support Services project. Faculty are also advised of the availability of services and asked to refer students who are experiencing difficulties in their classes.

In contrast to Student Support Services projects utilising the special enrolment or developmental education models, laboratory projects most often concentrate on one service or group of services. For example, such a project might provide tutoring services or, at two year colleges, special assistance in preparing for and completing the requirements to transfer to a four-year institution. Laboratory model projects are most often found at publicly-supported institutions with high percentages of disadvantaged students.

Critical Recurring Themes
Let's now discuss what makes a strategy focused on college completion an effective strategy. The most basic point is that decisions regarding the design of effective completion strategies must make sense in the concrete situation in which they operate. Dr. Vincent Tint, Director of the National Centre for Teaching, Learning, and Assessment in Higher Education at Syracuse University in Syracuse, New York, argues that it is critical to approach retention by rejecting the provision of discrete steps. Instead, the key to developing an effective completion strategy resides in the ability of the faculty and staff to apply what is known about student retention to the specific situation.

Certainly each of us attending this conference shares an understanding of the complexity of the task facing professionals working in access programs. In the United States, as I
noted earlier, policy makers are increasingly recognising this complexity. Just last year, Larry Gladieux, an astute observer of federal higher education policy, captured the essence of this issue when he wrote: "We... know more today about the complexity of the college-going process. Enrolment and success in higher education are functions of many factors—academic aptitude and prior schooling, family and community attitudes, motivation, and awareness of opportunities not just ability to pay"16.

But it is also important to recognise that as one develops retention models, ideology also plays a part. Some individuals approach retention as if all of the deficiencies were in the student—that low-income students generally do not have the academic preparation, the value systems, or the family support to be successful in college. Others address the issue of retention from the other end of the ideological spectrum, as if all the deficiencies were in the colleges and universities themselves. They argue that ethnocentrism and institutional policies which disregard the needs of teachers and students account for much of the completion problem. In my view, it is probably appropriate to recognise that deficiencies exist in both students and institutions, and that completion models should address both of these needs. The models discussed earlier do that to a greater or lesser extent.

Most observers would agree with Dr. F. M. Dunston, who, in a review of Black student retention, concluded that universities have had varying experiences related to retention. He found that a vast array of independent variables have been used to explain retention and that there is no standard model of variable inclusion and even less consistency in the conceptualisation of how these variables are interrelated. In short, Dunston emphasises that successful retention methods must continue to rely on tentative modes of analysis—there are no absolutes17.

In conclusion, my review strongly suggests that retention models must be flexible and sensitive to the individual circumstances of the students they serve and the institutional circumstances in which they are located. The array of variables which may impede retention and completion in higher education is extremely complex and different students may have widely differing experiences at the same institution. A successful retention strategy needs to take into account not only the possible deficiencies which disadvantaged students may bring to college, but also the institutional obstacles a student faces once he or she arrives.

The American experience also points to some additional realities for all access professionals. First, access professionals must accept the reality of on-going opposition to their students and to the existence of their programs. They must view advocacy as an integral part of their responsibilities—both on their individual campuses and with the political structures which affect campuses internationally. They must represent their students and consistently promote the importance of access programs. They must be vocal in both the college and political arenas. They must show students and their families how to advocate for themselves. Lastly, they must pay careful attention to articulating their mission in a manner which serves to unify their profession and which draws support from a broad constituency. Like TRIO, one can anticipate that all access programs will be subjected to assaults from time to time. Unless access professionals are prepared to meet
these challenges, the future of access programs will be bleak and the educational aspirations of low-income and disabled students will go unfulfilled.

We in the United States recognise that we have much to learn from access professionals in Europe regarding the organization and delivery of access services. We are very honoured to be invited to participate in this dialogue.

Notes

5. See P.L.92-318 as amended, Higher Education Act of 1965, Title IV.
12. The National Council of Educational Opportunity Associations was incorporated on November 13, 1980, and opened its Washington headquarters on June 15, 1981.
14. An excellent example of a special enrollment project is the Educational Opportunity Program (EOP) at Marquette University in Milwaukee, Wisconsin. The EOP project encompasses many of the features of the most comprehensive type of special enrollment model.
Overcoming the Barriers

John Lilipaly, Chair of the board of ECHO and member of the Netherlands Parliament.

Once upon a time there were two fishes, but one could not define their species. That is why the bigger fish said to the smaller fish:

'Do you know what we should do, we should try and draw one another'.

The little fish thought that this was an excellent idea and enthusiastically he agreed with his friend's plan.

The bigger fish said: 'Now you start by drawing my portrait'.

The little fish got going with diligence. He looked closely and tried to depict his friend as accurately as possible. The result was quite beautiful.

'Marvellous', said the bigger fish, 'now I am a tuna-fish, a beautiful tuna-fish. Well done, little friend!'.

Then they changed places and Tuna-fish started to draw a portrait of the little fish. But as meticulous the little fish had set about it, so careless was Tuna-fish's drawing.

'I think you'd better stop', said the little fish, 'I think you're making a hotchpotch of it'.

He looked at the portrait Tuna-fish had made of him.

'That doesn't resemble a fish at all', he cried out, 'You've made me look like a little trunk, a coffer with a tiny little mouth!'.

'Oh well', said Tuna-fish, 'too bad, it can't be helped. Henceforth your name will be Coffer-fish'.

Equal opportunity within Higher Education is a must because education has the task to educate and train and because education is an important element in the socialisation of individuals. When higher education is less accessible for certain groups of people, while the necessary intellectual capabilities are present, then there is something amiss with the quality of higher education. The position of these groups of people in the educational system can be improved by having the system pay more attention to their problems and their specific needs. But even more than this is it important that education sees to it that its curricula and its organization of education is geared to the average student. Mostly this is an able-bodied, white male. The average student therefore is the Tuna-fish, the beautiful strong fish.

Under-represented groups are often Coffer-fishes: not only are they quickly and carelessly inserted in the curricula, they are also assigned a kind of name-tag, i.e. a certain perception of their knowledge and know-how, a name handed out from the top. By under-represented minority groups I mean ethnic minorities, women and disabled. Attention for equal opportunities and diversity within higher education is therefore of great importance. Thus, on the one hand under-represented groups can be better informed, while on the other hand the potential of under-represented groups - at present often under-estimated - can be put to better use.

I'd like to talk to you about the barriers ECHO has identified, barriers now facing under-represented minority groups who have already started a study about the way in which
these barriers can be surmounted. ECHO's activities aim in first instance at migrants (al-
lochtonous inhabitants). In Europe and elsewhere the questions connected with
promoting equal opportunities for this group are similar. The basic issues are improve-
ment in one's position and recognition of the fact that one has a position. In other
words: migrant students wish to deploy their talents and achievements - often acquired
in different cultural contexts - but they are not always allowed to do so. This makes
there problems akin to those of other under-represented groups in education.

In order to overcome barriers structurally - and particularly because we are talking about
quality care - I would like to submit here views on a coherent strategy, the implementa-
tion of an overall policy. To conclude I shall talk about the barriers with which we at
ECHO are confronted.

ECHO became operational as from 1 January 1995. The aim of ECHO is to improve the in-
take, flow-through and graduation of migrants in higher education. In order to achieve
its aims ECHO exercises three main functions:

1. **The project function**
   
   the joint initiation of projects concerning the intake, flow-through and graduation of
   migrants in higher education and the making available of project funding to support the
   policies of institutions for Higher Education

2. **The service function**

   the combining and sharing of expertise about the intake, flow-through and graduation
   of migrants in higher education as well as the development of networks

3. **The innovation function**

   the development of a policy which will promote the intake, flow-through and gradu-
   ation of migrants in higher education and which can be made operational within the
   relevant institutions (the 'innovation function').

ECHO started by posing a simple question: who has a problem? Where are the barriers
for minority students in Higher Education? After studying the relevant research on this
issue and after consulting several experts ECHO concluded that there are barriers on four
levels: the level of the students, of the lecturers (teachers), and at the level of education
and of the organization.

First of all students encounter barriers such as linguistic and learning skills, false expecta-
tions as to what the study is all about or an obscure idea of what one's (future) profession
would be. There are personal problems (e.g. traumatic experiences of refugee students
or the pressure students who live at home encounter when trying to fulfil social obliga-
tions) or a negative attitude of teachers (lecturers) and fellow-students.

Barriers have also been identified with autochthonous teachers, such as teachers who are
insufficiently equipped to counsel migrant students and teachers with a lack of experi-
ence in teaching ethnically heterogeneous groups. It is a matter of the linguistic usage of
the teacher but also of connecting with the students' different educational background
and his or her socialisation history.

Furthermore there is a barrier at the level of the teachers i.e. the very low number of
migrant teachers (lecturers) in Higher Education. At managerial level matters are even worse. This is all the more unfortunate because the experience and expertise of such teaching staff is of importance for the emancipation process of the group as a whole. These staff members are also of importance as 'role models' for both allochtonous and autochtonous students. These barriers in the organization are often connected with the lack of an overall migrant policy. We often say that migrant policy is an ad hoc policy and that emphasis is put on extra additional counselling and in courses to improve knowledge of and insight in problems connected with migrant students. Less attention is given to optimising the educational climate, such as adapting the supply of food in cantinas, creating a student counselling system, supporting migrant students associations, taking on teachers (lecturers) with a migrant background and mobilising the management to pursue a migrant policy also at training level.

In the discussion on a policy at education level, finally, emphasis is put on the adaptation of curricula to the wishes and needs in the multi-ethnic society. Higher education trains students to be professionals in areas where they are to an increasing extent called upon by migrants (e.g. education and welfare, (health) care and justice). Therefore, the curricula of autochtonous students should be better geared to their working with migrant 'consumers'. Moreover, in the Netherlands time and again it has been admitted that in Higher Education (and not only in that area) the curricula are far too western and mono-cultural and that they ought to be readjusted to the backgrounds and achievements of migrant students. But results haven't been achieved yet.

You will appreciate that the Migrant issue in Higher Education is a most complex question. When attempting to find solutions, ECHO wishes to take as its basic starting point a coherent strategy, usually called 'Overall policy'. The concept "coherence" has two aspects. Firstly there must be a policy at all levels of the organization. Secondly, intake, flow-through and graduation must be tackled simultaneously. Until now much emphasis has been put on 'flow-through'. As an example of "Overall policy" related to flow-through I mention language teaching. To realize overall policy in terms of language teaching it's not enough to give a few courses for migrant students. The institution should also give these students postponement for a committing study advice as long as the students are taking the course. When we consider the growing population of migrants in the Netherlands (in Amsterdam for instance 60% of all inhabitants between the ages of 0 and 24 are migrants/allochtonous), it is absolutely necessary that more energy is also devoted to the 'access'. That could be done e.g. by intensifying the co-operation between Secondary Education and Secondary Vocational Training and by improving study- and career counselling and by parent participation. As far as the aspect of 'graduation' is concerned, measures should be taken with regard to traineeships (a preparatory phase for the Labourmarket), programmes enabling students to gather information on job opportunities and schooling/training of employers and personnel officers.

I would like you to join me in some brainstorming about the issue 'Operationalisation of an Overall Policy'. Let me briefly outline what we and the institutions for Higher Education are facing.
To start with: not all institutions are convinced of the significance of the problem for
their own organization, far from it. We get comments like "But we have so few mi-
grants" or "It isn't very much on our minds". So, first of all we put a great deal of energy
in trying to increase attention for the problem itself. We go for national coverage, but
many Migrant Policy Co-ordinators have to perform the same in the institutions. That
is why we have created platforms so as to enable people to provide mutual support.

We also go for minor successes. If an institution isn't yet ready for the overall approach,
we support small-scale projects, hoping (and experiences has born us out) that they will
spread. ECHO gives scope to smaller institutions or small projects too. We have noted
that it broadens the basis.

A second important aspect is defining the problem. As I outlined earlier, the issue of Mi-
grants should be defined at various levels within the education system. However, this
requires a basis, a support. Then, the next crucial question is whether the institution
wishes to engage in Migrant Policy or in Emancipation and Equal Opportunities Policy.
And this touches upon another discussion i.e. the affective or effective school. In other
words: is it education's task to provide the best possible education for all (quite a task in
itself) or should education also aim at following (and, particularly, influence) develop-
ments in society. Any institution carrying out projects is aware of their vulnerability: fi-
nancing is often temporary and project managers often hold temporary appointments.
The built-up expertise is largely bound to individuals and will be lost once they leave. This phenomenon hampers projects but certainly also the de-
velopment of an Overall Policy. In co-operation with "experienced" Polytechnics and
Universities ECHO now attempts to develop models outlining policy structures which
give management forceful role to play (or, if you wish, set management a substantial
task) to make a once developed policy structural in which Migrant policy measures are
integrated. As ECHO we believe that on a longer notice this integration should be achiev-
ed. In most cases this demands a structural input of funds, also once the project has been
concluded.

When a policy is in the process of coming off the ground, at whatever level, it is of great
importance that the target group participates in the discussion. All too often, unfortu-
nately, migrants are discussed when they are not present and officialdom defines and de-
cides what is good for them. And that is why projects often go fail. Hardly surprising,
when the needs of migrant students are defined and decided on by autochthons and not
by the migrant students themselves. An essential part of the improvement of the quality
of education is ensured by the input of the target groups. To ECHO, intensive co-oper-
ation with minority organizations or individual allochtonous experts is self-evident.

In the Netherlands, activities to support the overall policy are at present still devided ac-
cording to region and subject. There is as yet no university or polytechnic with an over-
all approach. Put together, all these pieces of Overall Policy could make an excellent
blueprint of our ultimate aim. And by 'blueprint I do not mean the schetchy scribbles
that gave poor Coffer-fish its name. If it were up to ECHO the emancipation of ethnic
groups would approach their own reality as closely as possible.
PART II  THE PLENARY SESSIONS

THE THIRD PLENARY

Meeting a diversity of student needs
In education it is not possible to always see what is a student's background. At the moment all students do not have the same opportunities. Unfortunately we think too little of differences. It is not always possible to see for example that a student might have a disability. As an occupational therapy student it is noticeable that there are only white women enrolled in this course. This raises the question of the role of minorities in education, society and the work force.

At the same time women are a kind of minority in higher education because of our status. There is great contrast between participation rates of women in different courses. It was normal 50 years ago to have only males at such an event as this.

My personal experience in regard to tertiary aspirations is that my mathematics teacher at school considered that I would not pass the exams. Two years later this advice almost meant that I could not start the Occupational Therapy degree. I was not stimulated to undertake mathematics. I realise that this advice now was a kind of obstruction.

Three years ago I was asked to join a student group - “Education for all”. This group is comprised of students from different background. Although the government was saying the policy was education for all but in our view it has been made for one type of student. Because education is important for society as much as it is for the individual - for example for the economy - it is important that access be increased.

In regard to the economy knowledge is an important export product for the Netherlands. In the emancipation project we have looked as “do-ability”, student ability in relation to equity in different courses and study skills, work materials, the curriculum and all matters that impact on both the access and success of students. The results of this survey was that although 50% of the student population is female they are concentrated in the arts rather than the technical courses. This raises questions about responsibility. Student counselling needs to consider this. In regard to research there are very few women doing higher degree by research and engaged in research work.

It is easy to stereotype and to be stereotyped. In the school group the majority stereotype the minority. Minorities can stand out. Where female enrolments are low, perhaps 15% as compared to 85% male then there is polarisation. In such courses there is the problem of how to be myself. I don’t want to be seen as a cute little girl. Women in choosing a course of study are not always motivated because of how they are received. Also parents may consider it not important for their girls to study and student counselling services may convey the attitude that a student may not be able to succeed in a particular course because of their gender. Too few people consider the problems of the curriculum and the reading material for courses. A female perspective is often lacking in course material. Sometimes it is completely missing. There is a gender bias in teaching.
In response to criticism that these things occur government response is often to say that we need to research the problem. Listening to students would be a good start. If higher education wants to reach the goal of access for all then access needs to be seen as a challenge. Equality of access and outcomes can only be achieved if student perspectives are listened to.

When it is normal for all to be together then it will be true that education is for all.
Universities working together on learning environments which meet the needs of a student diversity

Francien Wieringa, Hogeschool De Horst, The Netherlands.

The project I am currently engaged in is described as 'Inter-culturalisation'. There are five participating institutions, the 'five from Holland'. The process of inter-culturalisation is a quality management process that approaches the problem of access and success from a holistic position. It acknowledges that all elements of the institution have an effect on the position of minority groups. It is a project that has been supported by ECHO.

The institutions involved are registering ethnicity. It is currently focused on the Faculty of Social Work. The objective is one of ongoing process of quality improvement. It establishes a dialogue in and between the participating institutions of how equity in student staff policy and pedagogy may be improved. The elements of this project are as follows:

1. To create a relevant learning environment that will improve retention and progression.
2. The inter-culturalisation of the curriculum.

Diversity recognises that it is important to recognise that all students are unique.
Inclusive thinking suggests an integrative approach to achieve greater access and success of minority groups in the Dutch Higher Education system. Most HE is still dominated by white male groups. We want to change this dichotomous situation. Our overall objective is thus a paradigmatic shift. To achieve this, everybody in the institution needs to develop this kind of thinking. The project requires extra staff to achieve this but our intention is to work ourselves out a job, to become superfluous and redundant. The project requires the inventorisation of such aspects of the learning environment as didactic forms.

The overall strategy to achieve this change is thus one to modify the culture of the institution. This involves a review of other elements that make up the learning environment; festivities, catering, confidential agents, the names of rooms and so on. The naming of new rooms has in the past been to name them after famous white Dutch people.

The model is one of process. Process requires describing the history of the institution. Mistakes in one institution can be instructive for other institutions. The inventory we create is thus a resource of ideas for other institutions. The concrete aims are: the development of institutionally specific mission statements, the definition of the concept of diversity, the criteria for graduation and the content of the curriculum. We are creating a checklist. A part of the project is also to train teachers to become more aware of the implications of diversity for teaching practice. Didactics - the quality improvement of didactic method based on diversity. Although we are working with particular faculties we
also seek to develop advice for other faculties. Diversity of staff is also an important part of role model development. Access to higher education assumes that all students have the ability to succeed. The quality assumption of this process is that all students will benefit from the diversity, they can learn from differences and the outcomes are also positive for society.
MISSION STATEMENT

To provide high quality education and research, in both national and international contexts, for the intellectual, professional and social development of the individual and for the economic and cultural enrichment of London and wider communities.

This University is committed to providing higher education for the benefit of the individual to enable that person to operate in an international environment. This builds on the history of the University, formerly the original Polytechnic which made higher learning available to people in London who had not had the privileges of education in 19th century England. It set out to provide for the development of the whole person in educational, cultural, recreational and spiritual matters. This philosophy is one which the University will continue to espouse in the 21st century. This is however a much more complex society than 19th century London.

We now live and work in a multi-cultural society, particularly in London and other major cities which is part of the global economy which is undergoing a communications revolution. The University reflects this in its student body and we seek to provide education and access nationally and internationally, using new technology as it develops in eastern Europe and the Far East.

The student population has the following characteristics:

<table>
<thead>
<tr>
<th>Mode</th>
<th>full-time</th>
<th>part-time</th>
<th>10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>female</td>
<td>50.1%</td>
<td>male</td>
</tr>
<tr>
<td>Age</td>
<td>over 21</td>
<td>43%</td>
<td>-</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>white</td>
<td>47.4%</td>
<td>non white*</td>
</tr>
<tr>
<td>Disabilities</td>
<td>less than 1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Home Origin</td>
<td>88% UK</td>
<td>5.5% other EU</td>
<td>6.5% non EU</td>
</tr>
<tr>
<td>Target for 2000</td>
<td>75% UK</td>
<td>10% other EU</td>
<td>15% non EU</td>
</tr>
</tbody>
</table>

* largely Black African, Caribbean, Indian and Pakistani

The University regards it as of major importance to educate students to operate in the global economy and, to achieve this, it is extending its non UK student base and expects 10% of its full-time students to study for part of their course in other EU universities. It is essential that more academic staff work in other countries to extend their understanding of the issues and opportunities involved in studying and living abroad.
This mix of ethnic, age and home origins presents challenges in the management of the University particularly to encourage further approaches to access from those unconventionally qualified for entry to British higher education. It also presents opportunities for students to benefit from the range of student experiences and backgrounds from which their colleagues come, bringing different perspectives and cultures into the debate in the seminar room and social life. I have no doubt that these opportunities if taken will enrich the student experience and prepare them better for the world of work and general life than the conventional white male dominated universities that were so common in the UK and still are in some cases. It is the job of the University to create a culture that values this diversity of experience and uses it positively.

Creating an accessible environment

Let me now turn to some of these issues: Creating an accessible environment: I have no simple solution to this. All staff whether they are receptionists, lecturers, administrative staff have to be aware of the different needs of students from different cultures and particularly those with disabilities. We have to ensure that we treat everyone with equal respect and try to understand what the other person might feel.

If you are an uncertain adult not sure if you really want to put yourself into a degree course, you do not want to have to surmount hurdles even to find out information of what you might do or how to start. I had the painful but educative experience about 10 years ago when I was temporarily disabled in an accident and for three months had to get around and work whilst on crutches and in pain. There was much sympathy for me from my colleagues but then they knew me. There was much less sympathy from the general public and I realised just how difficult the University buildings were for someone who could not walk. There were areas where I could not go and I could not keep up with others as they moved around. That opened up my eyes to the some of the issues to be faced by the relatively mildly disabled. So what about the those seriously permanently disabled? They will have the physical barriers to overcome but more seriously they have to overcome the expectation that they have no real ability or contribution to make or else they are regarded as some sort of freak - look at Stephen Hawking as a role model.

British universities are now addressing some of these problems with new technologies and building design but much more needs to be done. Changing attitudes of staff and fellow students and potential employers is the bigger challenge.

Access students and the curriculum

Let me turn to the question of unconventional qualifications which in the UK system often involves students from non-white ethnic backgrounds or other countries and refugees. Many of these will also be older than the normal student cohort. The biggest issue that needs to be addressed in my experience is that of lack of self confidence of the older or less conventionally qualified student compared with the traditional student. Academic staff have to approach this with care providing encouragement to such students whilst avoiding them feeling patronised or as if they are special cases for whom
different academic standards are being applied. It is essential that no-one academic staff, student or employer has reason to believe that any variation of academic standards is applied to the access student and by access I mean anyone entering by a route other than eighteen years old. Our experience shows that these students, often studying part-time, perform as well or better than the conventional student. The motivation is often higher and the willingness to overcome setbacks.

The experiences of the students should be used to support the learning process. This can be particularly valuable when the student comes from a different country or brings experience from the world of work. Syllabuses and specific examples must be internationally based to widen the horizons of the home based student. They certainly should not be so specifically home country based that the international student cannot relate or feels that his/her experience is inappropriate.

So we need sensitive admissions processes, curriculum design and delivery and learning support systems e.g. student centred learning probably using information technologies to assist the student to feel able to participate in the learning process. This needs to be backed up with academic support and monitoring systems that give early warning of students losing interest or underachieving.

We also need to be aware of what happens outside the University. I have two particular examples in mind and there are undoubtedly others. These are employer attitudes and student behaviour.

Employer attitudes

There is some evidence at the University of Westminster and I believe more widely that although the academic achievements of mature and ethnic minority students are generally equal to or indeed exceed those of the conventional students, they are less successful in gaining employment within six months of graduation. We are monitoring this very carefully to seek causes. It may be that some of our less conventional students still lack self confidence when seeking employment and do not project themselves well in applications, particularly if English is not their first language. We also find that ethnic minority students and those with family commitments are much less likely to take up exchange study opportunities in other EU countries which may reduce their potential employment opportunities. It is understandable that those with families will find this more difficult but if they are to enter the European labour force they need to be mobile.

The lack of take up of EU exchanges by UK ethnic minority students is more worrying and we are seeking the reasons and solutions. There probably are financial and family cultural pressures particularly for women from the Indian sub-continent origins although they may be British born and educated that contribute to this. There may also be prejudices by some employers which we will attack if we can identify these - age, ethnicity, disability, language.
Student behaviour

The second issue that I mentioned is that of student behaviour. Whilst we promote liberal attitudes and respect for all races and creeds we find that this is not always the case amongst student society. It is a national problem on university campuses perhaps particularly so in London that religious fundamentalism and intolerance is increasing. International wars and incidents are reflected in off campus behaviour by small minorities often manipulated by agents who are outside the university system entirely. I would be interested to know if this is a European wide problem. Access Partnerships: Let me conclude on a more positive note with an example of how universities can work together to extend opportunities and access. The University of Westminster is a partner in an exciting JEP project supported by the TEMPUS(TACIS) programme. This is with the Chelyabinsk State University, Lille University and the University of North London.

It aims to establish Chelyabinsk State University as a regional and national innovator in the enhancement of access opportunities to higher education for people with disabilities and from rural areas where access to higher education is not available. This project which had origins in and support from the European Access Network provides for the partner universities to bring their experiences of admissions, disability support, careers advice, employer education, distance learning techniques and syllabus development to assist Chelyabinsk to respond to the particular problems that its region faces and for the EU partners to learn themselves from this project how to develop further their own work in these areas. We shall hear more of this from Professor Batukhtin in the next presentation.

This is one example of how universities can come together to share experiences and learn from each other in this complex task of widening access and changing attitudes to develop opportunities for those for whom higher education may seem to be an impossibility, whether that be through educational disadvantage, ethnic or religious prejudice, age or disability. The European Access Network provides an excellent forum for debate and action as shown by the example I mentioned above.

I have no doubt that for future success universities have to be truly global in their outlook. In that way they offer their students wider experiences and perspectives in both their studies and in their cultural and social lives which will enable them to operate more effectively in the global society of the 21st century.
Meeting regional needs for higher education in the Russian Federation

Dr Valentin Batukhtin, Rector Chelyabinsk State University, Russian Federation

Access to higher education in Russia with regard to the conventional system of parameters.

I am delighted to have been invited to speak at the plenary session of this convention and to take part in discussing the problem of access to higher education.

First it should be emphasised that we understand access to higher education as a possibility to get it for every person who desires it in accordance with his or her needs. In Russia there is a more or less definite system of indicators (parameters) of access to higher education that is to a great extent similar to that in the West.

Let us briefly view the way how some of the factors influence the access to higher education taking Chelyabinsk State University as an example. Chelyabinsk Region is situated in the south Urals, 'one foot in Asia, the other one in Europe'. The area is nearly 87,900 square kilometres and the population is about 3.6 million people. The situation with access to higher education in the Region is typical for most of the regions in Russia. We see from Tables 1-8 that access to higher education is lower for people over 20, for young people whose parents are not employees or do not have higher education and for young people who have not finished secondary school.

Therefore we believe that strategy of widening access to higher education is to create conditions for the above mentioned groups so that they could get HE. Much hope is placed upon the development of distant forms of pre-university education based on the state-of-the-art information technologies and telecommunication means.

Relative and absolute access to higher education and conditions that determine them. But I think that however important the assessment of the influence of the above factors on the access to higher education may be, it is necessary to pay more attention to studying the conditions that determine the relative (discrimination in parameter) but absolute level of access to higher education. These conditions are mostly formed by social and economical, political as well as system processes in the countries and provide national and regional specific features of higher education accessibility. These features affect all social strata of the population.

Following the definition of access to higher education as a possibility to get it for those who want it, we think that absolute level of access to higher education should be defined as the number of people who want to get higher education as referred to the number of places at the institutions of higher education. Of course, this ratio is to be corrected for example to account for the subjective (personal) apprehension of the people who want to get higher education (for example the attitude like 'it is no use trying because there is no chance to get enrolled'. The very components of this ratio are to be defined more exactly. We think that a developed method will be an important addition.
to the conventional ones to analyse the problem of access to higher education not only in the conditions of stable development of the society but also in the conditions when there, so to say, "tectonic shoves" that so characteristic of Russia today.

Main factors that determine absolute access to higher education in Russia and in the South Urals.

The special features characteristic of the current situation in Russia are;
- Sharp stratification of the Russian population in wealth
- Decreased state funding of higher education
- Increasing social trouble.

These features demonstrate system crisis that engulfed all spheres of life of the Russian society and, as we see it, they now determine the level of access to higher education in Russia.

Stratification of population in wealth is such that a considerable part can not afford the "luxury" of studying at university for 5 years. They have to work so that to provide subsistence for themselves and their families. Correspondence education in the way it is organised now and with its current methodology becomes too expensive for many people (for example due to the required transportation costs when one has to come to the university for examination sessions, or the necessity to take a leave from work for these sessions that is not always approved by the boss etc.).

State budget funding today covers only the teachers' salary. No finance is allocated for the development of the facilities or for buying new equipment. In connection with this, at least two important issues should be paid attention to. First, commercial forms of education (when the students have to pay for their tuition) are getting increasingly widespread or objectively introduce the property qualifications for higher education and shuts the opportunity for many possible students to get it. Second, non-budgeting of the university facilities means death to fundamental science, first of all, and the fundamental science is the basis of science as a whole and university education. Even now the Higher School has not got modern equipment. We have not yet experienced the horrible consequences of this course of development, but they will befall us. Russia has always been distinguished by its high potential in fundamental sciences, but today we are already "living on the old stocks" In three or five years this will result in a hard failure not only science. The basis for getting education of modern standards will be narrowed. The universities understand the dangers of the situation and try to find non-budget sources of finance. One of the ways, though being but a small share, is charging greater fees for tuition.

In these hard economic conditions our university places certain hopes on the forthcoming work on introducing distant education technologies based on modern equipment within the framework of Joint European TEMPUS Project in collaboration with the Science and Technological University of Lille, the University of North London and the University of Westminster.

One of the most unfavourable factors now acute in Russia and Chelyabinsk Region is
the increasing social trouble. This is particularly manifested in worse health of the population, increasing number of children with mental and communication problems. Here are some facts about the problems of mental and physical development of children and young people and risk groups. This problem is the result of not only of the general economic situation in Chelyabinsk Region as well.

In 1995 there were 342,000 disabled children in the Russian Federation, that is 4 times more than in 1915, 60% of them have mental problems. There is an increase of disabled children in the Chelyabinsk Region. In 1992 there were 5277, in 1995 - 13 341. About 180000 children suffer from chronic diseases. Every year more than 2,000 children are born with hereditary or congenital pathology, every fifth child is ill. The number of children with retarded mental development in special schools and boarding schools is 5,980, and 7,335 children with development problems study in ordinary schools that is 573 more than in 1994. Only 20% of all children are actually healthy, 40% have health problems, 40-5-% are chronically ill. 25-64% of children in mass schools are considered a “risk group”. They are characterised by school dis-adaptation and communication problems. They make 15-20% of breaches of law and crimes of deviantional and criminal behaviour.

Nearly half million children are fully supported by the state in Russia at present. More than 20,500 children and teenagers are registered as parentless in Chelyabinsk Region in the period 1980-1993. 7,444 children were registered within the last years: 1990-1,713; 1992 - 2,644; 1993 - 1,243.

In Chelyabinsk Region the system of state institutions of educating and upbringing children and teenagers includes 53 children’s homes (orphanages) and boarding schools. The children who stay in these institutions are characterised by limited concrete living experience and high level of health problems (mental problems - 41.8%; respiratory, ear and nose diseases - 14.8%; hearing problems - 13.3%). When leaving the orphanages they appear to be totally disadapted to society and require urgent social and psychological assistance.

Moreover, numerous research data show that in standard schools, lyceums and gymnasiums there are numerous children with educational problems. This also concerns the gifted children. All this creates first of all the problem of educatability and social and psychological adaptation of children.

The increasing social trouble creates a certain “blindness” and “deafness” in a considerable part of the population with respect to the values of higher education. They can neither have the education nor understand its necessity.

Reacting to the situation Chelyabinsk State University opened a Social faculty, Disabled Students Department three years ago and carries out work to optimise the pre-university training of children and teenagers with development problems. Recently a Chair was organised the main field of which is special psychology and correction pedagogics. There seems to be a growing understanding of the problem in the country. Quite recently Vice Prime Minister authorised the Administration of Chelyabinsk Region and
several Ministries to work our a project to launch a regional centre for working with disabled students based on Chelyabinsk State Universities.

It is clear that the above mentioned factors influence the access to higher education directly and profoundly. They can decrease the general level of education and render negative influence on culture, spiritual state and morals of the society in future. Activities of Russian universities and CSU aimed at widening access to higher education.

The above conditions are characteristic of most regions in Russia and can be said that they reflect the situation in access to higher education in Russia as a whole.

But Russian universities do not stay passive to observe processes. There is an active search for the ways to solve the problem. One of the most attractive approaches to overcome the unfavourable tendencies for us is collaboration with Western universities within joint projects.

Chelyabinsk State University works in TEMPUS Joint European Project together with the Science and Technological University of Lille (France), the University of North London and the University of Westminster practically implementing the issues of widening access to higher education in Chelyabinsk Region. The Project includes widening access to higher education especially for the rural population and disabled people. The accent is made on implementing modern educational technologies, particularly distant education methods. It is important that international experience will be used to create organizational structures in CSU that will make it possible for the people from "risk groups" to get higher education.

csu also works with the Council of Europe in a pilot project aimed at developing the methods to monitor the access of higher education. The first stage is finished and the first data (partly used in this paper) have been collected. At present the work is going on the model of monitoring the access of higher education at all stages. The model includes the development of the system of access to higher education that has been formed in Russia on thesis of the state-of-the-art technologies and Western experience.

Hence there are grounds for the following conclusions.

The tragic dialectics of the current situation is that crisis in Russia, its acute manifestations, create painful problems of providing access to higher education on the one hand and mobilise the creative potential accumulated by the universities within the numerous decades and stimulate the search for the new forms of work, new educational technologies, research on the other hand to answer the challenge.

In the very hard current conditions the universities of Russia remain not only the intellectual and moral reference points in the muddled pool of concepts, values and public moods. They are also centres that generate the ideas of how to overcome the crisis, the ideas that work for the future economic, scientific and cultural wealth of the country.
Tables for 1995 applications

Number of applications in 1995 - 2,227

**TABLE 1** Access to higher education at CSU for men and women:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>enrolled</td>
<td>36%</td>
<td>34%</td>
</tr>
</tbody>
</table>

There is no sex discrimination policy

**TABLE 2** Access to higher education for different age groups:

<table>
<thead>
<tr>
<th>Age</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20-24</th>
<th>older than 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of applicants</td>
<td>80</td>
<td>13</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>% of enrolled students</td>
<td>45</td>
<td>32</td>
<td>19</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

The share of applicants aged over 18 is lower, but the percentage of the enrolled students in this age group is higher.

**TABLE 3** Access to higher education for different ethnic groups (data for CSU):

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Russian</th>
<th>Tatar</th>
<th>Bashkir</th>
<th>Ukraine</th>
<th>German</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of the total number of applicants</td>
<td>81</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>5 *</td>
</tr>
<tr>
<td>% of the students</td>
<td>90</td>
<td>4</td>
<td>4</td>
<td>-1</td>
<td>-1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

There is no discrimination due to ethnic origin

**TABLE 4** Access to higher education for residents of different areas:

<table>
<thead>
<tr>
<th>Place of permanent residence of students</th>
<th>City of Chelyabinsk</th>
<th>Chelyabinsk Region</th>
<th>Other regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>University students %</td>
<td>55%</td>
<td>30%</td>
<td>15</td>
</tr>
<tr>
<td>Number of enrolled students as % to the number of applicants</td>
<td>38</td>
<td>34</td>
<td>31</td>
</tr>
</tbody>
</table>

Access to higher education is equal for residents of different areas. According to the data of 1989 General Census.
TABLE 5  Access to higher education for different social groups

<table>
<thead>
<tr>
<th>Parents occupation</th>
<th>Employees</th>
<th>Workers and farmers</th>
<th>Retired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>71</td>
<td>24</td>
<td>5</td>
</tr>
</tbody>
</table>

TABLE 6  Parents education and its influence on access to higher education for children

<table>
<thead>
<tr>
<th>Parents education</th>
<th>Higher education</th>
<th>No higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>University students %</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Enrolment %</td>
<td>47</td>
<td>21</td>
</tr>
</tbody>
</table>

TABLE 7  Influence of student occupation prior to enrolment on access to education:

<table>
<thead>
<tr>
<th>Student occupation prior to enrolment</th>
<th>Secondary school</th>
<th>Preparatory courses</th>
<th>Paid job</th>
<th>unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>university students</td>
<td>70</td>
<td>23</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>% of enrolment</td>
<td>42</td>
<td>43</td>
<td>13</td>
<td>19</td>
</tr>
</tbody>
</table>

Access to education is higher for those who have just left school or finished preparatory courses.

TABLE 8  Influence of pre-university training on access to higher education:

<table>
<thead>
<tr>
<th>Education prior to enrolment</th>
<th>Secondary education</th>
<th>Secondary professional education</th>
<th>Primary professional education</th>
</tr>
</thead>
<tbody>
<tr>
<td>University students, %</td>
<td>98</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of applicants, %</td>
<td>40</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

Access to higher education is higher for secondary school leavers.
THE FOURTH PLENARY

Higher education: under-representation and the labour market
Universities as employers - achieving diversity among staff

Dr Monica Armour, Transcultural International Amsterdam, the Netherlands and Toronto

1. Working definitions of the terms diversity and pluralism:
   'diversity is all the ways in which we differ'
   'pluralism is the inclusion in organizational culture, including policies, procedures and practices, of all the ways in which individuals differ'.

2. The employment and retention of faculty and staff of diverse backgrounds as an organizational culture issue as contrasted with an individual or small group problem or concern: This is a systemic issue that emerges from both direct and systemic barriers to achieve the full participation of members of diverse social groups as faculty and staff members in institutions of higher education.

3. Myths and realities - the availability of qualified members of diverse social groups for employment as faculty or staff in institutions of higher education.

4. A model for stages of pluralistic organization development and its applications to achieving and maintaining optimum diversity among faculty and staff in institutions of higher education:

   - **Monocultural - resistant - exclusive**
   - **Reactive - symbolic - responsive**
   - **Proactive - redefining - transformative - inclusive**

Monocultural - resistant - exclusive
Organizational policies, procedures and practices related to curriculum, selection, promotion & development of faculty and staff members exclude or discourage the participation of members of groups other than the dominant (mono-cultural) group.

Reactive - symbolic
A limited number of 'outsiders' are allowed to become members of the organization. However, they are found almost entirely at the lower levels of the organization and are concentrated in traditionally defined positions. Faculty and staff development opportunities are largely available only to members of the dominant (mono-cultural) group. Standards of competence are higher for members of non-dominant (non-monocultural) groups than for those of the dominant (monocultural) group.
Proactive – responsive

Positive Action, Employment Equity, Affirmative action or Equal Opportunity programs are in place and operationalised at this stage. Policies, procedures, and practices ensure representative participation of members of non-dominant groups in the organization. Active support is provided for the development of diverse social group organizational members. Members of all social groups in the organization are provided with opportunities to learn about the benefits of diversity and how to work more effectively with diversity amongst colleagues, other organizational members and students. All organizational members are encouraged to think and required to behave in ways that actively include, and do not negatively discriminate against members of non-dominant groups. All staff and student educational programs are reviewed for negative bias which is then removed and prevented in all future programs.

Redefining – transformative

The policies, procedures and practices developed and implemented in the Reactive & proactive stages of pluralistic organizational development are firmly institutionalised in the organizational culture. Education and training opportunities are equally available to members of all social groups that will assist them to:
- maximise their performance on the job;
- move to non-traditional jobs and positions for their group(s);
- relate to, and work effectively with, people who are different from themselves and each other.

The concept of diversity & pluralism are expanded to include members of any groups that have been historically marginalised or excluded form the organization – or new groups that are in danger of being marginalised or excluded at the present or in the future. The organization recognised itself as part of the larger community. It is committed and acts to eradicate all forms of social, economic, political and cultural oppression and exclusion of individuals and groups in the community at large. In this way it relates to and has a positive impact directly upon other institutions, as well as within it’s own organization.

Pluralistic – transformed – inclusive

Policies, procedures & practices outlined in the Redefining- Transformative stage are fully institutionalised, continually monitored and evaluated to ensure that recruitment, selection, employment, promotion and development or members of all groups remain equitable in opportunity and results at all levels and across all departments of the organization.
Education & training opportunities and programs are reviewed regularly to ensure their appropriateness for a diverse and continually changing staff composition in the organization's workforce, student body, and the potential workforce and student population of the future.

New programs are developed and old ones modified or discarded as needed so the organization's culture is continually updated and preparing both the organization and its members for the future rather than keeping them entrenched in the past, or maintaining the status quo in the present.

The organization provides support to other social systems within the larger community that contribute to equity and full access to all members of society. These social systems include any organization or institution that has the power to contribute to human resource development in its broadest sense.
Diversity, employability and the curriculum imagining the topography of an integrated policy

Peter Stewart, Consultant, Australia/Netherlands

The purpose of this presentation is to describe the process of questioning that might inform policy development. The placing together of seemingly disparate areas of policy development is intended to illustrate process, it is not intended to be prescriptive.

Equal employment policy, access policy for students, labour market outcomes for graduates and inclusive curriculum have ‘evolved’ from within isolated domains of the institutions and outside of the society. Domain in the sense of place of particular activity. Of relevance here are the domains of senior administration, student and graduate counselling services and faculties. The potential for each place of activity to recognise that they have a common concern about outcomes with other areas is relatively unexplored. Developing site specific policies that may contribute to an institution wide policy is dependent on developing a common vision and language.

Policies develop according to perceived need within specific contexts they are not intentionally fragmented. For example equal employment policy historically focused on gender, yet remains inequitable, despite the efforts of senior management and indeed of government policy makers.

The inclusion of minority and minoritised groups must overcome certain “practical” obstacles. Appointment criteria is often cited as a significant obstacle to achieve such outcomes. The fallacious merit argument is often flagged as a quality matter to oppose equity. The problem is further compounded by industrial conditions such as tenure and long term contracts that prevent the rapid achievement of comprehensive equity targets.

Equal opportunity policies and student perceptions

The relationship of equal opportunity employment policies for the improvement of the retention and success of minority groups or minoritised groups such that of the status of women is consonant with the importance attached to mentoring, role models and the ability of faculties to consult and develop effective inclusive curriculum.

If the landscape of teaching and counselling departments is persistently monocultural it may be questioned what messages are being sent to students who do not identify with the models of dominant culture and the likely outcomes for them in the labour market. What impact might a monocultural staff complement have on the motivation of a diverse student population?

External relations

Graduate career centres, apart from presenting further evidence of persistent monoculturalism also have the opportunity to convey messages to employers about quality in di-
versity. How an institution can impact on the labour market depends in part on institutional activities within the domain. Employers may be more influenced by good practice of educational institutions rather than rhetorical assertions about the desirability for them to adopt a policy of diversity. The question is what constitutes effective strategy to achieve a diversity of outcomes, it is suggested that strategy need not always be so prosaic or direct.

Achieving inclusive curriculum

Institutional policy regarding curriculum is of central importance to both the institution, the student and the society. In determining what and how we teach are both pedagogical and policy issues. The institution is concerned in policy with a reappraisal of curriculum. To provide greater access to the labour market is an institutional responsibility for both the student and the institution. Course reviews are often unlinked to questions of how new courses should be taught. This matter has through tradition been regarded as the business of teachers rather than senior management. The how of teaching could be more closely aligned with what we teach and further considered in relation to outcomes - the 'why' of teaching. Each performs as an indicator for the other.

Comprehensive Indicators

The role of comprehensive indicators in developing institutional employment profiles can be related to the educational profile exercise. For example annual course reviews to access and outcome indicators. Innovation must be accepted as a core value by the culture if it is to be effective in achieving any change. The traditions of institutions are highly cherished, they are so because there is an assumption that traditions imply the central importance attached to scholarship and teaching excellence. The importance of these values is not disputed, it is the invigoration of tradition that ought to be a part of the vision. The reframing of these values and their potential linkage to the review of institutional objectives and performance outcomes will produce different strategies. An innovation in policy does not guarantee that it will become a part of, that is to say, modify culture, it needs to be incorporated into institutional through comparison with the criteria of quality.

Labour market outcomes have an array of implications. A high profile institution that offers a similar course to that of a less prestigious institution might experience some consternation when the labour market outcomes for their graduates are lower. It impacts on student demand for its courses. Reviews of curriculum, teaching profiles and practice and teaching methodology rapidly ensue. New courses, new staff, staff re-deployment, consultation with business organizations, secondary schools and various sectors of the community are not uncommon responses to this situation.

Diversity in such a context need not be seen as a new concept or distraction from the core agenda of the institution - to be successful in all aspects of outcome. Institutions do have a vested economic interest in asking all the questions that need asking not just those that are perceived to be acceptable. Knowing what questions to ask requires collective effort, consultation and above all collaboration with all the clients.
Tradition

The similarities and differences between medieval and contemporary universities and indeed the pedagogy of much earlier times are much argued about in faculty coffee rooms and sub-committees, the maxims of Greek educational philosophy provide an enduring criteria. Institutional culture is thus complex and affected by the past and the present. Institutions are accountable to themselves, to its students and to the community. This is not a moral accountability but an economic accountability. Institutions that are successful in both access, graduation and labour market outcomes enhance their status and economic value as a quality institution through the level of student demand for courses.

Tradition is not the continuous offering of courses that are no longer in demand. Of course there are many notable exceptions to that. Above pattern there is also trend and the trend is clearly to meet the needs of changing market demands for particular skills provided by specific courses. For example an institution offering courses in tourism were seen as non-academic, not worthy of degree status. The significance of tourism in the labour market has been of unparalleled importance in the service industry sector. The graduates have been in demand. Such course offerings are now being taken seriously and there is competition to offer the best course. Old universities, the elite universities are now as likely to learn from new universities, open universities or polytechnics. Demand by prospective students increases the quality of the student intake and provides substance to institutional claims of status. In the annual admissions round, registration time, senior management watches anxiously to see if on national stock exchange of demand they have more or less courses for which demand is high. This analogy, by extension, is one where the currency of a course is established in regard to other courses offered inside and outside the institution.

Comparing islands and continents - the vicissitudes of monitoring

To look 'beyond access', as Paul Taylor suggests, and compare the sociology of the labour market with that of the demography of the community is a direct way of isolating issues of under-representation. This provides a direction to the isolation of appropriate policy directions. In many ways this is illustrates the contrast between access and diversity. The suggestions and practices for supporting diversity have shifted in the past few years to that of retention and academic excellence. Institutional Policies are dependent on both for economic survival and status. The relative retention and grades achieved by under-represented groups if it is not similar to that of mainstream students will of course have considerable impact on the labour market outcomes for students. The importance of these matters to institutions is demonstrated when it comes to monitoring.

The comparison of the academic performance of majority to minority groups is not always easily established. Statistically tests of significance are weak when comparing small to large populations and so the merit argument is often an argument of prejudice rather than of science. I mention this as it often advanced as a reason for opposing diversity yet if it were the case it would only provide evidence for a review of teaching practice, the implications of the concept of the role model and so on.
In conclusion then there are some direct points about strategy that need to be made. In my research concerning teaching methodology for minority students there stood out several points that I made in the paper session:

- the importance of collaboration and consultation. It is not enough to talk about inclusiveness without including minorities in the planning process;
- a recognition that there are more than one form of literacy - the multi-literacy concept;
- the importance of understanding site specific discursive practice;
- the development of policy requires an engagement with the information technology, computer aided learning environments and
- a recognition of the importance of student self representation in the learning process.
Diversity and the labour market, an employer perspective (Sales a vocation for women?)

Fabienne van 't Kruis

The company, established in 1985 is a remarkable company in that it employs women almost entirely. A company that provides sales representatives to other companies. In providing this service we also noticed that companies needed a marketing plan. After a few years of operation we commenced also to market development plans. We provide representatives for short and long term work.

One of our companies is Douwe Egbert. They sell tea and coffee. We set about developing a plan of how these products could be marketed in Holland. The main work of our company is sales and the question associated with this is who can do it best.

The main qualities of sales representatives we believe is important is the ability to think flexibly and to have high levels of communication ability. The question is why you buy from one person rather than another. At this moment we are selling a new product and the question is why should they buy it. The person who sells it is the difference. If you can speak of the best sales person in the world then we have them and they are women. A sales person must put themselves in the skin of the other. Flexibility and creativity are important to achieve that.

We have 350 women working for us. Why? After 11 years we found it didn’t work to employ men. Women have the skill naturally, they are trained to be flexible over their life time. They thus have the ability to combine various types of work. Women often have two jobs, one paid and one unpaid. To begin the sales force was nearly all men now it is nearly all women.

Of course there are exceptions to this situation such as the cosmetics industry where it would be difficult to have men selling cosmetics but we would like to see this change.

In terms of training we give our sales people training in cosmetics and dress.

The diversity of the work involved is such we have found that women have the flexibility to accommodate this diversity. Women for example have succeeded in combining the unpaid work of the home - of remembering birthdays, cooking, buying the food, ironing the clothes and so on. A practical example is what happened when we introduced a new beverage on the market. We found that the women achieved 25% more sales than the men. When we analysed this we found it was because the men worked through the list of companies they intended to visit in alphabetical order whereas the women went to clients near the beach when it was sunny and the cities in the cold weather. This example indicates the success of this orientation for the company.
PART III

SUMMARY OF WORKSHOP FINDINGS

Working group, panel reports and conclusions
Demonstrating the merits of diversity
Rapporteur Glen Postle

1 Issues (possible research areas)
Identification of potential for higher education selection - preparation, links with secondary education sector

2 Mainstreaming (how?) - staff selection, preparation, training and development, dominance of administrative requirements, the marginalisation of equity

3 Equity, equality and quality - the place of affirmative action, positive discrimination and reverse discrimination, power of some lobby groups and the powerlessness of others, separation of equity and quality, special difficulties of some groups e.g. low socio-economic groups, ethnic groups and students with disabilities

At the institutional level

1 - focus on teaching learning
   - curriculum relevance

2 - inclusive curriculum
   - flexible delivery
   - use of technology
   - distance education
   - concept of value adding

3 - celebration of diversity
   - capitalising on resources students bring into the institution
   - learn from differences -some concern for attitudes and values/ tolerance

4 - outcomes (positive) -access, success and retention
Meeting a diversity of students needs recommendations from the working group

Rapporteur Tatiana Leontiva

1 To promote the employment of multi-cultural teaching staff in order to ensure inter-cultural communications, the integration of cultures into the curriculum.

2 To implement the necessary changes into the teacher training programmes which will help to overcome the gap between the inclusive curriculum and the teaching methodology and will stimulate responses more openness to the students needs.

3 Bearing in mind the restricted internal resources of the institutions, to involve former students, parents, community centres in the process of creating a supportive environment for meeting a diversity of students needs.

4 To provide the continuity in the project for the staff development at all levels (both for part-time and full-time teaching) to ensure the establishment of the equality of opportunity policy.
Overcoming significant barriers for minority groups
Rapporteur Heather Eggins

The political environment

**Recommendations to government**
1. To encourage government to embed equity policy into higher education policies
2. To encourage funding council initiatives
3. To encourage the necessary research to be funded
4. Data bases: mandate to report on access and outcomes
5. Mandate universities to report on access and outcomes
6. Consider making laws relating to access

**Socio-economic problems**
1. Encourage foundations to target particular groups and provide funding - government
2. Encourage hardship funds in institutions and more money (Netherlands and UK)
3. Encourage the use of role models, mentors, going into schools (Scot)
4. Encourage working with whole family units (Australia)
5. Encourage support from industry (A)
6. Encourage government to consider range of good practice industry and community
   National policies vital

**Recommendations for Institutions**
1. Remove administrative hurdles
2. Introduce more flexible tracking for student choices
3. Introduce exit interview and exit questionnaire for all who leave at any point
4. Consider flexible teaching periods e.g. Third Semester.
5. Offer adequate range of student development personnel (including personnel from
   minority groups)
6. Explore ways in which teaching and learning can be delivered in a more radical way
7. Consider peer tutoring, mentoring, projects spanning year groups
8. Expand projects affecting perceptions of community at large
   e.g. BP and Sheffield initiatives
9. Strengthen contact with schools - role model (1 day return) speak to primary
   schools and parents (Sheffield Hallam)
10. Develop staff awareness of language use
11. Recognizing problems posed by assessment methods and attempt to alleviate them
    (e.g. Australian un-timed exams)
12. Look at the way exams are set - eradicate value-laden terms in the language and offer
    targeted staff development to all as an integral part of contract. Reconsider the cur-
    rriculum for each course in the light of equity policy
Higher education, under-representation and the labour market
Rapporteur Armand Policicchio

Our group discussed quite extensively the situation with regards to transition from higher education to the work world. We recognised that today this transition is especially difficult when the labour market is not expanding to the point when it can provide jobs for all citizens, let alone those with higher education degrees. Our findings point to two primary institutions with responsibilities for the movement of under-represented persons from higher education into the labour market.

The first institution is the government. In most nations it is the only institution that reaches across all areas of society. While it may not be able to 'legislate' a solution for everything, it has the ability to address issues and assign a national policy to them. It can use policy to create an atmosphere that encourages other segments of society to participate in opening doors for under-represented persons. The degree of intrusiveness will vary from nation to nation, but the 'moral authority' and/or 'big stick' of government can be tremendous incentive in creating opportunities for under-represented persons.

The university is responsible for opening doors for its under-represented students. While many universities still believe that their only responsibility is to teach and not to help students gain entry into the labour market; we contend that helping students gain entry into the labour market is part of the teaching mission of the university. The university should 'open-doors' for its under-represented students. It can do this through two avenues:

1. students, and
2. employers.

Universities should provide opportunities for internship and other paid and non-paid experiences for students to gain practical experience. Academic assistance should be available especially in 'tough' areas of study, in order for as many students as possible to take advantage of 'open doors'. The university should have available comprehensive Career Planning and Placement Services. This is part of the teaching mission; to teach students all the things they do not know about making the transition from the higher education culture to the labour market culture and the provide job leads. This can include things such as developing a resume, how to dress, how to interview, how to research a potential employer, etc. Students will need to learn how to 'work' both the formal and informal networks. The university should broaden its efforts to indicate more than traditional employment opportunities with major corporations. Students should be taught entrepreneurial skills in order for them to take advantages of opportunities in small business or to start their own business.

One of the main thrusts with employers should be to educate them as to the value of benefits of diversity in hiring and promotion. The university could use its networks, formal and informal, involve employers on campus and to introduce students to them.
Employers who support diversity efforts can be sued to bring other employers 'into the fold'. Employers should be recruited to support efforts of small business and of students to set up their own business.

The university needs the support of government to accomplish these tasks. Without government involvement the university can only accomplish things in a slow piece meal fashion. Government must be an active, assertive even aggressive partner in support of opportunities for under-represented persons.

We also discussed student responsibilities in this process. Students must be responsible for learning and earning good grades if they are to take advantage of opportunities which may be made available to the, It is not our intent that jobs be 'given'. It is our intent that students who demonstrate necessary skills and have appropriate credentials be given fair and equitable opportunities for employment. Diversity in the work force is a quality which we believe is necessary and should be promoted.

The transition of under-represented students from higher education in the labour market is not an easy process. Government, the university and employers must work together in partnership to make the transition work. All must change the way they view their role and how they 'do business'.
The panel session, tuesday 2 july 1996

Chair: Professor Nathan Deen
Panel members: Dr Olav Aarna, Dr Robert Lemelin, Dr Varina Tjon A Ten, Paul Taylor and Peter Stewart.

Nathan Deen opened the panel session acknowledging Peter Stewart for the many original ideas he contributed to the topics and questioned of the conference. Nathan Deen provided all members of the panel an opportunity to address all the topics. As well comments by the participants are included in this summary below. Although the statements made began by addressing particular themes overall, a consensus developed that it was not possible to consider the themes in isolation. The interdependence of policy and practice was affirmed in this session.

_Demonstrating the merits of diversity_

When I see this announced there seems to be no doubt about the fact that there is merit in diversity. I am not sure everyone shares that view and some people might think it would be better if there was uniformity. Is diversity something you choose?

Summary of panel discussion

1. The merits of diversity is not a universally accepted proposition in places of higher education and it was therefore necessary to continue to place diversity on the agenda.

A common theme in this debate is that those who see no need to examination diversity omit mention of the implications of cultural differences, that culture is also a factor in determining student access and outcomes. How culture is transmitted is a complex and disputed area but the data on access indicates there is a significant level of cultural reproduction whereby students whose parents have a higher education background have higher levels of access than other students. When diversity is discussed it is important to evaluate why there is a difference in rates of access and a corresponding difference in the rate of retention. Even putting aside the matter of uneven access, the question that institutions can address is what factors contribute to the uneven retention and success rates of students and what can be done to improve retention rates.

2. In demonstrating the merits of diversity the moral versus the educational values of diversity need to be addressed. The excessive reliance on assertions of natural and social justice may not necessarily work to the advantage of the objective of access and retention. Stronger pedagogical reasons need to be advanced. It is important to demonstrate that links between equality, equity and quality are both actual and potential.

3. Monitoring student profiles by group may provide an understanding, a demonstration of the merits and the obstacles concerning diversity.

4. The concepts used in advancing diversity could usefully be linked to those concern-
ing one of the agendas of broader European policy, that of democratic citizenship. The link could well be that diversity nurtures inclusive, and therefore democratic, citizenship.

5 Economic imperatives need to be considered. The language of the market place is an international language. Universities offer services in the educational market place and the diversification of marketing strategies - the development of international student programs for example holds implications for the merit argument. Should therefore we demonstrate merits of diversity as both economically desirable and politically necessary?

6 The concept of merit can hold two meanings at least. One is the merit in people regardless of background and the other meaning is that of merit in diversity (providing for a reality of a diverse population).

7 The general question of what is or could be the relationship between merit and access? To demonstrate the merits of diversity is first to define a philosophy in each institution. An example was provided in an institution that commenced the process of thinking about this philosophy, a large committee of 75 people working on this topic for two years. This process separated broad goals or ultimate goals and specific goals such as fairness. This process demonstrated that by working very closely in a specific culture is a means by which change be achieved. Developing access in that process was extensive process and in the example provided described as pluralism.

8 Pastoral care, providing student services, that flag students that make them aware that you are there, eager to serve them, are little changes that can have positive outcomes. These outcomes demonstrate the merits of diversity. In terms of integrating institutional roles this example showed that through a focus on the student, even changes as small as providing student lounges, places for them to gather, link up and discuss their courses was of value and demonstrates a way that providing access could be fairly easy. But what we talking about retention.

9 We should be welcoming to students

10 Acknowledging the existence of a multi-cultural society implies that one of the merits of diversity is tolerance. To initiate policy to provide for the needs of a multi-cultural society requires broad ranging initiatives and projects that will effectively engage with and dispel the resistance to diversity.

11 Democracy and diversity: Why should it be necessary to consider diversity as an issue if we accept the principles of democracy? It should be regarded as a mechanical process, a mechanism by which democracy can be achieved? The most talented ordinary students through massification gain access and the next phase must therefore be diversification.

12 Society expects contradictory things from HE, increased numbers of places and at a lower price as well. There are difficulties from the institutions point of view of how
to take advantage of this. A fundamental question is who is to pay for this new situation?
Or are there other ways of providing education that will be more economic and achieve both improved quality and broader student access and retention?

13 The need to demonstrate the merits of diversity could also be rejected, why should diversity be justified? It could be preferable for others to provide arguments about why institutions or government should not do anything about diversity. This could be a starting position in the development of institutional policy.

14 Does an engagement with arguments in support of diversity obscure the possible fact that we do are avoiding mention of race, gender and disability. In most places diversity really refers to those three. Resistance to diversity, of the perpetuation of exclusion, often concern other categories such as those of class, sexuality, political or religious beliefs. Diversity arguments need to incorporate a concern for all students.

15 Merit
By whom and how is merit to be assessed? In terms of access and in regard to progression there is a tension between the proposition of standard levels of achievement and the potential of students. Students without the same level of support before and after entry may have different needs or starting points. The question of 'who assesses what carries merit' was asked. There is a congruence between the arguments about student merit (student ability) and the quite orthodox pedagogical theory that asserts that effective learning is facilitated if the knowledge base and particular learning needs of students or groups of students are taken into account.

16 Identifying and overcoming barriers to successful completion: The barriers that minorities face when entering HE. Different examples were discussed some offered by students attending the conference and others by staff from institutions from across Europe, America and Australia. One example included rural mature age students who needed retraining in rural Scotland but need support to undertake HE both educational and financial. Their pedagogical problems included the need to recognize that their educational needs, as adults are not the same as adolescents. These students were described as in a double bind because they need to work to fund their study and at the same time they are expected to complete their course work in the minimum time along with school leavers.

17 The importance of continuous support to student success: Examples from the United States noted that there had been much work done in this area and a general principle now recognised was that students must not be met with impersonalism. If they meet with the opposite the research indicates that they have a good chance of succeeding.

18 Addressing causes of problems: Academic support at the beginning of study was important but equally important was the need for it to be persistent throughout the course.
The concept of "rhetorical communities", how languages specific to particular areas of study may be mastered, was outlined. "Arming" students to assist them on their passage through rhetorical communities turned them into insiders.

Effective support for students requires that progress has to be monitored consistently and closely, flags have to be sent up when students experience difficulty. The research indicates that the issues affecting retention are those of jobs, health and family more than academic issues. We have to address the causes of problems and these types of problems are ones that we are not used to dealing with.

Labour market barriers: In the case of Estonia (and many countries in eastern Europe) the problems are not of output but rather the barrier of the labour market. A consequent pattern, is for students to leave higher education before completing their courses, say after one or two years of study.

Mature age students in Australia face a range of economic barriers on return to study. If they wish to study full time they need to incur debt if they are able to access student financial support and that is not always possible. It is often the fact that it is easier for them to access unemployment benefits except that then they are only able to study part time and must leave their study if a job vacancy occurs. This is the case even if the job is only for a limited period and the educational result is to prevent the students from finishing their course or waste a year or part of a year they have invested in study.

In the Netherlands a student who experiences a teacher with a negative attitude towards minorities will need to be very strong to overcome these attitudinal barriers.

An integrated approach to overcoming barriers:
In San Antonio, Texas, a university with a majority of Hispanic students, approached the problem of overcoming barriers both economically and politically. At the political level through the boards and regents and economically through the reduction of part time staff. Part-time staff are not as available as full time staff. Also through a recognition of adult needs.

Many of the above issues in some way suggest we have to address retention: pastoral care, financial barriers, reviewing whether we have the right approach to teaching, the political dimension; do we need to go political - is that a common thing or are we diversifying too much.
A range of questions follow:
Are we setting ourselves up to fail?
What barriers are set for different people?
Strategies for overcoming barriers need to consider external - internal relations specific to their local contexts.

The importance of monitoring - the collection of statistics: The necessity of collecting statistics was noted and described as a "deficits obstacles approach", this approach facilitates knowing the nature of the obstacles, and to be able to measure outcomes...
to defend your programs. If they are to succeed, if the institution wants them to survive, students must be empowered to acquire the necessary information.

27 Internal barriers: are institutions about setting barriers. Institutions are sometimes reluctant to investigate the barriers inside. A distinction between regular or systemic barriers and special or institutionally specific barriers needs to be made.

28 The widespread problem of severe budgetary restrictions has an impact on those institutions that have tried many of these suggestions and are now confronted with large classes, part time staff and the necessity to prioritise resources. In this context the importance of government policy was underlined. Government higher education that links equality with quality, was commended - the Australian example where the indicators of equity, equality of access and outcomes formed part of the set of quality indicators.
Conclusions

by Peter Stewart

This conference brought together people not only from different places but also from all of the areas of activity that have a role in shaping the direction of thinking about the issues, concepts, policy and practice. A generous sharing of experience and thought took place. The word diversity, in the context of the international thought and practice presented at this conference, held different meanings for the participants, but proved to be a successful concept to open the door to collaboration. The papers presented, while describing particular national and institutional higher education environments, illustrated a plethora of different perspectives on the subject of diversity.

Discussion about demonstrating the merits of diversity indicated that it is not, or should not be, necessary to adopt a defensive position. Nevertheless, in a world of change, keeping the possibility of new practice on the institutional agenda was considered very important. The panel discussions, workshops and plenary sessions contained many conceptual, yet practical, tools for the formation of policy and practice in specific contexts and most importantly, strategies for how these matters may be approached.

The phrase 'integrated approach' was a term much in use by the end of the conference. Considerable discussion took place as to how to formulate ways of thinking and strategies that link policy, management and outcomes. Access, for example, was linked to career aspiration and the learning-environment objectives of better retention plus curricula which respond to the cultural composition of the student population.

Labour market outcomes were seen not as isolated from these topics but rather as central. Speakers included employers, representatives of student organizations, policy workers, senior management, academics and researchers, thus ensuring that the issues of diversity were canvassed at the broadest level. The inclusion of students as speakers and as participants provided an opportunity to practice the principle of inclusion.

As each institution and country needs to address its own situational needs and possibilities, the framework for discussion achieved a natural balance between the desire for an outcome enunciating common processes and a sensitivity to the imperative of developing local strategies that take into account the diversity of specific factors affecting success. These factors include the following:

- social and economic frameworks
- policy
- registration and monitoring,
- merit in relation to equity, quality and diversity
- diversity and labour market outcomes
- inclusive curricula,
- teaching methodology and the changing character of the learning environment
- the theory and practice of managing diversity
- meeting a diversity of student needs
- achieving diversity of academic and other university staff, consultation
- the educational and economic implications of computer aided learning, open and distance education
In discussing these factors there was the recognition that staff from different areas of responsibility can contribute to the development of the most adequate learning environment possible; teachers, senior management, counselling services, the designers of monitoring and reporting systems, students from minority groups, employers and community representatives. An approach that links older theories of management such as the concept of partnership to, what on the surface is seemingly strange company of Post-modern tensions between the place of the universal to the particular and the relevance of contemporary media philosophy concerns with the place of information technology in education, the management of education and the enhancement of learning environments. The concept of partnership acquired a different meaning in the new contexts discussed in the conference. An “overall” or “inclusive” policy carries the implication that effective strategy and practice depends upon ensuring that each individual or group has a potential role to contribute to a more effective and higher quality education.

Arguments presented at this conference re-affirmed propositions that assert education should mean wider access yet did not rely on the paradigm of equality as a moral good. Equality of access, retention and outcomes were seen as important given culturally diverse populations. Many examples of interesting practice were provided in the papers and discussions that in some way nurture democratic citizenship.

The workshop outcomes and papers provide the detail of how these elements of diversity might be approached. What indeed is new as an outcome was the acknowledgement that achieving equitable outcomes of higher education is a co-operative task. It requires the co-operation of staff with a shared vision to trace the actual and potential relationships of each domain, or area of activity, to the other.

A theme evolved during the conference proceedings and is to be seen in the papers, the workshops and in the panel discussions. The theme was the importance of adopting the integrated approach and in relation to diversity this suggested the importance of drawing out the implication of one activity to another. The widespread acceptance of this approach provides a base for the conceptualisation of future conferences concerning diversity. Older themes, such as the relationship of quality to equity, and equal opportunity, gained new significance when raised in this context.

A strong reference to the importance of consultation was an overarching theme of the conference. Consultation, the sharing of perspectives between higher education staff and students from minority groups, represented more than a value of the conference; it was seen as imperative to the process. Consultation involves not just the asking of opinions but also collaboration in determining the way to proceed; it is a shared decision making process.

This point was illustrated in the story of the trunk fish and the tuna fish, told by John Lilipaly in his speech about overcoming barriers to diversity. It is an exquisite metaphor for how each group typifies the other. It is also a cautionary tale in regard to stereotypes and negative views of the outsider, the minority. Discovering ways that minorities can participate in the formulation of policy, and the proposal that curricula should acknowledge differences, amplified and made concrete, proposals concerning consultation.
Conclusions, final plenary session

Nizam Mohammed, Chair Council of Europe, Access Project Group, University of London, UK

The conference theme, Diversity and opportunity in Higher Education has been a very apt theme because society is very diverse in all our countries and higher education in spite of the vast and unprecedented expansion does not reflect this mix. Higher Education needs to provide more opportunities for people of different backgrounds, from disadvantaged groups, if we are going to achieve a more equitable society. There is of course a fear in some quarters that if you admit students from these particular groups it will probably lower quality. Quite a number of the speakers and in the discussions over these last two or three days have shown that, if in fact you take in people from these groups you add to the quality, you can use their potential, their experience, and the resources they bring into higher education, which will enrich not only the institution but the society at large. But of course, we are speaking to a converted audience. We all believe in access, we all believe in the things we are discussing about what should be done and we need to go out to the outside world and speak more to the managers of our institutions and to policy makers in our national governments, and try to convince them to provide the necessary resources, or to prioritise what little resources we have in order to achieve that we all seek.

Marloes de Bie

When we started planning this conference we had to define the issue, it was diversity. The proceedings reflect this focus and I would like to share with you a few of the defining statements that have been made during the conference:

- Diversity is a way of life
- It is important to link equity to quality
- We must tackle the problem economically and politically
- Managing diversity should be an overall democratic principle
- It is a constant struggle and I am ready for it
- I do it my way

These comments, and the many contributions made during this conference, assist greatly to redefine the issues, the questions, and maybe provide assistance in achieving solutions. The proceedings of this conference provide a redefining moment, a moment of reclamation. I am also aware that there was great diversity in the audience yet communication between people was of the highest quality.

I would like to share with you one of the loveliest stories I know. It is the Gift of the Magi, a story about a woman and a man who loved each other very much. She had long hair, which is very important to the story. At Christmas they wanted to give each other presents but of course they were poor as all characters in Christmas stories are. She sells her hair to buy him a present, a chain for his watch, a watch he inherited from his grandfather. When she comes home and gives him the present he cries, she thinks he is crying out of happiness, but he has also bought her a present, a comb for her hair. Her hair of course will grow again and he will get his watch back.

The Magi were wise men who brought gifts for the baby in the manger. Being wise they saw the importance and privilege of exchange. In the case of this conference I hope that this exchange is only the start of future fruitful exchanges.
PART IV

The paper sessions
The impact of foundation studies on the retention rates of women

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Over the past two decades, Australia, along with other developed countries, has seen a dramatic increase in the number of mature age women enrolling in tertiary studies. During the 1950s and 1960s, the rate was low but, following the elimination of fees under the Whitlam Federal Government, the numbers began to grow substantially. Currently, mature age students represent around 25% of the student population and a considerable number of these students are women. According to Edwards (1993), three main factors have fuelled the female enrolments:

1. Women’s increasing participation in the workforce;
2. ‘Credential inflation’ which has motivated older persons to upgrade outdated credentials or to obtain qualifications not acquired as a school leaver;
3. The commitment by government and educational institutions to access and equity principles which has led to the recruitment of potential students from amongst groups not traditionally likely to enter higher education, i.e. mature age women.

Unfortunately, popular conceptions about mature age women students have not always been flattering, it has often been supposed that the mature woman student is likely already to have a degree and therefore to be depriving a school leaver of the chance of gaining a first degree. Also expressed is the fear that long absence from study may mean that the women lack the necessary skills, motivation and self-discipline to complete serious study. Contrary to these fears, mature women students come from a wide range of previous educational backgrounds, with only a relatively few women possessing a first degree. The vast majority never had the opportunity to complete high school let alone undertake higher education. However, given the opportunity, the women experience considerable academic and career success.

Australian research conducted by West (1986) showed that a majority of the participants in his study rated themselves academically as ‘well above average’ or ‘near the top of the class’. Other Australian studies have demonstrated that study is at least as valuable for mature age women as for men. This is as true for mothers as childless women, that is, maternal status is no impediment to academic success. Burns and her associates found that mothers achieved grade point averages which were better than those gained by both school leavers and mature age students in general (Burns, Scott, Cooney & Gleeson, 1988). After graduation, the majority of mature age women went on to establish rewarding and successful careers. The motivation level of mature age students tends to be exceptionally high. When asked why they believed that they outperformed younger students, the answer given most frequently was that they were ‘more motivated’, this is also supported by university staff (Burns, Scott, Cooney & Gleeson, 1988).

Mature age study has been shown to confer considerable benefits on graduates, both career related and in terms of personal development. Graduates typically describe themselves as more competent, confident and intelligent and possessed of an increased allegiance to liberal values than before they commenced study. Benefits are not confined to the graduates but extend to their families, communities and to the wider society (West, 1986). Families, especially those where the mother is the sole parent, gain in financial status and security as a result of the occupational benefits of tertiary study (Burns, Scott, Cooney & Gleeson, 1988). Children of mature age women students also reap the benefits with student mothers reporting that they were better able to help their children with their school work, to offer better advice about difficulties with homework and to be more understanding of the problems their children faced as students. They also remarked that their child-
ren, especially their daughters, were more serious about their studies and more motivated to continue their education as a result of the role the mother had provided (Kelly, 1982, 1987).

Despite the benefits, difficulties can and do occur when mature age women return to study. Women's traditional responsibilities for domestic work and child rearing, plus lingering social beliefs that women's place is in the private sphere and involvement in activities outside of the home is illegitimate, have led to some women experiencing difficulties. West's (1986) research indicates that a small percentage of marriages break up as a result of returning to study and there is also evidence that women students may be more likely to experience such a marriage breakdown (King, 1989). In a small minority of cases, women report that their husbands who opposed them returning to study burn their books, hid the mail or became violent, 'He was a big bully...I was completely frustrated and furious. He tried to control me by violence, and that was the last straw' (Burns & Scott, 1993).

West's (1986) research revealed that 22% of mature age students in his sample had withdrawn from permanent study, a higher proportion of men (24%) compared to women (17.8%) had withdrawn but there was a tendency for women's progress through the degree program to be somewhat slower. Student records from Macquarie University show that 42% of mature age students enrolled in a degree course discontinue it before completion (Scott, Burns & Cooney, 1992). At the University of Western Sydney, Nepean, student records indicate that 50% of mature age women students enrolled in Humanities, Education and Health Studies withdrew in their first year of study (Barlow & Heavens 1994).

The Australian Government's discussion paper 'A Fair Chance For All' (1990) states that most research on student attrition has concentrated on school leavers and neglects more marginal groups. The research on school leavers is not helpful in understanding why mature age students discontinue study. The life circumstances of mature age students are quite different from those of school leavers and the reasons they discontinue also vary. The research that is available tends to focus on the difficulties mature age stu-
dents experience in fitting into college (Wil-lingham, 1985). However, as West (1986) comments, fitting into university is more of a problem for school leavers, whereas, the problem for mature age students is fitting university into their already heavy life loads. An Australian study conducted by Scott, Burns and Cooney (1992) found that there was a complex of reasons for discontinuing study but five main factors could be identified: socio-economic class; lack of support from family; financial; weight of domestic responsibilities; and lack of knowledge or skills expected at university.

The study revealed that women whose own education and previous level of employment was low tended to be married to men who were also poorly educated and employed in lower status occupations (Scott, Burns & Cooney, 1992). Lower level of employment is associated with poorer wages, so financial difficulties are common. Additional financial strain is placed on the family budget when study is undertaken, HECS and university fees need to be paid, books, writing and course material need to be purchased, copious photocopying and transport costs all impact on the already strained financial resources. This situation is further exacerbated when child care fees are incurred or the woman has to give up paid employment.

As Richards (1985) points out, individuals from the lower social class are more likely to hold conservative beliefs about sex roles, therefore, women are more likely to carry the burden of responsibilities for household tasks and child rearing. Withdrawal of a part of the woman's labour from household duties in order to study is likely to be resented or at least not be supported by her partner. Beliefs about the desirability of undivided maternal attention for very young children can also lead to feelings of uncertainty and guilt for the woman and is frequently the cause of conflict between not only the woman's partner but also with her extended family. Feelings of guilt and uncertainty, combined with being unfamiliar with the university system and rusty study skills, reduce the woman's confidence in herself to be able to successfully complete tertiary studies.

Western Sydney hosts one of the largest areas of concentrated disadvantage in Australia. UWS, at its centre, has initiated and developed a number
of major projects aimed at facilitating access for disadvantaged groups, particularly where few parents have previously attended a tertiary institution. This has led to a wide range of admission, orientation and support programs.

One such offering is a university preparation for Mature Age Women (MAW), a program initiated, developed and implemented in the Special Projects Centre of the Division of Student Affairs & Services (hereafter DSAS) with an establishment grant from the Commonwealth Department of Employment Education & Training. In part, this was because the five factors identified by Scott, Burns and Cooney (1992) not only allow us to understand the difficulties women encounter when returning to study but provide us with a possible explanation of why 50% of mature age women 'drop out' of courses at the University of Western Sydney, Nepean (hereafter Nepean).

The 'drop out' rate for women is of particular concern to Nepean for several reasons: firstly, Nepean's reputation is diminished in the eyes of other universities and the community; secondly, that government funding is tied to outcomes, i.e. the number of students who graduate; and, thirdly, the Federal Government as stated in 'A Fair Chance For All' (1990) is committed to widening access to higher education and meeting a target of 125,000 graduates, a majority of whom will be women, by the year 2000. Consequently, Nepean is keen to develop strategies that would reduce the rate of women discontinuing tertiary study. To this end, the Tertiary Preparation for Mature Age Women Program was developed and implemented earlier this year by the Special Projects Centre, DSAS. This program endeavoured to equip the women with basic academic and library skills, develop confidence in their own ability to undertake study and to develop strategies for dealing with home tensions and problems. It is anticipated that this program would assist the women in their preparation for higher education and would significantly reduce the 'drop out' rate.

PROJECT DESCRIPTION

Mature age women, particularly women of 30 years and over, frequently experience adjustment difficulties in their first year of tertiary study. Twenty-five mature age women were included in this program, many of whom had not completed secondary education or recent formal education. Consequently, on entry to the tertiary system, they lacked the necessary plethora of basic skills to successfully complete university. The realisation that their basic skills are inadequate can contribute to feelings of anxiety, loss of confidence and lowering of self-esteem. These coupled with insufficient educational skills, lead women to questioning if they have the academic ability to perform. Our records indicate that far too many women convince themselves, often without adequate evidence, that they lack this ability and ultimately 'drop out' of university.

MAW is an intensive program to assist in the development of strategies and skills in time management, essay writing, note-taking, library research, adapting to changing family roles, self-esteem and confidence building and developing a peer support network combined into a learning cell which is capable of providing mutual support throughout the duration of their university career.

AIMS & OBJECTIVES

The project aims to assist mature age women to:

a. reduce the number of adjustment difficulties encountered;

b. gain basic skills necessary to complete their chosen course;

c. establish a peer support network;

d. minimise attrition.

COURSE CONTENT

Each mature age female student entering an undergraduate program was invited to participate in this tertiary preparation course. The course comprises attendance 9.00 am to 3.30 pm in the week prior to orientation and presented in both lecturer and workshop format. The focus of the course was on developing specific skills and strategies in three areas:

- study skills
- self-esteem and confidence building
- adapting to changing personal and family roles.

The content of the study skills component of the course was:

- active listening
- note-taking
- motivation
- goals
- organization
- handling distraction
- time management
- timetables and their use
- methods of study
- types of learning
- essay writing
- exam preparation
- sharpening mathematics skills
- library tour.

The content of the confidence component of the course was:
- beliefs that reduce confidence
- negotiating conflicts
- negative thinking
- looking after yourself
- handling criticisms
- stress management
- avoiding anxiety
- maximising potential.

The third component of the course focused on adapting to change, the content included:
- role of the family
- experiences of successful tertiary students.

The course participants were assisted to establish a peer support group. This group continues to meet regularly to discuss problems and issues related to the women’s studies and their personal lives.

PROFILE & NUMBER OF PARTICIPANTS
Women in the group were in the age range 30 to 45 years. The majority of participants were married women living with their partner, 6 women were separated/divorced and only two participants were single. The total number of dependent children of the participants was 68.

The range of number of years since undertaking formal education was 28 to 1 year. Educational levels of participants appear in Table Two.

Each session of the course had 100% attendance.

STAFFING
Teaching staff in the main, drawn from Nepean. Two external persons, were used when no suitably qualified Nepean employee was available. One male was employed, preference was given to the employment of female staff in order to reinforce that women can and are successful in the world of academics and work. Employing female staff enabled the women to bring up issues of a more personal nature, i.e. relationship problems. Employing 2nd Year students and a graduate reinforced the idea that women from similar backgrounds and life experience as themselves are able to manage study. During the sessions on Experience of Tertiary Study, the senior students brief was to be honest and to talk about their negative and positive experience of being a 1st Year student. The senior students were also able to provide concrete examples how they managed to combine study with family responsibilities and how they overcame problems. Staff involved in the program were selected from a range of areas including those from:
- Special Projects Centre - Adapting to Changing Roles;
- Counselling & Health Unit - Self-Esteem & Confidence Building;
- Learning Centre - Time Management and Study Skills;
- Faculty of Education - Sharpening Maths Skills;
- Continuing Education West - Experience of Tertiary Study;
- Library Staff, Kingswood - Library Skills;
- Nepean Graduate and Senior Students - Experience of Tertiary Study.

EVALUATION
The two phase evaluation of this program consists of an evaluation questionnaire which is completed one week after the final session of the course, the second phase consists of a follow-up evaluation questionnaire and a review of performance by way of examination results for the year of entry. The response rate was 100%.

One typical response pattern (of 25) indicated the following:
- 24 of the participants found the timing of the course suitable, including day;
- 13 participants deemed the course too long, 12 women considered the course to be an appropriate duration;
- 23 people regarded the time slot 9.00 am to 3.00 pm convenient;
- only 2 of the 22 women were unable to remain for the entire last session due to child care difficulties.
RATINGS
A very simple questionnaire requested participants to rate both presentation and content according to 3 levels of satisfaction, i.e. good, OK or poor.
In general, the ratings for each session of the course were positive. Study Skills, Time Management and the Library Tour were consistently scored as 'good'. While Confidence Building and Adapting to Change were rated slightly lower. However, this is not surprising as the material in each of these sessions is often difficult to digest if the person has not been exposed to ideas of self-awareness and development. Adapting to Change was designed to alter and prepare the participant for possible difficulties. Overall, 22 participants rated the course as being 'very helpful', 2 rated the course as 'helpful' and only 1 person rated the course as 'OK'.
Participants were asked to suggest other topics that may be included in the course, these suggestions included:
- revision of basic maths and science;
- memory training;
- additional practice at essay writing;
- university tour.

All 25 participants state they would recommend the course to mature age women enrolling at university. In addition, the women were asked to 'briefly explain what was the most positive thing you have learnt from this program' the responses were quite surprising in that the comments were so similar. The general comments received and the results of the evaluation questionnaire clearly demonstrated that a need exists for mature age students to undertake a preparation course before entering tertiary studies.

PERFORMANCE
A review of the performance of participants in the program, at the mid-semester break, reveals that these students perform better than matched controls and superior to traditional entry students. However, it will not be until the end of the academic year when examination results are available that we will be able to gauge if, in fact, this program has been successful or not.

ATTRITION/PROGRESSION
One of the most pleasing aspects of the program is the manner in which the small groups (learning cells) have been instrumental in actively discouraging 'drop out' or attrition. Traditional mature age women 'drop out' rate was well in excess of 50% in the first year, to date all 25 women who participated in the project are still attending lectures and tutorials. Since 1991, the average overall 'drop out' rate has been around 4%, by most standards a stunning success.

SOCIAL SUPPORT
One of the major concerns experienced by Student Counsellors is one of domestic violence through to simple lack of genuine support for women entering education. It was evident that, whilst most enrolling women had the motivation, the aspiration and dedication to stay in undergraduate programs, the orientation and preparation was more appropriately and usefully directed to partners/husbands and families. It was for this reason that orientation included the family unit (in its many guises). Families were introduced to the university by way of barbecues, social events and a brief formal lecture. These activities aimed at 'educating' the participants in the demands made upon students. In some instances, the partners were encouraged to stay in touch with one another and, in fact, developed into an 'outer' group of supporters (whingers and gossipers) who complained to each other about the women's participation in university.

What is obvious is that pressure from home to discontinue was significantly reduced and so one of the major impediments to success was reduced. Domestic violence, burning of books, arguments, etc. were significantly reduced. Indeed, the establishment of a peer support group was perceived as very beneficial for all participants. The women swapped telephone numbers and addresses and arranged to meet regularly with each other to discuss problems and issues related to their studies and their personal lives. This group has been quite effective in supporting each other, assisting each other with essays and has formed a study group. They have also been able to child-mind for each other when library visits were necessary, when a member was unable to attend university because of a sick child, the other women took turns in providing the absent student with copies of lecture notes and assignments.

One of the most important features from a university perspective was that the social support
network appeared to take the place of the support structures provided from the Counselling & Health Unit, Learning Centre, Special Projects & Disabilities, Chaplaincy, etc. Participants in the MAW simply utilised their services to a much lesser degree than either matched controls or the general mature age female population. A very real saving in support costs.

CONCLUSION
The comments received from the women coupled with the results of the evaluation questionnaire clearly demonstrates that women students will benefit from participating in the Tertiary Preparation for Mature Age Women Program prior to entering university. Programs of this nature will assist in reducing the likelihood of university ‘drop out’ because of lack of basic academic skills or confidence and will assist women to develop strategies for combsing family responsibilities with study.

References


Retention Rates of Women

Papers have been reproduced directly from disks provided by the authors. In some cases, due to technical difficulties, tables could not be reproduced accurately. The editors apologise for any vexation this may cause. Readers are invited to contact the relevant authors for clarification.
Don't Call It 'Drop-out':
the Danger of the Discourse of Deficiency

David Crosier and Maggie Woodrow

What is 'drop-out'? 'Drop-out' is the name commonly given to those who fail to complete their higher education course. It comes under a variety of other titles, but the alternatives - non-retention, student withdrawal, non-completion are hardly more positive or more precise.

Who is a 'drop-out'? This needs clarification. Can the term be sensibly applied these days to students who leave to take up the offer of a job? And are students who transfer to other courses, or even to other institutions to be classified as non-completers? And does non-retention also refer to a student who gains several credits and decides to defer the rest to a later date? Isn't this supposed to be one of the intended advantages of credit-based systems? Within what time scale then, do we decide that deferral has become drop-out?

From mass entry to mass exit? Although higher education institutions, throughout Europe, are concerned about the increase in drop-out, no answers have as yet been provided to the above questions, and no effective antidotes have yet been found.

Non-completion in higher education appears at first sight to be due less to restrictive policies than to the absence of any policies effective enough to prevent it and this is surprising. It has long been a concern in open-entry systems such as France and Italy, but is now also pre-occupying countries with highly selective systems. It seems that the arrival of 'mass' entry into higher education may have been accompanied by mass exit not long afterwards. In Italy for example at the end of the 80s the drop-out rate was just below 64, while in Germany a recent study indicates a non-retention rate of 27% The current crisis in higher education funding has focused attention on what seems to be either a waste of resources, or in open-entry systems, a built-in method of saving them, by rejecting large numbers of students after the first year. For individuals, drop-out can look like failure and can pose serious personal problems: for institutions, it looks like an investment gone wrong, and especially where entry is restricted, means the loss of a place that another student could have had.

LACK OF EVIDENCE
Despite these concerns, data on the extent, distribution and causes of non-retention are hard to find.
Collection of data on students who have left, successful or not, is notoriously difficult, and those who have withdrawn may be unable, or unwilling to articulate their reasons, which may well be multiple. Nevertheless, such problems argue the case for developing appropriate and effective monitoring systems, not for evading them altogether.

WHAT ARE THE CAUSES?
The reasons for non-retention are not simply of secondary interest, but the main determinant of what constitutes non-completion. This situation creates something of a procedural problem, since recording the incidence of patterns of behaviour would normally precede investigation of the reasons for it. Some decisions must inevitably therefore be taken before hand and some what in the dark.

A STUDENT DEFICIT MODEL?
One organization which has just taken this 'leap into the dark' is the new national Higher Education Statistics Agency (HESA), which is reporting for the first time on reasons for non-completion in the UK. This year all British Higher Education Institutions were required to send returns for each kind of course e.g. full-time/part-time undergraduate, full-time/part-time postgraduate etc., under the following main categories: academic failure, left in bad standing, transferred to another institution, health, death, financial or other personal reasons, written off after a lapse of time, exclusion, gone into employment, other.

The most remarkable aspect of these categories is that they focus exclusively on the responsibil-
ity of the student for non-completion, while the higher education institution itself remains unproblematic.

An institutional responsibility By comparison, other recent UK surveys have cast more responsibility on to institutions, attributing non-completion to: reductions in staff-student contact, reductions in tutorial time, lack of affordable student accommodation, and a shortage of crèche provision.

Reasons of this kind are not among the Valid Entries for non-completion listed in the HESA codes above, and yet they have provided helpful feedback for reducing the future incidence of non-completion. Institutions it seems are prepared to play their part, which is after all in keeping with the current drift towards entrepreneurialism in higher education. Where students are 'clients', the terminology of non-completion and withdrawal is inappropriate. Clients and customers do not drop-out, they are 'lost' and the responsibility for this is indubitably that of the firm. It is then the responsibility of institutions to match the image conveyed by their marketing hype to reality in the form of the student experience, or to pay the price of non-retention.

The fault of the system - the chance to fail Universities however may well attribute non-completion to the system in which they operate. This point was made by a recent CVCP survey which revealed that a high proportion (40) of withdrawals were mature students, unable to complete for financial reasons - a significant finding in view of continued state reduction in student support and the recent abolition of the additional allowance for mature students.

In other European countries with 'open entry' systems, funding systems are often premised on extensive non-completion and the proportion of teaching resources allocated to first year students is sometimes, as in Strasbourg University very limited. Thus students who have the chance to enter, find that in practice this represents little more than a chance to fail.

Acknowledgement that responsibility for non-completion is systemic would then require as valid survey entries, not only the financial problems, health or death of students as causes (as in the HESA case), but the financial problems, health and decline of European systems of higher education.

THE POLITICS OF 'DROP-OUT'

We need to recognise that giving different names to 'non-completion' contributes to the construction of different political realities. 'Student drop-out' makes it the responsibility of the student and puts 'academic failure/left in bad standing' high on the list of possible causes. This fits well with the view that mass higher education has lowered the quality of student intakes, a problem to be remedied by increasing barriers to access and returning to more selective systems. On the other hand, where 'non-completion' is viewed as 'losing clients' the responsibility becomes that of higher education institutions and of the higher education system itself. The remedy here would of course be quite different and would require from both, a greater commitment to understanding and meeting the different needs of an increasingly diverse student body.

Inadequate pre-course information A major barrier both to entry to and successful completion in higher education is the absence of adequate, appropriate and objective information, guidance and counselling, whether prior to entry, on course or in preparation for exit. In the Sheffield Survey 54 of students who had withdrawn, reported that higher education had differed markedly from their expectations and 44 gave 'course unsuitable' as their reason for leaving. This is also the main cause of the high drop-out rate in Slovenia, where students failing to gain entry to their chosen subject because of numerus clausus restrictions, often find the alternatives unsatisfactory. The access implications This information barrier is significant in reinforcing the culturally reproductive nature of higher education. Applicants and students with parental experience of higher education find themselves at a massive advantage, while those from families, schools or communities where post-school education is a rarity, must educate themselves and their families in the complexities of an alien system, while at the same time trying to promote their future within it. It is largely because the population of higher education represents a self-perpetuating elite that there is a general assumption that very limited information and guidance services will suffice, and even here it is clear that 'guidance' is more
easily accessible by those who need it least'. Moreover the services that are available, often fail to take into account the different requirements and backgrounds of different social groups e.g. mature applicants, or those from minority ethnic groups, while in the case of those with disabilities, the absence of information and guidance serves in many cases to conceal the absence of any appropriate access. Misleading marketing In western Europe at least, overblown marketing budgets are now an accepted feature of higher education institutions and if only these could be exchanged for the very limited resources invested in guidance and counselling, the information barrier would soon be overcome. The purpose of marketing, as an element of the new entrepreneurial university, is not to inform but to impress; not to provide a service, but to sell a product; not to expose the reality, but to conceal it. Impartial and objective services for information, guidance and counselling are thus made all the more vital, as an antidote to problem-free promotional literature. The success of marketing strategies is generally measured by an increase in demand, whether for Mars bars or students - a better measure in this case would be a reduction in student withdrawals.

A DENIAL OF CHOICE
Inadequate or non-existent information and guidance denies applicants and students the right to make informed and wise choices about their future study and their future careers, and denies universities, employers and society the benefits of such choices. In the west, the inadequacy of resourcing for student services is indicative of the low priority they are allocated, and sometimes of funding systems in which student drop-out is inbuilt. Where the first year experience is designed to ensure the survival only of the fittest, resources are unlikely to be heavily committed to on-course guidance and counselling.

In the east, the general lack of student services is more indicative of a lingering attachment to a philosophy of higher education which seeks control rather than choice, and direction rather than guidance. Here the acute lack of resources makes it all the more important to keep wastage rates down, and yet even when counselling is available e.g. in Slovenia, resources for it have recently been cut. A matter of investment An effective strategy for achieving a higher priority for information, guidance and counselling (and one which those directly involved have by no means fully explored) is to play on the investment implications. Applicants and students who are ignorant of the opportunities available to them, who are uncertain, ill-advised, misguided and hence susceptible to marketing hype and to subsequent disillusionment, represent a poor investment whatever the resources expended in ensuring the quality of their course. If we must seek commercial analogies for higher education performance indicators let us look for long-term customer satisfaction rather than for the immediate gratification to be found in increased take-up, which may do for Mars bars what it cannot for education.

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Sheffield Hallam University. 'Study of Student Non-Completion', UK, 1994.
A colleague (Brooke 1996) recently remarked that "An individual can no longer expect to follow a career path. Any path that there is will be made of crazy paving - and you lay it yourself!"

In future, before an individual can follow any career path, its shape will have to be determined by the individual, the route planned and then plotted. Career planning thus becomes "career orienteering". Responsibility for checking one's position along the way, in relation to the situation and the surroundings, lies with the individual. Such a check may necessitate a change of direction. In career terms such a change of direction may necessitate self development, remodelling or an intellectual "make over". How well does Higher Education prepare its students for this periodic "prismatic" planning? This paper uses as a starting point the McKinsey 7S framework (Fig 1) (Mintzberg and Quinn 1995). The central idea is well -known - that effective organizational change stems from the interaction of, and the relationship between, several factors; structure, systems, style, staff, skills, strategy, and shared goals. It was developed at the consulting firm McKinsey in the 1970s where its three authors, Waterman, Peters and Phillips worked at the time.

It is the author's view that its central ideas have relevance not only for effective organizational development, but also effective individual development. The author adapts this framework to focus attention on the individual, and provide an holistic view of self-development through change, by replacing the staff factor by self.

These central ideas are that:
1 Effective organizational change or self-development is really the relationship between, and the successful interaction of, several factors.
2 The diagram is intended to convey the notion of interconnectedness of those factors and significant progress cannot be made in one area without making progress in the others.
3 The shape is significant. It has no starting point nor implied hierarchy. It is not obvious which of the seven factors will force and then drive the change at a particular point in time.
4 The framework can be seen as a set of compasses. The effort involved in redirecting an organization is to ensure that all the factors are aligned. "When all seven needles are all pointed the same way, you're looking at an organized company" (Mintzberg and Quinn 1995).

This analogy is continued in this paper. The McKinsey 7S self-development framework is intended to be used as a compass by the "career orienteer". Thus the curriculum in Higher Education must provide both the course and the skills required to use the compass for lifetime learning and career planning (Fig 2).

**STRATEGY - WHAT DO I WANT TO ACHIEVE?**

An organization's strategy is the set of actions that a company plans in response to, or in anticipation of, changes in its external environment (Mintzberg and Quinn 1995). It is the company's chosen route to competitive success and encapsulates those factors that will create its unique value.

Similarly, in terms of the 7S self-development framework (Fig 2) the career orienteer will be required to, or wish to, develop a learning strategy at some point along the career route. How much practice does Higher Education currently give the students within its care in the preparation of a learning strategy? It should be the aim of all learning organizations, and particularly Higher Education, to give practice in developing a lifetime learning strategy.

For those who have already established such a strategy this will involve merely a checkpoint review, testing out the compass needles to en-
sure that the position matches their current situation to their surroundings, and they can move purposefully along their chosen career route. For others a learning strategy may be enforced by circumstances. Some individuals find themselves in a situation with which they are currently uncomfortable and need to move forward.

Megginson and Pedler (1992) state that a learning strategy starts with self and the desire to learn. “Without this desire self development cannot start. This desire usually stems from some dissatisfaction or feeling of discomfort with present state. It is not necessary to know what you want to learn nor what you need to learn.”

This desire to learn is an issue for those working in Higher Education. How can we enhance student motivation? when as argued by Elton (1996) “some students' motivation for learning may differ from what their teachers would like it to be, at least in the order of importance given to them”. He points out that motivation can be intrinsic, extrinsic, achievement oriented or social with intrinsic motivation related to interest in the subject (Entwistle and Waterston (1987)). Students will require assistance to assess their own motivation and teachers must recognise and then appeal to those factors which are likely to produce higher commitment.

When the career orienteer has reached a point at which the situation does not match the surroundings Megginson and Pedler (1992) set out the path for plotting a learning strategy:

1. The first step is self-diagnosis, the aim for the individual is to understand the source of dissatisfaction. In the view of Pedler, Burgoyne, and Boydell (1986) different people will prefer different methods of self-diagnosis. Some by simple introspection; others by conversing with members of their learning network, maybe a partner, colleague or friend; or by completing self-administered questionnaires found in the many books now published on self-development.

2. The second step is goal setting for self-development. The Open University (1992) suggests that each goal is followed through in stages. First, state each goal in one sentence, starting with a verb. This describes the outcome being sought. Second, state the criteria for success so that achievement can be recognised. Third, state the sort of situation in which this outcome will be achieved. Fourth, state the evidence that will demonstrate that the outcome has been achieved.

3. Complete a risk assessment in terms of those forces that are likely to help or hinder achievement and build them into the learning programme. Once the ability to take risks, survive them and profit from them has been developed then the self-development process will be strengthened.

4. Design a learning programme and find the appropriate resources aimed at developing the skills necessary to achieve the learning goals, encapsulating individual learning style and a successful learning system within a supportive learning structure with shared values of success.

5. Assess performance against original goals. Such an assessment will provide another checkpoint to evaluate whether the career orienteer is on track, and whether future goals need review. It also provides incentive to plan the next target.

SKILLS - WHAT DO I NEED TO GET THERE?

When organizations face a mismatch between the business environment and their current situation they must do more than shift in strategic focus. They need to add a new capability, new winning skills (Mintzberg and Quinn 1995). Skills represent the link between the organization’s strategy and the new era. Whilst at the same time they define changes that need to be made in the other six factors in the 7S framework.

This is so for the career orienteer. Responsibility for checking one’s progress along a career path lies with the individual. As mentioned earlier once a learning strategy has been devised this may necessitate a change of direction. In career terms such a change may necessitate development, or re-modelling, in other words, adding new capabilities, new winning skills or simply undiscovered capacity (Lusty 1996). Depending on the career orientation of the orienteer these skills could be personal, academic, professional, or entrepreneurial. For the purpose of this paper the author will reflect on the meta-cognitive skills that will assist the other six factors in the 7S self-development framework.
Some psychologists maintain that one factor unique to human thinking is metacognition, which is the ability we have to reflect on our own thinking process (Fisher 1990). These are the skills required to learn how to learn. How much do our students know about their own learning process when they have finished their studies in Higher Education? How often are they able to identify the thinking processes involved in the work on which they are assessed?

Psychologists also suggest that human intelligence derives from the information processing capability of the brain. Sternberg (1980) identified three components involved in our capability to process information and which determine our success in thinking. These are:

1. Knowledge acquisition (input) e.g. sensory experience, attention, memory, perception.
2. Metacognition and decision making (executive control) e.g. planning, predicting, checking and controlling.
3. Strategies for using knowledge and solving problems (output) e.g. reflecting, generating ideas, problem solving.

Fisher (1990) divided thinking skills into three:

1. Creative thinking
2. Critical thinking
3. Problem solving

His view is that thinking is involved in any mental activity that helps to formulate or solve a problem, to make a decision, or to seek understanding. It involves critical and creative aspects of the mind, both in the use of reason and the generation of ideas. It is through thinking that we make meaning out of life.

1. Creative thinking is largely rearranging what we know in order to find out what we do not know. Thus, to think creatively we must be able to look afresh at what we usually take for granted. Creative thinking supplies the context of discovery, provides a hypothesis, using insight and inspiration. It is also called divergent thinking and researchers have suggested that there are four aspects to divergent or creative thin-king skills. a) Fluency of thinking is the ease with which we use stored information when we need it. b) Flexibility is the ability to overcome mental blocks, to alter the approach to a problem. c) Originality or novelty is shown by an unusual or rare response to provide a vision for the future. d) Elaboration is the number of additions that can be made to some simple stimulus to make it more complex.

2. Learning to think critically is to learn how to question, when to question and what questions to ask. Critical thinkers develop certain attitudes such as:

(a) a desire to reason which requires learning how to reason, when to use reasoning and what reasoning methods to use
(b) a willingness to challenge
(c) a passion for truth For Bloom (1956) critical thinking was synonymous with “evaluation”.

In his taxonomy of cognitive goals of education evaluation was the pinnacle.

3. Many models are available to help problem solving. Fisher (1990) provides three sets of interacting factors involved:

(a) attitude which include interest, motivation and confidence
(b) cognitive ability which includes knowledge, memory and thinking skills
(c) experience to provide familiarity with content, context and strategies

STYLE - WHICH IS MY PREFERRED METHOD OF LEARNING?

Karlof (1993) states that style is one of the lesser known implements in the management tool box when consideration is made of the process of managing change. It can be said to consist of two elements - personal style and symbolic actions. Thus management style is not a matter of personal style but of what the executives in the organization do and how they use their personal signal system. When relating style to the 7S self-development framework no one learning style is considered better than another. Each will have particular strengths and weaknesses and these will be different depending on the particular setting in which they are used, and the task to which they are applied. Are students in Higher Education aware that some analysis can be made of their personal learning style and that learning strategies can be adapted to take account of this? The Open University (1992) link Honey and Mumford’s learning styles with the various stages of Kolb’s learning cycle. The Activist learns best from constant exposure to new experiences. Reflectors learn best from activities that allow them space to ponder over experience and assimilate information before making a considered judgement. Theorists learn best from activities that allow them to integrate observations into logically sound the-
ories. They are less comfortable with subjective opinion or creative thinking. Pragmatists learn best from activities that have clear practical value and allow ideas and approaches to be tested in practical settings. The Open University states that learning styles provide opportunities for students to think about the way they learn, help them describe the learning they do and assess its effectiveness. However, how many students in Higher Education are aware of their learning styles? They are understood by the teacher, but not the learner! They also utilise the abilities associated with each of the four stages of the learning cycle as part of the learning system to which the 7S self-development framework now turns its attention. Learning styles are useful insofar as they:

1. provide tools to help students think about, describe and assess the effectiveness of the way they learn
2. use the abilities associated with each of Kolb’s stages of the learning cycle (See Systems). The Experience to Reflection stage is most likely to suit an Activist with a preferred method of learning “on the job”. The Reflection to Conceptualisation stage is most likely to suit a Reflector, consciously aware of the process of learning with an ability to create theoretical models. The Conceptualisation to Experimentation stage is most likely to suit a Theorist, with a preferred method of learning way from the job. The Experimentation to Experience stage is most likely to suit a Pragmatist who enjoys carrying out plans and is good with experience
3. encourage the career orienteer to transform each event and each experience into an “optimistic learning opportunity”
4. reminds the developer that different learning structures will be required to support different learning styles at different stages in the learning system

SYSTEMS - HOW DO I GET THERE?
The systems of any organization are all the formal and informal procedures that make organizations work day by day and year by year. The systems identified in the 7S self-development framework concentrates on the learning process. The Open University (1992) defines learning as the ability to process information, insights and experience into new learning. In his article ‘Action learning and excellence in management development’ (Margerison, 1994) sets out the differences that have occurred in the last 30 years between traditional learning and action learning (Table 2).

DIFFERENCES BETWEEN TRADITIONAL LEARNING AND ACTION LEARNING
In 1984 D A Kolb published a book called Experiential Learning - Experience as the source of learning and development. Before developing his four-stage model of learning by doing the author sets out the issues of significance for the teacher and learner (Cotton 1995) - learners must be committed to the process of exploring and learning - the teacher imposes some structure on the learning process so that the learners are not left to discover by random chance - there must be scope for the learner to achieve some independence from the teacher - exposure to experience is necessary for the learner - the learner is involved in the active exploration of the experience - the learner must feel safe and supported so that they are encouraged to value their own experience - the learner must reflect on their experience in a critical, selective way Cotton (1995) states that there is a difference between learning how to do something and the process of learning from activities and personal experience. The process of active learning and work experience is called “experiential learning”. This is developed later. Gibbs states that learning can be described as either practical or theoretical as both involve doing or involve thinking. However, it is not enough just to do, neither is it enough just to think. It is also not enough simply to do and think. Learning from experience must involve links between the doing and the thinking. Kolb’s Experiential Learning Theory places four stages in sequence to form the experiential learning cycle. The cycle can be entered by the learner at any point, but its stages must be followed in sequence. This has significance not only for the learning system but other factors in McKinsey re-modelled:

(1) Learning style - Individuals will have their preferred learning style. However, each stage on the Kolb cycle will benefit from different abilities and approaches and individuals should be encouraged to experiment with a mix of styles.
(2) Learning structure - Experiential learning follows a link cycle so the teacher must provide appropriate learning activities and teaching methods to support each stage. Cotton (1995)
makes some suggestions.
(3) Active experimentation suggests that planning a learning programme and preparing a learning contract ensures that learning needs are diagnosed; learning objectives specified; learning resources and strategies put in place; and that there is validated evidence of Learning.
(4) Learning strategy - Cotton (1995) quotes Carl Rogers' theory "... get on with optimistic learning and self-development". Every event and personal experience can provide a learning opportunity. Thus an attitude of learning opportunism makes it possible to view all experiences as a potential area for useful learning.

STRUCTURE - WHERE TO DO I GO TO LEARN?
The structure of an organization refers to the way business areas, divisions and units are grouped in relation to each other (Karlof, 1993). The challenge is to be in a position to focus the dimensions of the organization that are currently important to its evolution and to be ready to refocus as the critical dimensions shift. Divisions and units are grouped in relation to each other. Structure has been interpreted in the 7S self-development framework as where the career orienteer "will go" to learn or rather, where learning will be "delivered". Margerison (1994) has identified the changing processes in management education and development from experiential to existential. These are characterised by him as follows: - From teaching to resourcing i.e. personal consulting and counselling - From programmes to contracts based on intra-organizational assessment of problems and opportunities - From individual to group orientation and learning - From standard to real up-to-date cases - From developing i.e. managers acting as developers - From top-down appraisal to bottom-up appraisal i.e. self-appraisal and team appraisal - From product-centred to marketing-centred orientation i.e. part-time Masters degree, tailored to suit the needs of the organization; NVQ and competency based qualifications gained as an integral part of work; work based learning - From inputs to outputs i.e. relating knowledge and skills to tasks that have a purpose rather than teaching as an end in itself - From fixed to continuing education i.e. life long learning - From experiential to existential management development. Much has been written about the advent of the "learning organization or the learning company". For the career orienteer "learning organization" has to take on a different meaning. Pedler, Boyden and Burgoyne (1988) set out their working definition of a learning company "An organization which facilitates the learning of all its members and continuously transforms itself." An organization is defined in the dictionary as an "organized body or system or society." In turn a society is defined as "any social community". The career orienteer will not remain a member of a single organization during the working life. Thus the learning organization will be replaced by the learning community. This community is likely to evolve into a learning network providing support through the learning process. We return to the learning strategy and the first step of self-diagnosis. Different people will prefer different methods of self-diagnosis. Some by conversing with members of their learning network, maybe a partner, colleague or friend. A learning community provides support. It may be the University, the employer, but it may be the pub, the family, or friends.

SHARED VALUES - WHO WILL BE MY MENTOR?
The effect of this view of the future is to place more emphasis on the final factor in 7S self-development framework shared values. For the organization super-ordinate goals related to guiding concepts, a set of values and aspirations, often unwritten, that go beyond the conventional formal statement of corporate objectives. The shared values of an organization are things that everybody is aware of as being specially important and crucial to the survival and success of the organization (Karlof 1993). The career orienteer, without an organization, will need to create individual super-ordinate goals and ensure that values are shared within their own learning community. Parikh (1991) acknowledges that the role of management has now changed and the essence of the new paradigm is to create within the organization "a climate, a culture, and a context in which corporate enrichment and individual fulfilment collaborate and resonate progressively...". He provides a very useful model (Table 3), contrasting the old management paradigm with the new paradigm, in which the focus is the individual "the concept of self - our real identity." This has been extended by the author to include self as learner within the new paradigm.
Table 3

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Focus</th>
<th>Source of strength</th>
<th>Leadership</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Paradigm</td>
<td>Institution</td>
<td>Stability</td>
<td>Dogmatic</td>
<td>Planned</td>
</tr>
<tr>
<td>New Paradigm</td>
<td>Individual</td>
<td>Change</td>
<td>Inspirational</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Learning Paradigm</td>
<td>Self</td>
<td>Self-development</td>
<td>Developer</td>
<td>Self-development</td>
</tr>
</tbody>
</table>

The Learning Paradigm in Table 3 show that the focus of management turns its attention to the individual; the source of strength of an organization is self-development; the role of leadership is as developer. In a learning community everyone is a learner and everyone is a developer. The role of a member of a learning community could vary from critical or developmental friend, monitor, motivator, or in a more formal setting, authenticator of claims for competence. (The Recording Achievement and Higher Education Project 1991 – 1993)

The Career Orienteer takes responsibility for individual career progression and self development. The 7S self-development framework provides a set of compasses to ensure that the learning strategy, the learning system, the appropriate skills, learning style, supporting learning structure and shared values of the learning community all convey a clear pathway to the goals set and the personal targets to be reached.

COURSE AND COMPASS

In an attempt to provide both the course and the compass for its students the Lancashire Business School at the University of Central Lancashire in the UK has developed a new subject Career Management as part of its Combined Honours programme. Students will undertake this subject alongside those offered by the Faculties of Health, Science, Design and Technology, Cultural, Legal, and Social Studies, as well as Business. The subject comprises historical and theoretical aspects of career management, personal development, career planning and reflective learning from experience. The learning outcomes of the subject propose that at the end of the programme students will be able to: - demonstrate skills appropriate to the needs of successful career management - be skilled practitioners of reflective learning - undertake self-analysis and personal audit using an appropriate range of techniques - prepare a personal development plan - apply a model of career management - compare and contrast theories of career choice - describe the historical development of and the contribution of various disciplines to the development of Career Education and Career Management - demonstrate knowledge and understanding of trends in the labour market - demonstrate knowledge and understanding of the use of occupational classification systems - explain recruitment and personnel selection processes. It is the hope of the course team that in the words of Carl Rogers these students will "... get on with optimistic learning and self-development" and that every event and personal experience can provide a learning opportunity along the pathway to an effective career route to the goals set and personal targets to be reached.

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Almost forty years ago Schelsky (1959:18) remarked that education is the ‘primary, decisive, and almost only social determinant of rank, position and scope for development of the individual. The ‘key power’ of education as a whole, including adult education, has only increased since then (Glebbeek 1993; Dronckers & Ultee 1995). Having a diploma is the most important determinant for getting a paid job. A paid job, in its turn, is the most important determinant for social participation.

In post industrial or late modern society (Giddens 1991), the responsibility for a successful educational career and, in line with that, for a successful allocation towards work is placed almost completely on the shoulders of the students. The majority of them, however, lack a clear orientation towards their investments in education in relation to the work roles they prefer. As a result of that, they lack an elaborate educational as well as an elaborate labour market strategy, which is very problematic in view of the responsibility mentioned above.

In the Netherlands, students orientate themselves during their stay in higher education primarily to the demands of the educational programmes they are following and secondly to their peers (Meijers: 1995).

Their teachers are not oriented towards the demands of the labour market, either. Although for different interests, students and teachers together create a pedagogic reservation in which the relation between education, work and biography is not a meaningful but a strictly instrumental one. By this is meant that students and their parents and teachers can only understand, and justify to themselves as well as others, their investments in education in terms of fear of being left behind’ (Dronkers 1995). As long as the study results are good this is not problematic. When these results drop however, many students lack a meaningful frame of reference within which they can re-orientate themselves towards their educational investments and/or the educational programme. It is necessary therefore, to establish a system of careers guidance in higher education that is almost completely absent at this moment. This system cannot be built, however, around the principle of providing information about the educational system and the situation on the labour market. The situation on the labour market is both in a quantitative and a qualitative way much too unstable, to make information about jobs etc. of much use. Besides that, information as such cannot compensate for a meaningless educational program. Students have to develop a career identity, which can be seen as a form of empowerment (Van’t Rood 1996). Students must be enabled to recreate a meaningful relation between education, work and their own biography in order to develop the sense of identity and direction needed for good study results and for surviving successfully in the labour market.

1. EDUCATION, WORK AND BIOGRAPHY IN AN INDUSTRIAL SOCIETY

The transition from an industrial to a post-industrial society confronts both individuals and institutions with the problems of identity and direction (Wijers & Meijers 1996). In an industrial society, identity and direction are institutionally entrenched. An individual is born into a family in which the relationships between the various members are clear to everyone. The parents have an almost absolute authority which they, in part, delegate to professionals within the education system. Together parents and teachers have no difficulty in making themselves responsible for the guidance of children towards adulthood (Meijers & DuBois & Reymond 1987; Tillekens et.al. 1990) not in the last place because the up bringing goals are clear. The children define themselves as children until they reach secondary school; with that they have adapted their role in what (De Swaan; 1982) has referred to as a ‘command house hold’.

The parents share the responsibility for their children’s upbringing with teachers, who can also unequivocally define themselves as instruc-
tors. In other words, the parent is in no doubt as to what the societal function of education is: education prepares students for a working career because it initiates them in the necessary knowledge and skills for performing a job. This conception of education corresponds with a fairly stable societal structure. Of course both jobs and qualification structure change in the process of industrialisation, but because most of these changes are the result of an internal differentiation they are not fundamental in nature (Mintzberg 1983). The result is that the education system has no need to undergo fundamental changes either; an internal differentiation that corresponds approximately with the differentiation taking place in the industrial occupational structure suffices (for an elaboration on vocational education see Meijers 1983). All roles in the education system are transparent; the relationships between teachers and students are regulated by what Willis (1978) has called the 'trade of knowledge for order'. The underlying assumption that makes this trade possible is that teachers, in the most literal sense, have valuable knowledge with which they subsequently acquaint students according to a pre-set plan (the curriculum) if they conform to the rules and regulations set by the school. In other words, in this interaction the knowledge presented occupies a central place. The school knowledge can take on this directing position because the job structure is so stable. It makes it possible to develop a qualification structure based on specified occupational profiles. Because the education system professes to pass on occupational knowledge and skills and because there is a stable job structure and full employment, power can be obtained over the spreading of individuals over the societal ladder. Ultimately the trade of knowledge for order is legitimised in this way.

Doing well in school increasingly becomes an instrumental activity, not in the last place because education is becoming more and more general in order to offer every student an equal chance. From this perspective good results in school are especially important, because they create room for leisure activities. The school certificate proves that an individual has obtained enough knowledge and skills to function productively in a job. Obtaining a certificate initiates a new life phase: that of young adult hood. Central in this phase is the orientation on the labour and relationship market in order to find a job and steady partner respectively. Neither the job market nor the relationship market need intensive regulation by the government because there are no huge qualitative or quantitative discrepancies between supply and demand in either market. Once one has found a steady job and steady partner, one has become an adult. After a short time men become breadwinners, while the women take on the role of housewife and mother. The men rarely change employers until they reach personable age, the gold watch is proof of the quality of the employee as well as of the employer and an therefore grow into something that is a very positive status symbol and almost never change occupation. Thus, for men, and through them also for their spouses, their occupation functions as a kind of church steeple: it gives direction and identity horizontally, as it makes a differentiation with other occupations possible, as well as vertically, as a clearly defined career path exists. Summarising one can say that the standard biography in industrial society on an institutional level also presents clear roles for every stage of life. During their entire lives it was clear for individuals which social roles they were expected to play and what the corresponding rights and duties were.

2 EDUCATION, WORK AND BIOGRAPHY IN POST INDUSTRIAL SOCIETY

For parents, teachers and employers their life path and their task in it was clear, as was the relationship in which they stood to one another. With the transition to the post-industrial society this standard life path has come under pressure, with the result that there is a growing problem with regard to direction and identity, both on the individual and on the institutional level. With regard to work and working the transition from an economy dominated by industrial production to a service economy above all means that work becomes more flexible. Also due to constant changes, labour loses a great deal of the stable structure it used to have. In the industrial society work was organized in terms of reasonably stable occupations and functions, which resulted in a control of the risks for employers, employees and government. Having paid work meant above all doing work that was predictable both in content and with respect to career perspectives. However, in the present economy this is no longer the
Companies are increasingly confronted with the necessity to operate as flexibly as possible. This flexibility is attained in many ways (Van der Zee 1993, 1996); most important is the flexibility of employees through de-professionalization, 'Ent be rufli hung'; see Geurts 1989 and the flexibility of the company through its maintaining only a small nucleus of staff with permanent jobs and otherwise working with flexible job contracts, the so called 'core periphery model'. One of the results of this is that the relationship between employer and employees, in terms of roles and the corresponding rights and duties, is starting to become unclear. Another consequence is that it becomes extremely difficult for a person to visualise a career path. Arthur (1994) states that in the turbulence of a globalizing market economy in which the steering power of the nation state decreases, 'turbo capitalism', one must speak of a 'boundary-less career'. Every one will be unemployed in their lifetime for longer or shorter periods and/or be forced to retrain. As it is a case of largely unpredictable forces, individuals in order not to slide off into anomic situations under risky conditions (Beck 1992; Giddens 1991).

Where before there was an unambiguous life path which indicated the pattern according to which all parties involved were to act, the road now has to be laboriously discovered, which results in endless negotiations between parents and children, teachers and students, parents and teachers, and employees and employers. The stake of these negotiation processes is the question of what meaning should be given to everyday life, i.e. experiences but also role demands and expectations. In other words: individuals have to develop self concepts and biographies with which they can find and shape their role in society. Only when they are able to do this can they function in a post-industrial society. Individuals have to do this in almost all areas of life, but in this contribution we will concentrate on the area of work.

In the present economic situation business organizations have to survive in a turbulent environment. Emery & Trist (1970) show how entrepreneurs feel forced to invest in such an environment because they are afraid that they will be 'left behind' by their competitors. This results in a kind of mass psychosis: every one starts running faster and faster without having a clear sense of the direction into which they are running. The net result is even more turbulence. In the course of this process there remains less and less scope for free, independent decisions that also take the long term into account, as well as society and the environment. Fear of losses and the threat of damage dominate the policy making process and, consequently, the development of the organization. As a result, the working environment becomes more insecure and threatening, not least because employers try to shift the risks on to their employees. The reactions of the employees become increasingly more defensive. This results in a loss of meaning because defensive behaviour is accompanied by a distortion of reality. Ultimately, this leads to a situation in which all members of the organization feel that they are no longer in control of the situation and consequently there is more insecurity and fear, greater distortions, and an even more turbulent environment. The only way out of such a "vicious circle", according to Emery & Trist, lies in a search for authentic values and in subsequently making those values the starting points of policy.

In education, too, we find an increasing loss of meaning: this goes for policy makers, for schools and for pupils as well. The policies of the business organizations increase turbulence and produce an ambiguous and unpredictable demand for workers with ever changing qualifications. The educational sector often still accepts this demand as a fait accompli, the 'natural' consequence of an economic development that is not under discussion, especially since at the moment there do not appear to be any viable alternatives to the market approach. Policies, therefore, are predominantly directed towards creating a national qualification structure and in line with that aim towards developing procedures for keeping the education system as responsive as possible with regard to the qualification requirements laid down by trade and industry. At the level of the educational organizations the demand for a responsive education system is translated into technical and organizational adjustments.

Pelkmans & De Vries (1991) conclude that educational institutions, including institutions
for higher education, put special energy into in-
take, mainly through information to the public,
the modulation of education, the integration of
long and short term courses - through develop-
ing intermediate courses and, finally, the im-
provement of educational yield by using a stu-
dent follow up system. The problems aimed at,
and especially the way in which solutions are
sought, make it clear that the development of a
vision and the improvement of content are ig-
nored altogether. This is illustrated by what is
generally seen as an important improvement re-
garding content: the modulation of courses. It
was thought that the module system would
provide a consistent view of the content of
what is provided, because a number of stacked
modules form a recognised learning route. This
is not in fact the case. The system is optimally
flexible, while a course in the old sense of the
word still remains possible. Thus, using mod-
ules does not provide the opportunity to make
content related changes. Just as before, the sys-
tem gives teachers the chance to present them-

selves as the experts who, in the most literal
sense of the word, trade knowledge in ex-
change for order from the side of the partici-
pants (Meijers 1996). An illustrative conclusion
is drawn by Pelkmans and De Vries (1991; ix)
with regard to modules as a innovative activity
in schools for senior secondary vocational edu-
cation: "It is not always clear which goals should
be reached with modulation activities or where
one wants to end up. This is less the case if
modulation refers to a periodization and more
so when the modulation is made up of a con-
tent and didactic rearrangement towards self
study units."

The result of the module system is that the
learning paths offered to students have less and
less intrinsic meaning (students are forced to
'juggle' with seemingly unrelated modules) and
become increasingly more like a rat race: the
situation in education is beginning to resemble
that in business organizations.

Students react defensively, just like employees.
They refuse to commit emotionally to the school,
the learning material and the teachers
and adopt a passive instrumental attitude. They
develop no desire for a particular occupation
and appear unable to express their investment
in an education in other terms than fear of
being 'left behind' (Dronkers 1995; Meijers;
1995). It is therefore not surprising that research
shows time and time again that reproductive
learning predominates in educational organiza-
tions (Vermunt 1992; Lodewijks; 1995). Repro-
ductive learning can be defined as a form of
knowledge at the root of which there lies no
striving or will and no felt meaningfulness or
emotion. If an individual does not know how
or what the knowledge he/she acquires contrib-
utes to what (s)he wants to do and which per-
sonal significance that knowledge has, then
(s)he has acquired knowledge that does not pre-
pare him/her for self-direction.

3. Acquiring a career identity through learning.
In order to become capable of achieving and
improving self-direction, the student has to be
enabled to undergo a learning process in which
to speak with; Emery and Trist (s)he or she is
brought into contact with his/her 'authentic
values'. Learning processes should focus par-
ticularly on authentic values relating to work,
both paid and unpaid and thus allow students to
discover a relationship between education,
work and life that is meaningful for them.

Discovering authentic values with regard to work can be called 'creative learning'. According
to Van Peursen (1992), the essence of cre-
ative learning is that the learner replaces or
changes the, usually hidden grammar, syntax or
structure of an entire system, a system that has
come to be embedded in the language, in sym-
bols, in scientific principles etc. Replacing or
hanging the structure of a system, especially one
that helps constitute one's self image, is not a
question of acquiring and applying knowledge
only. Creative learning is only possible if the
learner is able and willing to face the turbulence
of his world and the lack of meaning in his own
life. Creative learning therefore begins with in-
trospection, with acquiring an understanding of
oneself 'by identifying dependency producing
psychological assumptions acquired earlier in
life that have become dysfunctional' (Mezirow
1985:20). It is only possible to identify depen-
dency producing assumptions, however, by defi-
nning the concrete experiences from which the
assumptions originated. The real basis of cre-
ative learning, therefore, is experiential learn-
ing. Creative learning an be defined as a learn-
ning process in which already existing experi-
cences are 'turned into meaning', i.e. are inter-
preted with the help of concepts and/or meta-
phors in such a way that the individual comes to recognise what motivates him/her and what his/her authentic values are - what is vitalising for him/her?

CREATING MEANING AS A PROCESS

Before describing the process through which individuals acquire a career identity, we first want to analyse the process of giving meaning as such. Previously we stated that people experience a 'lack of meaning', as a result of which they can no longer relate their investments in education to an acceptable work role and to their lives as a whole. Lack of meaning not only prevents individuals from making sense of the world but also from defining themselves in relation to that world in positive terms. Lack of meaning, therefore, can be seen as the result of a 'broken' relationship, not only between the individual and parts of the society in which he lives, but also between the individual and his past. Lack of meaning, therefore, results in a lack of identity and direction.

According to Debats (1996) meaning can be defined as cognition that is in balance with volition and emotion. The relationship between cognition, volition and emotion is a complex one. The individual has no direct access to volition; it is only through emotions that volition is accessible. Volition makes itself known, however, through cognitions. It is in the will that a goal manifests itself. Emotions and volition both generate impulses to connect cognitions, emotions and volition with each other. In the first instance, emotions are purely instinctive, aimed at the preservation of life and, consequently, literally a matter of life and death. Human beings, however, are cultural beings: they 'give meaning' to them selves in relation to the world around them. That means that emotions are socially regulated and partly determined. Because man is a cultural being, he develops a sense of historicity, not in the last place through developing a self identity. It is exactly that, that makes him more than just an adaptive data processing system.

From this perspective, emotions are to be regarded as the result of life experiences that are 'given meaning': they are the result of a past that has been given meaning. Individuals feel whether situations in which a particular behaviour is expected of them are vitalising or have the opposite effect, and subsequently they give meaning to these experiences with the help of symbols, usually words. The meaning in question remains loosely connected with the emotion that constitutes its basis (see also Leach 1974). Emotions, therefore, in line with Fryda's theory (1989), can be regarded as expressions of an interest or concern: the emotion shows what a person considers to be of (vital) importance.

Since man is a cultural being, he is intrinsically motivated in 'existential' terms to want to mean something in the eyes of a relevant other person. Man only knows himself reflected in the eyes of someone else (Althusser 1971); he needs the contact with others to be able to exist as a human being. Individuals who do not succeed in being 'meaningful' to others are unhappy.

Balancing cognition, volition and emotions is a process that never ends because people continually undergo new experiences that force them to redefine the meaning of old ones, which may result in a new [goal] [motivation to act]. That means that the process of giving meaning is in essence a social process in which the individual negotiates (Bruner 1986) with himself and with others about how reality is to be interpreted. When giving meaning, people move in a 'space of meaning' with a double structure: on the one hand there are the life experiences that have been assimilated in a life history (Hermans & Kempen 1993) and on the other hand there are group cultures and/or organizational cultures, which reflect the history of a society.

Meaning as a process;

IDENTITY: EXTERNAL DIALOGUE,
INTERNAL DIALOGUE.

Cognitions, dominant emotions, dominant meaning as a social meaning as a personal construct - life history.
goal: sense of identity accepted social role and personal direction

MOTIVATION TO ACT

Determinants
1 space of meaning
1 life experiences (variety, richness)
2 frame of reference
3 space for experiences of parents and relevant others (socialisation process)

Figure 1 visualises the movement of the individu-
ual through the 'space of meaning'. The starting point of this figure is that the individual's environment is to be regarded as the scope that individual has or receives for creative learning. The environment is of influence in at least four different ways. Firstly, because of the meanings, the collective representations that are passed on in the primary socialisation and thus strongly affect the problem space of children and adolescents (Gottfredson 1981). The problem in post-modern societies is that it becomes difficult to construct common frames of reference because of the fact that once undisputed 'grand narratives' are increasingly greeted with incredulity (Lyotard 1994, 1992).

Secondly, it is of influence through the information and the nature of the information that is available in a particular environment. Without information that can be coded on the basis of the already existing semantic structures (i.e. fits in with the life and experiences of the individual) it is extremely difficult to learn, that is to construct new internal representations.

Thirdly, the environment is influential because of the opportunities for communication it offers: how and with whom an the individual discuss experiences so as to develop a self concept in relation to education, work and biography? There is a loose relationship between thinking and speaking. Conceptualisation takes place through an internal as well as an external dialogue. In the external dialogue, which takes place between the individual and others who are important for him, the individual, in negotiation with others, generates meanings which are subsequently, in an internal dialogue, through 'interiorisation' (Vygotsky 1978), internalised and become mental acts or, in this case, internal representations (Van Oers 1994).

Finally, the environment is of influence through the way in which the individual is 'addressed', that is to say, whether or not he gets, in terms of Marcia (1980), a chance to explore and to build up commitments.

Above we defined creative learning as a process in which already existing experiences are 'turned into meaning' that is, are interpreted with the help of concepts and/or metaphors, in such a way that the individual comes to recognise what motivates him/her and what his/her authentic values are (what is vitalising for him/her). The aim of defining authentic values (see hereafter) should be the acquisition of a career identity. A career identity can be defined as a structure or network of meanings given by the individual to his/her own motives, interests and abilities, which (s)he links with acceptable occupational roles (Meijers 1995: 63). We speak of a structure or network of meanings to make it clear that the individual is the heart and force behind the development of the career identity. The structure of meanings is in constant flux: influenced by the learning processes that are triggered off by concrete experiences (not only those relating to work and working experiences).

A career identity, however, is not only the sum of these experiences but also involves processing them into meaningful and useful links. This happens when the individual consciously links his/her values with working roles.

Or:

a student, in order to build up a career identity that will give him direction and an identity should not only be able to answer the question 'What is the meaning of work in my life'? but also the question 'What do I want to mean to others through my work?' In order to be able to do this, labour and the existing division of labour should themselves be thematised as the historically variable realisation of values.

From experiences to life themes

Life themes can be defined as central, guiding tendencies in motivation, interest and ability. They can be found in experiences with a (strong) emotional charge.

Such experiences are linked with events that affected the individual; that did not leave him/her indifferent. Every individual has a store of emotionally charged experiences in his/her episodic memory and thus, in principle, has the 'hidden' signs they contain at his disposal. Young people rarely have explicit life themes: they have had too little experience with work and life for that. They do, however, often feel drawn towards a certain collective area of values without having the concepts available to 'give meaning' to this intuitive feeling. For adults this is often easier because they have had more experience.
Based on a logical analysis we can now formulate principles about the implicit content of emotionally charged experiences and about the way in which such experiences can be made transparent for the individual and, subsequently, be used to obtain a career identity.

The emotionally charged experiences are related to events that actually took place in time and space.

Asking what in the event caused the emotion makes it possible to determine what the emotionally charged topic or stimulus was. Asking whether the topic has caused emotional reactions more often makes it possible to determine whether a more general area of interest for the individual is involved here, because, according to Fryda's theory, emotions imply that the individual is interested (Fryda 1989). Examples of such areas are hidden conflicts and tensions in intimate relationships; breaking agreements; surviving under difficult conditions.

Such areas of interest are characteristic of the individual whose experience led to them. For instance: 'I am a person who seems to worry about hidden conflicts and intimate relationships more than most other people'. An area of interest, then, can be traced back to emotionally charged experiences. Once it has been formulated, the individual can be questioned about the experiences that led to its coming into existence. Often the individual will come to realise that in former days, in the parental home for instance, he/she used to suffer because of hidden conflicts parents always used to pretend there was nothing wrong while in fact they were having a row. I hated it that they wouldn't talk about it'. Areas of interest, then, have a genesis of their own.

From the area of interest a value or area of values (Hermans & Kempen 1993; Hermans & Hermans (Jansen 1995) can be deduced. Questions about desires or preferences relating to the area of interest can lead to the discovery of the value or area of values of the individual. For instance: 'You and I, we want openness about conflicts in intimate relationships; that is a value for us'. A value that has found conscious expression may allow one to arrive at the realisation that the distance between one's value and the actual situation in the area of interest constitutes a problem. The individual can be asked whether (s)he really feels the distance between value and status quo in the area of interest to be a problem. 'Are you/Am I some one who experiences lack of openness about conflicts in intimate relationships as a burden?

If the individual thinks of the problem as a burden it is possible that he has some experience in working towards a solution, either in actual fact or by reading or fantasising about it. There is a chance that he has some knowledge and thoughts about the nature of the problem, and skills and ideas that might bring about a solution. In short: the individual may have abilities relating to the problems in his/her area of interest.

Ideas are to be regarded as talents, here. If an individual has the ability to realise his/her value in his/her area of interest or, in other words, if the individual is capable of solving (or learning to solve) problems in his/her area of interest, then perhaps he will want to do so (be motivated to do so). If it appears that an individual, in an area of interest that can be traced back to his/her own emotionally charged experience, has discovered a value, is conscious of a problem, has the ability to (learn to) solve that problem and the motivation (will) to work at realising that value/solving that problem, then the area of interest in question constitutes a life theme for that individual. Feeling, cognition and will are combined in a life theme and constitute the subjective component of the theme: the area of interest is the objective component. Life themes often point to the role or roles a person has played in the past (whether in reality or virtually, in his/her imagination) in the areas of interest discovered. For example: 'Yes, indeed, I have often pleaded for openness when yet another conflict at home was being covered up'. 'Yes, I have also played that type of role in school and among friends'. 'That type of situation appeals to me'. Life themes contain 'life signs' that indicate the role or roles a person played or would like/ be able to play in a particular area of life (interest). The role constitutes the scope for action that allows the subjective and the objective component of the theme to be linked with each other. The individual can follow the 'life signs' and identify with the role/roles he has played or wanted to play in the area(s) of life in question. This enables
him/her to develop an identity and a biography. "I am in deed the kind of person who worries about conflicts in intimate relationships and I have had a great deal of experience in that respect: I could tell you stories about it"

This may be seen to indicate that the past has to some extent been coped with and accepted. In this way the individual can achieve an insight into the areas of life that were meaningful to him/her and in which (s)he was (and still can be) meaningful to others. Identification with the designated role in the area of life implies an existential choice: 'Do I or do I not consciously commit myself to it?' 'Do I or do I not accept the limitations imposed upon me by my experiences? If a person is capable of conducting an internal and/or external reflective dialogue about his/her emotionally charged experiences, then those experiences can, in principle, be converted into themes which contain clues about the roles a person has played, wanted to play, or was forced to play in certain areas of life. Identification with those roles and subsequently help one cope with the experiences from the past and convert them into one's own biography. From life theme to career identity.

Life themes not only contain indications about a person's past, but the clues that are found about roles and areas of life can also be used to help develop a perspective on future education and work. In order to achieve this, the personal area of interest, which constitutes the situational side of the life theme, has to be transformed into a collective area of value. Reflection may bring about the realisation that managing conflicts in intimate relationships is a collective interest as well. Society as a whole has a need for adequate conflict regulation in families and other types of communal living. In cases where such regulation is absent, adults and children have to live without an important source of emotional security, care and upbringing with all attendant consequences for those who are directly involved and for society as a whole. Collective areas of value are linked with sections of the labour market. Identification with those roles and subsequently help one cope with the experiences from the past and convert them into one's own biography. From life theme to career identity.

What is central in the link of life themes with career roles is that work is made visible as the realisation of values (Wijers 1991; Wijers et al. 1991). Values can be defined as the desired level of requirements for life and well-being of a society (relating, for instance, to housing, clothing, food, health and safety). The areas that the values relate to are universal: societies have always attached importance to housing, clothing etc., irrespective of time and place. Only the level, quantitatively as well as qualitatively, varies with time and place. Looking back over the past it can be concluded that values change (the target level tends to get higher), but the areas of value remain the same.

Concretising and realising a value, as an expression of public opinion in a particular period, presents society with a collective task which an be defined as work. Work then becomes an essential activity for that society because it recreates the conditions for life and well-being. Conceiving of work as an activity directed towards the fulfilment of collective needs also makes it more tempting in a psychological sense for the individual to think about desirable career roles, because it emphasises the social disposition of human beings: affinity with and ex-
pertise in certain types of problem (i.e. relating to a particular area of value) are placed in the service of the collective. If work is defined as solving collective problems in collective areas of value or need, it becomes easy to see when the problems increase in complexity, chiefly because the target level is raised, that problems begin to be divided into sub-problems: the result is an increasingly complex labour market. It can also become clear that changes in the structure of jobs, organizations, functions and production processes are connected with the redefinitions of our collective problems. The process of re-definition is the result of discussions between all the actors involved in a particular area of value (see figure 2).

Figure 2: Work as realisation of values
*Source: Wijers et al. 1991: 85*
These discussions are especially important when they concern so-called key problems in a particular sector which can turn into professional dilemmas for the individual practitioner. Making a link between life themes and career roles possible therefore means that such key problems and dilemmas should be given special attention in the learning process. It must be made transparent for the learner what discussions are ongoing about the realisation of values in a particular sector, how via specific definitions of the problem, the need for solutions is transformed into a concrete demand for solutions, and last but not least, how the market ultimately generates a supply of solutions.

4 A STRONG LEARNING ENVIRONMENT

Creative learning, necessary for acquiring a career identity which, in its turn, is a condition sine qua non for obtaining a career, implies that the learner has to learn 'to become aware of elements of his culture that (s)he has always completely taken for granted and that for exactly the same reason have never attracted his attention before. How difficult that can be is formulated as follows by Fortman (1971:47): 'If a fish were capable of making discoveries, it has been said, his last discovery would be the existence of water. Only in the fish dealer's art would he realise what it means to be an aquatic animal. It should not come as a surprise, therefore, that man has only very recently discovered how extensively he has been conditioned by the culture surrounding him'. Such a learning achievement requires a different learning setting or learning environment than is now found in the education system. Research (predominantly in the field of educational psychology) shows that hip her order learning processes are only possible in a so called strong learning environment.

A strong learning environment can be defined as an educational setting that satisfies six conditions (Lodewijks 1995:44). Firstly, a strong learning environment has to be functional, which means that there must be as many situations and conditions as possible that correspond to the knowledge that must (later) be applied. Secondly, the learning environment must invite activity: it must compel the learner to be involved with the learning content in an interactive and integration oriented way. Thirdly, learning environments must be realistic: they must refer to something. They must have a user context. In addition, learning environments must also have models and involve coaching activities: there must be a teacher who is both an expert and a coach. In the fifth place, learning environments must teach students how to learn. This is important because students are made increasingly more responsible for their own learning. And, lastly, learning environments must systematically develop an understanding of the student's own skills. In other words: systematic attention must be paid to (learning) enjoyment and to the motivation of the students. A strong learning environment must include an instrument that enables students to gain insight into their own increased individual competence, which allows them to develop a growing insight into their own skills.

The investigation of Lave and Wenger (1991) into the way in which trainees in different cultures learn their trade within the framework of the apprenticeship system illustrates how the interaction between learner and learning environment makes creative learning based on personal experiences possible. Their central conclusion is that in the apprenticeship system the essence of learning is not the acquisition of (new) knowledge by working oneself (learning by doing) or by copying/imitating the activities of experienced practitioners, but legitimised peripheral participation in existing social practices. What does 'legitimised peripheral participation' mean? The essence of being a student in an apprenticeship system is that (s)he participates in a community of professionals and that acquiring the knowledge and skills belonging to the profession or occupation in question forces but also motivates him/her to participate more and more fully in the practices of that community. 'A person's intention to learn is engaged and the meaning of learning is configured through the process of becoming a full participant in a socio-cultural practice. This social process includes, indeed it subsumes, the learning of knowledgeable skills' (ibid: 29).

Training, in other words, first of all participating in the socio-cultural practices of a particular occupational group. Attention in this context is focused especially on the ever-changing pattern of social relationships in which the individual finds himself and which makes him a person(-ality). Participation is, after all, 'always based on situated negotiation
and re-negotiation of meaning in the world. This implies that understanding and experience are in constant interaction indeed, are mutually constitutive' (ibid: 51).

Since learning a trade is a form of beginning membership of a certain occupational group, the recognition of the status of apprentices (i.e. their peripheral participation being legitimised) by adult professionals appears of greater importance than education in itself. If young people are allowed to participate they tend to be highly motivated to learn, not only because they know that they are on their way to fuller participation but also because they gradually gain their own insight into 'what it is all about' and what actually has to be learned in order to become a professional practitioner. Learning itself nearly always proves to be improvisation in practice: a learning curriculum folds in opportunities for engagement in practice' (ibid: 93). The learners learn particularly from each other, because they are conscious of the fact that they are on the way to fuller participation together.

Participation in socio-cultural practices, however, strongly depends on the degree to which those practices are transparent for the prospective participant. Practices are more transparent when the occupational group has a common frame of reference. In other words: the better an occupational group is able to make the importance of the occupational practices clear, the easier it becomes for prospective participants to join them. An occupational practice will only rarely be transparent in itself in this sense: it has to be made transparent by means of stories and discussions about the key problems of the profession between prospective members and those who already are full members. The aim of such discussions is not that the newcomers 'learn from talk as a substitute for legitimate peripheral participation; it is to learn to talk as a key to peripheral participation (ibid: 109). That means that new corners should have free access to the 'real' fully fledged occupational practice without they themselves being able to produce fully fledged work. This is usually realised by letting them participate at the end of the productive process.

The essence of the study of Lave & Wenger is, in our opinion, that prospective employees must be given the opportunity to familiarise themselves with the real occupational practice and or the key problems of a particular occupational practice and subsequently to discuss those key problems with fellow students and professional practitioners in order to be able to attach meaning to the job and to working in that particular professional area.

The Dutch education system hardly provides for this opportunity at all. Education (including adult education) and the business world have their backs towards each other. Even in the apprenticeship system, which only plays a peripheral role in the Netherlands, we find increasingly more academicism or 'schoolishness' (Frietman 1990). In such a 'weak' learning environment both students and teachers are incapable of discovering meaningful relationships between education, work and life. Therefore an effort will have to be made on all levels of the education system to realise strong learning environments in which learners are enabled to build up a career identity. It will be clear that this is not just a matter of a simple link between education and the labour market but rather involves creating new educational arrangements that will interfere with existing practices in education as well as in the world of business and industry. It would, however, reconcile the as yet irreconcilable.

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B YOND ACCESS. Diversity and Opportunity in Higher Education 123
INTRODUCTION
This paper details some preliminary findings of a national study of student equity undertaken by a team from the University of Southern Queensland for the Higher Education Council of Australia, one of several councils of a body known as the National Board of Employment, Education and Training (NBEET). The team's brief was to collect information on the progress made by the higher education sector in Australia since the introduction of the initial national equity framework as described in A Fair Chance For All (DEET, 1990). This framework, sponsored by the federal government, encouraged universities to address access, participation and success of groups which had been under-represented in universities - Aboriginal and Torres Strait Islander people, women, people from non-English speaking backgrounds, people with disabilities, people from rural and isolated areas, and the socio-economically disadvantaged.

The national framework for student equity in higher education as defined in the document A Fair Chance For All, drew attention to differences in participation in higher education between these different groups and suggested strategies for moving towards a balance in the student population to reflect the composition of Australian society as a whole.

The emphasis of the framework originally concerned increasing access and participation of the identified groups in higher education but has more recently been extended to include a consideration of improved retention and performance of these groups within the system.

REFERENCES FOR THE STUDY
The aim of the team's research was to:
- identify the factors which are influencing institutional behaviour in the area of student access and equity in Australia;
- identify the range of organization structures and operational strategies currently employed by universities in Australia to address the needs of disadvantaged groups;
- screen the attitudes of a range of university staff on matters relating to student access and equity.

DESIGN OF STUDY
The consultancy project involved a number of concurrent phases:
- National and International Literature Review of student access and equity in higher education.
- Quantitative Analysis of the Sector's Equity Performance. Sector-wide performance was assessed using data collected from universities by DEET for its student statistics database during the period 1991-1995.
- Analysis of Equity Plans. The submission of Equity Plans by universities is a requirement as part of the Educational Profiles process used by the government as a basis to allocate special funding for areas such as equity. These plans were analysed (35 Equity Plans in all) to identify the institutional structures involved in the policy development, management and operation of equity activities within universities; the nature of equity planning and its relationship with overall institutional planning; the range of strategies employed to deal with the needs of identified disadvantaged groups, and the means by which equity performance is monitored within universities. The major interest of this analysis was to ascertain what universities reported by way of equity policies, objectives and strategies.
- Interviews with University staff. Interviews of university staff were conducted to support the analysis of equity plans and to gather information in accordance with the overall study goals. In all, eighty staff were surveyed...
through sixty-nine individual face-to-face interviews and these staff were employed in twenty-five of the thirty-five universities under study.

- Analysis of Feedback from Discussion Paper. In November 1995 the Higher Education Council circulated a discussion paper entitled Equality, Diversity and Excellence: Advancing the National Equity Framework. Thirty-eight institutional and individual responses to this document were analysed as well as the results of a series of consultations involving key bodies and university staff across Australia.

In this paper some of the results of the quantitative analysis are detailed as well as results from an analysis of the Equity Plans and Interviews. The first part of this paper, however, provides background information on the Australian context particularly with respect to the way equity has been introduced and implanted through direct government intervention.

STUDENT EQUITY - THE AUSTRALIAN CONTEXT

Following global trends, the move from elite to mass higher education in Australia can be traced to changing perceptions of the role of higher education which followed the Second World War. In 1946, Australia had just six elite State universities serving 25,500 students. The system then was homogeneous in the extreme with universities contributing to the definition and the perpetuation of privilege within society. By 1960, with the growing awareness of the social value of science and technology, Australia boasted ten universities and student numbers had doubled to 53,000 (Meek, 1994).

Growing pressures for the expansion of higher education in order to meet the growing need for an even better educated workforce led the Menzies government to establish the Committee on the Future of Tertiary Education (Martin Community) in the early 1960’s. The result of their deliberations was the establishment of the binary system of universities and colleges and although not fully intended by Martin, significant further growth in the numbers of universities and university enrolments into the 1970’s. Access to higher education was improved by moves made by the Whitlam Labour government to abolish student fees and to introduce a tertiary assistance scheme in 1974. Significantly, this government also took steps which resulted in the direct control of university funding falling to the federal government. This set the basis for an increasing level of Commonwealth influence on higher education activities after that time (Meek, 1994).

By 1975 148,000 students were enrolled in 19 universities and college enrolments were up to 125,000. This had increased by 1985n to 175,000 students in universities and 192,000 in colleges — a total of 367,000 students in the sector, a more than 14-fold increase in 40 years (DEET, 1993a). This level of growth provided almost unlimited scope for the increasing diversification of the student body. For some members of previously under-represented groups, particularly women, significant advances were made in accessing higher education over this period. However, despite the considerable changes which had occurred in Australian society since the Second World War, and the considerable innovations and reform which had occurred in Australian society since the Second World War, and the considerable innovations and reform which had occurred to higher education over this period, it was clear that by the mid 1980’s that university enrolment patterns for some groups, particularly those form disadvantaged socio-economic backgrounds, had changed little and that universities remained socially elite institutions (Anderson & Vervoon, 1983).

From the time of the early 1980’s a very significant change began to emerge regarding young people’s attitudes to higher education. Because of increasing educational opportunity, the changing nature of the workplace and a host of other subtle social and economic factors, retention rates to upper secondary school began to increase dramatically. Whereas the national retention rates to Year 12 remained less than 40% up to 1982, by 1985 they were approaching 50% and would steadily rise up to a peak of 75%, by 1992 (NBEET, 1995). Accompanying this trend was a growing expectation by young people of continued education. By the 1990’s, three quarters of young people would stay on to Year 12, and of these, two out of three would go on to further education. And as NBEET (1995, p 1) point out: “Even among the quarter who leave before they finish Year 12, education still figures prominently: over 40 per cent are in apprenticeships or some other form of training
and, of the other, many say they will go back to school or training at some time. It seems that only in extreme circumstances do young people drop out altogether from school and further education." For the first time a culture was developing amongst young people as a whole that staying in the education system was the norm.

Significant initiatives in the area of social justice have appeared over the past few decades which provide the foundation for the development of equity in higher education:

- Public Service Reform Act, 1984 (Commonwealth of Australia, 1984a) which has required all Federal Government departments to seek to remove discrimination against nominated target groups - women, people with disabilities, people from non-English speaking backgrounds and Aboriginal and Torres Strait Islander people.
- Sex Discrimination Act, 1984 (Commonwealth of Australia, 1984b)
- Access and Equity Strategy (Australian Public Service), 1985 (Commonwealth of Australia, 1985) which sought to improve the skills and mobility of the workforce and to redress discrimination;

...Equity has been progressed in several areas of education during the past few decades. The Disadvantaged Schools Program, initiated in 1977 had as a major objective that schools should provide greater equality of opportunity, that is, that all children should be assisted to gain the fundamental skills necessary to participate fully and equally in society, and to have the opportunity to share in its cultures (Schools Commission, 1978). Very similar sentiments underpinned policies targeting particular groups, such as the National Policy for the Education of Girls in Australian Schools introduced in 1987 (Commonwealth Schools Commission, 1987) and the National Aboriginal and Torres Strait Islander Education Policy of 1989 (Bourke et al, 1991).

During the early part of its term in the mid 1980s, the Hawke Federal Labour government introduced initiatives to promote student equity considerations in the higher education sector. These included the Higher Education Equity Program (HEEP), a submissions based in-
centive scheme introduced in 1985, a program of growth in funded places which favoured institutions likely to attract under-represented groups, and moves to encourage young people to stay on in the education system. Although these activities were associated with a move to more equitable patterns of university participation (Carpenter & Hayden, 1993), the policies which would have the greatest impact on equity in the sector came with the Government White Paper Higher Education: A Policy Statement released in 1988 (Dawkins, 1988). This statement guided the dismantling of the binary system of universities and colleges and the development of the Unified National System of Higher Education that now consists of 36 autonomous universities. Equity was stated as a central pillar of the new national system. “The Government is committed to the development of a more equitable higher education system with improved opportunities and outcomes for all Australians. It believes that higher education should be acknowledged as a legitimate aspiration for those who satisfactorily complete 12 years of schooling or can demonstrate an equivalent capacity as mature age students” (Dawkins, 1988, p53). Part of the strategy leading towards more equitable entry was growth in the higher education system. However, it was appreciated that growth alone would not be sufficient, that there was a need to develop a co-ordinated approach needed to become an integral consideration in universities’ planning and review processes.

The Senate Standing Committee on Employment and Training chaired by Senator Terry Aulich released its report Priorities for Reform in Higher Education in June 1990. In this report it was stated that: “the attack on unequal participation rates [is identified] as a priority goal for higher education in the coming years ... this is important not just in terms of social justice considerations but also to ensure that the background and life experiences of graduates are increasingly in tune with those of the whole Australian community.” (Senate Standing Committee on Employment and Training, 1990, p132).

In 1990 the Department of Employment, Education and Training, in consultation with the higher education sector, developed the policy statement A Fair Chance for All: Higher Education That’s Within Everyone’s Reach (DEET, 1990). This document identified six groups as disadvantaged in terms of their access to higher education opportunities on the basis of under-representation in the sector - people from socio-economically disadvantaged backgrounds, Aboriginal and Torres Strait Islander people, women, people from non-English speaking backgrounds, people with disabilities and people from rural and isolated areas. It stated the overall objective for equity in higher education: “to ensure that Australians from all groups in society have the opportunity to participate successfully in higher education.” Targets were set for the sector in addressing the needs of each of these groups and a range of strategies was described which could be employed to pursue social justice objectives. Universities have been asked to develop annual equity plans and Aboriginal and Torres Strait Islander educational strategies in which performance in the area of social justice has been reported and used as a basis for discussion with Department representatives at the annual Educational Profiles exercises. Universities have been awarded HEEP grants from a $4-5 million per annum pool with funds disbursed on the basis of the relative assessment of all institutional equity plans. These have been the principal incentives from government for universities to respond to considerations of equity.

A Fair Chance For All placed the goals of equity in measurable terms by stating that: “The overall objective for equity in higher education is to ensure that Australians form all groups in society have the opportunity to participate successfully in higher education. This will be achieved by changing the balance of the student population to reflect more closely the composition of society as a whole” (DEET, 1990, p2). The document also generated a list of very specific goals for the sector in terms of six identified disadvantaged groups. Many of these goals centered on increasing access by these groups. However, the Commonwealth later moved to broaden the emphasis from access and participation to include retention and success of people in identified groups through the move to utilise the range of performance indicators described in the report Equity and General Performance Indicators in Higher Education (Martin, 1994).

Student equity had begun to infiltrate the consciousness of the higher education sector. The Higher Education Council released a major
policy statement Higher Education: The Challenges Ahead in 1990 (NBEET, 1990) that identified access, equity, quality, research and postgraduate training as the key issues influencing policy development for the sector over the next decade. In enunciating the goals of Australian higher education, the Council saw the sector assisting with the development of a society which can be hopefully lay claim "... to being intelligent: a socially just and culturally rich one, that will expect to be wisely governed and led, with enlightened laws and effective social systems" (NBEET, 19909, pl).

Of the fifteen aggregated goals developed for the Australian higher education system, at least four were directly linked to responsibilities relating to equity:

"The aggregated goals of the system are accordingly to serve the community by [in part]: retaining and nourishing its diversity to meet the needs of a nation that is characterised by its geographical, social and cultural variety; encouraging further diversity so that all courses reflect the regional, social and cultural differences that impinge on the individual universities; providing a range of opportunities for access to higher education by members of disadvantaged groups;... ensuring that their students are encouraged to achieve beyond their own expectations" (NBEET, 1992, p12).

A very important initiative from the higher education sector had been the publication in November 1994 of generic guidelines by the Australian Vice-Chancellor's Committee entitled: Universities and Their Students: Expectations and Responsibilities (AVCC, 1994a) This statement described what might be considered as reasonable expectations of universities on the part of students and included significant equity considerations: "The university will endeavour to address the reasonable needs for all of its students regardless of gender, ethnicity, age, disability or background" and "The university will endeavour to provide an environment for students which is free from harassment and discrimination" (AVCC, 1994a, pp.-4)

Since A Fair Chance For All there had also been a gradual build-up of expertise in the sector on the development and implementation of equity programs and strategies. The sector now had available to it a wealth of knowledge and expertise in this area from which it could draw. The equity goals developed for the sector in A Fair Chance For All did not extend beyond 1995. This fact alone justified the extensive review of the national framework for student equity which were supported by the range of studies. In addition, much had changed about the operating environment of the higher education sector, and hence the context in which equity measures must be implemented, since the release of A Fair Chance For All. These factors were outlined below, and further support the rationale for the need for review:

- Much had changed in the higher education environment since the introduction of the national framework for student equity in 1990. The sector had grown very significantly and became more entrepreneurial, particularly with regard to expansion in international education.

More specifically:

- Enrolments in the sector grew from 485,000 to 604,000 from 19909 to 1995. (DEET, 1996) although the rate of growth had gradually declined from 10.2% in 1991 to a low of 1.7% for 1994 (DEET, 1996). Student commencements grew from 201,000 in 19909 to 245,000 in 1995, and of course completions rose from 95,000 in 19990 to 139,000 in 1994.
- The participation in higher education rose from 4.2% to 4.7% of the population between 1990 and 1994. Participation by the 17-19 year old age group rose from 152 to 166 per thousand of their age cohort (a rise of 9%). However, the most dramatic increases were seen for the 20-24 year old age group, rising from 119 to 147 per thousand of their age cohort (an increase of 24%) and in the 25-64 year old age group which rose from 22 to 26 per thousand (an 18% increase) (DEET, 1995).
- The proportion of higher education students studying full-time had steadily decreased from 61.7% of students in 1990 to 58.8% in 1995 with a significant increase over this period in students studying externally (from 10.9% to 12.4%) (DEET, 1996)
- Significant growth had occurred in postgraduate areas. Between 1990 and 1995, the total postgraduate load increased from 47,000 EFTSU to 74,000 EFTSU, with growth being most pronounced in the area of Higher Degrees by coursework (DEET, 1996).
- International education had developed
rapidly in Australia particularly in the higher education sector. The number of overseas students in Australia rose from 18,000 in 1988 to over 52,000 in 1995 (DEET, 1996). This followed the release of the document Changes in Overseas Student Policy in 1989 which announced that: "There will be no quotas placed on the number of overseas students entering Australia. Access will be limited only by the capacity of institutions to take such students after meeting obligations to Australian students under higher education funding arrangements." (DEET, 1989, p1)

EQUITY PERFORMANCE OF AUSTRALIAN UNIVERSITIES

As indicated earlier two areas will be discussed in relation to results gleaned from the study. It is not possible to deal with all areas covered. The first area reported deals with brief results of the quantitative analysis of the sector's equity performance. Table 1, below, summaries the broad patterns of access, participation, retention and success in higher education for each of the six identified equity groups during the period 1991-1995. These figures have been reduced to a common metric in a value of 1.0 denotes parity with the population norms used by Martin (1994). As such, the standardised values allow comparisons to be made among the six equity groups, across the four performance indicators, and over time. The relative status of the six groups can be readily viewed in this manner.

TABLE 1 Access, Participation, Success and Retention of Identified Equity Groups

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated</td>
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<td>0.69</td>
<td>0.61</td>
<td>0.64</td>
<td>0.65</td>
</tr>
<tr>
<td>Low SES</td>
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<td>0.61</td>
<td>0.60</td>
<td>0.62</td>
<td>0.62</td>
</tr>
<tr>
<td>Rural</td>
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<td>0.80</td>
<td>0.78</td>
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<td>0.76</td>
</tr>
<tr>
<td>ATSI</td>
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<td>0.99</td>
<td>1.06</td>
<td>1.13</td>
<td>1.18</td>
</tr>
<tr>
<td>NESB</td>
<td>1.02</td>
<td>1.13</td>
<td>1.19</td>
<td>1.19</td>
<td>1.22</td>
</tr>
<tr>
<td>Females</td>
<td>1.12</td>
<td>1.11</td>
<td>1.11</td>
<td>1.12</td>
<td>1.13</td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated</td>
<td>0.55</td>
<td>0.57</td>
<td>0.56</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
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<tr>
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<td>1.06</td>
<td>1.13</td>
</tr>
<tr>
<td>Females</td>
<td>1.09</td>
<td>1.09</td>
<td>1.09</td>
<td>1.09</td>
<td>1.10</td>
</tr>
<tr>
<td>Success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated</td>
<td>-</td>
<td>0.94</td>
<td>0.97</td>
<td>0.95</td>
<td>-</td>
</tr>
<tr>
<td>Low SES</td>
<td>-</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>-</td>
</tr>
<tr>
<td>Rural</td>
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<td>0.99</td>
<td>1.00</td>
<td>0.99</td>
<td>-</td>
</tr>
<tr>
<td>ATSI</td>
<td>-</td>
<td>0.77</td>
<td>0.76</td>
<td>0.77</td>
<td>-</td>
</tr>
<tr>
<td>NESB</td>
<td>-</td>
<td>0.97</td>
<td>0.97</td>
<td>0.97</td>
<td>-</td>
</tr>
<tr>
<td>Females</td>
<td>-</td>
<td>1.06</td>
<td>1.06</td>
<td>1.06</td>
<td>-</td>
</tr>
<tr>
<td>Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated</td>
<td>-</td>
<td>0.89</td>
<td>0.90</td>
<td>0.90</td>
<td>-</td>
</tr>
<tr>
<td>Low SES</td>
<td>-</td>
<td>0.99</td>
<td>0.99</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td>Rural</td>
<td>-</td>
<td>0.99</td>
<td>0.98</td>
<td>0.99</td>
<td>-</td>
</tr>
<tr>
<td>ATSI</td>
<td>-</td>
<td>0.75</td>
<td>0.74</td>
<td>0.75</td>
<td>-</td>
</tr>
<tr>
<td>NESB</td>
<td>-</td>
<td>1.03</td>
<td>1.04</td>
<td>1.05</td>
<td>-</td>
</tr>
<tr>
<td>Females</td>
<td>-</td>
<td>1.02</td>
<td>1.02</td>
<td>1.02</td>
<td>-</td>
</tr>
</tbody>
</table>
1. All values shown above have been standardised to a common metric in which a value of 1.0 denotes parity in relation to the general population.

2. The population norms used to calculate reference values come from Martin (1994). Details of the precise definitions and formulation of the indicators are shown in Appendix 5, NBEET (1996).

3. The term Access refers to the commencing student cohort in each reference year, including students enrolled in Enabling and Non-award courses. Participation refers to the total number of enrolments. Retention is defined as the number of students enrolled in Award level courses during Year N+1 divided by enrolments during the Year N minus graduates.

4. Source: Enrolment and Course completions files (HUC20 and HUS20) derived from the annual student statistical collections during 1991-95.

5. Figures for students with disabilities are not available.

Overall, students from isolated regions are the most disadvantaged equity group. They recorded the lowest participation rates and the second lowest access, success and retention rates. Students from low socio-economic status (SES) backgrounds recorded the lowest access rates, very poor participation rates, but displayed success and retention rates that were very close to national norms. Students from rural areas displayed less extreme, but diminishing, access and participation rates, with near normative success and retention rates. Aboriginal and Torres Strait Islander students recorded the highest increase in access to higher education during the reference period. As a group, however, indigenous students remain under-represented in higher education due, in part, to very low success and retention rates. Aboriginal and Torres Strait Islander students recorded the highest increase in access to higher education during the reference period. As a group, however, indigenous students remain under-represented in higher education due, in part, to very low success and retention rates. Students from non-English speaking backgrounds (NESB) recorded very large increases in access, participation and retention rates since 1991 and, as a group, appear to be substantially over-represented in Australian universities. Their success rates, however, were slightly below national norms. The data for female students show stable patterns of very high access and participation and they recorded considerably higher success and retention rates than males.
Participation rates have grown substantially since 1991, they remain below population share. In short, the sector seems to be relying on very large intakes of indigenous students to achieve improved participation rates, without addressing the considerable loss rates involved.

Access and Equity Programs and Strategies in Australian Higher Education Sector

The second area dealt with in the paper concerns results which detail the range of programs and strategies reported by institutions (through analysis of Equity Plans and interviews) as being used specifically to address access and equity. In this section, the dominant programs and strategies reported by universities in the area of access and equity are described. This analysis was problematic since, as interesting as the strategies which universities are employing in the area of access and equity, is what they think they are doing.

The analysis was based primarily on the programs and strategies which universities reported in their Equity Plans submitted in 1995 and covering the 1996-1998 triennium. Where possible, interview data were used to supplement information from the Equity Plans. The programs reported in these plans can depend on a number of functions. Two of the most critical for this study include:

- The nature of input into the planning process. For example, individuals or groups who develop these plans may not be aware of all activities in the university which are contributing to equity, or may not wish to report all of them.
- The perceptions of what constitutes an equity program. For example, some programs and strategies (such as remote campus operations) may be considered a central pillar of the equity portfolio in some universities, but may not be perceived in this way in others and hence not reported.

The following represents an outline of programs and strategies supporting Access and programs and strategies providing student support beyond access.

Programs which have fostered links between higher education and the secondary school system have often become known as LINK programs. These are another strategy aimed at encouraging participation of students from disadvantaged groups. LINK programs have fostered interactive relationships between higher education and schools and have aimed to encourage students to pursue further education by advising school students of the availability of higher education programs, by enhancing opportunities for entry and by providing support after entry. They are directed towards individuals who despite disadvantages in their social, cultural and economic backgrounds are likely to succeed in an intellectual environment (King, Kyle, Wright & Shaw, 1993).

All universities have some form of School Links, traditionally as a means of promoting recruitment. They are usually designed to foster links between higher education and the secondary school system, particularly in respect to encouraging participation of students from disadvantaged groups. All now appreciate the importance of these programs in advancing equity goals. These programs typically involve visits to schools and the distribution of promotional and general information material. In approximately half the universities, visits to campus by school groups at open days, residential camps and schools are reported as part of the equity program. Workshops for school students (usually girls from rural areas) often involving a residential element are operated by seven (7) universities.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of School link Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>22</td>
</tr>
<tr>
<td>Students from low socio-economic backgrounds</td>
<td>18</td>
</tr>
<tr>
<td>Students from non-English speaking backgrounds</td>
<td>24</td>
</tr>
<tr>
<td>Students from rural/isolated areas</td>
<td>10</td>
</tr>
<tr>
<td>Educationally disadvantaged</td>
<td>17</td>
</tr>
</tbody>
</table>

* Numbers are not additive as universities may have multiple programs or multi-target programs

TABLE 2: Number of School links Programs Targeting Specific Groups
TABLE 3 Number of Special Admissions Schemes Additional to RPL

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Number of Additional Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary entrance rank bonus scheme</td>
<td>4</td>
</tr>
<tr>
<td>Sub-quotas</td>
<td>6</td>
</tr>
<tr>
<td>Scholarships/reduced fees</td>
<td>9</td>
</tr>
</tbody>
</table>

Numbers are not additive

TABLE 4 Number of Targeted Bridging Programs

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Number of Bridging Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths/Science programs for women</td>
<td>11</td>
</tr>
<tr>
<td>Programs for rural students (into medicine)</td>
<td>-</td>
</tr>
<tr>
<td>Students from non-English speaking backgrounds</td>
<td>5</td>
</tr>
<tr>
<td>Other programs (e.g. long-term unemployed)</td>
<td>4</td>
</tr>
<tr>
<td>Multi-targeted</td>
<td>15</td>
</tr>
</tbody>
</table>

Numbers are not additive

In the 1993 DEET report Link Programs in Australian Universities it was recommended that: “Institutions should endeavour to broadband their LINK programs by including as many target groups as are appropriate to their regions, consistent with mission statements.” (King et al 1993, p100)

As this study focused mainly on five (5) higher education institutions, it is understandable that the extent of ‘broadbanding’ across the sector was unlikely to be know or recorded. A significant number of institutions have multi-targeted LINK programs and as stated earlier all universities now have some form of LINK program.

The same study recommends that LINK programs should target Year 10 students. This seems to be fairly widespread across the sector with a significant number (10) running Engineering/Science/Technology summer schools or residential schools for Years 9/10 females.

One aspect of LINK programs that seems to be unsupported, at least in terms of programs/strategies reported in Equity Plans is the way School Links programs might be used to build links with industry. The DEET study recommended that: “Institutions offering LINK programs should have as one of their objectives, promotion of tertiary study in both TAFE and Higher Education” (King et al 1993, p100)

Very few institutions reported that they included the promotion of both TAFE and Higher Education courses in their Equity Plans. Only four (4) made specific mention of this in their plans.

The increased emphasis on Recognition of Prior Learning (RPL) and non-traditional entry has facilitated the considerations of special admissions arrangements as an equity strategy. The key aspect which sets RPL apart from other types of higher education entrance procedures is that learning is formally recognised even if the environment in which the training and learning occurred was not formal in any way. That is, knowledge and skills acquired through life and work experiences which were not tied to any formal course of instruction or educational institution (Hayden, 1995). Although universities have embraced the concept as a special admissions scheme, albeit reluctantly, the TAFE sector appears to have made greater progress in this area than universities. Twenty-nine (29) universities cite special admissions schemes as an intentional equity strategy.

Generally, these schemes amount to little more that RPL through clearly identified application procedures or predetermined articulated pathways which are promoted to the target group/s concerned. However, additional strategies are employed.

These schemes typically involve targeted orientation programs and may also involve special monitoring of performance and access to sup-
port programs. These schemes are also sometimes used to target women, students from non-English speaking backgrounds and students with disabilities. However, they are also typically a central strategy in targeting students from low socio-economic backgrounds and rural/isolated areas. This is usually undertaken through basing the schemes on educational disadvantage, students who can demonstrate hardship or entry via recognised bridging programs.

Twenty-three (23) universities reported some form of bridging program as an equity strategy. It is interesting to note that four (4) out of the ‘Group of eight’ universities employ bridging programs while 20 out of 27 of the ‘other’ universities use these programs as an equity strategy. This would suggest that those universities use these programs as an equity strategy. This would suggest that those universities classified as the ‘Group of eight’ rely more heavily on school leavers for their students since a good many bridging programs are tertiary preparation courses for people who have been unable to complete secondary school because of some form of disadvantage. Relatively few ‘bridging’ programs are aimed at school leavers because of some form of disadvantage. Relatively few ‘bridging’ programs are aimed at school leavers and where they are, they tend to be ‘content remediation’ courses conducted concurrently with a full or reduced first year workload. Many of these remedial programs focus on mathematics or science.

In a study of this type of bridging program undertaken at Monash University, the authors concluded that: "...bridging courses need to be targeted to identifiable needs or groups and their continuation is to be based on that need. If the extent of these needs reach such proportions to render such courses inequitable, modifications to undergraduate courses, may be the appropriate measure." (Rae and Pozzobon 1993, p711)

This points up a continuing dilemma with these types of program, how to address the problem of under-prepared students without modifying or adopting first year course structures. In a few cases, first year courses were being changed in order to cope with this problem but generally concurrent remedial bridging programs were the rule rather than the exception. Many bridging programs aimed at providing tertiary entry preparation were targeted at specific groups as Table 4 indicates.

As for special admissions arrangements, generally bridging courses are frequently a key element of equity programs targeting students from low-economic backgrounds and rural/isolated students but often identified as educationally disadvantaged.

Most universities now acknowledge that it is necessary to provide support beyond access. Whereas, many access programs were developed since the release of A Fair Chance For All, many students support programs existed before its release and have been modified or adapted to fit the needs of the particular groups of students targeted by universities.

A majority of universities (23) report some form of Learning Centre as providing programs in study skills, communication skills, language skills or mathematics and computing support through group or individual tuition as formal programs or drop-in advice. Many are also faculty-based. A further 4 universities reported remedial programs offered through other structures or mechanisms.

Peer tutoring was reported in 6 universities with mentoring, particularly for women reported in 10 universities.

Although academic support of some type is available in all faculties and departments, universities frequently develop a formal program which targets equity groups and includes academic support as an element, often in combination with awareness, orientation, special counselling, remediation or mentoring. Fourteen universities reported programs of this type.

Despite the obvious connection between financial hardship and students from low socio-economic backgrounds, very few universities report financial assistance or scholarships in addition to the routine student loans arrangements as a strategy for this group. The exception to this is the fairly common practice of waiving or reducing fees into bridging courses or providing 'free' student support.

In addition to these academic support programs and strategies which tend to operate as an adjunct to the teaching/learning arrangements made by university teachers, there are several teaching/learning strategies which have been
developed specifically for groups targeted by the university and fully incorporated into the courses offered. However, these teaching/learning strategies appear now to be grossly under-reported in equity plans. The likely under-reporting of special examination arrangements or alternative assessment procedures for students with disabilities has already been discussed. Another example appears to lie in the area of inclusive curriculum. When universities were pressed in 1993, 34 institutions out of 37 report: "strategies to review and modify, as necessary, curricula to meet the cultural and other needs of the disadvantaged groups" (DEET, 1993). However, in the equity plans reported in 1995 only 13 universities mentioned developments in inclusive curriculum and review of teaching strategies to address the needs of particular groups. It is unlikely that these activities would diminish over this period. It is more likely that underreporting is now occurring, perhaps as a result of the strategy being now more closely associated with mainstream thinking in teaching and learning and less associated with 'equity issues'.

The degree of activity in teaching and learning strategies to address matters of student equity serves as an indicator of the degree of cultural change which is occurring in universities. A shift from 'deficit' to 'inclusivity' is reflected here with many universities acknowledging that addressing equity, and consequently student diversity, is no more and no less than adopting teaching/learning approaches that are appropriate for the needs of all students. The treatment of equity in these institutions is typically related to a broadening of the range of teaching/learning strategies, greater discussion and dialogue concerning more relevant and inclusive curriculum, greater willingness to acknowledge prior learning and experience and adoption of teaching strategies which are generally more student centred. The signs are that we may have some way to go but it does provide some grounds for optimism. Obvious strategies for women are the vanguard for developments in the area. A problem however, is that although more academics are now developing teaching and learning strategies to meet the need of amore diverse student body, they still do not see this as representing a move towards supporting equity in education. There is a need to bring the two concepts together in the consciousness of academic staff.

CONCLUSION

The use of the term 'disadvantaged' in the context of participation in higher education is problematic. At the time of A Fair Chance For All, under-representation in higher education by a group was perceived as an indicator of disadvantage by that group in broader society (reflecting a global trend). The way that the term is used in this context has always drawn criticism.

- Some people openly resent the tag of 'disadvantage'. For example, many people from NESB and Aboriginal people have noted that although they may suffer disadvantage in our society, their non-English speaking background or their Aboriginality does not represent a disadvantage, rather it provides pride, identity and a richness of culture.

- For other groups the term of 'disadvantage' through under-representation has lost its relevance. For example, Women and some NESB groups who are no longer under-represented in the sector as a whole point out that this fact makes them no less disadvantaged against the dominant culture in higher education than they were when under-represented in the sector.

- PWD point out that their goal is to participate equally in mainstream society, not to be categorised and potentially marginally through simplistic bureaucratically-driven classifications.

- Some individuals may exploit the term 'disadvantage' - it is well recognised that not all representatives from some groups are likely to be disadvantaged in the true sense.

It represents a common problem in the Social Sciences - trying to identify something that you can't measure by equating it with something that you can. After a while the two concepts become so interlocked that arguments develop over semantic distinctions of only secondary importance. Group percentages are a means of driving sector-wide change towards broadening access with success. Beyond this our concerns are with individuals - with addressing the impact of disadvantage, meeting special needs and identifying and assisting students at risk: "The myths and stereotypes that create images of specific groups ... have no relevance when we stop counting and start observing and working with people." (Taylor & Dorsey-Gaines, 1988, p202)

The use of groups will most likely need to be
retained as a means of driving access, but once in the system these students should come under the gamut of care expected for all students. Clearly, if disadvantaged students could be identified by recognising the basis for their disadvantage then much of this problem could be solved. More research leading to an improved understanding of the causes of disadvantage would make an invaluable contribution to this debate. It would also forge a sounder basis for the development of strategies to address the outcomes of disadvantage.

The group approach raises other difficulties. For one, the groups which are most clearly defined, particularly if they possess strong advocacy, are more likely to progress. The difficulties in identifying people from socio-economically disadvantaged backgrounds has made the proper targeting of programs extremely difficult. Where this matter has been investigated in any depth (for example, with the Open Learning initiative which has been established largely as a means of reaching the socio-economically disadvantaged) the results have often indicated that the programs are not, in fact, being utilised by this group but are serving to benefit others.

Another problem with the need to define groups is those who are left out. A Fair Chance For All modelled its approach closely on the framework described for The Public Service Reform Act, 1984 to promote equity of employment in the public service; including adopting the same disadvantaged groups, although the equity framework for higher education added the socio-economically disadvantaged and rural/isolated groupings. The rationale for adopting these groups was somewhat patchy - particularly with regard to which other groups may have been considered but discarded, and the rationale for such decisions. No end of categories were suggested in staff interviews for groups which might be covered by the national framework - ‘South Sea Islanders’, ‘people absent from education for an extended period’, ‘the long term unemployed’ (which despite the suggestions of some, are unlikely to be covered in total by the socio-economically disadvantaged grouping), ‘prisoners in custody’, ‘people doing second degrees’, ‘single parents’, among many others were suggested.

The group mentality can also promote ‘territorial’ attitudes where the interests of one group can be pitted against another. There were many instances during interviews with staff where and advocate for one group felt that the equity agenda was being dominated by another group. There is no hierarchy of disadvantage, and squabbles between members of different groups can only be detrimental to the cause of equity as a whole. A situation widely advertised in the press at the time occurred at Deakin University’s Warnambool campus where a proposal to introduce a ‘male officer’ position raised seething criticisms form women’s groups and generated heated debate before finally being defeated. The position was intended to address issues of male health, homosexuality, workforce child-care and fatherhood matters for a group which was a numerical minority at that particular campus. The proposal was rejected less for an acceptance that needs occurred in this area than the fact that the proposal represented a threat to which group should be considered as disadvantaged and hence counter-productive to notions of student care. We must get away from systems which generate simplistic group loyalties and concentrate on the matter at hand - valuing individual students and addressing their needs.

The greatest strength of A Fair Chance For All, its strong emphasis on social justice considerations, also represents one of its greatest limitation. For example, the consideration of women in non-traditional areas was based on the right of women to access prestigious professions. However, it failed to capture other rationales for desiring gender (and other group) balance in disciplines which may have enriched the debate. The arguments supporting the idea that a higher female participation in engineering would enrich that profession may be equally as valid when considering male participation in teaching and nursing. The other flaw in this approach is that it appears to ignore the reasons why some professions are considered elite - they tend to be those that are dominated by and exclusive to the dominant culture in society whilst those which are dominated by the disadvantaged are typically forced won in status. Once the dominance and exclusivity of broken for elite courses, the elitism of the course is reduced as clearly indicated by the recent experience with law. (It will be interesting to see if moves to increase female participation in courses such as the Master of Business Administration (MBA) will transfer to greater female participation in the boardrooms of industry.) If we
wished to strike a blow for gender equality it would be just as logical, although far less strategically feasible, to attempt to raise the status of female dominated professions, such as teaching, as it would to try and dabble in the enrolment patterns in technology courses and Higher Degrees by Research.

To conclude, the question: A Fair Chance for Whom? is critical, but not readily answered given the current confusion of aims and agendas which are driving equity at the present time. The sector really needs to take control of this debate and devise its own theoretical constructs on which to base its activities in this area. Once the rationale for student equity in higher education has been thought through and articulated, then strategies can be properly devised and more effectively targeted.

1 This board has been disbanded following a change of government in Australia.

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Epistemological approaches to cognitive development in college students

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This chapter is in preparation for Adult Learning: A Reader; Peter Sutherland (Editor)

'The only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realised that no knowledge is secure, that only the process of seeking knowledge gives a basis for security'.

Carl Rogers

What assumptions about knowing do college students possess as they approach a body of knowledge? What changes occur developmentally in the process of seeking knowledge? This chapter focuses on a qualitatively derived, evolving model of cognitive development that facilitates our understanding of these issues.

In their comprehensive volume, How College Affects Students: Findings and Insights from Twenty Years of Research, Pascarella and Terenzini (1991) identify four clusters of developmental theories and models that describe change in college students: Typological models, person-environment interaction models, psycho-social theories, and cognitive-structural theories. Typological models emphasise "distinctive but relatively stable differences among individuals" (Pascarella & Terenzini, 1991, p. 36) and categorise people by groups according to those differences. Examples of typological models include learning styles (Kolb, 1984), personality types (Myers & McCaulley, 1985), and socio-demographic characteristics (Cross, 1981). Person-environment interaction theories emphasise the ways in which behaviour is influenced by specific aspects of the environment, and the individual's interaction with it. Two examples include Holland's theory of career choice (Holland, 1985) and Barker's theory of behaviour settings (Barker & Associates, 1978).

PSYCHO-SOCIAL THEORIES
Although the cognitive-structural approach is the focal point of this chapter, the reader should be aware of the larger context in which cognitive behaviour occurs interactively with social development. Two psycho-social theories, one general and the other specific, are summarised to provide a context. Erik Erikson (1963) identified eight psycho-social stages of development, each consisting of a unique developmental task and crisis (challenge) which the individual encounters while interacting with the environment. If the challenge is met successfully, the individual is ready to face the next stage. For example, during the fifth stage, identity versus identity confusion, adolescents are challenged to establish a clear identity and explore new roles such as careers. If they work through these demands effectively, they can confront the challenges of the sixth stage with confidence. In the sixth stage, intimacy versus isolation, adults in their 20's and 30's are challenged to develop healthy, intimate relationships. In stage seven, generativity versus stagnation, middle-aged adults are challenged to help the younger generation lead productive lives. In short, college students of all ages are in the process of undergoing psycho-social and intellectual development interactively.

However, Arthur Chickering (1969) and Chickering and Reisser (1993) maintain that psycho-social development is more a journey of increasing complexity than a progression through specific stages as Erikson suggests. During development, maps (vectors) are provided that "describe major highways for journeying toward individuation - the discovery and refinement of one's unique way of being - and also toward communion with other individuals and groups, including the larger national and global society" (p. 35). Students journey differently through the vectors at different rates, but always they move from a lower to a higher level of complexity within the vector. In Developing Competence, students move from lower to higher levels of intellectual, phy-
sical, and interpersonal competence. Intellectual competence includes mastering content, building skills in comprehension, analysis and synthesis, and developing intellectual and aesthetic sophistication. Interpersonal skills include listening, co-operating, responding, and aligning personal with group goals. Students increase their competence by trusting their abilities, obtaining accurate feedback, and integrating their skills with a sense of self-assurance.

In the vector of Managing Emotions, students progress from lower to higher levels of (a) control of disruptive emotions (e.g., fear, anxiety, aggression, guilt, depression), (b) awareness of feelings, and (c) ability to integrate feelings with action. This is accomplished as students learn to develop awareness of their feelings, find suitable forms of release, and learn to substitute self-regulation for repression of emotions.

Moving Through Autonomy Toward Interdependence requires students to learn self-sufficiency, accept responsibility for pursuing self-chosen goals, and become less influenced by others. This vector involves changing from (a) emotional dependence to freedom from continual reassurance and approval, (b) poor self-direction to instrumental independence (self-directed activities and problem solving, mobility) and (c) independence to problem solving, mobility and (c) independence to recognition and acceptance of the importance of interdependence.

When students enter the vector of Developing Mature Interpersonal Relationships, they journey from lower to higher levels of interpersonal and inter-cultural tolerance of differences, and from having non-existent, short-term or unhealthy intimate relationships to a greater capacity for intimacy and commitment. Students shift from excessive dependency or dominance toward an interdependence among equals.

Establishing Identity is a journey from discomfort to comfort with one’s appearance, gender, family, heritage, social/cultural roots, roles, and lifestyles, and it depends in part on the development of previously identified vectors. Developing Purpose enables students to articulate their interests, goals, and plans clearly with respect to vocation, personal interests, and commitments to relationships. Developing Integrity is closely related to the two previous vectors. Now, student’s values are transformed from dualistic, rigid and self-centred to values that are humanising (considering other people’s interests), personalising (affirming one’s core values while respecting those of others), and congruent (matching one’s personal values with socially responsible behaviours).

According to Pascarella and Terenzini (1991), Chickering’s model has been criticised for its failure to specify (a) such concepts as cognitive development beyond “developing competency,” (b) how changes occur, and (c) how the concepts may be tested empirically or applied administratively. In spite of these criticisms, Pascarella and Terenzini regard it as the most influential of the psycho-social models of college student development. Similarities between Chickering and Reisser and the cognitive-structural approaches below will be mentioned in the discussion section.

COGNITIVE-STRUCTURAL THEORIES OF DEVELOPMENT

Included in the Pascarella and Terenzini synopsis of cognitive-structural theories are William Per’s forms of ethical and intellectual development, Lawrence Kohlberg’s theory of moral development, Patricia King and Karen Kitchener’s reflective judgement model, Carol Gilligan’s different voice model, and Jane Loevinger’s theory of ego development. The remainder of this chapter summarises an evolving epistemological model of intellectual development begun by William Perky in the 1950’s and extended by Mary Bleakness and her associates, Patricia King and Karen Kitchen, and Marca Baxter Magolda from the late 1970’s to the present. The populations sampled for the Perry and Baxter Magolda studies are exclusively young adult, primarily white middle and

...
upper class American college students. Belenky and her associates and King and Kitchener also included diverse samples of college and non-college students. The Baxter Magolda and King and Kitchener findings are derived from ongoing longitudinal research. The methodology used by each investigator was primarily qualitative. Specific procedures for coding and rating interview responses and assessing reliability of measures are not discussed here, but they can be found in the original sources.

WILLIAM PERRY’S FORMS OF INTELLECTUAL AND ETHICAL DEVELOPMENT

Between 1954 and 1963 William Perry and his associates interviewed samples of Harvard men and Radcliffe women each Spring regarding their college experiences. Although 112 men and 28 women participated in the study, gender differences were not observed and only the responses from males were used. Analysis of the interview data yielded a nine-stage sequence of “positions” that provided a developmental framework for understanding the meaning of students’ educational experiences. This “scheme of intellectual and moral development” (Perry, 1970) reflects the increasingly complex epistemological assumptions that students bring to a learning situation. Perry reduced the nine positions to three clusters: Dualism modified (positions 1 to 3), Relativism discovered (positions 4 to 6), and Commitment in relativism developed (positions 6 through 9). However, King & Kitchener (1994) and Chickering & Reisser (1993) group the nine positions into four categories: Dualism (positions 1 and 2), Multiplicity (positions 3 and 4), Relativism (positions 5 and 6), and Commitment in relativism (positions 7 through 9).

Dualistic students tend to organise their thinking about issues into discrete categories of right and wrong, good and bad, or we and they. There is a correct solution to each problem. Authorities know the right answers and a student’s job is to memorise them. Knowledge is quantitative and certain; agency (source of control) exists “out there” in authority.

In the Multiplicity stage of epistemological development, students admit to the legitimacy of opinions and values that are different, but only because the right answers are not yet known. Consequently, because judgements can not be made where correct answers are unknown, everyone’s point of view is equally valid. Students in Relativism begin to recognise that knowledge, opinions and values are relativistic and contextual (including those of authorities). That is, when beliefs are rooted in logic, evidence, and particular situations or contexts, they may be correct, but if they are not so anchored, beliefs may be worthless. Students foresee the need to make decisions about their values and choices, but they have not yet acted.

In the fourth and highest developmental stage, Commitment, students make choices about their values, careers, relationships, and other matters relating to identity, even though they are aware of the diverse and uncertain (i.e., relativistic) contexts surrounding those issues. By this stage, they experience agency primarily from within, not from external authorities.

Perry adds that during the process of development, students may experience temporising (postponing movement for a year), escape (abandonment of their responsibility, or exploitation of one stage to avoid a higher stage), or retreat (avoiding complexity and ambivalence by regressing to Dualism) (Perry, 1981). Perry discussed the implications of his findings for curriculum development. He encouraged teachers to teach “dialectically,” i.e., “to introduce our students, as our greatest teachers introduced us, not only to the orderly certainties of our subject matter but to its unresolved dilemmas. This is an art that requires timing, learned only by paying close attention to students’ ways of making meaning” (1981, p. 109).

According to Pascarella and Terenzini (1991), Perry has been criticised for insufficiently defining and measuring changes in the nine positions, although scoring systems have been developed by other researchers. In addition, Perry’s claims that three-fourths of his participants reached the commitment stage by graduation were not substantiated by subsequent research. A small body of research shows that instruction can be designed to facilitate development along Perry’s scheme (Pascarella & Terenzini, 1991). Moore applies the Perry scheme to the assessment of collaborative learning (Moore, 1994), but maintains that the most fundamental implication of Perry’s work is the greater empathy it provides faculty for the struggles students face dealing with the complexities of college (Moore, 1994). Overall,
Perry's ideas have met with considerable enthusiasm by many educators such as Moore (1994) and Nelson (1989) who actively apply his developmental scheme in diverse academic settings. Perhaps the most significant extensions and revisions of his work are investigations by Belenky and her associates, King and Kitchener, and Baxter Magolda.

"WOMEN'S WAYS OF KNOWING"

Noting the absence of research on the intellectual development of women, Mary Field Belenky, Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule integrated Carol Gilligan's research on moral development and identity in women with Perry's scheme of epistemological development. In Women's Ways of Knowing (1986), Belenky et al. describe the results of their interviews with 135 women of widely different ages, circumstances, and backgrounds. Ninety were college students from six diverse academic institutions that included a prestigious women's college, an inner city community college, and an urban public high school. Forty-five were clients of three family agencies that worked with teenage mothers, parents enrolled a prevention oriented children's health program, and parents with a history of family violence and child abuse.

Belenky et al. grouped their participants' "ways of knowing" into five categories: Silence, Received Knowledge, Subjective Knowledge, Procedural Knowledge, and Constructed Knowledge. The authors maintain that the five perspectives are neither exhaustive, fixed, nor universal and that similar categories may be found in the thinking of men. Just as Perry contended that his scheme of development applied to both genders, Belenky et al. do not claim that the five patterns of women's knowing is exclusive to women.

In the least developed way of knowing, Silence, "women experience themselves as mindless and voiceless and subject to the whims of external authority" (p. 15). As one woman remarked: "I didn't think I had a right to think. That probably goes back to my folks. When my father yelled, everybody automatically jumped. Every woman I ever saw, then, the man barked and the woman jumped. I just thought that women were no good and had to be told everything to do." (p. 30)

Silent women were fewest in number and among the youngest and most socio-economically and educationally disadvantaged of the five groups. Their perspective was included because it represents an absence of voice, i.e., a position of extreme denial of self and blind obedience to external authority. Perry's scheme does not, predictably, have a counterpart to Silence, given his sample of Harvard and Radcliffe students.

Received Knowledge is a perspective "from which women conceive of themselves as capable of receiving, even reproducing, knowledge from the all-knowing external authorities but not capable of creating knowledge on their own" (p. 15). Like Perry's dualistic thinkers, received knowers view ideas as right or wrong, good or bad, and have little tolerance for ambiguity. Unlike Perry's men who identified with and publicly repeated the ideas of authority, the women in this study did neither. They preferred to listen. One college student noted: "I don't talk in class very much myself. I am not a participator. Everybody at college is sort of outgoing. Everybody I've met has a vocabulary a mile long. My problem is -- is that I have trouble communicating" (p. 37).

Most of the received knowers in the sample were from the social service agencies or young, new college students. Subjective Knowing is "a perspective from which truth and knowledge are conceived as personal, private, and subjectively known or intuited" (p. 15). Belenky et al. regard subjective knowing as a form of dualistic thinking in which the woman has shifted the source of authority from external to a newly forming inner voice.

Every person has her own unique body of knowledge that's been given to them through their life's experiences. And realising that mine is as valid as the next person's, whether or not that person has gone through six or seven years of college, I feel that my knowledge is as important and real and valuable as theirs is. (p. 69)

Whether they grow up in advantaged or disadvantaged situations, the women in this sample mistrusted logic and analysis and tended to disregard the advice of external authorities. Belenky and her associates agree that subjective knowing is, for the most part, interchangeable with...
Perry's Multiplicity. However, gender differences exist between some socio-economically advantaged and disadvantaged knowers due to the opportunities which men and advantaged women have for experiencing and exploring other roles and cultures. Comprising about half of the sample, subjective knowers were found in all age, class and ethnic groups and in every educational and agency setting; over half reported that they were victims of sexual abuse.

Procedural Knowledge "is a position in which women are invested in learning and applying objective procedures for obtaining and communicating knowledge" (p. 15). Procedural knowing arises from the conflict that occurs when teachers demand that personal opinion be supported by evidence. There are two forms of procedural knowing. Separate knowers rely on "impersonal procedures for establishing truth" (p. 102) such as the methods of critical thinking taught in the academic disciplines. They understand the importance of careful observation, objective procedures, and emotional detachment. Connected knowers appreciate the value of observation and analysis, but they realise that personal experience is an important part of knowledge. Connected knowers begin with an interest in the facts of other people's lives, but they gradually shift the focus to other people's ways of thinking. Separate knowers learn through explicit formal instruction how to adopt a different lens - how, for example, to think like a sociologist. Connected knowers learn through empathy. Both learn to get out from behind their own eyes and use a different lens, in one case the lens of a discipline, in the other the lens of another person. (p. 115) Most procedural knowers were young, bright, privileged women attending or recently graduated from prestigious colleges.

In Constructed Knowledge, "women view all knowledge as contextual, experience themselves as creators of knowledge, and value both subjective and objective strategies for knowing" (p. 15). In other words, separate and connected knowing are integrated because personal experience is evaluated using the data of specific contexts. Constructed knowers believe that knowing is a process of the knower interacting with the known; the truth of ideas resides within the context of the situation. As one woman noted "Circumstances change. Our way of looking at things change. Time may have given us what we think are right answers, but it also gives us a different set of problems" (p. 138). Constructed knowers were described as articulate, reflective, passionate knowers, intent on having an impact on others and a voice of their own. They were ordinary women, not necessarily high achievers, seeking to balance several roles and commitments. Belenky and her associates note that while Perry's men described their commitments primarily in terms of a single act, usually a career, the constructed knowers also acknowledged the centrality of commitment to relationships.

Belenky et al. remarked that women, especially older women returning to college, needed confirmation that they were already knowers, not just potential knowers. Furthermore, the older, returning students sought a balance in their course work between no structure and excessive structure. In their discussion of connected teaching, Belenky and her associates prefer the teacher-as-midwife metaphor (helping students give birth to ideas) over the teacher-as-banker metaphor (transferring knowledge from teacher to students). Teachers who are connected knowers accept the subjective knowing view that each student has a unique perspective. However, they endeavour to transform students' private truths into publicly available "objects" by emphasising connecting over separation, understanding over assessment, and collaboration over debate (Belenky et al., 1986). The research by Belenky and her associates synthesises the findings of Perry and Gilligan and extends Perry's scheme to a relatively diverse sample of women. To those who work with adult students, "women's ways of knowing" provides a rich conceptual framework for understanding the diverse experiences and changing patterns of knowing that students bring to classroom environments.

KING AND KITCHENER'S REFLECTIVE JUDGEMENT MODEL

In the late 1970's, Patricia King and Karen Kitchener began formulating a model that somewhat incorporates Perry's epistemological framework and John Dewey's concept of reflective thinking as the evaluation of potential solutions to ill-structured problems. A reflective thinker is one who understands that problem solving involves uncertainty but is able to for-
mulate a solution based on evidence and critical inquiry. From cross-sectional and longitudinal studies of collectively large samples of men and women diverse in age (16 to mid-fifties) and education (high school to graduate school), has emerged a refined methodology and the Reflective Judgement Model. The seven stage model describes "changes in assumptions about sources and certainty of knowledge and how decisions are justified in light of those assumptions" (Kitchener & King, 1990, p. 160). The stages are organised into Pre-reflective Thinking (Stages 1 through 3), Quasi-reflective Thinking (Stages 4 and 5), and Reflective Thinking (Stages 6 and 7) (King & Kitchener, 1994).

In Stage 1, knowledge is assumed to be absolute and concrete; it is obtained with certainty by direct observation of the knower. Justification is not needed because whatever is observed is true. This stage represents "cognitive simplicity" and was found in some of the youngest high school students. For individuals in Stage 2, knowledge is regarded as absolute and certain, or certain but accessible only to authorities. What one believes is acquired by direct observation or from authorities. Beliefs are not examined but they can be justified by comparing them with what authorities believe. Similar to Perry's dualism, this stage of epistemological development is typical of young adolescents and some college students. In Stage 3, knowledge is either certain or temporarily uncertain in some areas, and it resides in authority. Certain knowledge is justified by reference to authorities; uncertain belief by reference to one's personal views. Interview data revealed that this stage characterised the assumptions of students during their last two years of high school or first year of college. The first three stages are called Pre-reflective because individuals do not acknowledge uncertainty and, consequently, can not distinguish between well-structured and ill-structured (real life) problems (Kitchener & King, 1990, King & Kitchener, 1994).

In Stage 4, knowledge is regarded as abstract, not concrete; it is uncertain due to limitations of the knower and of authorities. Because there is no certainty, all views are equally valid, i.e., idiosyncratic. Beliefs can be justified through reasoning and evidence, but they remain idiosyncratic. The acceptance of uncertainty by the knower indicates an ability to distinguish well-structured from ill-structured problems, the basis for reflective judgements. Stage 4 thinking is characteristic of college seniors. Knowers in Stage 5 begin to view knowledge as contextual and subjective. That is, they realise that beliefs are filtered through one's perceptions and interpretations of evidence acquired in particular situations or contexts. Knowers may avoid viewing problems solutions as "right" or "wrong," given that all knowing is contextual. Beliefs are justified by using the rules of inquiry for that context and by interpretations of evidence derived from the context. This form of reasoning is typical of graduate students; most persons classified as Stage 5 in the ten year longitudinal study were in the 26 to 30 and 31 to 35 age categories. Stages 4 and 5 are called Quasi-Reflective Thinking: While knowers acknowledge uncertainty and can distinguish well-structured from ill-structured problems, they remain unable to compare and evaluate alternative views or solutions.

In Stage 6, knowledge is uncertain, contextual and constructed (knowledge is not a given) into individual conclusions for the solution of ill-structured problems. The conclusions are based not on subjective judgements, but on interpretations and evaluations of evidence derived from different sources. In addition, some alternatives can be judged better than others. Justification is based on evidence derived from multiple perspectives by constructing solutions that were based on multiple criteria. This stage of knowing was found in advanced graduate students, most of whom were over 30 years of age. In Stage 7 knowing, solutions to ill-structured problems are constructed by the use of critical inquiry and evaluated and re-evaluated in terms of what is most reasonable, given the evidence. Epistemically justifiable claims can distinguish among the quality of the solutions offered. Kitchener & King (1990) believe this stage of knowing is rare among graduate students, but it can be found in some mature educated adults in their thirties or older. Stages 6 and 7 represent true reflective thinking as John Dewey described it. (Kitchener & King, 1990; King & Kitchener, 1994).

King and Kitchener (1994) discuss the results of a ten-year longitudinal study begun in 1977 and several cross-sectional studies which collectively validate the Reflective Judgement model. More than 1700 people have participated in the
RJI (Reflective Judgement Interview), including 200 persons in longitudinal studies, 150 high school students, 1,100 college students (traditional- and non-traditional-age), 200 graduate students, and 150 non student adults. The researchers' ten-year longitudinal study consisted of 20 high school juniors, 40 college juniors, and 20 advanced doctoral students. Although there were equal numbers of females and males, all participants were white and from the upper American Midwest. Data was derived from the RJI and other measures (King & Kitchener, 1994).

Overall, their findings revealed that people who are involved in educational activities tend to improve their reasoning about ill-structured problems. Their development seems to proceed in a "slow but steady" pattern, but it follows the stages of the Reflective Judgement Model and is facilitated by educational settings. Age alone was not found to be predictive of differences in reflective thinking, but for adult students age is related to other factors such as readiness to learn and openness to challenge and divergent views. Traditional-age and non-traditional-age students did not differ significantly from each other either as freshmen or as seniors, although there was less variability in RJI scores among non-traditional age students. King and Kitchener conclude from the analysis of their ten-year study and their review of several cross-sectional studies that gender is not a factor that significantly differentiates reflective thinkers, although some differences may exist in the "timing" of developmental changes between men and women.

King and Kitchener (1994) offer several suggestions for promoting reflective thinking in students.

- Show respect for students as people regardless of the developmental level(s) they may be exhibiting. (p. 231)
- Understand that students differ in regard to their epistemic assumptions (assumptions about knowledge). (p. 232)
- Familiarise students with ill-structured problems within your own discipline or areas of expertise. (p. 233)
- Create multiple opportunities for students to examine different points of view on a topic reflectively. (p. 237)
- Create opportunities and provide encouragement for students to make judgments and to explain what they believe. (p. 238)
- Informally assess students' assumptions about knowledge and how beliefs should be justified. (p. 240)
- Acknowledge that students work within a developmental range of stages, and target expectations and goals accordingly. (p. 242)
- Provide both challenge and supports in interactions with students. (p. 244)
- Recognise that challenges and supports can be grounded emotionally as well as cognitively. (p. 246)
- Be cognisant of which skills are required for selected activities or assignments. (p. 248)
- Foster a climate that promotes thoughtful analysis of issues throughout the campus. (p. 255).

BAXTER MAGOLDA'S EPISTEMIC REFLECTION MODEL

The most recent contribution to the epistemological model of intellectual development is that of Marcia Baxter Magolda. Incorporating concepts, methodology, and findings from Perry, Belenky et al., and King and Kitchener, Baxter Magolda has established a framework for knowing, investigated gender-related patterns, and conducted follow-up studies of her subjects in work place and post-baccalaureate settings.

Baxter Magolda interviewed 101 randomly selected traditional age freshmen (51 females, 50 males) who enrolled at Miami University of Ohio in 1986. Her sample is homogeneous in age (80% were 18 years old when the study began), race (only 3 students are members of non-dominant populations), and setting (most students at this "selective" state university were Ohio residents).

Her methodology included taped interviews and the MER (Measure of Epistemological Reflection), a short-essay questionnaire consisting of items that paralleled the interviews. The interview and MER addressed six domains of knowing: the nature of knowledge, decision making, and the roles of the learner, instructor, peers, and evaluation of learning. From her analysis of the data, Baxter Magolda constructed four levels of knowing: Absolute Knowing, Transitional Knowing, Independent Knowing, and Contextual Knowing. Gender related pat-
terns of knowing were found in the first three levels.

"Absolute knowers view knowledge as certain. They believe that absolute answers exist in all areas of knowledge. Uncertainty is a factor only because students do not have access at the time to absolute knowledge" (Baxter Magolda, 1992, p. 36). According to students in this stage, the learner’s role is to obtain knowledge from an all-knowing instructor who uses teaching methods that promote the acquisition and retention of information, mainly through memorisation. The purpose of evaluation and assessment is to show the instructor that the student can reproduce the knowledge acquired. The role of peers in learning is minimal, given that their knowledge of the topic is limited only to what the instructor has provided.

Baxter Magolda discerned two patterns of knowing among absolute knowers that are opposite ends of a continuum. Receiving-pattern learners describe their role in terms of listening and note taking and take a private approach to learning. They expect little or no interaction with instructors, view peers as sources of support in listening and occasionally asking questions, and regard assessment measures as tools for demonstrating what they know. Receiving-pattern students in the study tended to be women, but some were men.

On the opposite side of the continuum are Mastery-pattern learners who describe their role as assertive and public in the classroom, interacting and sometimes arguing with instructors whose job is to challenge students to master knowledge in class and for exams. Peers are but partners in the interaction process. Mastery-pattern students tended to be men but some were women. Baxter Magolda (1992) observed that Absolute Knowing characterised 68% of the freshmen, 42% of the sophomores, 11% of the juniors, and 2% of the seniors in her sample. To engage Absolute knowers, teachers should try to be helpful, use active teaching strategies, promote peer interaction, help students understand the grading system, and provide opportunities for students to know them in and out of the classroom.

Transitional Knowing is so named because it serves as a transition stage between the certainty of Absolute Knowing and the uncertainty of Independent Knowing. "Although transitional knowers still believe that absolute knowledge exists in some areas, they have concluded that uncertainty exists in others" (Baxter Magolda, 1992, p. 47). If there are discrepancies among authorities, it is because authorities do not know the answers. According to transitional knowers, the role of instructors is not only to communicate information, but also to use methods which help students understand and apply information. Evaluation should measure understanding, not simply rote memory. Peers can help by participating in discussions and activities that promote understanding.

Two bipolar gender-related patterns of knowing observed in transitional knowers were Interpersonal and Impersonal. Interpersonal-pattern knowers, predominantly women in Baxter Magolda’s sample, view learning as a process of exchanging ideas with other students and the instructor; evaluation should be an opportunity to express creatively what students understand. Uncertainties about knowledge are reduced by making personal judgements. Impersonal-pattern students, who were predominantly men, seek challenge through debate with their instructors and peers, prefer evaluation that is fair and practical, and reduce their uncertainties through reason and research. Baxter Magolda noted that Transitional Knowing characterised 32% of the freshmen, 53% of the sophomores, 83% of the juniors, 80% of the seniors, and 31% of the sample in the year following graduation. Baxter Magolda recommends that teachers who work with transitional knowers should: (a) demonstrate a caring attitude that promotes student-teacher interaction, (b) use teaching strategies that involve students in course material and with each other, and (c) promote understanding and thinking over memorisation.

"Independent knowing represents a shift to assuming that knowledge is mostly uncertain. Viewing knowledge as uncertain changes substantially the learning process and the sense of where knowledge resides" (Baxter Magolda, 1992, p. 55). According to students, the fact that authorities differ is mainly a reflection of the range of views that exist in an uncertain world. Independent knowers view themselves as equal to authorities, thus their ideas are as valid as those of their teachers. Independent
knowers believe that students must think for themselves and create their own perspectives. The role of instructors is to create an environment that promotes an interchange among students who are valued as sources of ideas.

The bipolar gender-related patterns observed in independent knowers are Inter-individual and Individual. In the former and predominantly female group in the study, students tend to think for themselves, but also seek the perspectives of others. Teachers are expected to promote an exchange of views and include students in the evaluation process. Individual-pattern knowers in the sample tended to be men who focused on their own independent thinking and expected peers to do the same. They prefer instructors who allow students to define their own learning goals, and expect assessment to focus on independent thinking. As the characteristic mode of learning, Independent Knowing was found in none of the freshmen, 1% of the sophomores, 5% of the juniors, 16% of the seniors, but it dominated the knowing of 57% of the sample in the year following graduation. Baxter Magolda’s advice for instructors who work with Independent Knowing students includes the following: (a) Use teaching strategies that connect classroom learning with real life, promote independence, develop critical thinking, and encourage peer collaboration; (b) Develop a genuine relationship with students; and (c) Treat them with respect and as equals.

Baxter Magolda believes that contextual knowledge is rarely evident in college, based on the sample of young adults she interviewed. Contextual knowledge was first observed during the junior year in 1% of the students. It doubled to 2% in seniors, and characterised knowing of 12% of the sample participants in the year following college. In Contextual knowing, “The nature of knowledge remains uncertain ... but the ‘everything goes’ perspective is replaced with the belief that some knowledge claims are better than others in a particular context” (Baxter Magolda, 1992, p. 69). Individuals resolve the uncertainty of knowing in a particular context by judging the available evidence. The role of the learner is to think through issues, compare differing perspectives, integrate existing with new knowledge, and apply it to new contexts. Students expect their professors to create an environment which facilitates these processes, one which allows mutual critique of students with each other and with the instructor (Baxter Magolda, 1992).

Analysis of the data from interviews and the MER did not reveal gender-related patterns in contextual knowers; the two patterns seem to merge in the Contextual Knowing stage. In the post-college phase of her seven year study, Baxter Magolda (1995) investigated the integration of gender-related patterns of knowing in 70 of her original participants. “The receiving, interpersonal, and inter-individual patterns illustrate relational knowing due to their connections with others and what is known” (p. 208). In contrast, “The mastery, impersonal, and individual patterns reflect impersonal knowing in their focus on objectivity and separation of knower and known” (p. 208).

Using stories from the interviews, Baxter Magolda discusses how relational and impersonal patterns merge in the individual’s self identity in a balanced way with respect to beliefs, career and personal decisions, and the establishment of personal relationships.

Her post-college interviews also examined changes in knowing that occur in job and post-baccalaureate settings (Baxter Magolda, 1994). Of the 101 students interviewed as freshmen in 1986, fifty-nine students graduated within four years, the remaining eleven within five years. Thirty-seven women and 33 men participated in the fifth year of the study; 29 women and 22 men consented to a sixth year interview. After graduation the participants entered such occupations as insurance, sales, accounting, teaching, mental health, banking, advertising, retail management, airline attendant, and government. Of the 13 participants who entered graduate or professional programs immediately, eight were full-time students and five worked part-time. Baxter Magolda made appropriate revisions to her data gathering procedures for the analysis of participants’ epistemic assumptions.

One obvious change between college and post-college experiences was the sharp decline in Transitional Knowing “from 80 percent in the senior year to 31 percent the fifth year and to 8 percent the sixth year” (p. 31). In contrast, Independent Knowing increased sharply from 16% in the senior year to 57% in the fifth year and declined slightly to 55% in the sixth year.
Three themes which characterised the post-college experiences of Independent knowers help explain why Transitional Knowing dropped radically and Independent Knowing surged. First, participants were expected to function independently in their setting. As one woman noted about her public relations job: "It's up to me how, what approach I take to do it, and different angles for things. It's expected of me to improve, but a lot of ... the way I do it is my choice. This gives me a lot of flexibility and creativity, which I like. There's no right or wrong to it, they are my ideas" (p. 32). The second theme was the importance of learning by gathering information from others, whether in a job or in a graduate program. Gone was the transitional knowing assumption that peers are not essential to the learning process. The third theme was the importance of learning through direct experience. As one corporate employee described this theme, "I learned how to become very clear and concise. No one has time for frills and extra superfluous kinds of things. I learned to be prepared. I learned that you don't call someone when you don't know what you're talking about. You learn those things in school, but you don't really experience them. You don't experience the consequences or you don't experience the reality" (p. 33). Independent knowers also noted the importance of acting assertively and reducing the influence that others have on them.

Contextual knowing increased from two percent during the senior year to 12 percent in the fifth year and 57 percent in the sixth year. Three major themes contained in contextual knowers' remarks may explain this increase. First, contextual knowers often made subjective decisions in their work. Second, they frequently acted in the role of authority. As an insurance underwriter remarked: "I make decisions in terms of risk, return, and trade-off. What's the worst possible outcome, and can I make a buffer for it? ...It is deciding the cost of writing business, how much to charge to get the business, the potential payoff" (p. 35). Third, Contextual knowers often collaborated with others in the exchange of ideas. For example, participants noted the role of brainstorming sessions in a business setting, the importance of exchanging views in a law school class, or working jointly with staff in selling medical supplies. Collaboration was viewed as a means of achieving success in one's job, not simply as a learning tool.

Some secondary themes emerged from the interviews. For example, contextual knowers noted the importance of maintaining a "can do" attitude about their work which enabled them to stretch their abilities to the limits. Also, they acknowledged the importance of experience, of believing that they were contributing to their work setting, and of finding meaning in their work, within and beyond the workplace.

In discussing the implications of the post-college study for higher education, Baxter Magolda (1994) observed participants in the post-college study reported experiences that, in their perspective, affected ways of knowing that were different from ways they reported during the college study. It was the nature of these experiences - the independence and responsibility - not the context of the experiences (work or school) that was important to them. (p. 39) In addition she noted that "Study participants found themselves in work and academic settings in which they were expected to be authorities or to find out what they needed on their own with minimal guidance" (p. 40). In view of these observations, Transitional knowers would be forced to make drastic changes in their epistemic assumptions and behaviour from classroom to job or post-baccalaureate settings in order to succeed.

Baxter Magolda (1994) recommends that courses for advanced students should require them to analyse and evaluate knowledge acquired in lower level courses, develop their belief systems about it, and perform the tasks of their discipline to the extent possible in the college and university setting. To promote independent and contextual knowing, teachers should design the learning environment which provide students with independence, direct experience in decision making, accountability for their actions, and interaction with other students to explore and evaluate options - in short, an environment in which students are able to construct their knowing (Baxter Magolda, 1994). This writer notes that examples of strategies and techniques that can promote independent and contextual knowing include research projects, internships or practicums, independent study, and group projects in which stu-
students bear the burden of responsibility for planning, decision-making, execution, and follow-up.

**HOW ARE ASSUMPTIONS ABOUT KNOWING INFLUENCED BY POST-BACCALAUREATE EDUCATION?**

Of the 70 students interviewed after graduation, 25 enrolled in post-baccalaureate education, full-time or part-time, immediately or within one year of graduation. Fourteen enrolled in graduate school programs, four in undergraduate courses preparatory to graduate school or certification, three in law school, two in seminary, and one each in job-related courses on banking and real estate. Analysis of the interview and MER data obtained from the 25 students revealed five interrelated themes which reveal the central importance of knowledge construction to contextual learning (Baxter Magolda, 1996).

First, students valued opportunities offered by their teachers to think for themselves, i.e., to develop opinions supported by evidence and to struggle with new ideas. Second, students appreciated opportunities to form connections between the ideas they learned in course work and their beliefs, values, and identity. Third, students valued learning environments where they were encouraged to incorporate their own knowledge and experiences into course topics and assignments. Fourth, students appreciated learning environments that were characterised by mutual respect between teachers and students. Fifth, students valued collaboration with peers that involved establishing a level of trust which promoted the sharing of experiences, discussing different perspectives, and processing ideas. In short, the five themes reflected by post-baccalaureate participants are extensions of Contextual Knowing observed in undergraduate settings; the implications for promoting Contextual Knowing reiterate those identified above.

Baxter Magolda (1996) maintains that these findings provide challenges to teachers who strive to promote Contextual Knowing. For example, instructors and students could jointly determine which kind of personal experiences can be incorporated into classroom discussion. Although some students are willing to share relevant experiences, others may not understand the value of their particular experiences or be willing to share them. A technique successfully used by this writer and others is the use of journals in which students record the connections between course-related concepts to their experiences, and occasionally, share them with classmates (Hettich, 1990). Another challenge is to teach students that "the ongoing construction of knowledge involves balancing experience and evidence outside one’s experience. Thus teaching involves helping students analyse their own experience in light of existing perspectives" (Baxter Magolda, 1996).

Baxter Magolda’s work is an important contribution to the work begun by Perry and extended by the other investigators discussed above. As her longitudinal research continues, it is hoped that additional studies will shed light on the mutual interplay of epistemological development and life/career experiences.

**DISCUSSION AND IMPLICATIONS FOR EDUCATORS OF ADULT STUDENTS**

This review of epistemological knowing of college students is incomplete for it was not the scope of this chapter to cover all approaches. For example, Tennant and Pogson (1995) discuss the implications of the psychological literature on adult development with respect to three areas: acknowledging the experience of learners, promoting autonomy and self-direction, and establishing “adult” teacher-learner relationships. They review the literature on adult performance on intelligence tests and discuss life course issues and developmental perspectives on adult education.

This writer believes that the works of Perry, Belenky and her associates, King and Kitchener, and Baxter Magolda, essentially and collectively represent a single model of epistemological knowing that has evolved over the past four decades, but with different points of emphasis (e.g., voice, reflective thinking, gender differences). That the different populations sampled over the decades yielded generally similar structures is testimony to the robustness of the model, the methodologies used, and the basic theoretical assumptions proposed. There are differences among the theorists in their emphasis, characteristics of stages, scope of knowing, and other issues, but the similarities are more numerous than the differences. But there are issues to be raised. For example, what are the limitations of a constructivist approach...
to knowing? What is the external validity of the research performed, given that the studies were based on predominantly white middle class, Midwestern and Eastern American college students? What impact do the recommendations for teaching have on learning in various settings? Nearly all studies that are as thoughtful and informative as these were are going to raise several issues.

Earlier it was asserted that cognitive development in college students proceeds within the broader context of psycho-social development. A comparison of Chickering and Reisser's psycho-social approach with the four epistemological approaches presented reveals agreement that the course of growth is a process of developing increasing complexity. Furthermore, progress in specific vectors, other than Developing Competence, is reflected in changes observed in studies reported above. Specific comparisons between Chickering & Reisser and the four approaches is possible, but the primary implication to be drawn is that educators are not merely improving students' intellectual skills. Regardless of age, maturity, and background, students are on a journey toward complexity and all dimensions of their being are involved. They travel through several interacting vectors, but teachers interact with them primarily in the intellectual vector of Competence. Being aware of a student's journey enables educators to create an atmosphere, when possible, which can promote the advanced stages of knowing.

The implications for teachers who work with students in various stages of epistemological development was addressed in the four approaches, specifically by Kitchener and King and Baxter Magolda. If their recommendations do not surprise adult educators, at least we understand the theoretical and methodological contexts from which they were derived.

Of special interest is Baxter Magolda's findings regarding her graduates' experiences in work place and post-baccalaureate settings. Not only are these the situations to which college students aspire, but also they are where many adult students currently operate. Teachers may benefit from learning about different work place and post-baccalaureate settings, and integrating the relevant skills and procedures practiced there into instructional strategies.

It has been suggested (Hettich, 1992) that study skills (e.g., time-management, reading, group skills) represent "job" requirements of college that subsequently connect directly to parallel requirements in job settings. Recall the increase in Independent and Contextual knowing students experienced between their college and post-college experiences. Note also the themes reflected by Baxter Magolda's Independent knowers: Learn independently; learn by using other, especially human resources; learn by direct experience; learn by acting assertively; and learn by thinking for yourself.

The post-college themes of Contextual knowers included: learn by making subjective decisions; learn by acting in the role of authority; learn through collaboration with others; learn by stretching your abilities ("can do" attitude); and learn by creating meaning in your work. Many correlates of these themes are common classroom practices such as individual and group projects, internships, and independent study. Similarly, co-curricular activities involving leadership, service, team work, and other forms of personal and group development are rich opportunities for developing the higher levels of knowing.

Baxter Magolda (1992) and King and Kitchener (1994) discuss the implications of their findings for student service personnel. What would be the effects on the development of Independent and Contextual knowing if more aspects of the workplace and post-baccalaureate education were incorporated into classroom and co-curricular activities? Is there a role for adult learners in this process?

Finally, what place may theories of college student development occupy in the classroom? Every student who has completed a course in introductory psychology has been introduced to Piaget and Erikson. But how many students know how their own cognitive and social development proceeds during college? When this writer summarises Perry's basic stages to freshmen enrolled in a study skills course (Hettich, 1992), most students must work hard to understand the stages. When he discusses the work of Perry, Belenky and her associates, and Baxter Magolda to student's in advanced courses (e.g., Learning and Cognition, Organizational Behaviour, Senior Seminar) students grasp essentials
of the theories, participate in class discussion, and write about the theories in their journals. Students at all levels are nearly unanimous in asserting that exposure to the epistemological theories helps them understand their own personal growth. Many advanced students, younger and older alike, have expressed regret that they were not exposed to such theories earlier in college. Perhaps these students are wiser than we know. They seem aware, like Carl Rogers, that the process of seeking knowledge, not necessarily knowledge itself, is the basis for a secure education.

This writer expresses his gratitude to Peter Sutherland, Marcia Baxter Magolda, Jerry Cleland, and Dee Konrad for the support, comments, and suggestions they provided, and to Barat College Library staff, Bill Moore, and Madeleine Van Hecke for their assistance in obtaining materials.

References


The Stichting Vrouwen en Hoger Technisch Onderwijs (VHTO) is a non-profit organisation. VHTO stands for Foundation Women and Higher Technical Education. The VHTO is financially supported by all the Institutes of Higher Technical Education (Hogescholen) in the Netherlands. The VHTO also receives a grant from the Ministry of Education, Culture and Science.

The VHTO supports female engineers and female students in Higher Technical Education (Hogescholen) and tries to improve their position and promote their contribution. The VHTO has the following activities (among others):

- supports a network of female engineers by organising meetings and trainings (150 members);
- publishes the VHTO-Newsletter for female engineers and female students of Hogescholen (twice a year);
- publishes Topics, our emancipation-magazine for teachers and staff members in Technical Hogescholen (twice a year);
- publishes 'Brochures Beroepsbeelden' (images of women in technical professions) for schoolgirls to give them more appropriate information and role-models;
- supports a platform of emancipation co-ordinators of Technical Hogescholen supplying them with relevant information, organising trainings etc.;
- organises meetings, conferences and workshops for teachers, managers and staff members of Technical Hogescholen about various of subjects (Image of Technology, Women's studies, Equal Opportunity Policy, Curriculum Innovation, Learning styles and Didactics etc.);
- advises the government (education policy, labour market policy);
- advises the management of Technical Hogescholen;
- does research on the results/effects of equal opportunity measures and policy.

Internationally, the VHTO works on this as a member of WITEC. WITEC stands for Women in Technology in European Countries. WITEC is a European network of universities, schools, enterprises and individuals working for the motivation, development and support of women in science, technology and enterprises. The VHTO co-ordinates the activities of WITEC in the Netherlands.

**WOMEN COMPARED PROJECT**

The VHTO and WITEC-Netherlands received STIR funding for a project called 'Women compared'. STIR is a special development programme in the Netherlands for internationalisation in higher (technical) education.

The project is carried out in two phases:

I In the first phase, data are collected on the participation of women in Higher Technical Education in ten European countries, including the Netherlands.

These figures are placed against the background of:

- the job market situation
- the emancipation policy

In this way, insight was gained in the differences in participation of girls in Higher Technical Education in these ten European countries.

II In the second phase the so-called success factors were investigated. We looked for examples of good practice of curriculum innovation that aim at making technical education more attractive to larger groups of students: girls and other types of boys.

Success factors can be found in areas such as: school policy, public relations, educational style, learning methods, teaching methods, content of courses, guidance, culture and atmosphere in school, professional image.

The project was finished in April by publishing the results in our Emancipation Magazine for Higher Technical Education Topics and by organising a working conference about changing
the curriculum to make technical education more attractive for larger groups of young people.

PROBLEMS WITH COLLECTING AND COMPARING THE FIGURES

We started the project with the idea to collect relevant figures in each country and compare them. We started this task too optimistically. The need in the Netherlands and also in other countries for quantitative comparison material has always been great. But material is:
- difficult to get access to;
- often out of date;
- certainly not comparable.

Our conclusion is that total figures per country are interesting; it is interesting to know if, compared to other countries, more or less female students are taking part in higher technical education. But to find success factors it is better to look at participation figures per school.

The present situation in the Netherlands: women in higher technical education

Dutch girls and boys have always been rather one-sided and traditional in their education and career choices. Many girls rule out a technical course or a technical profession at an early stage by not choosing mathematics and sciences as final examination subjects. From the girls who do take these subjects, a large number of them do not choose a technical follow-up study.

This is probably partly due to the fact that they are not familiar with the range of technical courses and professional opportunities. However, it is becoming increasingly clear that it is not only a question of unfamiliarity but also that many girls are not attracted to technical follow-up courses and technical professions. This applies in an increasing extent to boys as well.

It remains essential that good advice on technical courses is given and a clear professional profile is offered. In addition, it is also important to renew this type of education (in form and content) in such a way that it will appeal more to girls and boys.

This insight is not only winning ground in the Netherlands, in other European countries action is also being taken to change the curriculum from this point of view.

PARTICIPATION IN THE NETHERLANDS

Girls are not equally represented in higher technical education in the Netherlands. In the academic year 1993/1994, only 15% of students in technical education were women. There is an upward trend though; in 1977/1978 the percentage of women was only 1.8% and in 1984/1985 this percentage was 4.8%.

In other European countries too, there are less girls participating in technical courses than boys. Surprisingly, the Netherlands are doing very badly in this respect; they are at the bottom of the list of the ten countries involved in this research.

- The unpopularity of the Technical Hogescholen and the science subjects with girls is linked to several factors:
  - the negative image of the Technical Hogescholen;
  - the negative image of technology in the Netherlands;
  - the job market participation of women;
  - working conditions (like possibilities for part-time work and child care).

MEASURES

This knowledge does not however release Technical Hogescholen from the necessity of taking a look at their own 'image'. Over the last few years, a great deal of work has already been done to make courses more accessible to girls. A great deal of attention has been paid to provide specific advice for girls:

- special information leaflets have been produced;
- many schools organise hands-on days for girls in secondary education;
- within the usual career guidance activities, special attention is paid to girls.

At the moment, attempts are being made to bring all these activities into a phased information path, so that girls in the second year of secondary school and onwards are introduced step by step to technical courses and professions.

Also in the area of support for female students, many initiatives have been taken. In addition to extra attention for female students in all the usual supportive activities in higher education:

- gatherings are regularly held for girls (often around the placement phase);
they are coached by female engineers;
- they receive a Newsletter and (in the final year) a job application manual.

CURRICULUM INNOVATION

Until now, little attention has been paid to the curriculum in Higher Technical Education in the Netherlands. However, as already mentioned, it is finally becoming clear that improvements in the access to Higher Technical Education are not achieved solely by giving better information and advice: a critical review of the curriculum is also necessary. It is not only a question of doing something about the unfamiliarity of Technical Hogescholen, but also about the image and content of the courses. Emancipatory innovation of the curriculum of technical courses requires, among other things (see the list of success factors on page 62-63 in Topics):
- broad-oriented subject matter (not one-sided technical material);
- integration of courses (different subjects refer to each other);
- subject matter rich in context (related to other professions);
- consideration for the practical value of technology (context);
- diversity in styles of teaching and learning (project-based learning, problem-based learning);
- academic staff paying attention to the differences in students (such as learning styles);
- improvements in the culture/atmosphere at school and in teaching groups (building, study environments, interaction between lecturer-student and student-student).

All these elements have been proved to contribute to the percentage of girls participating in Higher Technical Education.

A PIONEER PROJECT IN SWEDEN: D++

Although innovation in curricula from an emancipation perspective is still in its early stages in both the Netherlands and other countries, some institutes have already progressed further and can be regarded as 'pioneers'. In the project 'Women Compared' a number of these pioneers were found in England, Germany and Sweden. Their experience may offer Dutch Hogescholen new leads on how to undertake successfully the necessary innovation of curricula of technical courses.

One of the pioneers we found is Chalmers University of Technology in Göteborg in Sweden. The name of their project is D++: two pluses, more attractive to women students, better education for all! Project D++ has been initiated, with 4 other projects, in the light of the low number of female students at Swedish universities of technology and has been funded by the Swedish government. The project is implemented in relation to the programme of Computer Science and Engineering. The aim of the project is to reform the 4 year education programme for a Masters degree in computer science and engineering so that it will be more attractive to women. Radical changes in the programme have been made on the basis of women's views regarding studies in technology.

Women's statements on the learning environment include:
- a desire to see the links between different kinds of knowledge,
- to understand the use of knowledge both in the study environment and in professional life,
- to see the relationship between theoretical knowledge and 'reality',
- to have better contact and communication with teachers and fellow students,
- to feel that the competence they gain from their studies will stay with them when they have graduated

New forms of working, teaching (teachers more like tutors or advisers) and exams with elements of problem based learning (PBL), and project organised courses have been introduced. A new study environment has been developed, for increased interaction between students and teachers.

All this elements together will provide:
- greater creativity and involvement
- personal development
- personal responsibility

Project groups and group work require special facilities. A special building has been dedicated for the D-programme, the iDea building. A starting point from these changes is an understanding of the great importance that computer technology has in all aspects of society and human life. An engineer needs to have an overall view and an awareness of both possibilities
and risks of technology. It is well known that women emphasise this more than men do.

A recruitment campaign resulted in a 170% increase in the number of female students: from 6% in 1994 to 16% in 1995.

In this recruitment campaign no special attention has been paid to women, stating that women would then run the risk of being regarded as a favoured minority group, and this would rather increase gender discrimination than reduce it.

GENERAL CONCLUSIONS ABOUT NEW FORMS OF WORKING AND TEACHING AT CHALMERS UNIVERSITY
- major changes have been implemented and have been very well received by the staff
- staff has better contact with students
- students (new/old) have great satisfaction with the new building - students much closer
- recruitment group is very active to spread information about D-programme
- students present the D-programme and experience at their former upper secondary school
- special weekend courses for female groups in secondary school are organised

CONCLUSIONS AND RECOMMENDATIONS

Attractive education for boys and girls
Even though the projects start from an emancipation point of view, it should be noted that the initiators expect also more boys to be attracted to the new, adapted courses. In the Swedish D++ programme for instance, this is indicated by the second 'plus'. Various authors in Topics therefore think that their projects contribute to quality improvement in higher technical education.

Here and there it seems as if technical courses are 'rooted' in a traditional way of working. The reason for starting a project at the Fachhochschule Bielefeld ('Modell-Versuch') was what is known there as 'an extreme resistance' of certain courses to change. These courses are described as boring, non-integrated, unrealistic, purely oriented to technology and not geared to the fast changes taking place in technology and society in general. In Bielefeld, new attempts are being made to break through this because innovation in content and working styles is expected to change the image for the better, and so attract a wider target group, including girls.

Radical or gradual innovation
A point in which the 'pioneer' projects differ is that in some cases a totally new course or study is set up (radical innovation) and in others, changes are made to an existing course or study area (gradual innovation). In most of the projects parts of a curriculum were replaced by others or new parts were added. If you choose for radical innovation, the innovation is going fast, but there is also more chance of resistance from the people involved, such as the academic staff. If a slower approach is chosen, then the chance of acceptance is greater. But innovation process progresses more slowly and there is the danger of stagnation. On the other hand, it is a known fact that innovation is always a slow process and we have to have patience.

Content of curriculum
What should the new curricula look like? Everyone tends to agree on this point. One-sided, mainly technical education should be avoided. In old lesson programmes, this aspect can make room for new elements. Many people think that technical education should be more 'social'. There should be more non-technical subjects included which are related to technology. In this way, attention can be paid to historical and social aspects of technology, social communication skills (the business world is also asking for this!), language skills (more international-European and mondial co-operation), ethics, environmental issues, etc. Efforts should be made to integrate subjects. Subject contents should be placed in a social context. At the same time, links should be made with professional practice. Optional subjects in the curriculum make it possible for the students to add aspects to their basic package that they feel are important or that they just enjoy.

Styles of teaching and learning
Girls will do better in technical courses if there is many-sidedness with respect to teaching and learning. In fact, many-sidedness benefits all students. Technical courses, however, often fail to meet the needs of anyone other than their traditional target group, e.g. women and 'non-standard men'.
Workshops instead of normal lectures or classical education are, according to some people, a step in the right direction. A step further is project-based learning, or problem-based learning, which is now introduced in more and more technical courses. These styles of teaching enable subject contents to be integrated, it trains students in social communication skills and let the students experience something of what professional practice is about.

Women-only courses
Something completely different are courses and programmes which are only for girls and women. This phenomenon is not seen by everyone as a positive development. According to opposers, the differences between boys and girls are emphasised and underlined. Supporters think that such courses increase the confidence of girls and women, who generally speaking have less technical skills than boys at the start of the course. This is not in itself a problem, because the skills needed to practice the profession are gained during the course. But girls can feel unsure of themselves because of what they see as a disadvantage, so that they are hesitant when using equipment in the presence of boys.

It would be more in balance to look at the different experiences of girls and boys as they start the course and fill in any gaps that may be found on both sides. Some people emphasise that words such as 'differences', 'disadvantages' and 'inferiority' should not be used, but rather that a course should be considered as a whole with the aim of making it more attractive to everyone.

IN CONCLUSION
This part of the project 'Women Compared' has now been completed. In the autumn of 1996, follow up research will be carried out. The objective of the new project is to gain a clearer picture of the situation in the countries around the Mediterranean countries and in Eastern Europe. The idea still circulates that women in these countries are more equally represented in participation in technical education and technical professions. Whether and why this is the case, or not, will be investigated. Furthermore, a look will be taken at the situation in the US.

The results are presented in our Emancipation Magazine Topics. If you are interested in these Topics please contact Antoinette Taillie, VHTO, tel: +31 20 5469155.
INTRODUCTION
The British Higher Education system has seen a number of radical changes over the last ten years. Many of these changes have been structured and have led to a general re-shaping of the sector. One common ingredient of all the changes has been the development of "Access Awareness". The vast majority of universities in the UK have now publicly committed themselves to increasing or enhancing Access. There is, however, no specific definition of Access or in many cases an understanding of the difference between "increasing" and "widening" Access. The former is often referred to as increasing the participation rate whilst the latter is concerned with the diversity of the student population.

Changing the nature of the student population is a major challenge for any university given that they already have a target population and have established systems to recruit and support those students.

Our higher education system is not designed with the needs, aspirations and expectations of adult clients in mind. At present, most mature students who enter higher education have to fit themselves into a system designed for relatively compliant and predictable 18 year olds. More adult students can only be satisfactorily accommodated if we are prepared to change the existing patterns of provision and practice better to suit their different and varied needs". Tight, 1993, (1).

This paper sketches the development of Access to Higher Education (HE) in the UK, identifies the major changes that have taken place within the sector and examines how an institution has begun the process of change identified as necessary by Tight.

ACCESS
Access to HE in the UK has been the focus of many initiatives and developments ranging from specific Access Courses to partnership projects. The majority of these initiatives have concentrated on, and indeed been evaluated on, the basis of admission to courses. They have not addressed the issue about the appropriateness of the HE curriculum. Many of these Access initiatives have been borrowed from or have influenced development in other countries. The UK does not have the general policy framework that exists in Australia, for example, through "Fair Chance for All", 1990,(2), where there appears to be a requirement on universities to develop equity plans and generally agreed definitions for widening participation.

In the UK the time has now come whereby the question 'Access to what?' has to be asked. Adult students (over 21) are now in the majority in HE in the UK yet the system has not substantially moved on from Tight's prognosis - it is designed for the 18 year old whose family expected them to go to university.

The major changes that have taken place have been:
- the removal of the binary divide that separated polytechnics and universities so that all are now in the same sector
- a major increase in the number of students
- a continued squeeze on resources
- the introduction of the modular curriculum.

It is the general increase in student numbers and modularity that have had the greatest impact on the student experience. No longer is the UK HE system concerned with providing opportunities to a few it is now concerned with a mass system. Class sizes have doubled and staff have less time to support the individual learner due to increasing pressures to research, run short courses and to earn income.

The student number increase has occurred at the same time as modularity has developed. The traditional student support model has been for a student to be part of a course where academic staff from the course team provided general support along with that developed through peer
groups. Students felt a sense of belonging to a particular group within the university. Modularity effectively means that the course team model is dismantled as more and more students share modules, and that the subject related peer groups do not form as students are never in the same class long enough to form the necessary relationship, or they do not have the same issues in common.

Essentially HE is in danger of becoming an anonymous experience for the individual learner. Tight's prognosis has not been heeded. Universities tended in the early 1990's to increase enrolment and change the curriculum without addressing the need to radically change systems. This need to change is now being recognised. "As participation expands and lifelong learning becomes the norm, institutions are offering a more complex range of opportunities to a larger student body, while that student body itself is becoming more diverse, in age, experience, motivation and learning need. To benefit fully from these larger and more complex institutions learners need more developed skills of self-management, while institutions, faced with growing resource constraints, have to consider whether learners can be enabled to do more themselves...", DEE, 1996, (3).

The major difference between this statement and Tight is that we are now talking about the need to change in the context of all learners not just adults.

AN INSTITUTIONAL DEVELOPMENT

One institution that has sought to change is Sheffield Hallam University. It has recognised the issues but only really started to effect the change that is needed. In a report to the Academic Board in 1992, 'Advice and Guidance Within a Flexible Institution', it committed itself to developing an educational guidance provision that would seek to empower the student so that they could make the maximum use of their opportunities and seek the appropriate support. The concept was to enable "informed choice for the independent learner". This issue was more readily addressed in the Further Education sector after an Audit Commission Report in 1993, (4) led to the Further Education Funding Council developing a funding methodology that encouraged colleges to provide guidance.

Before examining this institutional development it is worth addressing the meaning of guidance.

Guidance is not a process whereby people are told what to do. It is a process which is based on exploring the options available and their consequences so that the individual is able to make an informed choice. It is concerned with vesting a degree of autonomy in the individual so that they can make a decision. Many involved in the guidance movement in education in the UK accept that there are seven key components to guidance:

- Informing
- Advising
- Counselling
- Assessing
- Enabling
- Advocating
- Feeding Back

As stated earlier Sheffield Hallam University established an Educational Guidance Service. This service was deliberately placed within the Access arm of the university in order to ensure that all the lessons learned from the difficulties facing adults entering the institution could be translated into general university practice. This model and the issues raised within it have been developed further by the Higher Education Quality Council (5). The Guidance Service was established as the Division of Access and Guidance and became fully operational in 1994/95 with the following role:

- to provide and facilitate a high quality advice, guidance and support service, both before, on entry and whilst on course
- to ensure that the needs of the students are the major criteria for service delivery
- to encourage the widening of participation
- to promote equality of opportunity throughout the work of the Division as a guiding principle in student recruitment, service delivery and staff development.

The existing Careers Service had responsibility for exit guidance and it was decided to leave this function separate whilst the new service developed. By 1996 it became apparent that the services needed to be brought together as Access and Guidance had rapidly become firmly established. Much of this success could be put down to three factors:
an acceptance of the need to enhance the student experience
- a cry for help from teaching staff inundated with student demand and increasing work load
- the philosophy of working with staff across the university and not trying to impose new systems - often referred to as "taking people with you".

Establishing and resourcing the Division of Access and Guidance was an important stage in demonstrating the University's commitment to student support.

The Guidance Service is fully operational in terms of offering an appointment and a drop-in service and has now been located in purpose built accommodation at the Main Entrance to the University. The Service has both a functional and strategic purpose and operates both on and off-campus. As such, the Service operates within a multi-dimensional framework responding to the wide-ranging demands of current and prospective students as well as monitoring service usage in order to contribute to key areas of development and planning such as recruitment and student retention.

SERVICE TO UNIVERSITY STUDENTS
The Guidance Service is available if a student:
- seeks information or answers to immediate queries on any aspect of their student experience
- needs in-depth advice on academic concerns on the educational options available
- is considering deferment or withdrawal from study
- needs advice about progression following assessment/failure
- seeks direction to other sorts of advice and guidance
- seeking to establish the most beneficial course of action

In addition to individual appointments and drop-in provision it also offers group sessions to all HND students and others seeking advice on further study opportunities as well as providing a range of information materials on all aspects of the student experience and as the Guidance Service is impartial and confidential it enables students to identify a broad range of issues which concern them.

As well as responding to student self-identified problems and concerns the Guidance Service seeks to be pro-active, enabling students to ask pertinent questions and to be aware of their responsibilities and entitlements, by the provision and dissemination of relevant information. An essential feature of this process, and central to effective guidance, is the development of a guidance network and clearly formulated referral procedures. The Guidance Service, therefore, works closely with Schools and other central departments such as the Registry.

SERVICE TO POTENTIAL STUDENTS
The Service is also available to those seeking pre-entry guidance and offers information and advice on:
- entry to Sheffield Hallam University programmes of study at all levels, full-time and part-time, day or evening
- preliminary study as preparation for entry to Higher Education such as Access or Foundation Courses
- the Credit Accumulation and Transfer Scheme (CATS)
- the Accreditation of Prior Learning - building on prior certificated learning or learning gained from prior experience.

As part of its development the Guidance Service is seeking to extend its range of activities in order to offer the local community a variety of ways in which potential students can learn about higher education opportunities suited to their particular needs including guidance sessions delivered in the community - in the workplace, community centre, careers centre etc. Publicity materials are being prepared and strategies for delivery developed to co-ordinate with existing activities such as taster courses to facilitate entry to HE or to enable people to build on their professional experience and work towards a formal qualification.

STUDENT GUIDANCE AND THE STUDENT LIFE CYCLE
Whilst many of the Division's activities clearly match the specific stages of student support and guidance there is no simple one-to-one fit and given the focus on Access and on-course support it should be seen in terms of specific areas of activity as they relate to the overall aims of enhancing the student experience.
PRE-ENTRY

Pre-entry covers a wide range of activities and processes and it is important to note that at this stage of the student’s career, as with all other stages, it is essential to be pro-active and not simply reactive. In the context of access and outreach development pre-entry guidance has focused on developing closer relationships with guidance colleagues across the region and on developing guidance opportunities for under-represented groups.

It is equally important, if not more so, to create the conditions in the community and local colleges and schools, whereby potential students are made aware of opportunities they may have not previously considered as part of their ‘world view’. Similarly, guidance is not just about giving information but actively listening to members of the community in order to re-evaluate what HE offers and to what extent it meets the needs of all sections of the community. Access is not just about making our provision more accessible but also about HE accessing the needs of the community at large and specifically groups traditionally under-represented.

The developing focus has been on supporting the process of choice, application and awareness for Access students and the transition into the University and this has involved a number of activities.

Alongside the specific outreach work the Division has sought to build on the traditional Education Liaison work by extending the local contacts with schools and colleges to include working with younger children of varying ages in order to develop awareness of higher education and working with Local Authority Careers Services at Careers evenings. This is part of a wider strategy to develop and improve awareness of higher education opportunities and contribute to the overall aim of informed choice within the decision making process in a region where the staying on route at the age of 16 is lower than the national average.

Whilst the decision to admit an applicant to a particular programme of study is an academic decision specific to that course it is important that all Admission Tutors operate within a framework consistent with meeting learner entitlements. An important part of the admission process with regard to meeting learner entitlements is “providing clear criteria and procedures to all applicants” and “appropriately trained admissions staff”. To this end regular Admissions Tutors Forums are organised to which all relevant academic and administrative staff are invited to discuss issues and agree procedures. A regular review of admission procedures and the production of guidelines for admission staff and others are seen as a vital part of the process of ensuring that applicants and potential students are treated equitably and are adequately guided through the admission process.

As well as providing a University wide opportunity to review the admissions process the Admissions Tutors Forums have enabled detailed consideration of a variety of specific admissions issues, viz.
- the impact of Advanced GNVQ on admissions policies and practice at Sheffield Hallam
- admissions procedures, arrangements and support for disabled students
- sharing good practice on Open Days and interview techniques
- mechanisms by which international students are recruited to the University
- recruitment from Access Courses and other Mature Applications.

The informed student is one step on the road to becoming an empowered student, particularly in a setting where knowledge is power. Providing students with information about their learning environment creates legitimate expectations and reasonable demands. The idea of a Student Charter was an important catalyst for change in raising the issue of student satisfaction. Although Sheffield Hallam produced its own Student Charter it attempted to go beyond this and, in accord with a major principle of the HEQC Guidelines, produce a major document indicating the rights and entitlements of students and matching these against their responsibilities, the Partnership in Learning. “This Partnership in Learning is not based on bland charter-type statements but has tried to move into significantly more detail. It does not prescribe to academic staff what they must deliver but, more importantly, provides the framework in which they can operate”. (6)
ACCESS AND INDUCTION

Access is part of a continuing process and therefore the transition arrangements for the student progressing are of key importance.

Part of the role of the Division is therefore to assist in the development of a comprehensive and student-oriented framework for the University and to issue guidance on the induction process.

With the intention of building on and developing the normal course-specific and relatively time limited induction process the aim was to introduce an 'extended induction' process, which involved bringing all new students, at whatever level of entry, into the University two days earlier than the normal 'freshers' week' in order to induct them into University life in general, explain the purpose of induction, provide information about issues such as financial support and child care and organise a variety of social events in conjunction with the Students' Union to ease the transition into HE. The innovative element of the new induction framework was that it was developed into a term long programme beginning with specific course focused information and guidance sessions followed by a range of activities related to process of teaching, learning and support issues. In brief, the aim was to enhance the induction experience and the objectives of this 'extended induction' were:

- to establish the student as an independent learner who is in control of their learning
- to make clear the rights and responsibilities of the learner
- to ensure that students are aware of, and able to use, the mechanisms for feedback and complaints and to facilitate their participation in the operation and monitoring of the programme
- to ensure that students are aware of the structure, means of management of the programme and timetable arrangements and learning methods
- to make students aware of learning resources, such as the library, support, guidance and central services available
- to provide information and advice on assessment methods and procedures, work experience and feedback on assessment
- to develop students' personal effectiveness and learning skills

For example an additional three day induction support programme for Disabled students was organised to ensure that these students were given the active support and information they needed to begin their programmes.

What is necessary now is to firmly embed the concept of an 'extended induction' and the philosophy behind it, within mainstream academic teaching and learning. This means re-thinking the nature of the student's encounter with higher education, particularly in their first semester, away from the relatively narrow requirements of a particular course and more to the needs of the student to develop the personal and core skills which underpin the notion of the 'independent learner'. The concept of an 'extended induction' will facilitate such a move, including a move away from summative assessment and towards formative assessment. There is likely to be little disagreement about the purpose of the exercise but much work will need to be done to persuade some of our teaching colleagues of the process.

A GUIDANCE CULTURE?

We have always argued that guidance should be integral to the student experience and not just 'bolt-on' and that it should be pro-active and not simply reactive. In attempting to develop a 'culture of guidance' and thereby enhancing the student experience the Division of Access and Guidance drew explicitly on the HEQC Guidelines both with respect to its development activities within the University and to its Outreach work as well. Changing the culture of any large institution is not easy and is bound to be a process of uneven development. Many staff feel threatened by the notion of student empowerment, flexibility and student choice. Whether these fears are grounded in reality is irrelevant for they are real in their consequences. The need to tackle that very old question 'who will own the students?' is a real one. As Layer (6) says, "The question is usually raised by resource considerations, but we are rapidly moving to an age when it is recognised that the students are adults - they 'own' themselves, and it is our job to help them maximise their investment". 

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Clearly, a major area of contention and debate in any attempt to establish a guidance culture is the issue of central versus local, or course-based, delivery. There is no simple answer to this issue but what is essential is the need for flexibility as well as co-ordination and co-operation between the centre and points of delivery throughout the University. A 'guidance culture' can't be imposed from above but must, at least in part, emerge from practice. The long term aim must be to create a University culture in which guidance work is valued and all staff provide guidance as appropriate. It is for this reason that Access and Guidance have attempted to implement the HEQC Guidelines by operating at all 'levels' of University life and to create structures and frameworks which facilitate and encourage the guidance and support process whether it is delivered by office/administrative staff, academic staff or fellow students.

ON-COURSE SUPPORT
The University was aware of the need to clarify and make explicit the nature and variety of the forms of support available to students. Rather than imposing a support system on Schools and departments a consultation paper, The Role of the Academic Adviser, was widely circulated to provide a framework to be used by Schools to deliver student support. The paper sought to make clear the distinction between three main areas of support and guidance and detailed the duties associated with each role:
- the Academic Adviser was seen as a student management role responsible for 'cohort care', the monitoring of student programmes and relevant advisory work relating to regulations, programme negotiation and students rights and responsibilities
- pastoral support was concerned with the more personal, individual help than with academic studies. This was more closely related to the traditional personal tutor role, acting as a first contact point for any kind of personal problem or advising on issues such as equal opportunities or disability
- personal development - this role involves developing the students' ability to be self-monitoring and to be aware of their own progress. In particular, to encourage them to accept and exploit their role as independent learners especially in the area of core skill development.

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STUDENT CONTACT SCHEME
Given that for many students starting at University can be a fairly daunting experience the Student Contact Scheme was built on the simple premise that for new students who are finding their feet, one of the best sources of information and help is other students, especially those who are taking the same programme at a different level and so know their way around. The increasing size of classes; more diverse (and less stable) student cohorts increases the need for a 'friendly face'.

The Scheme was set up to provide such a contact. It aims to help build links between students who are studying at Levels One and Two of the same programme. Through the meetings with Level Two contacts, it is intended that students will be able to share their experiences of life at the University and act as a source of information and support for each other. But also as the Information Pack for mentors says
"Thank you for agreeing to take part in Sheffield Hallam's Student Contact Scheme. We hope you enjoy the experience."

CONCLUSION
We have attempted to describe the work we have been doing in Access and Guidance. There is little doubt that student support and guidance are firmly on the agenda at Sheffield
Hallam and are increasingly being built into the fabric of the University. However, there is much work still to be done.

We need to improve our pre-entry information which is still driven by a marketing strategy rather than a guidance strategy. The failure to distinguish between the marketing and guidance function of university prospectuses is discussed in 'Choosing to Change' (7) which recommends "that institutions consider separating conceptually and then practically, their recruitment from their guidance strategies. In other words, they should decide, in the first instance, whether their prospectus is an instrument for marketing or for student assistance in making the right choice of programme." Monitoring users of our Guidance service, particularly those who were thinking of withdrawing or those who failed assessments, showed clearly that many students felt that they hadn't received sufficiently detailed pre-entry information.

We need to develop clearer and more effective strategies for supporting part-time students. In fact our current research into the experience of part-time students is beginning to indicate that although many part-time students were aware of the existence of support services they were under the impression that support services were only available to full-time students. This is perhaps not surprising given that part-time students are less likely to define themselves as 'students' and therefore less likely to see 'non-teaching' activities as part of their experience. It is more difficult to 'enhance' the student experience if there are no shared meanings as to the nature of that experience.

Similar arguments may appertain to post-graduate students who are likely to see themselves as 'beyond' support and guidance and are even more likely to define themselves in fairly narrow academic terms. We need, therefore, to address the support and information needs of post-graduate students and develop University frameworks in the way we are beginning to do for disabled students and others.

We need to improve liaison between the Centre and University Schools in order to demonstrate that the empowered student is more likely to be an independent, autonomous learner and therefore less likely to make demands on teaching staff. Few students arrive at University or College as independent or autonomous learners and we therefore have to help them become so by investing in the initial student experience. Whilst it should never be our primary aim, enhancing the student experience could well be a resource saving!

The starting point was a particular group of students, the end point is all students need guidance and that means Access does not become a deficit model.

References

(1) Tight in Chapter 2 of "Disaffection and Diversity, Overcoming Barriers for Adult Learning", (Ed Calder), Falmer Press, 1993.
(2) "Fair Chance for All", Department of Education, Employment and Training, Australia, 1990.
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Promoting Wider Access through Special Initiatives - a Funding Council Perspective

Gerald Madill, The Scottish Higher Education Funding Council

CONTEXT

The Council's remit

The Scottish Higher Education Funding Council (SHEFC) operates within a policy context defined largely by the Further and Higher Education (Scotland) Act 1992 and by guidance from the Secretary of State for Scotland. However, the Council also operates within a wider policy environment and requires to be sensitive to the current concerns of higher education institutions (HEIs) as well as to the historical context.

Further and Higher Education (Scotland) Act 1992

The Further and Higher Education (Scotland) Act of 1992 involved a major reorganisation of post-16 Education. For the purposes of this paper, its primary provisions are outlined below:

The Creation of a Scottish Higher Education Sector

The creation of a unified higher education sector for Scotland, accountable to the Scottish Office, was a change of major significance. While SHEFC is entirely autonomous from the other higher education funding bodies, it works closely with them in a number of areas. Examples include the Joint Information Systems Committee, the Joint Medical Advisory Committee and the UK-wide Research Assessment Exercise. The Council also participates in a number of joint initiatives with the other funding bodies, for example, in encouraging the use of information technology in teaching and learning through the Teaching and Learning Technology Programme and the Computers in Teaching Initiative. One of the advantages of having a unified, Scottish sector is that it allows for frequent and comprehensive consultation with institutions to inform the Council's work. It also allows the Council to give full weight to aspects of the higher education system in Scotland which differ from the rest of the UK, such as the structure and duration of degree courses.

The ending of the 'binary divide'

Prior to the Act, HEIs were either self-standing, self-validating Universities, funded by the Universities' Funding Council (a United-Kingdom body), or Central Institutions (CIs)/Colleges of Education (teacher training), funded by the Scottish Office Education Department. The CIs included, 'multitechnic' colleges and monotechnic institutions, such as art colleges. The SOED sector institutions were validated by the Council for National Academic Awards (CNAA), which was abolished under the Act.

As a result of the Act, a number of 'multitechnic' institutions have been granted university status. Others now have the power to award degrees, but do not have university status, while other institutions are required to have their degrees validated externally, by a partner institution. All HEIs are now eligible to compete for funds for research.

Teaching Quality Assessment

While institutions in the former public sector were closely regulated in a variety of ways, the older Universities operated with a considerable degree of autonomy. One direct result of the 1992 Act is that the old universities are for the first time accountable to an external body (SHEFC) for the quality of their teaching provision.

GUIDANCE FROM SECRETARY OF STATE

SHEFC is a non-departmental governmental body. It operates within the framework of the 1992 Act and within other parameters set out in guidance from the Secretary of State for Scotland. The Council's 'sponsoring' Department is the Scottish Office Education and Industry Department.

The Council's initial 'Letter of Guidance' from the Secretary of State made specific reference to Wider Access. Institutions are expected to build on past successes in increasing participation by part-time and mature students and by those with non-traditional entry qualifications, by providing more flexible patterns of teaching and learning. The Council is also required to
consider how access to higher education for students with particular needs can be facilitated' and to 'consider the needs of prospective students from ethnic minorities'.

THE COUNCIL'S MISSION
'to promote the quality and encourage the expansion of teaching and research in Scottish higher education institutions through the efficient and effective use of public funds allocated by the Secretary of State for Scotland to support these activities'.
The Council is mindful of the need to maintain the diversity and responsiveness of provision and of the need to pursue its mission with due regard to the autonomy of higher education institutions.

Funding for Special Initiatives
The Council's general approach to funding is to allocate the maximum proportion of funds for teaching directly to institutions, rather than to retain 'top-sliced' funds to be allocated to specific areas of expenditure, e.g. special initiatives. The Council will only usually top-slice funds in the following circumstances:

As a response to Government policy e.g. the Women Into Science Engineering and Technology (WISSET) initiative. The Government's wish to encourage wider access to higher education also influenced directly the framing of the Flexibility in Teaching and Learning Initiative (FITLS);

At the request of the sector e.g. the Use of Metropolitan Area Networks Initiative (UMI), or the Learning Technology Dissemination Initiative (LTDI).

A good idea which would not happen otherwise and which would provide 'added value' for the sector. An example of this would be the Teaching and Learning Technology Programme (TLTP), which is jointly funded with the other UK funding bodies.

Wider Access Initiatives
Wider access initiatives to date have predominantly operated a bidding process. Where the Council is seeking to develop existing good practice and expertise through pilot projects, it seeks high quality proposals with a high level of transferability. At a time of financial stringency, a central aim is to concentrate funds for development in appropriate areas, and ensure that the results of projects are disseminated widely, thereby achieving maximum value for money. Initiatives are devised in such a way as to recognise the expertise and interests of the range of institutions in the sector. This is reflected in the consistently high number of bids for funding received under the initiatives.

Where the Council has identified a need across the sector, for example the need for more advisors in institutions to co-ordinate support for students with disabilities, the Council will allocate funds to each institution, and specify the use to which these funds should be put, including any conditions attached to the funding.

In devising and administering teaching and learning initiatives, the Council is usually advised by the Chief Executive's Teaching and Learning Advisory Group (TLAG) or its sub-groups. Membership of the TLAG is drawn from practitioners in the sector, from a variety of institutional backgrounds, subject areas and areas of expertise in teaching and learning. It also includes a student and a member from an industrial or commercial background. The TLAG and its sub-groups also consider and advise on proposals for funding received under teaching and learning initiatives.

Flexibility in provision
Experience of flexibility initiatives to date shows that more flexible approaches to teaching and learning assist institutions to meet needs of students – both existing and potential students. More flexible provision is opening up HE to those unable to benefit from traditional, full-time, often 'residential' provision, by providing different modes of attendance, eg part-time, distance/open, work-based, learning.

Flexibility can also encourage greater diversity within the sector, by allowing institutions to build on their existing strengths, to gain recognition for expertise and for developmental work in their approach to teaching and learning. Evidence shows that success in achieving external funding for flexibility projects can have a stimulating effect within the institution and raises the profile of such work. In a number of cases, the achievement of Council funding has led to the setting up of new units and/or individual posts within institutions. It is important to stress that, while the Council views dissemi-
nation as a crucial aspect of its flexibility initiatives, the importance of dissemination is to make the results of projects and any materials produced available to wider sector. It is then for other institutions to make use of materials or adapt the process etc., as they see fit, or, indeed, not at all.

Another benefit of greater flexibility is that it can help institutions maintain or improve the quality of teaching and learning at a time of financial stringency. Approaches such as such as peer-assisted learning, student-centred learning, and self-paced learning, once in place, can be less staff-intensive and can result in a deeper and more satisfying educational experience.

The Quality Assessment process has been very informative and the findings of Quality Assessment have informed the consideration of teaching and learning initiatives. This was particularly the case with the third phase of FITLS, which was a direct result of a thorough analysis of all the QA documentation available to the Council at that time.

**INITIATIVES**

**FITLS 1**
The first phase of the Council’s Flexibility in Teaching and Learning Scheme was aimed at improving access through the development of more flexible patterns of provision. The initiative sought to support projects in areas such as: accelerated learning and summer teaching programmes; the extension of part-time provision; outreach provision and distance learning; and modularisation of courses. A total of eleven projects were funded, at a cost of £700,000.

**FITLS 2**
The second phase of FITLS was again aimed at improving access. Institutions were invited to submit proposals for projects which would encourage more students from ethnic minorities or from disadvantaged socio-economic groups to enter higher education. Projects were also invited to consider how to support such students appropriately and thereby improve their academic performance. One strand of the initiative sought proposals to introduce accelerated or decelerated course provision and another strand sought other initiatives to encourage wider access. Twelve projects were funded under this phase, amounting to £1 million.

**FITLS 3**
The third phase of FITLS was focused more on quality improvement than on wider access. Drawing on an analysis of all the available quality assessment documentation, which identified a number of broad areas for development, this initiative sought to fund projects developing these areas: transferable skills in the curriculum; student-centred approaches to learning; strategic approaches to liaison with industry; proposals to further extend access to higher education; and proposals to develop existing projects funded under previous Council flexibility schemes. Fourteen projects received funding from this phase, totalling £910,000.

**Disability Initiatives**
SHEFC has funded a number of initiatives which are specifically aimed at improving participation by and provision for students with disabilities. In developing these disability initiatives, SHEFC has consulted widely with HEIs and with experts in this area. As a result, good relationships have been developed with a wide range of organisations. A great deal of positive feedback has also been received from HEIs.

**DISABLED STUDENTS INITIATIVE (DSI)**
The Disabled Students Initiative ran in academic year 1993-94 at a cost of £125,000. The work of the project was overseen by a Steering Group comprising a number of disability experts and members of the Council’s Executive. Three Development Officers were appointed on a regional basis to produce a study of the provision for and participation of students with disabilities in Scottish higher education. The project findings were reported to the Council in an Interim and a Final Report. The project also produced Access to Success - a guide for students with disabilities wishing to study in higher education. This has been hugely successful with the initial print run of 7,500 exhausted within two months of publication. Access to Success is now available from the National Co-ordinator, who is based at the University of Dundee.

The DSI recommended that SHEFC should encourage institutions to develop good practice and policies regarding students with disabilities. It further recommended that the Council should support institutions which lacked equipment for students with disabilities. The Support for Students with Disabilities Initiatives (Equip-
ment and Staff) were set up in academic year 1994-95 in order to build upon these recommendations.

SUPPORT FOR STUDENTS WITH DISABILITIES (SSD)
The SSD-S comprises two strands: an allocation to each SHEFC-funded institution to fund a part-time adviser/co-ordinator for students with disabilities; and funds for a National Co-ordinator post, based at the University of Dundee, to co-ordinate networking activities and to offer guidance and advice to the institutional co-ordinators. SHEFC is kept informed of progress by receiving reports and through regular liaison meetings with the National Co-ordinator. Bids are now being received for SSD-S year 3 (£200,000).
The SSD-E provided £2 million for the purchase of specialist equipment (and some minor works) to improve provision for students with disabilities in Scottish HEIs. Institutions were required to submit proposals on a regional, collaborative basis, following discussions with other institutions. The regional consortia established for this purpose remained in place beyond the bidding process. Staff find them useful for mutual support, dissemination and regional co-ordination and complement the national advisers network.

DISABILITY DISCRIMINATION ACT 1995/- CHIEF EXECUTIVE’S DISABILITIES ADVISORY GROUP (CEDAG)
The Disability Discrimination Act 1995 places a statutory duty on the higher education funding councils to ‘have regard to the requirements of disabled persons in exercising [their] functions’, and to require, as a condition of grant, Disability Statements to be published by the governing bodies of HEIs.

To date, the CEDAG has advised the Council to operate a third year of the SSD-S scheme and has commissioned, at the Council’s instruction, an evaluation of the first three disability initiatives. The Council has also contributed to a research project into disability policy and provision in Scottish HEIs; funded revisions to and publication of Access to Success; and will operate a pilot exercise (in line with the outcome of the recent consultation exercise) on the production of Disability Statements.

WOMEN INTO SCIENCE, ENGINEERING AND TECHNOLOGY
The Council has taken an increasing interest in issues relating to women in SET since the publication of Realising Our Potential (Cm 2250) and The Rising Tide (HMSO 1994). Council considered the conclusions and recommendations of these reports in early 1994. The White Paper on Science and Technology, Realising Our Potential, identified women as ‘...the country’s single most undervalued and, therefore, under-used human resource...’. It stated further that ‘...there is massive scope to attract more women into science and engineering’ as their lack of participation in science education is seen to represent the under-use of a potentially valuable resource. The Rising Tide notes that, while there has been a rapid expansion in the number of students in higher education over the last few years, most of the additional places in SET have been taken up by men. The under-representation of women seems to be most marked in physical sciences and engineering, compared to biological and medical sciences. However, in all sciences, as in many other areas of activity, women become progressively less well-represented further up the career ladder.

PURPOSE OF THE INITIATIVE
The purpose of the initiative is to improve access to, participation in and progression through careers in SET for women in Scottish higher education institutions. In particular, it aims to encourage the development, dissemination and adoption of good practice in relation to women in SET in the teaching, learning and research environment in Scottish higher education institutions. It is intended to be a highly practical initiative with much scope for the dissemination of findings from both strands.
The scheme comprises two strands of activity:

**STRAND ONE:**
the research and preparation of three linked guides to good practice in the area of women in SET on the themes of access, participation and progression. The guides will incorporate advice on recruitment and admissions, teaching and learning methods, student academic support, careers advice and research and staff management practices. The guides will have a variety of audiences ranging from prospective students to heads of science departments and institutional policy makers.

Proposals were invited from the sector to carry out strand one and the successful proposal was a collaborative project involving Dundee and Stirling Universities.

**Details of the research project**
The project team will produce three guides to good practice: Access Matters; Participation Matters; and Progression Matters. It is envisaged that each guide will have a wide audience, including prospective and current students, admissions tutors, departmental staff, careers guidance officers and institutional senior management. Information will be included on good practice in the following areas, amongst others:

**Access Matters**
- admissions to higher education: practice and experience
- adult access routes
- science options within school
- the impact of pro-science publicity

**Participation Matters**
- teaching methods
- curriculum content
- the impact of gender neutral language policies
- support services such as counselling, childcare and befriending schemes

**Progression Matters**
- recruitment and selection procedures
- appraisal procedures
- promotion procedures
- the impact of other positive work environment policies

**STRAND TWO:**
the establishment of a number of institutional projects to develop and test the interim findings of the draft guides to good practice.

The purpose of this Strand is to develop particular aspects of good practice which have been highlighted for further exploration by the first Strand of the initiative. This will be undertaken in a practical way through a series of small, institution-based projects within Scottish higher education institutions.

Whilst the first Strand of the initiative is concerned with gathering a wide range of already documented evidence of good practice in relation to women in SET, the second Strand will take an empirical approach to identifying good practice within Scottish HEIs. This Strand aims, therefore, to complement the examples of good practice which have been gathered from international literature, and from a wide range of contexts, with examples of, and advice on, how aspects of that good practice might be implemented and developed within Scottish higher education institutions.

The general aims of the projects are:
- to highlight empirical examples of barriers to women’s access, participation and/or progression in SET within institutions or departments; and
- to evaluate ways in which these barriers might be removed through better practice.

**CONCLUSION**
The Council has, since its inception, sought to fulfil its role in encouraging institutions to develop their approaches to wider access for students from a variety of backgrounds. Although the Council’s approach has varied, taking into account the special circumstances of the groups addressed by each initiative, it has always sought to achieve maximum impact and value from these initiatives. Advised by experts in the field, the Council has taken a rigorous approach to the consideration of proposals for funding and has sought to ensure that, once funding is in place, the progress of projects is monitored, to verify that projects adhere to the framework of the initiative and to ensure that the lessons learned by projects are disseminated across the sector. The Council also expects institutions to embed the work of projects in their provision.
In order to ensure that the sector continues to obtain value for money from top-sliced initiatives, and in order properly to account for the use of public funds, the Council believes that it is important that initiatives are evaluated externally. This has the benefit of informing the development and administration of any future initiatives, as well as informing future funding decisions. The Council's flexibility and disability initiatives are currently being evaluated by external experts.

The level of interest in the Council's teaching and learning initiatives in general, and specifically in the wider access initiatives, has been consistently high. This is shown by the number of proposals submitted and by the requests for information from the sector and from beyond Scotland and the UK. However, the continuing efficiency gains required of the sector have led to the Council making a significant reduction in the amount of money available for special initiatives, in order to protect the institutions' core funding. It remains to be seen how much scope the Council will have in future to fund initiatives to encourage greater access and flexibility in higher education provision.
Appendix A

Projects funded under FITLS 2

**Lead Institution**  
Glasgow Caledonian University

**Project**  
The transition from school to higher education: support for students from under-represented social classes

This project aims to improve participation rates amongst social classes currently under-represented in higher education by increasing awareness amongst university staff, providing more information for potential students through counselling, 'taster' courses and mentoring, giving support through Summer Schools and targeting students for greater support and guidance in their first year at university.

**Lead Institution**  
Glasgow Caledonian University

**Project**  
Increasing access to higher education in Glasgow by ethnic minority students through the development of appropriate recruitment and support mechanisms

This initiative is designed to improve participation rates and academic achievement amongst ethnic minorities locally, by surveying the local ethnic minority community to determine barriers to participation, identifying their support needs, developing appropriate support mechanisms and embedding new systems within the university.

**Lead Institution**  
Glasgow University

**Project**  
Supporting Areas of Priority Treatment (APT) students

The university hopes to improve links with APT schools by appointing to each school involved in the project a member of university staff who will act as a mentor, supported by two or more undergraduates from the area as student advisers. They will work with staff, parents and pupils in the schools and liaise with appropriate staff in the university, thereby increasing the numbers of applications from the school and improving the performance of students from APT schools once at university.

**Lead Institution**  
Glasgow University

**Project**  
Flexible Study Opportunities and Admissions Policies for widening access to the University of Glasgow

This project will promote wider access opportunities for mixed mode and full-time study at the university with particular emphasis on attracting mature students from social classes III, IV and V and from rural areas. The university will pilot a more flexible admissions and pre-entry support policy, with earmarked places in one faculty. It is intended that the outcomes of the project will be incorporated into the university’s procedures and policies for accreditation, student induction, guidance and learning support. The scheme builds on an earlier project funded under FITLS 1.
The Open University will work with other agencies to provide access courses to HE delivered in outreach settings, providing a methodology for engaging with non-traditional learners, ensuring appropriate backup and support. There will be counselling and support for students, designed to assist access into the Open University or other HEIs. Students completing the course will be guaranteed a place on an OU foundation course.

**Lead Institution**
Strathclyde University

**Project**
University Ethos and Ethnic Minorities: Overcoming Access Barriers and Developing Institutional Support Systems

This is a collaborative project developed after extensive consultation with representatives of ethnic minority communities. It identifies under-representation of ethnic minority students in the Faculty of Education at Strathclyde and includes: a mentor scheme, an institutional development plan, a community based initiative and a collaborative programme of liaison with HECHE Initial Teacher Training schemes set up in England during session 1993-94. Different strands of the project will be developed in each of the consortium institutions, and will continue to draw on the knowledge and experience of ethnic minority community agencies.

**Lead Institution and Contact**
Napier University

**Project**
Improving Access to Higher Education for Disadvantaged Groups through Enhancement Course Provision

The Consortium aims to use Enhancement Courses to improve access to non-traditional students by targeting the registered unemployed. The courses will aim be particularly suitable for individuals who lack essential entry requirements or hold out-of-date qualifications. Distance learning delivery will allow participants to fulfil Department of Employment eligibility criteria. The institutions in the Consortium will work with the Employment Service Scotland to promote the courses and guidance will be offered via both self-study packs incorporating a computer-based self-profiling tool, to be developed by the Scottish Council for Educational Technology and counselling opportunities developed in collaboration with the Open University. This will be complemented by a Summer school.

**Lead Institution**
Paisley University

**Project**
Accelerated/decelerated degree provision in areas of priority treatment

This project will develop induction programmes on campus and in local areas, using the Renfrewshire EPB network. It aims to assist potential students develop the necessary skills, knowledge and attitude to make an effective transition to HE study. Successful students will be guaranteed a place on the CATS Evening Programme, initially on a decelerated study track, but with the possibility of switching to a faster track study at a variety of points in the year.

**Lead Institution**
Stirling University

**Project**
Expansion of Pilot Summer Academic Programme (Credit Bearing)

This project aims to build on the success of the existing Summer Programme, by developing into advanced courses in a selected number of subjects, effectively allowing the programme to function as a self-contained teaching semester. This will allow students to substitute it for a conventional semester or take it in addition.

N.B. This funding for the above project is conditional on adequate registrations being received to support the programme.

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**Beyond Access. Diversity and Opportunity in Higher Education**

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This project will provide a work-based access programme for employees who due to work commitments, unfamiliarity with HE and other barriers have not been able to enter HE by the conventional routes. The programme will articulate directly with Stirling’s part-time Evening Degree Programme, but also with appropriate FE programmes where appropriate. Its initial emphasis will be on disciplines relevant to the workplace.

This project aims to deal with the ‘supply side constraints’ on HE participation amongst adults from the lower socio-economic groups in North Edinburgh, by working closely with projects and agencies involved with adult education in the community, by making use of existing community education premises and the new QMC Leith Campus and by developing modules relevant to the life experiences of students and access-friendly modes of delivery. The project will also develop appropriate student support services and embed good practice into levels II, III and IV.

The project aims to exploit telecommunications and computer technology to deliver existing courses in open and flexible distance form. Part-time and full-time provision will be integrated, developing a comprehensive programme of Pathways to Science, with flexible entry and exit points, targeting students from underrepresented groups and adults disadvantaged by geographical remoteness. The project will develop Access to Science Certificates and Undergraduate Certificates in Science, which will provide a framework for institutions serving the North of Scotland to develop existing courses in more flexible forms. Best practice will be followed in accrediting prior learning, to allow flexible entry points, and full use will be made of credit transfer.
## Annex B

### Projects funded under FITLS 3

<table>
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<tr>
<th>Lead Institution</th>
<th>Project title</th>
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<tbody>
<tr>
<td>University of Aberdeen</td>
<td>Developing Departmentally-Based Employer Links</td>
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**Summary of Project**

This project aims to build on the success of the University’s Enterprise in Higher Education programme and will document and disseminate information about the design, introduction and operation of productive linkages between the work environment on the one hand and academic departments, students and the curriculum on the other.

<table>
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<tr>
<th>Lead Institution</th>
<th>Project title</th>
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<tbody>
<tr>
<td>University of Aberdeen</td>
<td>Pathways to Higher Education in Science (Phase 2)</td>
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</table>

**Summary of Project**

This is the second phase of a project designed to widen access to HE in Science in the North of Scotland. This phase will: extend opportunities for off-campus learning; establish pathways for off-campus learning to year 2 entry in a range of BSc degrees at Aberdeen and Heriot-Watt Universities, increase the responsiveness of both institutions to changing patterns of student demand; generate courseware for off-campus learning to improve quality and flexibility; transfer the benefits gained from supporting distance learners to on-campus teaching programmes; and improve inter-agency collaboration in supporting community-based provision (including provision designed for ethnic minority groups).

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<tr>
<th>Lead Institution</th>
<th>Project title</th>
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<tr>
<td>University of Dundee</td>
<td>'Distance has no Meaning' - Mixed Mode Delivery in Modern Scottish History</td>
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**Summary of Project**

This project will develop a flexibly delivered course for on and off-campus study in modern Scottish History. The project will adapt existing courses at Junior Honours and Honours level, for distance learners, provision which is not currently available anywhere in the UK.

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<tr>
<th>Lead Institution</th>
<th>Project title</th>
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<tbody>
<tr>
<td>University of Edinburgh</td>
<td>Strategies for Departmentally Based Briefing, Training and Support for Tutoring, Demonstrating and Workplace Supervision</td>
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**Summary of Project**

This project seeks to build on the success of the project funded under FITLS 1, providing guidance and support for postgraduate and other part-time tutors. It involves a collaborative approach to build on previous work and aims to identify, document and disseminate instances of good practice.

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<th>Lead Institution</th>
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<tbody>
<tr>
<td>University of Glasgow</td>
<td>Recruitment and Guidance of non-traditional entrants to the University of Glasgow</td>
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</table>
Summary of Project
This project will build on the work of previous FITLS projects and will: establish a guidance service to monitor and advise part-time students; consolidate and extend the work of the Effective Learning Advisory Service; extend the flexible admissions policy to more FE Colleges; and extend the mentoring project to improve links between the University and APT schools.

Lead Institution
University of Glasgow

Project title
Provision of credit-bearing study to people in rural areas

Summary of Project
This project is aimed at wider access, providing distance learning on a part-time basis to students in Argyll and Bute, via the Department of Adult and Continuing Education. It will make use of existing expertise within the University and will take account of the Argyll and Bute Link to Education (ABLE) network when developing materials and selecting courses. The project will adapt written material to hypertext form and use the World Wide Web to make it available, and will provide appropriate guidance support for distance taught courses.

Lead Institution
Glasgow Caledonian University

Project title
The transition from school to higher education: support for students from under represented social classes

Summary of Project
This project builds on the work of the FITLS 2 project, which aimed to establish structures which will encourage a higher proportion of students from social classes 3, 4 & 5 to enter higher education and to help ensure that they are successful in their studies. The new project will continue working with last year's cohort of S4 pupils, will develop work with a new cohort of S4 pupils and extend the work into four new schools.

Lead Institution
Heriot-Watt University

Project title
Interactive Corporate Capital Investment Appraisal

Summary of Project
The purpose of this project is the development of interactive courseware for use in Scottish Universities offering courses in Accountancy and Finance and for courses organised by the Chartered Institute of Bankers in Scotland. Key features of the courseware design will be: student centred; group-based/team building; analytical skills tested; spreadsheet skills applied; word-processing skills applied; report writing skills developed. The intention is that courseware capable of providing 20-25 hours of student contact time will be developed.

Lead Institution
Napier University

Project title
Learning and Skills Achievement through Partnership with Employers

Summary of Project
This project will develop and test innovative mechanisms for involving employers (industry, professional bodies, commerce etc.) directly in the design and delivery of student project work and problem-solving tasks and the assessment of students' transferable skills, focusing on team-work. The mechanisms to be tested will be influenced primarily by the Alverno model. A particular feature of the Alverno approach is the formation of 'ability teams' to examine industry input to the validation of skills attainment. The project will build on Napier's existing Live Projects programme and on recent developments in the use of real-life problem-solving exercises.
**Lead Institution**  
University of Paisley

**Project title**  
Transferable Skills through Personal Development Planning

**Summary of Project**
The aim of this project is to build on the personal development planning process developed in the FITLS 2 project by introducing the process to a greater variety of students and a wider number of academic departments. The project intends to integrate the process within the new module and semester system through the guidance framework outlined in the recent HEQC guidelines therefore promoting greater student autonomy and transferable skills. In particular the project will investigate the linkage between the University process and the appraisal and development cycle for part-time employed students.

**Lead Institution**  
University of Paisley

**Project title**  
Extending access to higher education through company's Staff Development Programmes

**Summary of Project**
The overall ethos of this project will be to develop the 'alternative campus' and establish a centre for work-based learning. This is to be achieved through the production of an interactive computer-based guidance package and workbook, which will enable employees to carry out an assessment of prior certificated learning. Each employee will gain immediate feedback on the amount of general credit for certificated learning which has been formally credit rated. This will be used to form the starting point for personal negotiation of an agreed programme of study at either undergraduate or postgraduate level with a University adviser which may include accreditation of prior experiential learning where appropriate, taught modules delivered both at the company's premises and at the University as well as through work-based projects, and credit rated in company courses.

**Lead Institution**  
The Robert Gordon University

**Project title**  
Audit, Development and Initial Implementation of an Industrial Liaison Strategy

**Summary of Project**
Industrial involvement in each School of the University has been developed under the Enterprise in Higher Education Initiative, although a variety of practice exists at School level. This project aims to introduce a consistent academic industrial liaison strategy across the University after first identifying best practice. It is hoped that the adoption of a clear strategy will provide significant benefits to the University in the preparation, review and delivery of the curriculum and to employers in assuring the relevance of programmes of study.

**Lead Institution**  
St Andrew's College

**Project title**  
A Flexible Approach to Postgraduate Teacher Education

**Summary of Project**
The College aims to develop a range of learning materials in open access, technology-based format to replace 25% of the taught components of the College's Postgraduate Secondary Professional Studies course with student-centred methods and will: improve the quality of learning of students and encourage responsibility for their own learning; promote a wider range of delivery methods and learning strategies; provide staff development for staff in the Professional Studies Department, and by extension to all staff in the College; reduce class contact time in the Department by 25% without reducing quality; and improve the course generally.
Summary of Project
This project will build on the success of the FITLS 1 project 'Student-Centred Projects for Teaching and Learning in Pre-clinical Medicine' in such a way that it can be offered to students in a modular degree course on a cross-faculty basis. The project has two components. The first of these will involve an experienced multimedia developer, who will teach students the skills necessary to create multimedia projects within their chosen academic discipline. The second will provide training for staff in the appropriate technological skills which will allow them to supervise the students' projects. It is anticipated that students will derive three important educational benefits arising from the project; specialist knowledge; the development of transferable skills for both independent and group learning; and the acquisition of a wide range of pedagogical and technological skills.
This paper summarises major findings of a university teaching development research project that concerned innovations in teaching methodology for non mainstream students. It reflects on the interface between teachers in mainstream courses and non-mainstream students. Consultation with Indigenous university staff from Australia, USA and Europe provided produced common themes concerning methodology: consultation, culture, representation and self representation. As a general comment in consultation a common perception expressed was that methodology could not be regarded in isolation from other factors affecting the educational environment. A persistent theme emerged that the existing lexicon of some university cultures inhibit the development of appropriate methodology. The results of the research were quite startling and challenge many assumptions about methodology. Methodology is relocated in a matrix of culture, identity and competing discourses.

The assumption that students from minority cultures sometimes have lower retention and graduation rates than others because they lack preparation is considered problematic. This was strongly debated by staff consulted during the course of research. These opinions will be described.

The role of computer aided learning systems to enhance the learning environment is also discussed in regard to self representation in the learning environment and the concept of 'multi-literacies'.

Pedagogical interest in language development now includes something referred to as multiple literacies. Multiple literacies refers to the variation in meaning attached to language by different groups. Innovations to meet the needs of Diaspora, Indigenous and other minorities including International fee paying students indicates a strategy for how the needs of student diversity might be met.

A separate but related trend in pedagogic research is the developing interest in developing computer aided learning systems and the use of multi-media format. The threads that join information technology and literacy is the opportunity provided by the world of bytes to facilitate visual literacy and self representation in the learning process.

Consultation and collaboration between higher education and minority groups both minority group students and minority communities might also be considered an important process to achieve successful participation in higher education.

Multi-Literacies and Technology
A group self-described as the New London group formed in 1994 to consider the direction of literacy pedagogy and the future of teaching practice:

'Multiliteracies' - a word we coined to describe two important arguments we might have with the emerging cultural, institutional and global order. Our first argument relates to the increasing multiplicity and integration of significant codes of meaning-making, where the textual is also related to the visual, the audio, the spatial, the behavioural and so on. This is particularly important in the mass media, 'multimedia' and in electronic 'hypermedia' because new communications media are reshaping the way we use language. Where technologies of meaning are changing so rapidly, there cannot be one set of standards or skills that constitute the ends of literacy learning, however taught.

Secondly, we decided to use the term 'multiliteracies' as a way to focus on the realities of increasing local diversity and global connectedness. Both of these facts make dealing with differences - linguistic differences and cultural differences - central to the pragmatics of our working, civic and private lives.

The concept of design, in this case the design of new literacy pedagogy, indicates intentionality and awareness of all elements related to a given project. In determining principles of teaching methodology, consideration must be given to...
the matrix of local diversity and global connectedness - of culture and the institution and to the transforming influence of information technology.

THE INDIGENOUS UNIVERSITY

This project is not directly concerned with the proposal for an Indigenous University. However, the implications of technology for learning beyond place suggest the design of future education that allows diverse affiliations to take place. Developments occurring in regard to media literacies are global in their ability to exist beyond the immediacy of the momentary classroom at a specific site in space. The new learning media or how we make meaning can take into account four learning activities in more flexible ways that allow for greater student representation: situated practice, overt instruction, cultural framing and transformed practice.

The call for an Indigenous university, greater autonomy and place of indigenous support centres, schools, disciplines, increased employment of Indigenous educators and so on indicate a dissatisfaction with traditional pedagogy. The intention to establish an Indigenous university is complementary to the potential changes contained in the development of media literacy and the status of Indigenous knowledge and its revaluation as cultural capital.

To enter a multimedia development studio, as exists at James Cook University, Townsville, or the Computer Aided Learning Centre in Melbourne is hard to do without a sense of excitement at what is happening. These sites, not the only ones producing quality teaching material, stand in contrast to what remains a matter of conjecture at other places.

What the New London statement suggests is the desirability of freeing up notions of literacy, grammar, narrative, genre and the relationship of teachers to technology and to students. Even the language of email now can be considered as a new form of language but only one of the emerging new literacies. The concept of the university and the library are equally challenged by the information superhighway, although a more critical appraisal might regard it as an information dirt track at this stage. However, apart from networks, quality journals and diverse information exists floating in the ether along with pornography and other less wholesome information. The net after all exists as a mirror of the human condition.

CULTURE AND DISCOURSE

The comment has been made that some students withdraw because they find the university challenges a sense of the self. In consultation it was reported that Indigenous Elders in some communities believed they had to re-educate students when they returned from university or school. This anecdotal comment received during consultation indicates the intricate relationship between culture, student self-representation and identity.

In considering the possibilities of teaching methodology there is the proposal to consider methodology in regard to the text:

The starting point for multiliteracies is an understanding of how texts are historically and socially located and produced, how they are 'designed' artefacts. The much vaunted and now highly criticised terms 'Indigenous perspective' and 'inclusive curriculum' now join the wall of clichés, assigned the speaking position of appendices more than centrality, tokenism more than collaboration.

Culture and methodology can be explored to consider this experience. (See particularly the section on overseas experience). The 'cultural' experience of the student is something outside the normative and abstract advice contained in standard texts on how to improve one's teaching. Such texts turn on the discourses of the dominant culture and miss the subtle divide of cultural experience contained in the contrasting experience of the teacher and student. Self-representation for students of the dominant culture will of course be well catered for by such traditional and very professional commitment of the university tutor or lecturer.

Despite the initiatives in supporting Aboriginal education it is reported that such efforts are qualified by considerable shortcomings.

Media philosophy

It is important to think of multi-media as more than a private world's fair or son et lumiere of
information, mixing fixed chunks of video, audio, and data. Translating freely from one to the other is really where the field of multimedia is headed.

"The Road Map for Survival on the Information Superhighway Being Digital", by Negroponte sold a quarter of a million copies at Heathrow in a short period of time. Certainly there is a reading public flowing through airports but this indicates an interest in the world of new media, its influence and possibilities. A world of bits rising over the finite material world of atoms.

The examples of what can be done in computer aided learning in the area of language development should be noted. Firstly, a Wangkangurr (the Aboriginal language of South West Queensland) and English language course that includes an input microphone and so can operate as a personal language laboratory - at the pace the user wants to proceed. And the language is linked to photographs: voice, language, text and interaction. That particular development was being undertaken in the CIMS centre of James Cook University, Townsville. The CD was written in Macromind Director, which is one of the industrial standards for production and exists in both PC and Macintosh versions. Another provided an interactive visual and textual game environment for the writing and structuring of a narrative. Numerous projects are documented in The Committee of Advancement of University Teaching (CAUT), Application for Teaching Development Grants list. This can be examined on the CAUT home page.

The various forms of literacy allowed by multimedia formats appear in most applications for HRE (CAUT) funding in Australia. (What is implied in providing that list is the emphasis on the process rather than definitive ascription). Each of those projects, for example, indicate a particular learning environment, course and course material and groups of students, as they are projects which are unique to their contexts and objectives and cannot be directly applied to other situations. A matter sympathetic to the proposition that methodology needs to engage with the transformative influence of the information age on literacy. The university learning environment is at the centre of the transition of the economy of materials to the economy of information.

There are many individual producers of multimedia CD art, history, fiction, educational material using animation, video, text, and interactive options that inform of the importance of information technology to teaching methodology. In consulting individual producers it is noted that the work involved in development can be significant. Yet centres such as CIMMS at James Cook University, Townsville Campus, operate on a cost recovery basis and the Computer Aided Learning Centre, (CALC) in Melbourne is a private company working on a contract basis. An interesting use of technology employed there, touch screen monitors are common enough in Chemist shops but used here in a creative way for the teaching of English as a Foreign language. It is conceivable that in the future multimedia CD both interactive and read only memory will be marketed from one university to another.

So what unfolds is the curious relationship of multimedia to social justice and teaching methodology. A relationship that implies individual program development utilising the opportunities provided by students' visual and audio literacies, technology and the opportunity to review existing assumptions concerning privileged discursive assumptions in methodological practice. This matrix provides a tool for self-representation in the learning process and cognisance of how to facilitate negotiation rather than compliance in regard to situated practice.

'Situated practice', which involves immersion in experience and the utilisation of available discourses, including those from the students' life worlds. This is both the strength and bias of progressivist pedagogies such as 'process writing' and 'whole language'.

What does a CD offer to the teacher-student relationship? In "An Anecdoted Archive from the Cold War 1956" written by George Legrady, Hyperreal Media Productions, 1994, moving image video and historical film, text and voice give the viewer the opportunity to explore various elements and to have the ability to engage or disengage with segments. Apart from the obvious autonomy for students there is also the model for teaching research skills to students. In this case it is an example of the potential for History and Politics methodology. The "viewer/player", the student, can range over material,
copy either text, image or audio and so become producers in their own right. Contained in this process is the essence of essay research and writing skills, and critical thinking.

These potentialities are apparent to those who work closely in the design, conceptualisation and application of computer hardware and software for the educational environment. Computer Aided Education (CAE), Computer Aided Learning (CAL) and Multi-media, are some of the labels used as generic descriptors.

WHERE WORLDS CONVERGE, a conference and workshop hosted by the Royal Melbourne Institute of Technology, Winter School of Design held in July 1995, explored collaborative learning through the frame of media philosophy and the application of multimedia. The conference and workshop resulted in the production of a web page produced by the participants at the end of 10 days. Illustrated by this exercise was the application of information technology and the resource of the Web to the learning environment. Participants were able to integrate material collaboratively and produce a result at the end of a very short period. Much of the reference material used in the production of “papers” came from the Web itself. It functioned as a resource library of visual, audio and textual material.

Although the topic was eco-tourism and virtual reality the relevance of the conference and the experimentation that occurred in the workshop was much broader. These were contained in the creative play methods of approaching information, ideas, the role of humour in the educational process and the use of the technology in seeking information from the global information repository available through the World Wide Web. It was as much an opportunity to test the potential of such a library of information. Indeed it was possible not only to take text but also visual material from such a system. Thus the possibility of extending a relationship between the production of CD ROM (CD READ ONLY MEMORY AS DISTINCT FROM CDI - CD INTERACTIVE), remote campus connections, Visual interactive systems, Local Area Network (LAN) systems, email conference groups and Multi-user Domains (MUDS). The implications of such possibilities go beyond specific campuses and allow for some modification to the concept of what constitutes the learning environment. Here exists the possibility of a cross-spatial course, student cohort, teaching crew and even the possibility of a pan-national university.

In relationship to the specifically Australian context, this provides opportunities for self-representation that are contained in the call for an Indigenous University in Australia. The existence of distance and open learning systems as an increasing part of university culture is a notable characteristic and one sympathetic to that of establishing subjects, courses and degrees in cross institutional mode. In so doing the university is redefined. These systems have far greater implications for the future of the spatial domain of learning than they do for the physical manifestation of a campus. Already many, if not most, universities in Australia have multiple campuses implying a need for enhanced communication. Through the sharing of resources and providing methods for diverse students to be in contact with students of their choice, methodology need not be prescribed by the particular course or physical place of study.

Although it is easy to criticise the university canon the British and to an extent European systems from which the Australian university has its genesis the international demand for courses offered suggest that the market places a value on what is offered. Teaching methodology is however concerned with how courses are offered. The point has been made that consultation through collaboration is at the basis of negotiating cultural difference. The tension between standards and methods is one of appearance rather than actuality. Innovation in method that is occurring suggests that this relationship is what needs exploring to determine what represents standard and what represents outmoded tradition or what consultation suggested was conflicting views of what represents the core tradition of university. It is the ability of any type of cohort to find a voice in the university that is relevant to the questions of race and gender.

Eklektikos [Eclectic, from the Greek Eklektikos (ecleg6 pick out)]
The diversity of teaching methodologies currently being employed in Australia, North America and Europe encourages us to borrow
freely the elements for experimental mix. The developmental education, remedial model of the USA. Mentoring systems, role models, sequential learning, linked literacy development and subject material and the adoption of deconstruction as a tool in demystification are examples of such elements that could be adopted for the development of situational methodologies.

There is no question that under-representation is noted and acted towards in a plethora of ways but what is common is that students who have an uncommon background for university milieu or language or canons have some difficulties which emanate from the learning environment. Much of the argument is concerned with the axiom that there are indeed ways of doing things that are considered worthwhile somewhere. This book it is intended, should act as a resource manual rather than attempt any definitive statements about what is best, for that begs the questions for whom and where?

Australian experience

In examining University culture with respect to teaching methodology and under-represented groups each site is a site of ontological significance. Each example illustrates only itself. However the concerns voiced in consultation have resulted in various themes that underline the need to consider needs in any one place as specific to that situation. This is a cautionary note and it is not necessarily the examples referred to that are the only ones of interest.

The University of Western Sydney (UWS) Centre for Indigenous Australian cultural studies

The UWS Centre for Indigenous Studies commenced as an Indigenous support program but has broadened into an academic centre offering various courses within a multi-disciplinary Indigenous knowledge framework. Active course development and engagement with the institution from an academic position marks the kind of change which is emerging across Australia.

The documentation acknowledges that the culture, identity and social experience of Indigenous students necessitates a new framing of course development and teaching methodology. It is an example of the development of an Indigenous pedagogy. Their policy statement and course description contest conventional teaching methodology, academic culture, assumptions about the representations of Indigenous and non-Indigenous Australians in the Arts in regard to social issues. The rationale of one subject within that course illustrates the approach.

Representations of Indigenous Australians are to be found within a broad range of texts produced by both indigenous and non-indigenous people. These texts give us access to the shifting conceptualisations about both the nature of Aboriginality, and relations between indigenous and non-indigenous Australians. Examination and comparison of dominant as well as self representations of indigenous Australians in a variety of texts, will enable the students to deconstruct the cultural processes through which their own identities are produced.

Rather than an intellectual assault on Identity such approaches have the potential to acknowledge Indigenous identity and make an Indigenous student feel that the institution has an understanding of them as people and accept the existence of an Indigenous canon.

In every university valid examples of innovation may be seen. At the James Cook University, Centre for Aboriginal and Torres Strait Islander Participation, Research and Development, the staff, as elsewhere in the consultation process, the conception of the place of the Centre in relation to the discourses of the university, the role, methodology and content of the Foundations Studies courses, the Tertiary Access Program 1 & 2 exemplifies the principles of appropriate methodology in regard to Indigenous students in regard to the transition to mainstream courses. Their methodology complements foundation curriculum and articulates with mainstream courses. Articulation may be a more appropriate description than that of bridging gaps. Their methodology includes Of particular relevance to this project were firstly a serious concern regarding the matter of consultation raised elsewhere, but the application of discourse theory to student learning it was suggested was highly successful in raising student confidence and motivation. The canon was demystified and the Indigenous narrative no longer subject to the privilege of the dominant.

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The CAUT teaching grant research applications of December 1994 indicate the scope of thinking about the issue of teaching across universities in Australia. It is interesting that there is considerable consensus about the issues. The assumption behind all of these applications include a questioning of existing methodology, a recognition of the place of interactive multimedia in future university teaching.

These are examples to be read at e-mail: "caut@hed.deet.gov.au" or on the node COOMBS.ANU.EDU.AU:
- Multi-Path Teaching Resources Available
- Student Self-Learning and Self-Assessment using an Interactive Computer-based program
- Multiple Mentoring (Involvement of the Aboriginal Community): Griffith University
- Developing Analytical Skills: UWS
- Critical Thinking in Context: Murdoch
- Computer-supported Collaborative Work in Microbiology and Immunology: UNSW
- Using Hypertext to Promote Flexible Learning in a Graduate Nursing Program: USA
- Australian Multi-Media for Large Geography and Environmental Studies Classes: Macquarie
- A Student-Centred Interactive Multi-Media Approach to Teaching First Year Accounting: JCU
- Interactive Multi-Media Computer Tutorials in Basic Biology: UNE
- Teaching and Learning Strategies for First Semester First Year Students in Political Sciences: University of Sydney
- An Integrated Multi-Media Approach to the Teaching of Statistics in Nursing Research: RMIT

MULTI-PATH TEACHING

Critical theoretical skills development in first year social work and community welfare students JCU:
This project aims to prove a culturally and developmentally appropriate multi-path teaching package consisting of three elements: computer-based audio-visual materials, video case studies, and a senior student mentor system designed to address issues in the social context of learning.

Multi disciplinary peer collaborative study programs for first year Aboriginal and Torres Strait Island students, QUT:
The aim is to reduce initial uncertainty and 'fear', to build confidence towards passing and to enhance self-esteem.

STUDENT SELF-LEARNING AND SELF ASSESSMENT USING AN INTERACTIVE COMPUTER - BASED PROGRAM

Student self-learning and self assessment using an interactive computer-based program, Swinbourne UT:
This project will produce a tool to help students identify their learning styles, strategies (including the use of visual, auditory and kinesthetic senses). The tool, which could be used by any Australian tertiary student will consist of
1. A computer based set of questions which allow the student to observe and identify how they learn
2. A kit of material which will assist students to improve or enhance their learning
3. An information kit for university teachers

MULTIPLE MENTORING

Involvement of the Aboriginal community, Griffith University:
The exercise, based on research into local culture, will be used both as vehicles for discovery learning and for diagnostic evaluation. (...) Student learning and transition to university studies will be enhanced through the preparation of individual remediation strategies and the generation of greater community involvement.

DEVELOPING ANALYTICAL SKILLS: UWS

To place the responsibility for learning in the hands of the student, enhance student's analytical skills, and facilitate the student's ability to solve complex problems (...) a software prototype will be developed and then adapted to a learning program containing problems of graded complexity.

CRITICAL THINKING IN CONTEXT:

MURDOCH

It will integrate materials on critical thinking into the existing materials on essay writing and reading used by students in a foundation course (...). The materials will include video triggers and work materials for students and a teaching guide for staff to aid in developing students' critical thinking skills in writing and reading. Tutors teaching in the course will be intro-
duced to the materials in the induction course on foundation course tutoring.

**Computer-supported collaborative work in microbiology and immunology: UNSW**

To develop prototype interactive teaching sessions for students in groups of four (...) the major goal is to combine the benefits of small group teaching with the potential of the multimedia technology now available at the University of New South Wales.

**USING HYPERTEXT TO PROMOTE FLEXIBLE LEARNING IN A GRADUATE NURSING PROGRAM: UNISA**

This project will transform into hypertext format sections of a post-graduate nursing subject that was originally print based. This will allow students to engage with ideas of the subject at different levels of analysis by exploring various pathways through the materials. Use of the hypertext form enables the teaching to begin from and continue to take into account the knowledge framework individual students bring to the subject.

**AUSTRALIAN MULTIMEDIA FOR LARGE GEOGRAPHY AND ENVIRONMENTAL STUDIES CLASSES: MACQUARIE**

We are addressing three key issues facing teachers in large classes. One is the need to achieve the best possible student learning experience in the face of declining teaching resources. Second, for some purposes, multimedia is markedly superior to conventional teaching methods. Third, given the power and value of such learning technologies, it is important that Australian education does not become solely dependent on overseas-developed multimedia resources which reflect foreign perspective and priorities.

**A STUDENT-CENTRED INTERACTIVE MULTIMEDIA APPROACH TO TEACHING FIRST YEAR ACCOUNTING: JCU**

The package will be produced using advanced IMM technology and consist of material designed to provide self-directed learning at both lecture and workshop levels. By using the package in a supportive environment, at a speed of their choosing, students will be equipped to understand both the conceptual and procedural issues of accounting.

**INTERACTIVE MULTIMEDIA COMPUTER TUTORIALS IN BASIC BIOLOGY: UNE**

The tutorials seek to address several major problems: students fail to identify important connections between pieces of information; they have difficulty in understanding the structure of complex biological objects; and they struggle to understand how form and arrangement of such objects change in time. Working through the tutorials, students will respond to a series of questions by entering text, pointing to specific objects or moving objects around on the screen. Feedback is provided in the form of text, diagrams, colour images, sound, video and animation. A tightly structured question and answer sequence is used to lead the student from basic facts through to fundamental concepts.

**AN INTEGRATED MULTIMEDIA APPROACH TO THE TEACHING OF STATISTICS IN NURSING RESEARCH: RMIT**

The goal is to produce five flexible, time-saving and re-useable computer assisted learning interactive multi-media modules.

What this sample of 135 CAUT applications suggests is that there is a great deal of thought going on that questions the assumptions of how teachers teach, what students know and how students learn. What emerges is a pervasive interest in introducing the new literacy of information technology to the learning environment and the commonality of direction in Australian university teaching methodology research.

**Notes**


2. Cope and Kalantzis: 7 Situated practice involves immersion in experience and the utilisation of available discourses, including those from the students' lifeworlds (...). Overt instruction involves systematic, analytic and conscious understanding. In the case of multiliteracies, this requires the introduction of an explicit language to describe meaning as design. This was the bias of traditional literacy pedagogies such as Latin-based English grammar teaching. It is
also the strength of 'genre' approaches to literacy pedagogy (...). Cultural framing interpreting the social and cultural context of particular patterns of meaning. This involves the student standing back from what they are studying, and viewing it critically in relation to its context (...). Transformed practice - the transfer in meaning making practice which puts the transformed meaning, redesigned meaning, to work in other contexts or cultural sites."

3 Cope and Kalantzis: 6
5 Negroponti, Nicholas “The road map for survival on the information superhighway BEING DIGITAL”, Hodder and Storton, 1995 Australia: 71
6 Negroponti, Nicholas “The road map for survival on the information superhighway BEING DIGITAL”, Hodder and Storton, 1995 Australia
7 As De Kerkhof after McLuhan commented at the RMIT Winter School of Design conducted in Melbourne in July, 1995.
8 See MEDIAMATIC home page, Netherlands, for innovations of multimedia literacy. Cope and Kalantzis: 7
9 Legrady, George “An Anecdoted Archive from the Cold War”, Hyperreal Media Productions, San Francisco, 1994
10 See the Australian Network for Art and Technology (ANAT) home page and newsletter: email: anat@camtech.net.au (http://www.va.com.au/anat/)
11 See RMIT home page - winter school of design
12 See course documentation for the Diploma in Indigenous Australian Community Studies, October 1994, University of Western Sydney MacArthur.
13 The other significant aspect of this example is that it is a multi-sited program. Lotus Glen and Townsville Correction Centres being prisons and Yarabah a community one hours drive south from Cairns. This spatial arrangement indicates the potentiality for the application of computer interface. In a sense such an example of situation is also a metaphor for the potential change across universities.

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Beyond access: diversity and opportunity in higher education

Amsterdam 1-3 July 1996

PROGRAMME

SUNDAY 30th June 1996
14.00-15.00 Registration

MONDAY 1st July 1996
09.00-10.00 OPENING PLENARY - THEME 1

The Merits of Diversity in Higher Education

Chair
Professor Nathan Deen, University of Utrecht, the Netherlands

Welcome from
John Lilipaly, Chair of the board of ECHO, Member of the Netherlands Parliament

Welcome from
Michel Feutrie, Co-Chair of EAN, University of Lille:

10.10 A European perspective
Dr James Wimberley, Head of the Higher Education Section, Council of Europe

10.30 An American perspective
Dr Tom Wolanin, Deputy Assistant Secretary for Legislation and Congressional Affairs, US Department of Education.

10.50 An Eastern European perspective
Dr Olav Aarna, Rector Tallinn Technical University, Estonia

11.30 THE SECOND PLENARY - THEME 2

Overcoming barriers to successful completion

Chair
Maggie Woodrow, EAN, University of Westminster

Non-completion in European higher education, report of a survey undertaken on behalf of the Council of Europe's Project on Access to Higher Education
Jean-Louis Moortgat, Advisor to the Registrar, University of Libre de Bruxelles, Belgium

11.55 Models in American Higher Education: The Policy and the Politics
Dr Arnold Mitchem, Executive Director, National Council of Educational Opportunity Associations, Washington, USA

12.15 Overcoming the Barriers
John Lilipaly, Chair of the board of ECHO and member of the Netherlands Parliament.

Dance performance by the Amsterdam School of Arts on the theme of Diversity
14.10 WORKING GROUPS - FIRST SESSION
1. Demonstrating the merits of diversity
Chair: Glen Postle, University of Southern Queensland, Australia

2. Overcoming significant barriers for minority groups
Chair: Heather Eggins, Chair SRHE, UK

3. Meeting a diversity of students needs
Chair: Tatiana Leontiva, Minsk State University, Belarus

4. Higher education, under-representation and the labour market
Chair: Dr Armand Policicchio, Slippery Rock University, USA

16.15 FIRST PAPER SESSION
17.00 EAN ANNUAL GENERAL MEETING
18.00 SOCIAL PROGRAMME

TUESDAY 2nd July 1996
09.00 PANEL SESSION
Chair: Professor Nathan Dean, University of Utrecht, the Netherlands
Contributors:
Dr Olav Aama, Rector Tallinn Technical University, Estonia
Dr Robert Lemelin, University of Southern Maine, USA
Peter Stewart, Educational consultant, Australia
Paul Taylor, University of Warwick, UK
Dr Varina Tjon A Ten, Forum Institute for Multicultural Development, Netherlands

11.20 THIRD PLENARY - THEME 3
Meeting a Diversity of Student Needs
Chair: Professor Nathan Dean, University of Utrecht, the Netherlands

A Student Perspective
Marieke Rietbergen, Dutch National Union of Students (LSVB)

Universities working together on learning environments which meet the needs of a student diversity
Francien Wieringa, Hogeschool De Horst, The Netherlands

Managing a Cosmopolitan University
Dr Geoffrey Copland, Rector, University of Westminster, UK

Meeting regional needs for higher education in the Russian Federation
Dr Valentin Batukhtin, Rector Chelyabinsk State University, Russian Federation

14.00 SECOND PAPER SESSION
15.30 WORKING GROUPS SECOND SESSION

16.45 Social Programme
18.00-19.00 Boat trip along the canals
19.30 Convention dinner in D’Vijffvlieghen
WEDNESDAY 3rd July 1996

09.00 FOURTH PLENARY SESSION - THEME 4
Higher Education: under-representation and the labour market
Chair Dr Maurits van Rooijen, Director of International Education, University of Westminster, UK

09.05 Universities as Employers - achieving diversity among staff
Dr Monica Armour, Transcultural International Amsterdam the Netherlands and Toronto

09.25 Diversity and employability in the Higher Education curriculum
Peter Stewart, Consultant, Australia/Netherlands

09.45 Diversity and the labour market, an employer perspective (Sales a vocation for women?)
Fabienne van 't Kruijs, Director Holland Sales Service B.v., The Netherlands

10.40 FINAL PLENARY SESSION
Chair Nizam Mohammed, Chair Council of Europe, Access Project Group, University of London, UK

10.45 RECOMMENDATIONS FROM THE WORKING GROUPS
11.30 OPEN FORUM
12.00 CONCLUSIONS OF THE GENERAL RAPPORTEUR
Marloes de Bie, Director ECHO, Netherlands

12.30 End of the Convention

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