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Innovative OER in European Higher Education:

Best Practice Report on Widening Participation in Higher Education Study through Open Educational Resources

Andy Lane, The Open University (United Kingdom)

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Education and Culture DG
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Best Practice Report on Widening Participation in Higher Education Study through Open Educational Resources

Andy Lane, The Open University (United Kingdom)

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Executive summary

1. The level of participation and achievement within higher education is viewed as crucial for social and economic development. While widening participation in higher education is a goal of all 46 countries within the European Higher Education Area there is no common or simple definition of what widening participation means in practice. In principle it is a variable mix between how many people, what type of people and what type of achievement those people gain through engaging in higher education level study.
2. Whether from the perspective of the learner or a higher education institution it is possible to consider the availability, accessibility, affordability and acceptability of taught educational provision and educational resources. A large number of physical, social, economic, cultural and psychological factors or barriers influence how many and what types of people participate and what achievements they gain.
3. There has been a growth in interest in open education and open educational resources. This interest in openness both builds upon the pioneering work of open and distance learning institutions to address widening participation, many of which participated in this study, and also extends the concept of what it means to participate or engage in higher education level study.
4. Open educational resources come in many forms and their availability, accessibility, affordability and acceptability vary depending on the licence used and the technology employed to create and deliver them. As with participation in higher education there are a number of multi-faceted and multi-layered reasons why people may be excluded from using open educational resources.
5. The evidence from the pioneering work of the partners in this study is that open and distance learning offers great scope to expand the availability and accessibility of higher education study where traditional campus based institutions cannot take on many more students as quickly or where students wish to 'learn why they earn' as life long learners. It can also be more affordable and acceptable although this depends on individual contexts in individual countries. The modular nature of their programmes also provides more flexibility for there to be higher education study achievement below a first cycle Bachelors qualification.
6. The partners' work with publishing open educational resources indicate that this can also greatly increase the opportunities for people to engage with informal (self-organised and non credit bearing) or non-formal (peer group or employer organised and non credit bearing) higher education study. Such opportunities are able to provide better bridges into formal study for those groups currently excluded from higher education study and better bridges with employers and voluntary organisations seeking more customised educational experiences for their employees or members.
7. These developments around openness and in particular open educational resources are leading the partners in this study to closely examine their business models and modes of operation in terms of how many people they recruit and teach, what type of people they recruit and teach, the modes by which they provide educational resources and structure educational experiences and what constitutes successful engagement or participation.
8. New policies and practices are required at all levels in the higher education system to address issues of openness and open educational resources in higher education study and the role that both can play in increasing and widening engagement and participation.

1 Introduction

This Best Practice Report captures and examines evidence from the literature and from the study partner case studies to identify the role that open educational resources (OER) might play in widening participation in higher education (HE) study. It draws upon the extensive knowledge and experiences of the European partners in the study, most of whom have long track records in widening participation in higher education in Europe through open and distance learning (ODL) and some of whom are leaders in the emerging field of open educational resources.

This study has been made possible through a grant from the European Commission under the Erasmus Lifelong Learning Programme, within the strand of Virtual Campus. Led by the European Association of Distance Teaching Universities (EADTU) this project is called "Innovative OER in European Higher Education (OER-HE)" [1] and for which this study is just one strand. EADTU has been working closely for some years with a number of member universities in Europe on developing institutional strategies for OER. This work builds upon that previous EADTU taskforce and project on Multilingual Open Resources for Independent Learning (MORIL)[2] and adds in one conventional university to make 11 European university partners. The MORIL project was supported by two grants from the US-based William and Flora Hewlett Foundation.

[1] http://www.eadtu.nl/oerhe/
[2] http://moril.eadtu.nl/

1.1 The role and importance of widening participation in higher education

An OECD (2006) report is clear about the benefits of educational attainment:

> *A well educated and well-trained population is important for the social and economic well being of countries and individuals. Education plays a key role in providing individuals with the knowledge, skills and competencies to participate effectively in society and the economy. Education also contributes to an expansion of scientific and cultural knowledge. The level of educational attainment of the population is a commonly used proxy for the stock of "human capital" that uses the skills available in the population. (p7)*

While it follows that widening participation in higher education has both a social and an economic dimension, as noted in this quote, the levels of educational attainment in a particular population may hide great inequalities in the chances and opportunities to do so throughout all sectors in society.

Inevitably the chance to participate is constrained firstly by the absolute availability of places for study within a country (e.g. the number of higher educational institutions and the capacity of those institutions to teach students). It is constrained secondly by the affordability of opportunities (for instance study may involve great costs) and thirdly by its accessibility (such as being taught in a second or third language for the student or involving significant travel). Fourthly there is a question of acceptability of the opportunities on offer (for example the provision may be of poor quality, have an implied bias in the intellectual position taken by the teachers or it may be in subjects prospective students do not want to study). Nevertheless, even where provision is available, affordable, accessible and acceptable it may not be taken up by some less privileged groups in society for other, wider, physical, social, psychological and cultural reasons.

1.2 Widening participation policy across Europe

In the past 10 years there has been significant development of the European Higher Education Area (EHEA) following the Bologna Declaration in June 1999. Now involving 46 countries within Europe, the first 10 years of the Bologna process have seen much progress in achieving greater compatibility and comparability in their collective systems of higher education. A major aim has been to increase student and scholar mobility within Europe and to attract students and scholars from outside Europe to study and work there.

The three main strands of activity in the past decade have been:

- Establishing a common framework for higher education qualifications based on a three cycle structure (bachelor/master/doctorate) across the EHEA
- Establishing national qualifications frameworks linked to the overarching EHEA framework and based on learning outcomes and workload alongside
    - Promoting a Diploma Supplement to capture and record student achievements
    - Promoting a European Credit Transfer and Accumulation system to increase transparency and recognition of achievement across borders.
- Adopting a common set of Standards and Guidelines for quality assurance processes including the creation of a European register of quality assurance agencies.

Work on all these strands is still ongoing although it was hoped they would be fully implemented by 2010. However, as well as reaffirming their commitment to completing these strands, the Ministers responsible for higher education in the 46 countries of the Bologna Process[3] have also looked at further developments for the next 10 years up to 2020 (EU, 2009). The first of their named priorities is about equitable access and completion:

> *The student body within higher education should reflect the diversity of Europe's populations. We therefore emphasize the social characteristics of higher education and aim to provide equal opportunities to quality education. Access into higher education should be widened by fostering the potential of students from underrepresented groups and by providing adequate conditions for the completion of their studies. This involves improving the learning environment, removing all barriers to study, and creating the appropriate economic conditions for students to be able to benefit from the study opportunities at all levels. Each participating country will set measurable targets for widening overall participation and increasing participation of underrepresented groups in higher education, to be reached by the end of the next decade. Efforts to achieve equity in higher education should be complemented by actions in other parts of the educational system. (EU, 2009 p2)*

They go on to note that widening participation shall also be achieved through lifelong learning and that intermediate qualifications within the first cycle at the national level can be a means of widening access to higher education.

Widening participation to higher education in Europe is therefore seen as an important social aim to be enacted both within countries and across the countries belonging to the

[3] The Bologna process is a collective effort by public authorities, universities, international organisations and institutions. Although the process goes beyond the European Union's borders it is closely connected with EU policies and programmes.

EHEA. This aim is reflected in the European Universities' Charter on Lifelong Learning (EUA, 2008) which asks Universities to commit to, amongst other things, embedding concepts of widening access and lifelong learning in their institutional strategies, providing education and learning to a diversified student population and adapting study programmes to ensure that they are designed to widen participation and attract returning adult learners. The Charter also asks Governments to commit to recognizing the university contribution to lifelong learning as a major benefit to both individuals and society and promoting social equity and an inclusive learning society.

Individual countries have responded and are responding to these challenges in different ways and Case Studies 6 and 7 provide detailed overviews of how two countries – the Netherlands and the UK – have been addressing them. However, before looking at what is happening to address widening participation in different countries through the partners' Case Studies we first consider what we mean by widening participation in higher education.

1.3 A conceptual framework for widening participation in higher education study

It is not within the scope of this study to examine in detail all aspects of widening participation to higher education within the 46 members of the EHEA. The scope is restricted to a much smaller number of countries and focussed very heavily on members of the European Association of Distance Teaching Universities. Such 'open universities' largely operate through open and distance learning whereby students study part time at home or at work, studying a variety of specially prepared teaching materials and supported by tutors. This mode of provision inevitably suits life long learners of all ages better than the more traditional campus based provision of other universities catering for (mainly) secondary school leavers in the 18-25 years old age range.

More recently there has been renewed discussion within Europe and globally about open education in general, and this is discussed further in section 2. Equally there is much debate surrounding open educational resources, and this is also covered in more detail throughout section 2. It is also necessary however to examine widening participation more systemically by noting who is involved in widening participation, what widening participation means for those people and how widening participation may be achieved.

Widening participation inevitably focuses on how to motivate, enthuse and encourage new and lifelong learners to experience and benefit from higher education but often does not focus as much on how teachers and the institutions they work in influence the way higher education is perceived by these target groups. Equally it is necessary to question whether being a registered student at an accredited higher education institution (HEI) is what constitutes participation, but even if so, how much study might be deemed to be successful participation (as flagged perhaps by the intermediate qualifications in the first cycle mentioned above)?

To examine all these points we have used a conceptual framework that, as already noted, views participation in higher education to be limited by the:

- *availability* of opportunities to participate (usually taken to be number of study places available within higher education institutions);
- *affordability* of those opportunities (this could be due to issues such as the cost of the opportunity in terms of fees and living costs);
- *accessibility* of those opportunities (the ability to participate through a disability or ability to perform effectively due to the medium of instruction being a second or third language); and lastly by the
- *acceptability* of the opportunity (a more subtle issue exemplified by the mode of instruction not suiting a students learning style or cultural norms making either the mode of study or the study of certain topics difficult).

Inevitably this leads to a tension between the supply of higher education provision and the demands by people wanting to experience that provision (and equally the demands expressed by those setting education policies and those wanting to employ those who have participated in higher education).

This same framework can also be applied to the educational resources in the form of learning and teaching content, as well as the hardware and software that support that higher education provision. In other words what is:

> (1) The extent or *availability* of educational resources (how many of them in what forms, both formal and informal)?

(2) The *affordability* of those resources (how much do they cost)?
(3) The degree of *accessibility* to those resources (where can they be found and by whom), that help contribute to the level of use of those by learners (the degree of engagement if not participation)? and finally
(4) The *acceptability* of the resources that can also influence not only the way in which engagement and participation happens but also the way the experience is valued?

We believe that greater availability and accessibility of higher education places (particularly through open and distance learning) are necessary, but not sufficient, pre-requisites for increasing participation in higher education and that open educational resources offer new ways to consider what engagement and participation in higher education means in the 21st Century and help address some aspects of affordability and acceptability of both the taught and unsupported provision for some people**.**

2. Review of the literature and partner case studies

2.1 Definitions of widening participation

Widening participation is a relatively new term used within higher education and one most debated and developed within the UK through National policies (and reported on through a dedicated journal)[4]. It may be considered as a process, an outcome or a type of student (Shaw et al, 2007) but inevitably these aspects become entangled as you examine the motivations of HEIs, teachers and learners alike. Accordingly, there is no settled definition of widening participation but the Higher Education Funding Council for England recently stated on their website:

> *Widening participation addresses the large discrepancies in the take-up of higher education opportunities between different social groups. Under-representation is closely connected with broader issues of equity and social inclusion, so we are concerned with ensuring equality of opportunity for disabled students, mature students, women and men, and all ethnic groups. (Hefce, 2011)*[5]

This definition identifies that certain societal groups or communities may be excluded from current educational provision (the type of student) and that a number of factors may be involved (that involve the processes used to administer HE) and assumes equality of outcomes. While it may be simple to use socio-economic class as a major measure of potential exclusion it is another matter to disentangle the wide variety of reasons that effectively lead to this exclusion.

Starting with the type of student, within the literature related to widening participation in higher education, some or all of the following have been identified as potential barriers to particular groups and communities engaging with available provision (David et al. 2008; Lane, 2009):

1. Geographical remoteness, even in rural areas of small countries, where there are few or no campus based opportunities for HE study, and therefore involves moving away from home (Bowl, Cooke and Hockings, 2008);
2. Cultural norms, with some ethnic cultures not supporting the education of women in particular circumstances, for instance, or cultural assumptions in courses being off-putting to some citizens (Brennan and Naidoo, 2008; Richardson, 2010);
3. Social norms, whereby some family groups or communities do not apparently value education as highly as others, so discouraging engagement, or the attitudes of some groups being antithetical to others' participation (Preece, 1999; Greenbank, 2006);
4. Prior achievements, such as prior qualifications being used as a filter access to a scarce resource (higher education) or as a filter to maintain an individual institution's social and cultural status;
5. Absolute individual or household income or in relation to their community, where the relative cost of accessing higher education by certain groups is very high, particularly if it means giving up paid employment to study (Lindstrom, 2006; Diamond, 2008);
6. Digital divide. Computers and the web offer many freedoms but they still cost money to access and confidence to use effectively. People with less money may not

[4] This journal is called Widening Participation and Lifelong Learning and can be accessed at http://wpll-journal.metapress.com/home/main.mpx

[5] Disabled students are implicitly included in this broad definition but disability discrimination legislation means that such students are specifically and explicitly dealt with in practice, in the UK at least (see http://www.hefce.ac.uk/widen/sldd/legis.asp) .

easily afford such technology and even find that the absolute cost to them is higher than other groups because they are seen as a greater financial risk to a technology provider (EC, 2005). Equally some people may believe that computers and the web would be useful to their lives;

7. Physical circumstances. There may not be any easy places to undertake the learning due to lack of a home, space in a home or having a particular type of home such as a prison. Similarly, people with certain disabilities may need specialist equipment or support to enable them to participate effectively;
8. Institutional attitudes and behaviours. The way HEIs describe themselves and the ways they engage with (prospective) students can be supportive or not of certain categories of people (Johnston and Simpson, 2006);
9. Individual norms, where a person is constrained by social and cultural norms – attitudes and beliefs – that they think they are not capable or not good enough to study at this level or others think this of them.

This is a formidable set of barriers to participation in higher education with possibly the last one being most crucial as, without the intent to learn at this level, the other barriers may be perceived rather than real barriers, until tested out for real (Fuller et al, 2008). There is another personal barrier, however, which relates to the preferred learning mode of the individual. Some people find it easier or harder to learn from reading texts or listening to lectures or doing practical experiments without specialist support or more flexible and/or varied teaching strategies.

The converse to this student or learner view, and thinking about how such potential students adapt to the prevailing HE provision, is how teachers and HEIs adapt their processes to make them more suitable for people facing such barriers? Equally there are the issues of what constitutes appropriate levels of attainment even when participation happens? Do students have to complete their degree, do they even have to pass any examinations if their experience of HE gives them new confidence or skills to be able to, for instance, start up a small business?

Many ODL institutions have devised means of overcoming some or all of these barriers through their formal programmes of study and sometimes through informal programmes of study. So how does open education in general and open educational resources, in particular, help widen participation by lowering these barriers?

2.2 A brief history of open education

The phrase open education implies that traditional higher education must be closed and taken out of the traditional classroom setting. The recent book on Opening Up Education edited by Ilyoshi and Kumar (2008) has many authors exploring different aspects of this issue while the equally recent Cape Town Declaration on Open Education (Anon, 2007) also indicates a renewed interest in how education, and particularly higher education, may be made more accessible and available to more people around the world through the use of new technologies and new systems of teaching and learning and in particular open educational resources.

To some degree this discussion is returning to the issues outlined many years earlier by Ivan Illich in De-Schooling Society (Illich, 1971) where he argued:

> *A good educational system should have three purposes: it should provide all who want to learn with access to available resources at any time in their lives; empower all who want to share what they know to find those who want to learn it from them; and, finally, furnish all who want to present an issue to the public with the opportunity to make their challenge known. (Chapter 6)*

Illich was also arguing for the de-institutionalisation of society and education within it and yet he and the authors of the Cape Town declaration were perhaps ignorant of other approaches to open education in the last 40 years provided by ODL institutions. In particular, the discourse around the role of openness in higher education can be said to have seriously started with the inception of The Open University of the United Kingdom (OUUK) in 1969 (see Case Study 7). While the use of distance teaching methodologies in higher education predates this by a century (notably the University of London's External degree programme) and was widely used by a number of institutions in the Soviet Union and by UNISA in South Africa in the early 20th Century[6], it was the OUUK that was first named an Open University (Tait, 2008). While the choice of the title was a collective one it was the OUUK's first Chancellor, Lord Crowther, who first gave meaning to what openness might mean for the UK Open University (and possibly other open universities) when he said it would be *'open as to people, places, methods and ideas'* in his inaugural speech. This is still reflected in its mission (The Open University, 2010), although how these four 'opens' and openness in general is interpreted in practice has changed and is changing further with the advent of open educational resources. This is discussed briefly below and is described in more detail by Gourley and Lane (2009).

The plurality of possible meanings for openness implied in this one institutional case is still reflected today across the wider ODL movement (Anderson, 2009), with many attempts to define the essential characteristics of open learning, open schooling or open education (but rarely it seems open teaching). In many cases ODL institutions are found wanting on many aspects of openness as defined by different authors.

While not repeating these international debates in this report a notable trend amongst open universities and other universities employing distance teaching methodologies alongside campus based teaching has been the move away from a discourse based on distance teaching or education to one of open and/or distance learning partly to reflect the position of the learner rather than the teacher or institution. In contrast, the principle of open access as a major aspect of openness ('open as to people'), whereby no previous educational qualifications are required before registering on an undergraduate course, and a central feature of both the OUUK's and Open Universiteit Nederland's (OUNL) operations (see Case

[6] Open and Distance Learning is still strong in the Russian Federation as discussed in Case Study 5

Studies 7 and 6), is by no means universally adopted by other open universities. A possible reason for this is that while the ideals of openness in HE have often been focused around the open universities, the latter have been very much state led interventions as described in some detail by Tait (2008), as can be clearly seen in the case studies for the Hellenic Open University (Case Study 3) and the Open Universiteit Nederland (Case Study 6). Many of these state led interventions have been intended to fit within the prevailing social and higher education systems in their respective countries, often raising particular issues of 'comparability' with campus based educational institutions.

As stated in many of the case studies (e.g. Case Study 1: Anadolu University and Case Study 5: Moscow State University of Economics, Statistics and Informatics), in one sense distance teaching universities practice open and distance learning that potentially benefits more people as it offers an alternative method to gain higher education credits and qualifications, one that is not tied to regular and frequent attendance at a campus for classroom based teaching. Their programmes are usually modular and allow for accumulation and transfer of credits for those geographically remote or in employment who feel unable to take up full time study. In other words openness is often seen as a essential but not necessarily sufficient factor in widening participation in higher education.

2.3 The new openness for higher education in the 21st Century

Whereas, as argued above, ideas of openness were largely centred on ODL institutions in the late 20th Century, since the beginning of the 21st century we have had the rise to prominence across all HEIs (and beyond) of additional names and ideas to consider. Achieving openness in HE can be difficult and is not helped by the fact that definitions and names can quickly multiply and become confusing. In the past 40 years we have seen names discussed such as open learning, distance learning, supported self study, informal adult learning, home study, e-learning, lifelong learning and flexi-study, and all have been used in different ways to describe certain facets of the act of learning in higher education (interestingly the OUUK prefers to use the term supported open learning for its formal provision – see Case Study 7). In the past 10 years new names have been added to the educational lexicon such as open content (Wiley and Gurrell, 2009), open courseware (Carson, 2009) and open educational resources (Casserly and Smith, 2008; Caswell, Henson, Jensen and Wiley 2008), all based upon open licensing (Bissell, 2009) and driven by the emergence and spread of digital technologies. And in contrast to open universities, these open movements have mostly not been state interventions but have arisen through the acts of institutions themselves and wider communities sponsored by philanthropic Foundations, although some governments are beginning to take note of these movements (Kumar, 2009).

This diversity of old and new names involving openness reflects the diversity of provision and modes of study that are emerging and at times debates solely about such names and definitions can become sterile. What is more important is to understand the *principles* upon which a more open educational provision should be based, principles that seem to mainly address a fundamental right of access to education on the part of all, but that also examines the *practicalities* of providing more open systems, as addressed by the many authors in Ilyoshi and Kumar (2008). The most basic principles we believe that all education, not just higher education, should follow, is that of *the primacy of the learner and their context* in shaping their learning experiences and *the extent of openness in the provision* that tries to meet those contextual needs.

2.4 Open educational resources: a new paradigm for higher education?

The word paradigm can invoke many meanings but the one we wish to use in this report is that of a dominant worldview – a set of experiences, beliefs and values – by which individuals, institutions and societies understand and act. If open educational resources are to create a paradigm shift and be a new paradigm we need to examine first what the current paradigm appears to be.

Much of higher education is based upon the primacy of a teacher as an expert teacher, if not subject specialist, who normally engages with a relatively small cohort of students, with the size of cohort largely determined by the size of the classrooms or lecture theatres which can accommodate the cohort but also by the amount of time and effort that the teacher can apply to the assessment and support of that cohort. Whereas performing to a large audience can be stimulating and uplifting, marking hundreds of essays in a short space of time can be very demanding and dispiriting.

Consider also how universities make educational resources available to learners. In a traditional, campus-based, or 'closed' university, the educational resources are only available to registered students within the perceived walls of the University, and yet most learners are outside these walls, and only available to a few of these learners in the university's hinterland served by extra mural activities. Universities also limit the number of students they enrol, and determine the students' entry through selection methods such as previous educational achievement. Students are largely registered in whole programmes and not individual modules. Further, most universities serve full-time students. Part-time students must structure their time around the institution's schedule, which can be difficult for those who work or have family and other commitments. The students must come to the campus to participate in the educational experience. The methods of teaching used are also very limited (and limiting): Students attend professors' lectures, along with some seminars, workshops, and laboratory, or other practical activities. Educational resources are housed in a physical library or bookstore. Moreover, learning is assessed primarily through examinations and similar means.

This picture may be extreme for effect, but in brief, the experience of a traditional university is of an individualised process where individual lecturers and professors devise, specify, and deliver the courses studied by individual students even though present as cohorts or groups in a classroom. The students are therefore largely guided by the views of a single source even though they may read the views of others in assigned texts.

In contrast open universities have sought to open up higher education to greater numbers and teach and support students in a greater diversity of ways. What is clear is that learning in classrooms with a teacher at the front is now a small part of the complete picture and that individuals will be undertaking a wider range of learning opportunities, both formal and informal, throughout their lives, by themselves, in groups, at home and at work, to name but a few modes. Nevertheless, the physical nature of much educational provision – tied to a particular place, bound up in a particular medium – text or audiovisual assets – and available only at pre-defined times – meant that the locus of control was much more with the providers of learning opportunities – the teachers and universities - than the users – the learners.

The advent of digital technologies and the internet in particular is changing this dynamic because it helps remove some of these barriers, making digital content much more accessible, available and affordable and enabling new forms of instantaneous communication between people in different places and times. Even more significant than these hard or commercial technologies, however, has been the emergence of soft or social

technologies in new forms of licensing for (largely) digital content. This 'some rights reserved open licensing', for example the Creative Commons licences[7], placed on new and previously 'all rights reserved' copyrighted content enables the free copying, sharing, reuse and remixing of that content within pre-defined guidelines. This development has been central to the emergence of OER which goes well beyond just the issue of open access where someone can still try to control all uses of the material. The philosophy of OER is that you want people to take it away and do things with it. In principle this gives learners (and teachers) even more freedoms as they can decide when to access it, whether they want to alter it, or how they learn from it because of the potentially non-destructive, replicable and recorded nature of the original material and all versions they make of it.

As noted earlier much of the current provision in HE is still based upon a teacher-centred model. New technologies can give greater freedoms to make the learning more learner-centred. The experience of ODL institutions is that self-organised learning opportunities are fine for individuals but that most group-based opportunities need to be mediated or facilitated by key individuals or organisations. The corollary to a good mediator is good content. The proliferation of material accessible on the web means that there may need to be new quality assurance mechanisms for educational resources based on a mix of professional, peer and user reviews. Such mixed teacher-centred and learner-centred quality frameworks for formal educational materials are emerging and need to be built on for materials to be used successfully in informal, non-formal and formal settings.

Our initial experience with OER also indicates a large and often unfulfilled desire for adult learners to be able to convert or trade-in their informal studies for more formal or readily recognised credits, certificates or qualifications given by organisations or their peer community (see Case Study 6 from OUNL for an example of this). Collectively we are exploring the possibilities that new technologies open up for the recognition of achievements gained through individual, group based or long term participatory learners but there is a lot more work to be done to create cost effective and credible systems and processes. There is no doubt that OER are making us re-examine our business models and our own degree of openness as is evident through the entire set of partners' case studies.

Up to now we have focussed on what OER might mean for individual universities. We now want to consider the collective marketplace for HE. Most HE students today have a relationship with just one university in their life. At that university they have any number of individual relationships with individual professors and fairly small groups of fellow learners. As our opening remarks suggest, many other potential students are denied access to this because of scarcities in prime resources - lecture rooms and professors. There are now more people than ever wishing to participate in HE, and increasing numbers of them want that participation to be more flexible and mobile to meet their needs. They want to be able to combine modules from different universities. They want to gain credit for other types of study and experiences. They want to be full-time at some points in their life and part-time at others. They want to stop and start up again when they can. They may still want to study when they are retired. They may want to be teachers, as well as be taught.

Publicly supported and funded open universities have been in the vanguard of opening up education for more people and giving them more flexibility in their studies. Some private online universities such as the University of Phoenix in the USA[8] and corporate universities attached to multinational corporations are extending this formerly largely social economy into a market-based economy but it is unclear how they contribute more specifically to widening participation.

[7] See http://creativecommons.org/
[8] See http://www.phoenix.edu/

Open educational resources are working in the other direction, opening up previously closed resources and taking content they might have been deemed to have commercial value into a gift based economy. Closed resources, whether privately or publicly funded, have to be paid for either at, or close to, the point of need. Open resources will probably also need to be funded by public or philanthropic monies and effort, but are then free thereafter to all who can reasonably access them. Nevertheless the dominant relationship at this point in time is still that of a few producers serving up resources to many consumers.

The really significant development for open education is the advent of Internet-based social networking and collaborative technologies. This enables far more people to be producers of resources and providers of particular services – such as tutoring a specific course for anyone, anywhere. The marketplace is global, not just local or even regional. In principle, all can become producers and consumers. Such relationships, however, can still be largely meeting market needs rather than social needs. The Internet and OER do not spell the end for traditional universities any more than open universities have done so, or any more than radio has replaced printed texts or television has replaced radio. They both expand the overall market and differentiate it into a greater number of sectors, including the social element of the economy. It may be that the Internet and open education, now the smallest sector in the market, will become the largest sector in the education market.

Although the shape of this market may be decided by the future users of OER, rather than the current producers of closed educational resources, these current producers have the opportunity to influence what happens and decide what role they wish to play in the new market. To that end, we close with the following observations on how OER can aid widening participation based on our collective experience as partly documented in the Case Studies:

- Making educational content freely available for people to potentially use is easy to do, technically.
- Making educational resources available for re-use under an open license is more difficult, because it works against the current culture and traditions of copyright and intellectual property rights that permeate the modern knowledge society.
- While making OER accessible to the most disadvantaged groups in the world is also challenging, it is readily achievable as the digital technologies of all types being developed and refined by multinational companies offer different and more affordable routes to such content and resources. The difficulty comes in ensuring that people can make any significant use or re-use out of the content and resources that may be available to them.
- In terms of OER, the question is who benefits and how do they benefit? What conditions are needed to convert the vast number of browsing consumers of a wealth of variable information to serve functional needs, into many communities of learners seeking to transform themselves though education? It is to this question that we return in the following sections.

2.5 The availability of open educational resources

The infrastructure of the Internet and its reliance on digital technologies has vastly increased the amount of available educational resources (of all types and qualities), even those under copyright, that can be accessed, or changed and shared around by anyone who has the means to access it. The mobility of content has never been faster or greater. The adoption of 'some rights reserved' licensing regimes such as Creative Commons[9] and the decisions by many universities (for example through the Open Courseware Consortium[10]) to make some or all of their educational resources available under such licences in digital form on Web sites, or to undertake open access publishing of research papers and reports, is significantly widening the availability of OER and so overcoming one of the barriers to use by learners and educators alike. We mention educators here because although widening participation is primarily about increasing the numbers of students in HE, such increases can only be served if there are concomitant increases in the numbers of HE teachers participating in systems of HE provision (this may not always be full time HE teachers but also those in other occupations who provide teaching or teaching support to vocational and/or professional programmes such as medicine, engineering or agriculture). In other words and as noted earlier, widening participation needs to be addressed through both the supply and demand sides of the relationship.

[9] See http://creativecommons.org/
[10] See http://ocwconsortium.org/index.html

2.6 Engaging with open educational resources: teachers

As previously mentioned, the concept of OER is subject to different interpretations and variant names such as open educational content, open courseware and open learning resources (Friesen, 2009). Nevertheless, behind all the names it is largely agreed that:

> *OER are teaching, learning, and research resources that reside in the public domain, or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge (Atkins, Brown and Hammond, 2007, p4).*

The claimed benefits of open educational resources are also diverse. As Hylén (2007) notes *'The reasons for individuals and institutions to use, produce and share OER can be divided into basic technological, economic, social and legal drivers*'. He went on to explore six incentives for institutions to become involved as a provider of OER that can be summarised as:

1. Sharing knowledge is a good thing in itself;
2. It increases the value of existing investment of public money;
3. It can cut costs and improve quality;
4. It can be good for public relations;
5. It provides a chance to explore new global business models; and
6. Open sharing will stimulate innovation.

Hylén also identified four motivations for teachers to be involved as:

1. Sharing knowledge being a basic academic value;
2. The increase in personal reputation in an open community;
3. Being a leader in their field; and
4. There is little value in keeping the resource closed.

As well as motivations like these there can also be barriers to creating and/or using OER, as discussed both in Hylén (2007) and the OLCOS Roadmap 2012 (Geser, 2007). This point is further exemplified in Case Study 2 where the FernUniversität in Hagen surveyed teachers in Universities in German speaking countries.

In addition to these motivations and barriers at the individual teacher level many similar considerations have been reported at the institutional level for HEIs (Ferran et al, 2006; Hylén, 2007; Geser 2007). Nonetheless these lists do not fully reflect who are the target audiences for OER and the different motivations that they offer for institutions and individuals as noted for the OUUK (McAndrew, 2006; Gourley and Lane, 2009; McAndrew et al, 2009) and also discussed in Case study 7. For instance, the OUUK's OpenLearn[11] project has demonstrated the following benefits of OER:

- Enhancing the reputation of the OUUK.
- Extending the reach to new users and communities.
- Recruitment of students from those who come to see OER on OpenLearn.
- Supporting widening participation.
- Providing an experimental base of material for use within the university.
- Accelerating uptake and use of new technologies.

[11] http://www.open.ac.uk/openlearn/

- Acting as a catalyst for less formal collaborations and partnerships.

Similarly, the perceived benefits to lecturers or other educators given by Hylén are for the primary authors of OER, not the secondary users of the OER as noted by the OUUK. These benefits are equally diverse but have been found to include (McAndrew et al, 2009):

- Investigating the OUUK approach to teaching a particular topic;
- Downloading OpenLearn OER study units for incorporation into courses, whether online, blended or face to face;
- Using study units as recommended or supplementary reading for an existing course;
- Reworking and localising study units for their own purposes and their own contexts;
- Sharing materials and ideas with other educators worldwide;
- Collaborating with others in developing new OER;
- Experimenting with the available technologies on the OpenLearn platform;
- Contributing to research into the effectiveness and uses made of OER.

So, while there are system wide de-motivating factors around OER, teachers have the opportunity to play and experiment without needing significant support or having to seek prior permission. This coupled with ever easier ways to publish content means that the stock of OER of all types in all languages is certain to increase. However, as noted in Case Study 1 from Turkey, a lot of content has been made available for viewing by anyone but has not always been openly licensed and so increasing its value to users to download and, if desired, to freely modify or translate. So while open access to educational resources is a good first step, the real benefits of openness come with full open licensing (Lane and McAndrew, 2010).

2.7 Participating in formal, non-formal and informal learning: learners

The advent of OER has sharpened the debate as to what it means to participate in higher education and what outcome is expected from that participation. Traditionally this has been attendance at a campus based institution taking a full taught degree course (Bachelors or Masters). As already noted, many distance teaching institutions operate a modular taught degree programme while campus based teaching institutions may offer modular part time routes to an equivalent degree programme but the overwhelming expectation has been that a degree is the finish point and that only accumulating some credit or attaining an intermediate qualification is less valued. For some open universities the ability to take individual modules is seen as offering greater openness and allowing wider participation by people in higher education (see Case Study 7 on the OUUK for more details on this) but equally not all those people who start a module necessarily complete all the assignments and gain credit. In other cases people may undertake study and gain non-accredited certificates from other organisations which it is then possible for them to have credit rated, i.e. assigned HE credit by an HEI such as the OUUK[12].

While there have always been some educational resources publicly accessible (at cost) to people (e.g. text books, public lectures) these were not always accessible and understandable to many without a strong prior educational background. The greater quantity and variety of open educational resources means that many more people can access them and also that many may be a bit more understandable to them, particularly if the resources have been devised for self study. It is still difficult, however, to claim that informal study of OER provides a higher education experience since it lacks the direct tuition, support and assessment elements that characterise formal courses. Nevertheless, OER do allow others to self organise study groups and so feel that they are engaging in higher education level study, albeit one that is not formally designed and accredited by a higher education institution. However if other organisations run courses based on such OER then they may be eligible for credit rating as noted above.

Indeed, it can be argued that OER offer a bridge between the informal, non-formal and formal domains by helping people to overcome their concerns arising from individual, social or cultural norms as noted above. Examples of how this might be achieved are discussed in Case Study 7 from the OUUK as well as further thoughts on what constitutes support around OER.

[12] http://www3.open.ac.uk/credit-rating/

2.8 The accessibility of open educational resources

Wider availability of OER is, however, of no benefit to those who have few or no means of accessing it (this gap often being referred to as the 'digital divide'). The challenge here is providing a public-wide infrastructure (whether publicly or privately funded) of information and communication networks that everyone can access and derive services from – if, of course, they can privately afford the computer or mobile phone that can link to those networks (Case Study 5 from Russia highlights the potential scale of this issue in some countries). Although this is a significant barrier for disadvantaged groups or those suffering multiple deprivations within developed countries, and an even bigger barrier for the many more disadvantaged groups in developing countries, it can be partly surmounted by ever more affordable and accessible devices and investment in new infrastructure.

Such a technological solution does not help with the greater issue of wider access to formal education programmes, since at the basis of that issue are the social norms surrounding the value placed upon formal education as being superior to non-formal or informal education, and the ways in which systems of education are organised. People may be able to access and engage with OER on their own, outside of the constraints of a university, but what recognition and benefits do those people gain from doing so if universities still require high prior achievement for gaining entry to formal study, and employers recognise only those achievements made when participating at universities? Further, if they are inexperienced and unconfident learners, without the types of support that university staff can provide for registered students they may not gain much learning benefit from engaging with OER. Again, some indication of routes forward for bridging non-formal and formal study are shown in the Case Studies from the Anadaolu University (No. 1), the Open Universiteit Nederland (No. 6) and The Open University in the UK (No. 7).

In addition, even access to digital information and communication technologies is not sufficient to make OER accessible to people as there are other factors that contribute to the phenomenon known as the digital divide, as will be discussed in the next section.

2.9 Digital skills, digital contexts and 'digital divides'

Much of the 'digital divide' debate concerns the fact that some groups or individuals in societies have differing access to digital information and communication technologies. In effect an economic divide is created by relative purchasing power. Many have also raised the issues of usability of the digital technologies and empowerment being other socially dividing factors (Norris, 2001; Van Dijk and Hacker, 2003; Nielsen, 2006) whilst yet others have looked at this specifically for education (Enoch and Soker, 2006).

The economic divide has mainly focused on access to Personal Computers, whether desktop or laptop machines. With greater types of digital devices (particularly mobile devices) becoming available; with more computing power and accessibility to communication networks; and the ever declining cost of computing and communication services; this is probably not the most pressing long term issue for the educational divide (although very much a short term issue as noted in Case Study 5 from Russia). The growing availability, affordability and accessibility of digital devices that can be used for educational purposes means that teachers can plan more confidently knowing that their students will not be so greatly disadvantaged and in some cases certain groups, such as the visually impaired, may be better served than with non digital technologies (Cooper, Lowe and Taylor, 2008).

The usability divide or usage gap refers to the technology being too complicated to use at all or requiring sophisticated skills and competences to use for particular purposes. In other words, how adept people are at using the technology and conversely how simple has the technology been made to use by those creating it? This issue is often discussed through the topic of digital literacy (or fluency). The most quoted definition of digital literacy is that of Gilster (1997):

> *.. the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.*

As noted in Newrly and Veugelers (2009) Stayaert has expanded this definition to encompass instrumental skills (simple actions to control features and programmes on the digital device), structural skills (dealing with information being managed using the features and programmes) and strategic skills (applying the instrumental and structural skills in creative and reflective ways). A similar focus on skills within digital literacy is seen in this definition from Martin (2006):

> *Digital literacy is the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesise digital resources, construct new knowledge, create media expressions, and communicate with others in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process.*

Much of this discussion about digital literacy revolves around a modern day skill set that relies on digital technologies or tools; but does not specify the full nature of these skills nor their role in relation to educational literacy or learning how to learn (Selwyn and Facer, 2007). To simplify, both self communication (learning) and person(s) to person(s) communication involves the structured manipulation of words, numbers, sounds, symbols and pictures, mediated by the technologies being used (or not) as aids to the process. Words can be as speech or written text, and the skill of understanding (aka listening/reading) or manipulating them (speaking/writing) are variously known as articulacy and literacy. Similarly, symbols and pictures, both static and dynamic involve a skill set sometimes known as graphicacy.

Putting aside this terminology for a moment, the general issues around these skills relate to being able to be a participant in society. It is being able to participate in everyday life and work either because you can understand/interpret/enjoy the communicative outputs of others and/or because you can make your own outputs that others can understand/interpret/enjoy. The most interesting developments for education are how technology defines and/or shapes which communicative skill is used and who is able to use it (effectively).

Digital technologies are changing the ability to produce and share graphical representations such that they are becoming a serious area of research and activity (despite the practice being hampered by no agreed grammar for such outputs). Similarly, video use has been even more influenced by digital technology such that skills of producing and interpreting such outputs are more widespread and more familiar than ever[13]. The argument being made is that digital technologies are not only changing the medium and practice of communication but also the predominant form of expression within that medium. If so, how competent do we all need to be in these different communicative skills, and how competent do we need to be in using the technologies that enable us to participate (if we want to) in that particular form of communication and collaboration? Such questions apply as much to teachers as learners since both need to be equally comfortable with the technology and the practices it supports.

These issues are as relevant to ODL or e-learning as they are to just OER. The Case Studies in this report indicate that much effort is being put into adequately equipping ODL students with the hardware, software and skills to be able to overcome as many aspects of the 'digital divide' as possible. However, the funded and targeted widening access or participation schemes variously noted in the Case Studies all involve formal study with formal support. Learners accessing OER by themselves from websites lack such support, particularly perhaps in digital literacy skills, despite the use of open learning environments and well designed self study materials as has been achieved by the OUUK (Case study 7). In fact some of the mini case studies from the OUUK indicate that 'digital divide's are best bridged through the mediated use of OER in face to face settings where there is peer and professional support (Khokhar, 2007; Lane, 2008a).

[13] An example of growing academic interest in this area is the recent 1st International conference on Visual methods in September 2009 – see http://www.education.leeds.ac.uk/research/visual-methods-conference/ which is to be followed by a 2nd International conference in September 2011 http://www.visualmethods.org/

2.10 The acceptability of open educational resources

Having an open door through wide availability and high accessibility of HE does not mean that new learners will pass through it or that they stay "inside" the system for very long. There are a number of differing social and cultural reasons that inhibit certain members of society from even thinking they could participate in higher education, let alone feel confident to start any form of formal programme on offer. The social and cultural norms of their family, friends, or work colleagues can instil and reinforce personal views and attitudes that keep them from accessing what might be available: for example, that they are not smart enough or suited to study at a higher education level (and often not even at lower education levels). To be able to engage in higher education programmes and to find success of some kind in that engagement usually requires active support and encouragement from someone in the family or peer groups, or active support and encouragement from teaching professionals or para-professionals (support staff rather than teachers).

As noted previously, the advent of digital technologies and their use within e-learning or blended learning schemes has opened up further possibilities for open and distance learning by both increasing the scope for much more non face-to-face two-way interaction and forms of collaboration between groups of learners and their teachers. At the same time the *availability* (physical access)*, accessibility* (usability), *affordability* (direct and indirect costs) and *acceptability* (social empowerment) of this mode of teaching and learning is extremely variable, with socially excluded groups or communities being those who do not have much access to such technologies, may find few opportunities available to them in their circumstances and are worried that they cannot cope with these new technologies and ways of learning (Kirkwood, 2006a; 2006b). To reiterate, they do not feel included even when people are trying to reach out to them because they lack confidence in their competence to succeed. (There is another side to this in that even where an institution is trying to reach out to such learners the language it uses can be off putting to the target groups).

This disempowerment can be viewed as excluded communities having few, if any, degrees of freedom to engage with open and distance learning. The contrast here is between the discourse and practice of making educational materials, activities and opportunities as open as possible by certain groups in societies and with the freedoms that are embodied within the different types of openness. One example is the practice of open access to undergraduate courses where no prior qualifications are needed to register – that is students have freedom from discrimination on the basis of prior achievement. However open access does not mean that the course is free of cost or that there are constraints to the freedom of when the course can be studied and assignments submitted. Another example is open educational resources where there is much greater freedom around cost (they are free to access although there may be costs to being online) and time of study (they can be studied at any time as long as they are available and accessible by the user – that is they can go online). These freedoms are made more possible with digital resources as they can be accessed simultaneously by many people and infinitely replicated. As noted earlier both the relative abundance of, and non-destructive through consumption, attributes of a digital resource means that issues of physical scarcity no longer apply.

Formal education is a structured set of activities where a key element is the interactions between teachers and learners and between fellow learners; interactions that are supported by educational content (e.g. text books, course notes, assignments, etc.) and learning resources (e.g. whiteboards, laboratory equipment, Virtual Learning Environments, etc.). In this triangular relationship between teachers, learners and resources it is mainly teachers that select and/or develop the set of resources and activities that learners are expected to engage with. As argued by Lane (2008b), teachers attempt to mediate the interactions

between the students and the resources (or 'inter-mediate'), acting as an expert and/or a guide to the learning process. Of course this simple model ignores the wider and variable social and cultural settings for these activities, while other people can be part of this strictly educational relationship such as librarians, mentors in work based settings and technical support staff. Nevertheless, such inter-mediation in structured settings is dominated by a largely closed, face-to-face presence model rather than an open and distance model; but it is still a feature of ODL systems. Openness rarely extends to offering completely unfettered choices to the learners on what to study, when, how and where, as, in principle is being offered by OER and some emerging community based operations on the web such as Wikiversity and the Peer-to-Peer University (Thierstein, Schmidt and Håklev, 2009).

Under this view of education, if learners are to effectively engage with formal educational opportunities then that process is normally mediated by the structuring of the educational resource by teachers, the learners own capabilities, the inputs of fellow learners and the interventions of professional teachers/support workers (Lane, McAndrew and Santos, 2009; McAndrew et al, 2009). Openness, in the form of OER, may impact on not only this formal education but also much informal education.

Firstly, digital resources and digital environments can substitute for physical resources and physical environments but inevitably they are different and the need to learn and understand how to create, navigate and use such resources must not be underestimated. The digital educational divide can mean that some learners are much more sophisticated users of digital technology for learning than their (subject focussed) teachers, while such fluency (or not) with the technology can exacerbate the educational divide as modes of communication, collaboration and computation multiply or become more sophisticated.

Secondly, the very openness of an OER means that learners have much more access to structured content without the other structuring provided by intermediaries such as teachers. While such wider and free access may be good in principle, in practice it may be harder for less sophisticated learners to make good use of them without more direct support from intermediaries.

So, while openness within education and the use of open educational resources have the potential to reduce inequalities in the educational divide it can be argued that it may actually exacerbate the already existing digital divide. In particular the availability, accessibility and acceptability of this mode of teaching and learning is extremely variable, with socially excluded groups or communities being those who do not have much access to such technologies, may find few opportunities available to them in their circumstances and are worried that they cannot cope with these new technologies and ways of learning. In other words it is the social and cultural factors that may be much more important than the economic ones. In such cases of disempowerment there need to be appropriate social and cultural support for the prospective learner to help reduce or remove these disempowering conditions. As Wilson (2008), Selwyn and Facer (2007) and McAndrew et al (2009) argue, interventions need to recognise and draw upon existing networks within communities, using local champions to develop skills and confidence and allow people to make an informed choice about their learning and their use of digital technologies for that learning.

2.11 How open educational resources might support higher education study

Openness, when looked at in terms of OER, is centrally concerned with freedoms as expressed in the open licences applied to them:

- Freedom from paying any money to access and use the content for specified purposes;
- Freedom to copy and make many more copies;
- Freedom to take away and re-use without asking prior permission;
- Freedom to make derivative works;
- But not necessarily freedom to make profits from them.

So, openness can be equated with freedoms, but the degrees of freedom available within a particular openness can vary (as seen in the spectrum of Creative Commons licences themselves) and can be influenced by many other factors beyond the licence and particularly how potential users perceive their openness. For example, the OUUK's work with the BBC has meant that (free to view at first then free to record when technology allowed) educational radio and TV programmes associated initially with courses have been openly available through terrestrial public service broadcasting in the UK ever since the OUUK began teaching in 1971. So, people have had the freedom to access and to copy this particular copyrighted content using video recorders for personal use but not the freedom to use what they record for educational or public performance purposes without a licence or prior permission.

In attempting to cover both principles and implications for practicalities Schaffert and Geser (2007) have set out four dimensions of openness for OER which are heavily influenced by digital technologies and where they feel that all dimensions need to be present for maximum openness (see Figure 1). For example, a document written with MicroSoft Word™ can easily be shared, copied and altered if it has an open licence but it does mean that you as the author, and others re-using it, have to have purchased proprietary software to do so.

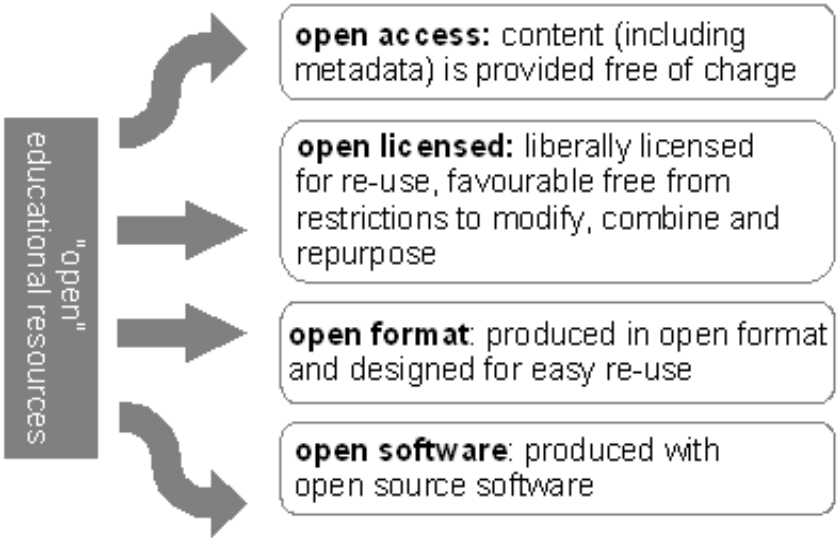

Figure 1, the meaning of 'open' in 'open educational resources' (Schaffert and Geser, 2008)

It is still early days in the OER movement, but the evidence to date points to a change in the dynamics of adult learning, between teachers and learners and between formal higher education and informal adult learning, as this new range of openness becomes more widespread (McAndrew et al, 2009), although some question the motives behind OER developments by Universities (Huijser, Bedford and Bull, 2008). What is almost certain is that there are now more educational resources potentially available to many more people than has ever been the case through public libraries, in the sense already noted that online digital copies can have infinite users whereas hard copies (books) are only available to a few people at any one time.

However, if OER are to be useful in widening access and/or participation it will be necessary for teachers and institutions to ensure that the OER are appropriately designed. Kahle (2008) has written about the primacy of design for educational technologies and that for open educational technologies (and we would argue open educational resources) in particular he proposed five principles:

1. *Design for access* – who is the technology open for?
2. *Design for agency* – the degree of user action and control over the technology;
3. *Design for ownership* – allowing people to have a stake in the technology through open licensing;
4. *Design for participation* – encouraging community involvement in developing or extending the technology;
5. *Design for experience* – take note of the aesthetics of use as users will quickly make judgements on this.

What is notable is that through all five principles there are elements that involve design and innovation processes pre-release of the technology (for educational resources this is Learning Design) coupled with continued design and innovation post release (the concept of continuous improvement or perpetual beta for technologies as discussed by McAndrew, 2006, amongst others). An exemplification of these design practices is given for the OUUK's OpenLearn initiative in Lane (2010). At the same time proper consideration of some of those same elements can encourage take up or adoption by individual users as well as diffusion amongst communities and populations of users. While these principles may be stronger in achieving the participation of educators they still have resonance with the needs of learners.

3 Case Studies from the study partners

The following case studies have been provided by the partners in OER-HE. They mostly either describe educational policy in general for higher education in their country before looking at widening participation and open educational resources activities at their institution in particular or they examine some other aspect of OER activity in their country. The case studies vary in length and depth and reflect the varying state of development of the use of ODL and OER in widening participation in higher education across Europe. Between them they provide a comprehensive set of activities involving ODL and OER that can contribute to widening engagement with and participation in higher education study. They also indicate how the sharing of best practices through such projects can aid the policies of the partner institutions themselves as well as the policies of the countries in which they mainly operate.

3.1 Case study 1 from Anadolu University[14]

National Educational Policy for Widening Participation in HE

The Turkish higher education system has a very centralized structure. The Higher Education Council (Yüksek Öğretim Kurulu, or YOK)[15], a semi-state agency, takes almost all the decisions regarding higher education in Turkey, including how many students the programmes can accept, how many professors can be employed, where the new universities or programmes should be established, and so on.

Widening participation in higher education is one of YOK's priorities. However, the context of widening participation is different in Turkey than the context in other European countries. In Turkey there are not enough places in the higher education institutions for every person who wishes to pursue their education. Every year around two million people take centralized, multi-phased university entrance exams but unfortunately nearly half cannot get access to any programme. To help ameliorate this situation YOK has several strategies for widening participation in higher education. One of these strategies, also supported by the current government, is to increase the number of public and private higher education institutions. Therefore, in the past eight years the number of the universities in Turkey has increased from 76 to 146. This strategy has brought new challenges however. For instance, many new universities are struggling with the shortage of qualified faculty. During the same time period, the increase in the number of academicians was only around 30 percent while the increase in the number of universities was around 95 percent.

Another strategy accepted by YOK to widen participation in higher education is open and distance learning. YOK is encouraging universities to offer distance (or online) programmes and courses as indicated in its current strategic plan. This plan recommends all the programme coordinators to offer 10-30 percent of the courses in their programmes online to be able to accept more students into the programmes. However, due to lack of know-how, belief and infrastructure there are almost no programmes that include online courses. On the other hand, there is a significant increase in ODL programmes. This strategy seems to be working for widening participation in higher education.

Anadolu University's Policy and Projects for Widening Participation in HE

Anadolu University has, since 1982, been offering ODL opportunities to millions who cannot attend the traditional higher education institutions due to various reasons, such as gaining lower grades in the university entrance exams, having full-time jobs, families, and/or disabilities, not having enough finance to be able to attend traditional universities, and so on. Today, it provides undergraduate and associate degrees as well as certificate programmes to around 1.3 million students via ODL. A total of 44 percent of the students in all the higher education institutions of Turkey are Anadolu University's ODL students. Therefore, Anadolu University by itself has been fulfilling the task of widening participation in HE to a great extent.

Anadolu is still working on improving widening participation in higher education by offering new programmes in different fields. For instance in 2009, it launched new associate and undergraduate programmes in the fields of health, science, and humanities. Food safety, pharmacy, chemistry, sport management are some of these new programmes that have helped Anadolu to widen participation in HE.

Another project the University has been carrying out, entitled Second University, offers an opportunity to those who would like to return to higher education or go for a degree in

[14] http://www.anadolu.edu.tr/en/
[15] http://www.yok.gov.tr/en/

another field rather than their first one. The project, initiated in the 2003-2004 academic year, enables the Associate and the Bachelor's degree holders, as well as students in any programme of any higher education institution in Turkey to be admitted to the distance programmes of Anadolu University without taking the university entrance exam. The Bachelor's degree holders can apply to two or four-year distance programmes, while the Associate degree holders can be admitted only to the two-year programmes. The total number of students in the programmes is around 70,000 and the number of graduates had reached 10,000 in 2009.

A number of e-Certificate programmes are also another project Anadolu has offered to widen participation in HE. These programmes are designed for those who would like to improve their job-related skills and hold at least a high school diploma. Currently, the University offers 17 different e-Certificate programmes in the fields of Accounting, Marketing, Entrepreneurship and Finance. Each programme is composed of 3 courses and the achievement is tested by face-to-face centralized exams organized in 17 provinces in Turkey and Cologne in Germany. Although all the materials including textbooks and TV Programmes are provided, the programmes are heavily based on e-learning tools and services. Some of the organizations involved (e.g. KOSGEB – Small and Medium Sized Industry Development Organization) and corporations (e.g. Migros, a supermarket chain) encourage and provide financial support to the members or employees to attend these programmes. Another goal of this project was to encourage the general public to participate in Anadolu's programmes by introducing the ODL system in Anadolu to the general public so that they can become accustomed to learning through a distance course. No follow up has been carried out, however, to assess whether this goal has been achieved or not.

Overall, Anadolu University by itself has accepted the task of providing a higher education right to all, and found ODL to be one of the effective means for fulfilling this task.

Use of OER as part of addressing Widening Participation

Anadolu University offers several OER projects. Brief descriptions of these programmes can be found below. However, none of these projects directly aim to widen participation. By way of example and similar to the e-Certificate programmes, one of the secondary goals of the following Yunus Emre project, is to widen participation in the ODL programmes of Anadolu.

Yunus Emre

Yunus Emre or the New Generation Learning Portal[16] is an OER initiative to disseminate the instructional materials used in the University's distance courses. It was launched in 2008 by the Open Education Faculty and was named after an historical poet and philosopher, Yunus Emre. The goal of the initiative has two parts; (a) providing informal learning opportunity to those who need it without any cost, and (b) introducing the University's ODL services and content to the public. All the course materials are available on the portal including video (downloadable video programmes originally broadcast to air), multimedia software (non-downloadable e-learning materials), audio books (downloadable, mp3 format), digitized version of textbooks (non-downloadable text in .pdf format), and trial exams (non-downloadable, randomly generated, timed multiple choice tests). In the Yunus Emre portal there currently are materials related to a total of 153 courses in 20 subject areas. Since January 2008 6,792,031 different individuals entered the portal a total 49,054,080 times. No formal feedback system was established, so we are not sure about the impact of the project. But we observed an increase in the number of participants to our e-Certificate programmes after launching the Yunus Emre portal. We inferred that the project achieved its second goal of introducing our distance programmes to the public. On the other hand, there are several

[16] http://yunusemre.anadolu.edu.tr/

issues concerning the Yunus Emre project. First of all, it is mainly an open access OER project. We feel that we should work on transforming these materials to be openly licensed so that more people can download and modify them to use according to their own purposes. We also found out that we did not do a good job marketing this programme – many people are still not aware of this learning opportunity.

OpenCourseWare (OCW)

After the establishment of the Turkish OCW national consortium in 2007, Anadolu University initiated a project to support the consortium goals. It was coordinated by the Centre for Research and Development in Distance Education (UZ-ARGE). The EduCommons infrastructure was used to offer available course materials of the professors in the University[17]. A support team (2 technical and 1 OER expert) provided structured and one-to-one training to all faculty who voluntarily contribute course materials to the project. These experts also offered ongoing technical and instructional support via online tools, by phone and in face-to-face meetings. A lack of motivation, shortage of technology and instructional design (knowhow on OCW) skills as well as copyright concerns among faculty members were the main barriers for wider adoption of this OCW project.

ANAPOD

The Computing Centre of Anadolu University launched the ANAPOD project, another open access opportunity, in 2008. It is actually a podcasting system and inspired by Apple's iTunes-U. Unfortunately, Anadolu University could not join the iTunes-U because of lack of adequate copyright laws but worked with Apple's legal distributer in Turkey to create and offer podcasts of the courses to the public.

The project has four parts:

(a) Supporting face-to-face instruction,
(b) Sharing faculty experiences with the general public,
(c) Empowering faculty to prepare open learning materials that might help the University widen its open and distance learning services (alternative production method), and
(d) Testing the integration of some new technologies into instructional (ODL) processes such as mobile learning.

A completely new infrastructure (hardware and software) was established in the faculty chosen on the basis of their willingness and performance in previous projects from all the departments. Several high-tech hardware (a MacBook, HD Video camera with 60 GB hard disk capacity, advance microphone system for recording during F2F lectures, 250 GB portable hard disk, etc.) and software (iWork, iLife, screen capture and video editing, etc.) were also given to each participant faculty. These faculty members are asked to publish their materials in a Wiki site[18] created specifically for ANAPOD after taking a series of structured training on MacBook Basics (3 hours), Digital Content Generation and Podcast Materials Production (2+4 hours), Video Encoding, Editing and Web Content Development (7 hours). One-to-one training and ongoing support are also being provided by the Computing Centre.

Currently, there are complete course materials (text, video, audio) from 54 courses created by 36 faculty members. The production of materials from a further 93 courses is still in progress. Although we have not carried out any formal study on this project we observed that in these courses, the students performed better in the exams while their attendance at the class sessions decreased. We also noticed that everyday more and more people from

[17] http://adm.anadolu.edu.tr:8080/eduCommons
[18] http://anapod.anadolu.edu.tr/

other institutions and countries are accessing these materials. Moreover we found out over time the quality of the materials and know-how among faculty about use of technology and technology-based learning increased. On the other hand, we think that some materials need improvement to be used as OER. Also, we need to change these materials from being open access to open licensed materials to help more people gain benefit from them. Furthermore, copyright and intellectual property issues, heavy workload, lack of time management, instructional design and technology skills among faculty members as well as negative attitudes against use of technology in instructional processes are major barriers for the success of ANAPOD project.

Summary points

- Turkey has much greater demand for higher education study than can be fulfilled by the existing HEIs.
- Widening participation is just about accommodating this demand and is not focussed on particular groups.
- Anadolu University is a principal vehicle for increasing participation through ODL programmes but is also trying to reach out to new groups and those unfamiliar with studying at a distance by providing open access resources through a number of initiatives.
- Currently most openly published resources are open access only and not given a Creative Commons licence.
- There are issues both within Anadolu and with the public over the technologies needed to develop and use open educational resources.

3.2 Case study 2 from the FernUniversität in Hagen[19]

The situation of OER in German-speaking countries: A Delphi study[20]

What is the current situation of OER use in German-speaking countries? What are the main obstacles and what is the potential? In particular, what strategic attempts at implementing OER in higher education have been tried? Whilst at an international level OER use has made considerable progress, this has not been achieved in German speaking countries (Germany, Austria and Switzerland). There is some anecdotal evidence about possible reasons for this but firm empirical data are missing. Many questions are still unresolved, such as why are university teachers and students reluctant to share educational materials freely with peers?

Consequently, a study that provided a detailed insight into reasons for major OER pitfalls was conducted with the aim of identifying the potential for future developments. The Delphi method was chosen because it offers a systematic approach to investigating such a dynamic field as OER. Two steps constituted the study: First, twelve experts from German speaking countries were individually interviewed concerning their perceptions of major OER aspects. They were identified by a carefully designed list of criteria. Second, an online survey was administered to more people based on the qualitative data from these initial interviews. Participants had to express their personal opinions with regard to a set of OER-related statements.

The interviews followed a predefined list of questions, which are set out below along with a short discussion of the main findings:

(1) Conceptualisation and perception: How do you define OER as a teacher in relation to your work? How do you make use of OER? How do you perceive OER in your work?

The experts surveyed indicated they had an elaborated understanding of OER ranging from a very broad (all resources from a discipline without any didactical guidelines) to a narrow definition (only resources that are licensed under Creative Commons). A considerable variety of types (teaching methods and materials and open source tools) were stressed that had significant similarities to the classification set out in the OLCOS-project[21].Participants mentioned that OER is perceived as a buzz word that has yet to fulfil its promises.

(2) Obstacles of OER: What are the main obstacles of OER? What kind of obstacles do you identify in your personal work?

Participants mentioned the following obstacles as being the most challenging:

- *Cultural*: HE teaching is not oriented towards sharing and disseminating content. There is a strong focus on research at the expense of teaching.
- *OER-related*: It has been stressed that the concept of OER is still not known by most people and there are too few OER available. Moreover, there are no nationwide initiatives in German speaking countries (in contrast to the Open Access movement).
- *Legal*: There is uncertainty with regard to legal conditions, e.g., "How can I use materials in a legally-sound way?"
- *Technical*: There is a lack of technical solutions to utilise OER and unsatisfactory usability of some OER.

[19] http://www.fernuni-hagen.de/english/
[20] This report is based on an article submitted to the "Zeitschrift für E-Learning" (Journal of E-Learning) and appeared in the third issue of 2010.
[21] http://wikieducator.org/Open_Educational_Content/olcos/introduction

(3) Personal commitment: What would you do to push OER (for your students, for your institutions, and for your career)?

Different aspects of commitment were stated: Some experts reported that they have a special introduction to OER in their courses and seminars. Others stated that they freely share their work or engage in political activities to help progress OER.

(4) *Institutional integration: How could a broad institutional integration of OER be reached?*

A top-down approach was favoured as the best strategic approach to enable institutional integration of OER. This should entail concerted actions throughout the institution supported by the management of the institution. They also felt it was advantageous to progress in small steps and have comprehensive information for and briefing of the mid-level faculty. Another strategy that was suggested was the linking of OER to existing major reform processes such as Bologna.

(5) Vision: Where do you see OER five years ahead?

In general it was stated that the future of OER is not predictable; however some visions were outlined:

- OER activity will continue at the same level as now
- There may be some form of self-commitment by big organisations to publish content openly
- The awareness of OER will increase
- There will be more OER available and more collaboration taking place
- The concept of OER will become less prominent and subordinated under the topic of media literacy
- The practical utility of OER will grow, in particular in improving day-to-day teaching and learning routines
- There will be more progress of OER use in research than in teaching

(6) Summarizing thoughts

At the end of the interviews, the experts were asked to summarize their thoughts on OER. Some of these thoughts are reported below:

- The development of OER is not declining; however any progression covering large areas of activity is not expected
- There is a lot of detailed work yet to be done, in particular at the subject level
- Altogether, little progress has been made because of the “culture” and “technology” obstacles
- A broad discussion regarding the goals of OER continues to be important and should cover politics, education, and technology

Conclusions

Taken together, these results showed several interesting patterns. The experts expressed a highly elaborated perception of OER, identified “cultural climate” as the current highest hurdle and suggested several practical strategies for implementing OER in higher education. As one of the first attempts to assess the OER movement in German speaking countries, this study has unveiled not only crucial obstacles but also much potential for future development of OER in these same countries.

Summary points

- There is little use of OER in German speaking countries
- The main barriers to use are cultural and technical

3.3 Case study 3 from the Hellenic Open University[22]

Greek National Educational Policy for Widening Participation in HE

In Greek higher education, most Universities usually operate face-to-face teaching systems which come with a series of restrictions (a student's ability to be present during tutorials, compulsory Entrance Examinations, education provided to a narrow age group, unilateral education after students' initial decision, no short term educational courses available).

In contrast, open systems in Greek higher education are founded on one principle, everyone's right to a lifelong education. As a result, they attract a considerable number of applicants and provide educational opportunities to many, as studying takes place at home, according to a timetable that suit students and their own pace, with no entrance examinations, thus the students develop their own educational pathway, by selecting units through the modular courses.

One step therefore towards widening participation in Greek higher education was the founding of the Hellenic Open University (HOU) in 1997, with the first taught modules offered to students in 2000.

Hellenic Open University's Policy and Projects for Widening Participation in HE

The HOU's mission is to provide distance education at both undergraduate and postgraduate level. For that purpose, it develops and implements appropriate learning material and methods of teaching. The HOU is the nineteenth Greek State University but the only one that provides ODL at both undergraduate and postgraduate levels via the development and utilization of appropriate learning material and methods of teaching. Promoting scientific research as well as developing technology and methodology in distance learning also falls within the scope of HOU's objectives. Like all other state universities in Greece, it is a Legal Entity of Public Law, completely independent and autonomous. Its operation is determined by Act 2552/97 (as amended by Article 14 of Act 2817/2000 and as amended further by Article 3 of 3027/2002).

A fundamental characteristic of ODL is the accountability underlying the entire learning process. The study schedule which the students have to follow, the material they have to study, the assignments they are expected to submit at a set time, all these elements comprise an important framework for academic quality. The very educational system of the HOU supports students' active involvement with their studies, and promotes a process of learning that is not based on recitation, rote-learning or the teacher undertaking an authoritative role, but rather on direct and creative learning.

Use of OER as part of addressing Widening Participation

The HOU is further assisted by its ability to learn from current practice elsewhere and be flexible and adaptable to new circumstances, and this could include using OER. These characteristics determine its future actions and empower its development.

The options available through the development of information and communication technology, the dynamics of the learning material, which is especially designed for distance learning, as well as the scientific research which constitutes an important agent for the academic development of the university, are features directly related to its future perspectives. At the same time, increased public interest and trust in pursuing university-level studies should lead the HOU towards offering an academic education of high quality, validity and international prestige.

[22] http://www2.eap.gr/frameset_en.jsp?locale=en

To date, HOU has produced a large number of digital educational content that could provide a solid basis for open content in the form of open educational resources, but this is still under investigation in relation to copyright issues and our estimation is that this will be resolved shortly.

Summary points

- There is little attention to widening participation in Greece although the Hellenic Open University has a primary aim of supporting increased participation by those who pass the necessary examinations.
- No attention has yet been given to using open educational resources to support engagement or participation with higher education study

3.4 Case study 4 from the Katholieke Universiteit Leuven[23]

The Katholieke Universiteit Leuven (K.U.Leuven) is a traditional university that has a large responsibility towards regular education groups. It has about 37,000 students on campus and about 75,000 if one counts those spread over the Flemish region in other higher educational institutions in its university association.

Widening participation has been understood primarily as being about motivating as many as possible young people to participate in regular higher education. In this sense, it is a huge success: after continuous growth of the Flemish universities, the Bologna process and in particular the creation of associations between universities and institutes for higher education noted above, with the number of students in the latter organizations also growing substantially.

Besides the university association, the Flemish community also operates Centres for Adult Education[24], while the Open Universiteit Nederland is legally in charge of open education in the Flemish region[25]. The former Flemish minister for Labor, Education and Training Frank Vandenbroucke was strongly supportive of widening participation initiatives[26]. A couple of year ago he was strongly supporting the collaboration between the Belgian universities and the Open Universiteit Nederland for supporting widening participation. He was strongly in favour of defeating time and space by the implementation of distance teaching for student groups with disabilities or as 'second chance' education for adults, with all possible methods used to give more people a chance of a university degree. The Vlaamse Onderwijsraad (Flemish Education Council) has also had specific policies on widening participation since 2003[27] so widening participation should play a key role in Belgian higher education.

K.U.Leuven is making particular efforts to reach out to special interest groups[28]. First of all many efforts are made to attract students that are physically impaired, offering them specific services. Also, K.U.Leuven targets migrant student groups to open up higher education and invites students to follow courses through a credit system which attracts many retired people to join the classes at the university.

The needs of widening participation are huge. Large groups of newcomers and migrant populations pose a renewed challenge for education, in particular in metropolitan cities like Antwerp and Brussels. Linking up to these communities is important, highlighting the need for a multi-lingual approach to OER.

With a recent initiative to deploy open educational resources[29], to be elaborated further in WP2, the university will have an additional tool to reach this goal. One of the goals underlying this OER effort is precisely to reach out to stakeholder communities and get new insights faster "out there".

Whether it concerns new insights in a green and sustainable economy or refinements in social legislation, it is often important to set the new benchmarks for large groups of concerned people. By offering a K.U.Leuven branded series of Open courses on the web, the University is trying to offer a beacon, not only within the Flemish higher education space but well beyond.

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[23] http://www.kuleuven.be/english/
[24] See http://www.ond.vlaanderen.be/onderwijsaanbod/volwassen/ (in Dutch)
[25] See http://www.ou.nl/eCache/DEF/1/57/425.html (in Dutch)
[26] See http://www.ond.vlaanderen.be/beleid/toespraak/archief/2006/060831-OU.htm (in Dutch)
[27] See http://www.vlor.be/project/gelijke-onderwijskansen-en-diversiteit-0 (in Dutch)
[28] See http://www.kuleuven.be/studentservices/disability.html and http://www.kuleuven.be/diversiteit/allochtonen/index.html (in Dutch)
[29] See Annex "Openheid en auteurschap in de integrale leeromgeving" - internal document K.U.Leuven (in Dutch)

So why use OER for widening participation? A printed and subsidized handbook series on public health and legislation by one of K.U.Leuven's former rectors was a huge success[30]. However, giving rich and innovative content for free is not enough. Today, knowledge evolves at such a rapid pace in a myriad of directions that knowledge needs to be shared in a participatory, bi-directional way. The whole idea of the Open course series is that chapters can be added, and ownership can be taken by groups of stakeholders, for the simple reason that he who has a stake has the most intrinsic incentive for knowledge growth.

For this reason OER cannot be seen apart from social software and the need for an interactive, participatory web in which those resources are embedded. Structuring the open learning space for the regional context is a duty for the universities, as they want to shape the context in which knowledge growth might materialize.

Even though the concrete proposals to use OER for widening participation at K.U.Leuven are very recent, many individual researchers have longstanding experience in open resources: Erik Duval being one notable example[31], as well as our center for Multimedia support AV-Net[32], which has a strong pedigree in European projects on the matter[33]. Prof. Jan Baetens, as well, is very active in the field of European projects related to OER. With the European network 'LACE'[34] (Literature and Change in Europe) he is working together with his international colleagues on opening study material in the field of literature and culture. Different institutions collaborate on courses which are published on our Moodle platform e.g. the colleges of the course 'Film and Literature' held in. In this way disabled or working students can follow the course without a problem and watch the web lectures from a distance. In the future it is our aim to film more courses, as we are involved in a project on 'webcolleges' within the Association K.U.Leuven.

Widening participation also goes hand in hand with internationalization efforts. LACE is a good example of that: the main reason to put LACE courses on the open Moodle platform is to attract international students who might be interested by the expertise of the LACE partnership. In this sense the LACE network can have a wider impact rather than being confined to the strict boundaries of the network. This fits well in the overall K.U.Leuven internationalization efforts, with 11 Erasmus Mundus programmes now in place[35]. Unsurprisingly perhaps K.U.Leuven is one of the very few European Universities which has a homepage in no less than 6 languages, including Japanese and Chinese![36]

Summary points

- KU Leuven is not a distance teaching institution but it is developing policies on openness and exploring how OER can support its own programmes and those of the colleges involved in the Association K.U.Leuven.
- A number of individuals and projects at K.U.Leuven are helping the University to understand how OER may help widen participation in HE in the Flemish region and beyond.

[30] Dillemans, Roger e.a., *Wegwijs Recht*,1982; *Wegwijs Gezondheid*, 1991
[31] http://erikduval.wordpress.com/
[32] http://www.avnet.kuleuven.be/english/Welcome
[33] See e.g. http://ec.europa.eu/education/pub/pdf/llp/llp10_en.pdf
[34] Truyen, F., Kuppens, A. (2010) *LACE: How Open ICT Helps to Build International Masters in the Bologna Philosophy*. In Gomez Chova, L. (Ed.), Marti Belenguer, D. (Ed.), Candel Torres, I. (Ed.), *Edulearn10 Proceedings CD*. Edulearn. Barcelona, 5-7 July 2010 (pp. 005427-005436). Valencia: International Association of Technology, Education and Development (IATED).
[35] http://www.kuleuven.be/newsletter/newsflash/new_erasmus_mundus.html
[36] http://www.kuleuven.be/, see also http://www.kuleuven.be/english/

3.5 Case study 5 from the Moscow State University of Economics, Statistics and Informatics (MESI)[37]

This case analyses the present state of eLearning and Distance Learning (DL) in Russia, gives an overview of existing problems, and discusses the ways of tackling them by HEIs participating in the process of globalization of higher education, partly through the concept of OER development and access, and thus creating the environment for collaboration around OER adoption. The aim is to both improve the Russian systems of education and enable better Russian integration with the European education community.

eLearning in Russia: Current practice and future directions

Both eLearning and Distance Learning have become a necessity for expanding education in both the densely populated Russian areas and the vast remote regions. It is a main priority in the current process of Russian-wide "informatization" and is reflected in all the basic legal documents and concepts. Government policy seeks to satisfy this need by setting key educational objectives by providing Russian educational institutions with computer equipment and free Internet access. While connectivity is extensive it is not fast. Though a "digital divide" between the centre of Russia and outer regions is still present, technical opportunities and infrastructures are not a problem for most educational institutions. The active spread of broad-band telecommunication networks in Russia and the tendency of the lowering of access rates provide opportunities for training territorially separated groups on-line with a high level interaction in a modern Learning Management System.

But the first results of Federal Project "ISO" (Informatization of the System of Education) showed that the effectiveness of education in the information age needs not only equipment and Internet access provision, but a deep understanding of changes in Pedagogy which are based on the peculiarities of the "net generation", the specific types of ICT being used, the teacher's professional competence, and a general information culture of openness, clarity and reliability of educational resources and processes.

An important aspect of government policy in education is aimed at providing quality education that satisfies the demands of the 21st century. President Medvedev's recent annual address stated that Russia lags behind, particularly in education, and that certain measures should be taken to bring Russian education up to a competitive level. Another document "The Concept – 2020", considered to be strategic for Russian development, also stresses eLearning and DL as the future of Russian education. The main principles of this educational concept in the information age are depicted in the "Law on Education" which lies in humanistic learner-centred pedagogy, providing accessible, qualitative and competitive education.

As a result both eLearning and DL are very active in Russia and is found in most regions of the country. Some of the better examples of Russian DL include: the K-12 secondary school "Prosvescheniye.ru" and virtual school for Invalids "I-schola"; the Centre for Applicants of the Taganrog Technological Institute of the South Federal University, uses eLearning to prepare students for national examinations; and Moscow University's Foreign Language Faculty provides distance learning courses. In college education eLearning is not so popular though there is a good example of Moodle implementation and course design in the Mechanical Technical School in Vyatskiye Polyany (Kirov region). Most universities offer DL programmes and resources (Moscow University of Economics, Statistics and Informatics, South Federal University, Tomsk State University, Nizhniy Novgorod State Institute of Commerce and others), both commercial and open in different subject areas. Professional

[37] http://eng.mesi.ru/

development programmes and courses are popular at a distance especially those developing teacher's professional competence. They are represented by both federal institutions (Federal Institute of Education Development, The Academy of Professional Development in Education) and foreign companies (Intel, Microsoft).

Despite the interest, Russian eLearning and DL is impeded by methodological, legal, pedagogical and human obstacles that do not allow many institutions to develop different forms of eLearning in Russia to a high quality and to a competitive level. In most cases ICTs are used to structure and guide students' self studies or for traditional classroom content support and delivery. Most of the content is commercial and closed, accessible only through their Intranet, though some institutions use open courseware tools, software and services, such as Moodle, Google, Wiki, YouTube, Blogs, etc. The state sponsored Internet sites for open education resources are filled with non-systematized mostly traditional but digitalized content[38].

Educational institutions are shifting towards open learning opportunities as a result of a better understanding of social challenges faced in the information age, demands for academic mobility, lifelong and just-in-time education, and the necessity of education exchange, quality and competitiveness of the provision. However the state of open education in Russia leaves much to be desired due to the lack of government support and copyright protection insurance, open content quality assessment procedures, and teacher and professional training.

Educational institutions integrating DL in their learning process should realize that DL effectiveness and competitiveness depends on how we design and realize learning and teaching at a distance and not only see it as digitization of traditional content. The consideration of each component of learning at a distance as a pedagogical system is important. There are several areas for improvement: we should improve the learning content, we should train and motivate the teachers to be more effective, we should increase the amount of social constructivist activities and modern pedagogical technologies used, we should train professionals in ICTs and as instructional designers, and we should help the learners learn to learn in virtual communities and develop their meta-cognitive strategies of processing information and knowledge building.

So, the obstacles that impede eLearning and open education in Russia are:

1. "Digital Inequality". Most of the educational institutions do not have Internet sites. The Internet speed in the more remote regions leaves much to be desired. The students have to pay for internet access from home.
2. "Isolationalism". Every university in even the same region tries to (re)invent a wheel by introducing DL on its own, thus having to overcome the same difficulties that leading regions and universities faced. Part of the problem lies in different universities in the same region belonging to separate Ministries (e.g. Murmansk Technical University and Murmansk State Pedagogical University). Further, no all-university network is present, which is why the number of similar DL courses increases every time a university takes up a DL project. Educators in the region are not informed about the experiences of their neighbours.
3. Teacher's Professional Competence. The community of teachers that are involved with eLearning is limited (usually there are the same people participating in different projects and online communities) and most of them are young and teachers of English, as language and age are the main obstacles

[38] See www.edu.ru for example

to using ICTs in learning for Russian educators. Their ICT-competence is limited and no motivation is present for them to begin.

4. Content development consists usually of scanning printed lectures and putting them on-line, and having some tools for teacher interaction (usually e-mail, or forums).
5. Copyright problems, in particular clear OER and intellectual property rights policies are proving very difficult to introduce and promote.
6. Student's readiness and motivation to use ICTs mainly for socializing and not for education.
7. The tools and instruments used. Most of the instruments used are costly, limited in functions and do not give opportunity for material exchange.

In the present situation the main areas for improvement in the integration of open education, thus moving eLearning and DL in Russian educational institutions onto a higher level, lie in doing the following:

1. Putting the latest developments of pedagogical science into practice, develop the overall concept of open education and DL in the Russian Federation, defining the basic terminology and educational models, thus providing legal support and a methodological basis for integrating DL opportunities in educational programmes as an OER.
2. Integrating the activities of IT companies and educational institutions for improving DL content, process and tools, finding the best innovative practice and experiences of DL on the regional level and expanding and integrating them throughout Russia by open information exchange and community expertise.
3. Promoting sharing of the OER developed, improve its quality assessment, build repositories of eLearning resources (learning content, tools (software and LMS), processes) with didactic support providing academic mobility and access to educational opportunities, developing links between content experts, teachers and employers.
4. Improving accessibility of the resources better Internet copyright protection systems should be developed, including introducing the international Creative Commons License. The current information culture of common ownership needs to change to a new culture that respects authorship, and academic citation and promotes working with open educational resources for both educators and students.
5. Training teachers as a part of their professional development through an open resource for improving their ICT competence in developing eLearning materials, and integrating internet resources into real and virtual classrooms.
6. Teaching learners how to learn with the help of ICTs and not only to use them for personal purposes. We need to dispel the current image of DL as being an easy way of passing tests to get a second rate diploma.
7. Creating virtual professional communities and make them accessible and open to a wider audience.
8. Providing educators involved in eLearning with information and access to major educational conferences and events.

So, the effectiveness of education in the information age needs not only equipment and Internet access provision, but deep understanding of the didactic essence of eLearning and DL, changes in Pedagogy, better specification of the kind of ICTs used in content design, structure and delivery, and improvements in teacher's professional competence, copyright protection, information security and culture.

MESI Initiatives (Possible Areas of Research and Development)

There are several reasons for the lack of interest being shown by educators in OER initiatives. They point out an already overloaded work schedule and lack of time for such 'extra' activities. Besides, they prefer their old traditional way of teaching as they have already mastered that approach. Nevertheless MESI, as a technologically advanced Russian University being involved in the process of eLearning more than any other university, acknowledges these difficulties and has made the first steps towards the development and implementation of an OER-led initiative.

MESI has created an Information Centre of Disciplines (ICD) which aims to provide a platform for the interaction and collaboration of faculty (including deprived regions), educational content developers and students through Internet and Web 2.0 tools such as wiki-tools, forums and blogs.

ICD is being implemented to meet the following goals:

- Provide a platform for networking, efficient distribution and storing of learning materials and content;
- Increase the coherence and collaboration between faculty, staff and students; ensuring fruitful discussions and ideas' exchange; gathering feedback from learners;
- Ensure regular updating of the content;
- Create a repository of links to external OER for each discipline, including conference materials and other useful resources;
- Allow an opportunity for faculty and students to build up personal blogs, carry out surveys, hold online forums, include documents, curriculum related data, etc.

Though ICD only functions inside the existing, albeit vast, university community and network, it may be considered as a transition step towards presenting the OER developed in ICD for use with even larger professional communities and university affiliations. Moreover, MESI plans to publish on-line short-term open courses offered in the university's specialized disciplines.

MESI has also started to offer the online education system "Smart MESI"[39] which includes a full-text database of all electronic materials developed by MESI faculty and staff available for students and teachers as well as being a platform for collaborative work between teachers, students and other stakeholders. It can efficiently manage the work of 5,000 users at the same time. Apart from the public materials it contains non-public zones for adapting and creating new learning content.

In addition MESI has its own channel on the social networking site YouTube[40] for the regular uploading of video lessons and sharing other video materials (e.g. master classes, workshops, seminars and conference extracts) which are then used as OER. The main aim is to promote discussions on specific topics within the community of students, teachers and other stakeholders in order to develop the learning and knowledge base.

MESI publishes four journals in different knowledge areas, including one students' journal "LOOK IN" which is also available online[41].

MESI provides free access to OER from both Russian and several foreign educational servers (such as MIT Open Courseware, LexisNexis full-text database, etc.) and databases[42]. They

[39] http://smart.mesi.ru
[40] http://www.youtube.com/user/mesi
[41] http://issuu.com/look_in
[42] See http://pre.mesi.ru/science/ibc/resources/

contain up-to-date research papers and textbooks as well as important statistical information on the main subjects taught including economics, management, humanities, and informatics. MESI also enables free access to Russian law databases[43].

Finally because MESI has the mission of providing competitiveness, access and flexibility of education for all, it aims to improve the globalization of Russian higher education, widen the participation of Russia in international educational projects, promote quality, enhance knowledge sharing and expertise about Russian eLearning and stimulate OER development by means of introducing the WWW Centre of Open Education Resources This centre aims to integrate the following:

- Documents (Legal Support for eLearning and open education, International and Local)
- Terminology (community developed Glossary in wiki)
- Catalogue of Innovative Educational Institutions
- Catalogue of Education Resources
- Professional Community of Educators in Different Subject Areas
- Consultancy and Feed Back
- Collection of Open Events and Conferences
- Professional Development (open courses for educators, webinars)
- Students' Meta-cognition Development (open courses, video materials)
- E-xcellence system (self assessment for an educational institution for monitoring readiness for eLearning) developed by EADTU and partners and translated into Russian

MESI hopes that Russian integration will increase the competitiveness of Russian education and provide knowledge sharing and expertise within the neighbouring eastern European countries.

Summary points

- eLearning and Distance Learning have become a necessity in both densely populated urban areas and vast remote regions and Government policy seeks to meet this need.
- For most educators eLearning, distance learning and open educational resources are not seen as important because of a set of legal, technological and pedagogical obstacles.
- MESI has begun to embrace OER and expects to be a leading and coordinating institution for improvements in eLearning and DL within Russia.

[43] For example http://www.budgetrf.ru/

3.6 Case study 6 from the Open Universiteit Nederland[44]

Netherlands National Educational Policy for Widening Participation in HE

Widening participation in HE has been addressed explicitly in Dutch national education policy since the mid 1960's, in two ways. The first has been the development of a national system of student grants, giving students from lower and middle income groups the (financial) opportunity to participate in (middle and higher) education. Until recently, this national student grant system has been in existence in different forms. The second way in which the issue of widening participation has been addressed in Dutch national educational policy has been the question of "open education". The first time this term was used officially was in mid 1970s when the PvdA (Labour) minister Jos van Kemenade presented his ideas on 'open schools' and 'second chance and second-way education". This case study will focus on the issue of widening participation in HE by means of open education in the Netherlands.

In the 1970s the term "adult education" was formally introduced in the Netherlands. It was the decade in which many ideas and experiments about adult education were launched, with or without government support: the "Open School for Adults", "literacy projects for adults", "Local Educational Networks", "Educational Activities for Cultural Minorities", "Paid Educational Leave", courses like "Parents learn again", and a highly successful project called the "Moeder Mavo" (Mom's Secondary School). This last project was made possible because a law had been passed facilitating access for adults to initial education in a form intended for them; the long-standing law on evening schools for adults was extended to provision during the day!

The motives behind these projects were mostly socio-cultural, emphasizing the right of people of social inclusion and climbing the social ladder by means of education. Although it was mostly people who had left the educational system with no official diploma who made use of these initiatives.

In 1977 in the White Paper called "Open Higher Education" it was advocated that an Open University offering open higher education was urgently needed in the Netherlands, as its form of multimedia education would provide the highest form of widening participation and it would meet best the various needs of adult learners.

Arguments put forward in favour of a Dutch open university were:

- Because of its economies of scale, higher education by means of an open university would cost less and hence would have a cost reducing influence on all higher education institutions;
- As a consequence higher education would be more socially accessible, especially for lower income groups;
- An open university would also mean that adults who hadn't been able to enter higher education would be given equal opportunities by means of a 'second chance to participate in higher education';
- An open university would offer a type of higher education (modular, flexible, open) that would be more suited to the actual living and working patterns of adults[45]

The Open Universiteit was actually founded in 1984. From this starting date, the issue of widening participation in higher education, especially for people not yet having had the

[44] http://www.ou.nl/eCache/DEF/36.html

[45] COHO/HOS Werkgroep (1977): Open Hoger Onderwijs. Advies tot oprichting van een open universiteit. ('Open Higher Education. Advice for the foundation of an open university') Den Haag

opportunity to participate in higher education, has always been central to its mission (see below).

Until 1986 adult education was part of the socio-cultural policy agenda. Gradually the Dutch Ministry of Welfare, Public Health and Culture lost its control over lifelong learning (meaning adult education) policy and other Ministries such as Education, Culture and Sciences, Social Affairs and Employment, and more lately Economic Affairs became actively involved. In 1993, Jo Ritzen, again a PvdA Minister of Education, introduced the term "continuous learning" as:

> *"Continuous learning is necessary for people to secure and retain their employment. But learning is also necessary for the economy. The talents of people are the most important economic resource. On social grounds, the Netherlands cannot permit to waste talents and risk social divisions."*

The emphasis shifted more and more towards learning for lifetime employability.

During the 1990s lifelong learning was gradually looked upon as a necessary element in a developing knowledge economy rather than a right of individuals to social inclusion. On the first of January 1996, the Law on Education and Vocational Education (WEB) came into effect. This law effectively provided a legal framework for the largest part of the provision of adult education and this part was in legal and organisational terms closely related to secondary vocational education. Approximately 500 institutions were amalgamated in 41 Regional Education Centres. With the introduction of this law, the regulation of adult education – with the exception of higher education! - became the responsibility of the national central government. Post-initial formal and non-formal learning undertaken by adults has thus acquired a place in national policy thinking.

In 1998 Jo Ritzen, still Minister of Education, together with his colleagues from Social Affairs and Employment and Economic Affairs, launched the "National Action Plan for a Life Long of Learning". The action plan was meant to stimulate lifelong learning in such a way that it becomes a normal ingredient in everyday life. The action plan was intended to ensure that everyone, young and old, should have the possibility to continue to improve their employability and continue working in society. Lifelong learning was not only defined in terms of formal and non formal courses and programmes, but also to all kinds of informal learning at work. The reasoning behind the action plan was almost completely economic: a highly qualified labour force is a prerequisite for the Netherlands to remain competitive internationally. The key term was 'employability'. Higher education was part of the action plan, but no special instruments or special activities were sketched out. The issue of social accessibility of (higher) education was not completely out of sight. It was moved to the background. Hardly any attention was paid either to the needs of the individual nor to the socio-cultural function of lifelong learning.

A new impulse for lifelong learning came from the Lisbon Memorandum of the European Council conference in 2000. This memorandum stated that, as a response to the challenges of the knowledge based economy, the educational policies of the member states should increasingly focus on lifelong learning. This statement was not only fully embraced by Dutch government; the Netherlands expressed the ambition to be one of the three best performing economies in this respect.

In the 2002 policy document "Policy Agenda Lifelong Learning" the Dutch government outlined its view with regard to what extent government should assume responsibility for lifelong learning. It was stated that in view of the economically strategic importance of lifelong learning for the knowledge economy, a new model for policy was needed. Individuals should be at the core of policy and should be provided with stimuli in order to take more responsibility for their own employability. For this situation to happen a market-based system of lifelong learning was needed. Instead of a state induced supply sided

approach, a demand-led approach would make 'the education and training market' function better and would stimulate individuals themselves to play an active role. In an open market, every individual is supposed to find his/her own way in the market of education after leaving initial education and then entering the labour market. The Government only contributes by means of positive fiscal stimuli. It is the prime responsibility of employers to keep the qualifications of their employees up-to-date. A demand-led financing scheme for post-initial education was to be constructed alongside the market based system of lifelong learning services provision.

The Government also determined that involvement in the 'market of post-initial education' should be limited to the following:

- Individuals without a starting qualification at the level 2 of secondary vocational education have the right to make use of education and training provision financed by the government. This level of education is considered to be the critical threshold for entering the labour market.
- As an employer, Government itself is an important factor in the (post initial) education and training market.
- Government can intervene when expected developments do not take place, for example as a result of market failure.

In November 2004 the Dutch Government presented an "Action Plan for Lifelong Learning". Six arguments were given as to why the Dutch state should intervene in the market of post-initial education and training:

1. Investments in education and training are not effective enough
2. There is urgent need to improve the labour productivity
3. Labour reserves in the Dutch economy have to be utilized (there is a shortage in the labour market and reserves are too expensive)
4. There is a urgent need for knowledge transfer
5. The individual has to be stimulated
6. Social cohesion has to strengthened

It was indicated that in principle Government would take care of 'initial education'. Post-initial education and training were said to be primarily the domain of employers and individuals. If state action was needed, then the focus would be on specific target groups such as youngsters not yet having obtained a 'starting qualification' for the labour market; on taking measures to make the market more transparent (e.g. financing the start up or an information portal on the web); and on stimulating the recognition of prior learning. Furthermore, central government would not start any new activity or programmes. Existing potentially successful ones would be stimulated. No additional budget was allocated for lifelong learning.

Although the problem statement of the 2004 Action Plan was formulated predominantly in terms of the centrality of the individual, the individual was defined in economic terms (employability). Although the broad definition of lifelong learning of the European Commission was used, lifelong learning was limited to post-initial learning, and in particular non-public and non-formal education and training. The issues of higher education and widening participation in higher education were not addressed explicitly in the 2004 Action Plan, except in the statement that the future Dutch economy urgently would need more highly educated professional workers.

In 2005 an Interdepartmental Project Directorate of Learning and Working was started. It was a joint project of the Ministry of Education, Culture and Science and the Ministry of

Social Affairs and Employment with the involvement of the Ministry of Agriculture, Nature Management and Food Quality. It was to take "concrete steps forward to advance adult learning" rather than formulating general policies or general national subsidy programmes'.

The "action programme" of the Project Directorate Learning and Working was based upon two principles:

1. For every Dutch citizen it is important to continue learning throughout his/her whole life in order to be able to participate optimally in the knowledge economy and the knowledge society.
2. In addition, in order to have a successful working career, citizens must also develop a 'learning career'. These two careers will continually alternate and reinforce each other.

The overall goal was to create a 'sustainable regional infrastructure' in which adult learning would flourish in the long-term. Central government was not supposed to develop this national infrastructure itself, but to stimulate and facilitate employers, employees, citizens, educational institutions, local governments and other relevant partners. *"We want to make a start (…) with all the parties involved, but at the end of the day, it is up to the relevant parties to implement the project*".

Yet again, the issue of widening participation in HE was not addressed explicitly in the action programme of the Project Directorate. The objectives in the "2005 action programme" were the following:

- Ensuring that more young people and adults combine their job or job-seeking efforts with training and education that will lead them to acquiring a (basic) qualification for the labour market (MBO level 2).
- Employers and employees, education providers and local governments in the Dutch regions conclude collaboration agreements concerning the creation of work based learning in the regions.
- These collaboration agreements to result in a total of 15,000 work-based learning programmes being realized before the beginning of 2008. This concerns learning-working programmes aimed at integration into the labour market or at earning an occupational qualification, possibly in combination with learning the Dutch language if non-native.
- The interdepartmental project directorate for Learning and Working has succeeded in realising 20,000 APL procedures (Accreditation of Prior Learning) before the beginning of 2008.
- Setting up easily accessible and independent information desks for learning and working in the regions in order to provide employed people, job-seekers and employers with low-threshold access to career advice, assessment of competencies acquired and education opportunities.

The Action Programme 2005–2007 was followed by the 2008–2011 programme, formulated along the same lines of action and according to the same philosophy of stimulating cooperation between the different social actors of lifelong learning. Stimulation of cooperation was once again considered to be the heart of the Dutch national lifelong learning programme.

In 2007 the OECD made critical comments on the participation of people aged over 30 in Dutch higher education. Dutch universities and polytechnics seemed to be failing to address the lifelong learning agenda, by not being sufficiently open to providing courses for students in later stages of life.

This problem had also been detected by the National Council of Education in its advisory report in 2005 to the Dutch government called "De helft van Nederland hoog opgeleid" (Half of the Netherlands highly educated). Dutch labour market studies had showed that in 2012 the Dutch economy will be faced with a shortage of at least 100,000 people with high-level qualifications. This shortage was expected to increase up to 200,000 people in the period up to 2017.

To meet this shortage, at least 10,000 extra people with high-level qualifications would be needed yearly. From a demographic point of view, it is very unlikely that the Dutch higher education institutions could meet this demand through the normal enrolment of young people. Most of the growth, therefore, has to come from people who want to enter HE in later stages of life, so, from people who want to engage themselves into lifelong learning. Participation in HE had to be widened.

A national scheme of 'APL and customised HBO trajectories for learning while working' was designed, under the authority of the Project Directorate of Learning & Working. Pilots project were set up for sectors where there was an obvious demand for highly educated workers. A new degree, called the "associate degree" or AD (European Qualification Level 5), was being introduced and universities for professional education were invited to start pilot projects in AD-trajectories, which had to part of already existing bachelor programmes! The target groups for these AD-trajectories were workers and advancing MBO students.

The AD-pilot period will end in 2011 and then it will be decided whether this Associate Degree will become an integral part of the Dutch HE system.

In 2007 the "Nationwide Programme for e-Learning" (Nationaal Actieprogramma e-Learning) started. The aim of this programme was to increase the level of participation in higher education in the Netherlands through the deployment of e-learning. The programme focused on using e-learning, in particular ICTs, to increase the inflow and outflow of HE students (including lifelong learners) and reduce the rates of drop-outs. The national coordinator was SURF[46]. The programme provides a framework within which Dutch HEIs can formulate their own projects. These projects must be common projects between several institutions and may focus on ways of making educational programmes more flexible, more suitable for lifelong learners, and so on. Universities and polytechnics can propose projects, for which – if the tender is successful – the budgets will be met by a SURF subsidy of 65 per cent. Open Universiteit has submitted two projects successfully within this project, of which one is the "Networked Open Polytechnic" (see WP 2).

Open Universiteit's Policy and Projects for Widening Participation in HE

The Open Universiteit is an open institute of higher education for adults. Ever since its founding in 1984, openness, whereby no previous educational qualifications are required before registering on a undergraduate course or module, has been a central feature. Open Universiteit offers adults who have not had the opportunity earlier in their life – for whatever reason – to attend higher education the chance to do so. In this respect the Open Universiteit has been a lifelong learners' university right from the start, but it was from the mid 1990s that the Open Universiteit has put lifelong learning in the heart of its mission:

> *"Open Universiteit develops, provides and promotes innovative higher distance education of top quality, in collaboration with networks and alliances. As the prime university for lifelong learning, it addresses the wide-ranging learning needs of people during their course of life, plus the need to achieve a considerable upgrade of the knowledge level of the community at large.In both the Dutch and international market of lifelong learning, Open Universiteit wishes to establish firm footing. The Open Universiteit aims to play a key role as the prime university for lifelong learning."*

[46] http://www.surffoundation.nl/en/themas/elearning/nationaalactieplanelearning/Pages/default.aspx

At the end of the twentieth century the relative share of people in the Netherlands who had already attained some form of HE-degree had risen to more than 40% of the entire student population. This increase in students has, on the one hand, to do with the learning arrangements of the Open Universiteit better meeting the needs of adult learners. The Open Universiteit produces both pedagogically rich open and flexible learning materials designed to be accessible to individual students studying off campus at home or at work in ways that matches their needs and circumstances and also provide innovative support structures that encourages group interaction and tutorial support. On the other hand, the increasing share of lifelong learners at the Open Universiteit has also to do with the fact that the conventional Dutch universities are not really open or yet able to provide other types of learning with learner groups other than the age group of 18–25 years. They scarcely provide, for example, courses appropriate for students in later stages of life, non-degree retraining courses for adults, or gap filling courses for students not progressing through the traditional learning routes.

Use of OER as part of addressing Widening Participation

Over the period 2006-2008, the Open Universiteit conducted an experiment in which Open Educational Resources were offered in an effort to bridge the gap between informal and formal learning and to establish a new style of entry portal to higher education with no barriers at all. OpenER received considerable attention both in terms of visitors and in the media. About 10% of the visitors reported that OER influenced their decision to start some formal learning track at an academic level. Lessons learned were both from users and from inside the Open Universiteit itself. The experiment changed the attitude towards OER within the university and led to a growing awareness in the Netherlands of the value of OER in general, in other educational levels as well as amongst policy makers and politicians.

For the OpenER experiment the Open Universiteit received grants from the Project Directorate of Learning and Working as well as from the William and Flora Hewlett Foundation, in total approximately €660,000. The project was planned to deliver at least 16 courses, each with a study load of 25 hours (about 1 European Credit). At the end of the project there were 25 courses published.

Although the grant period ended on July 1, 2008, the Open Universiteit has continued to offer free courses and will increase its offer. Part of the investment is earned back with an increase in course sales as the first results have indicated.

The next section provides a little more detail on OpenER and is based heavily on Schuwer and Mulder (2009).

OpenER initiative: context and characteristics

According to HOOP (2004), about 30% of the working population in the Netherlands has enjoyed education at the University or college of higher professional education level.[47] This percentage needs to be increased dramatically up to a figure of 50% in order to remain competitive as a nation in the world economy.

The basic approach for solving this problem is the principle that at all educational levels students, the employed and the unemployed, should have full opportunity to develop their talents and skills in such a way that they can attain the highest educational level possible for them to achieve. The Dutch Education Council, the advisory body to the Government in education matters, indicated three courses of action: creating a wider range of learning pathways, creating more diversity in higher education and bringing more non-traditional

[47] These days we distinguish Research Universities and Universities of Applied Sciences.

groups (i.e. employed and unemployed people) to higher education by extending opportunities for lifelong learning based, amongst other options, on an e-learning approach.

OpenER relates to the third course of action. OpenER is compatible with observations indicating that, to achieve higher participation in HE, existing thresholds must be lowered and the willingness of individuals to invest in educational activities must be stimulated. Ease of access and transfer is required at all educational levels.

The main characteristics of OpenER are:

- OpenER is flexible, open, time-independent and easy accessible. This is important because in the Netherlands the high work load makes it hard to find a place for learning activity in daily life.
- OpenER requires an individual to invest time and effort, but does not incur any out-of-pocket expenses. The content is self-contained. No learning materials have to be bought.
- Due to the technology used, OpenER is simple and inexpensive for the learner to use. They are not required to make any investment in software or specific supplies. A standard PC with internet access and web browser is sufficient to access and use the OER.
- In addition OpenER gives the individual (e.g. an intermediate vocational student) the opportunity to become familiar with studying at the higher educational level without having to make an immediate financial investment. There is no 'stress' because it involves online self-paced learning. Furthermore, testing in a person's own environment removes a barrier. The learner is the one who decides to take the step to formal recognition of a performance by means of the additional services we provide for assessment and certification.
- OpenER is compatible with the goal of using e-learning to achieve the strategic objective of promoting maximum participation in education. Educational Institutions are expected to use e-learning to make their education available to people outside the traditional target groups. With OpenER, individuals can be given easily accessible experiences with on-line learning, even those who do not belong to the generation that has grown up from the outset with computers and the internet. OpenER both complements and facilitates access to e-learning.

In order to fulfil the Lifelong Learning ambitions within Europe the OER concept needs another perspective. Freely available content on the Internet should empower learners to study independently in an open and flexible learning environment, with no need for reference to a teacher, a classroom or an educational institution. This does not happen by accident or through the deployment of ad hoc initiatives, but requires a structured and explicit learner-centred content design instead of the conventional teacher-centred content approach.

Reflecting on the three lines-of-thought inherent in the term, one could argue that in the notion of 'Open Educational Resources':

1. The word *Open* should imply much more than offering open access to a large content base (even if this would be filled by highly reputed universities like MIT)
2. *Educational* should rather be read as 'Learning', putting the learner in the centre (be it in a formal, non-formal or informal setting) instead of the formal educational system and its key knowledge providers (the teachers)
3. *Resources* should be interpreted very broadly, going beyond the initial focus on a new online delivery mechanism for digital content towards web-based facilities and

> instruments supporting dialogue, interaction, collaboration and more in general learning communities. (Mulder, 2006)

Aspects 1 and 2 are in line with the profiles and positions of open universities, much more so when compared with the so-called traditional universities. Regarding aspect 3, open universities certainly have experience in this area, but they will need to extend their activities and explore more intensively their opportunities (Vincent and Mulder, 2006; Van Dorp et al., 2006). Offering OER in the context of the second and third lines-of-thought has been named OER 2.0 (OER wiki, 2008).

The OpenER experiment is offering courses along lines-of-thought 1 and 2.

When the site was launched, it attracted a lot of media attention, due to a front page article a week before the launch in a national newspaper (Reijn, 2006). Although the site only consisted of three courses, the media attention resulted in 25,000 visitors during the first week. Some figures about the courses and the website as of July 2008 add to this picture: Currently, the site attracts about 800 unique visitors per day. The number of unique visitors since December 5, 2006 has been 750,000 of which 90,000 are returning visitors (12%). Currently, there are 24 courses available on the website. The last course published is an online game in which players learn about human metabolism. The format in which the courses are delivered ranges from text only (in downloadable PDF-files) to fully web-based and highly interactive (e.g. the game). Some courses include a video podcast of a presentation and a study guide for a book.

All courses have been published under a Creative Commons licence (Attribution, Non-commercial, ShareAlike[48]. In some cases, parts of the course have been published under a more restrictive licence because of copyright issues (e.g. the owner of the intellectual property rights on a picture did not give permission for reuse of his picture by other parties other than the OUNL).

About 5700 users registered voluntarily and about 2,000 feedback forms have been submitted. Two surveys were conducted to measure the effect of OpenER, including data collection on the number of users that take the step from informal learning as offered by OpenER to formal learning as offered in our regular programmes.

To gather evidence that OpenER influences users in their purchase of a regular course, a question was added to the electronic order form: '*Was taking a free OpenER course a reason to order this course?*' Users were obliged to answer this question with either "yes" or "no". The first results in a period of 4 months showed that in 9% of the orders the question was positively answered.

This result was more or less in line with a finding of the survey that was conducted among those visitors of the OpenER site who had registered themselves voluntarily. 5769 surveys were sent out, of which 980 responded. The question '*Did you apply for a (formal) study programme or did you buy some (non-free) course?'* was answered as follows:

> Yes, at the Open Universiteit: 42%
> Yes, at another university: 4%
> Yes, at a Polytechnic: 5%
> Yes, at a commercial institute: 7%
> No: 30%
> Not filled in: 12%

[48] see http://creativecommons.org/licenses/by-nc-sa/2.5/)

The two surveys generated 2,000 feedback forms that reveal a lot of valuable information for continuation of the project. The following table lists some findings from these surveys. There were two slightly different types of surveys. One was addressed to those users who only visited the site without going through a full course (Type A surveys) and the other addressed those who had gone through a course (Type B surveys). About 1600 forms were of Type A and 400 forms were of Type B.

Question	**Result**
Are you currently taking some form of formal education?	No: 70%
What is your highest level of education? (Only Type B)	Level below higher education: 43%
Are you satisfied with the courses offered?	Yes: 93%
Do you have any plans to start a formal study? (Only Type B)	Yes: 85%
Does offering these free courses affect your study plans? (Only Type B)	Yes, I know I want to start some form of higher education: 49% Yes, I know I will NOT start some form of higher education: 3%
What is your age? (Only Type B)	25 – 54 years: 67% (these are the people working and still far from retirement)

There were some unplanned outcomes. Maybe the most significant result is a growing awareness of the value OER can have for Dutch Education. Because of the OpenER experiment, which was a pioneering OER initiative in the Netherlands, the Open Universiteit became a credible national spokesman for the OER movement and its applications for Dutch education.

Lessons learned

Users make remarks in the surveys and in other feedback forms, teaching us that:

- for some users using another language other than Dutch is a barrier
- courses of 4 hours study load were considered too short to obtain a good idea of what it means to study a subject on this level of education
- for courses that were fully web-based, not offering a print option for the course text, users asked for a printed version
- errors in the courses were reported by the learners
- the 'read aloud' versions were hardly used; the main cause reported was the automatic generation of a read aloud version of a webpage (using *Readspeaker*) with errors in pronunciation.

Within the OUNL opinions about offering free courses changed dramatically during the project. At the start there was some hesitation about the idea ("Are you out of your mind to offer our crown jewels for free?") and some reluctance to co-operate because of time

constraints. Due to the positive media attention and the large number of visitors, this attitude changed in a positive manner.

OUNL Schools each had their own objectives in selecting and developing the free courses. The Schools suggested that the free courses should:

- give a good indication of the main subject areas in the school;
- show how entertaining learning can be;
- also be attractive for their own students (this school had a lot of materials considered to be of high importance for their own students, although they were not part of a regular course; instead of making a CD-ROM of these materials, they were published as OER).

This change in attitudes and opinions was also a result of consistent internal communication via the internal website and through the blog of the project leader.

Summary points

- OUNL has always had an open access policy and been the main HEI in the Netherlands seeking to widen the scope of participation in HE study through ODL.
- Dutch Governments have proposed a number of policies and schemes to address both increasing and widening participation.
- OUNL has developed or is involved in a number of grant funded institutional and national initiatives that utilise OER to increase engagement and participation with HE study, including providing new bridges between informal and formal study.
- The OpenER project has been particularly successful and enabled much research and evaluation work to be carried out into the impacts of OER.
- Form these experiences OUNL has been rethinking their own strategy and business models so as to incorporate OER into them.

3.7 Case study 7 from The Open University in the United Kingdom[49]

UK National Educational Policy for Widening Participation in HE

The UK Government has published a number of reports and papers that deal with aspects of Widening Participation. Two of the more focussed were papers both called Widening Participation in Higher Education published in 2003[50] and in 2006[51] respectively. It has also commissioned papers on the topic such as the Widening participation: synthesis of the evidence Research paper published in 2009[52]. Through these policy proposals and discussion documents it has both provided specialist funding directly for various activities and indirectly through the different Funding Bodies for Higher Education in the 4 nations of the UK (England, Scotland, Wales and Northern Ireland). In fact HE policy is largely devolved to the National assemblies and the Westminster Government mainly deals with England.

This means that there are different approaches to widening participation in the 4 Nations. The Higher Education Funding Council for England (HEFCE) states on their website:

> *Widening access and improving participation in higher education are a crucial part of our mission and form one of our strategic aims. Our aim is to promote and provide the opportunity of successful participation in higher education to everyone who can benefit from it. This is vital for social justice and economic competitiveness.*[53]

The Scottish Funding Council (SFC) has regularly reviewed participation in further and higher education in Scotland, the most recent report coming out in June 2010.[54] Meanwhile the Higher Education Funding Council for Wales (HEFCW) also has its Reaching higher strategies[55] that continue to be a key driver of HEFCW's activities and they monitor and report regularly on performance against the targets. All gear their funding regimes to meet their different strategies.

The UK Government, through HEFCE, aims to support widening participation in part-time study through Financial Assistance to students. The University takes steps to make sure enquirers are as aware of this as possible, given that this is so much part of its Mission. Students can access this information direct from our website alongside the information about fees. But the University is conscious that these are matters where students may prefer a personal contact; the Student Registration and Financial Support section, and the nation and regional centres readily respond to enquiries and refer students to expert advisers. The need to be accurate and communicate effectively is intensified here by the fact that devolution means that circumstances vary from nation to nation within the UK and will continue to do so as we currently (July 2011) work out the implications of recent White Paper on new funding regimes and support mechanisms for English HE from the new Coalition government[56] which states:

[49] www.open.ac.uk
[50] See http://www.bis.gov.uk/assets/biscore/corporate/migratedd/publications/e/ewparticipation.pdf
[51] See http://www.bis.gov.uk/assets/biscore/corporate/migratedd/publications/6/6820-dfes-wideningparticipation2.pdf
[52] See http://www.bis.gov.uk/assets/biscore/corporate/migratedd/publications/b/bis-rp-002.pdf
[53] See http://www.hefce.ac.uk/widen/
[54] See http://www.sfc.ac.uk/web/FILES/ReportsandPublications/Scottish_participation_report_04-05_to_08-09.pdf
[55] See http://www.hefcw.ac.uk/about_he_in_wales/wag_priorities_and_policies/reaching_higher_strat_he.aspx
[56] http://www.bis.gov.uk/Consultations/he-white-paper-students-at-the-heart?cat=open

> *We are putting in place a range of measures to tackle the various barriers that prevent bright young people from disadvantaged backgrounds from participating in higher education. Our funding reforms provide more generous support for low-income students. This, together with the National Scholarship Programme, will help tackle the financial barriers*.(p.68)

The Open University's Policy and Projects for Widening Participation in HE

The Open University (OU) is the UK's only university dedicated to open and distance learning. It is unique in operating across the whole of the UK. The University in England and Northern Ireland is funded by the Higher Education Funding Council for England. It operates as a statutorily recognized university in Scotland (The Open University in Scotland) and Wales (The OU in Wales/Y Brifysgol Agored yng Nghymru), receiving funding from the devolved governments there. The University also operates more widely; either teaching students directly or in partnership, its teaching extends across Europe to Russia, to South Africa and to Singapore. The Open University is the largest university in the UK and ranks regularly in published league tables among the top UK universities for the quality of its teaching. Figures for 2010 shows that overall the University had 250,000 students in that year. This total includes

- over 180,000 studying at undergraduate level,
- over 14,000 following taught modules at postgraduate level,
- over 40,000 studying for awards validated by The Open University,
- over 1,300 research students.

The median age of new undergraduates is 32. Of those who declared an 'ethnic origin' 8% identified themselves as Asian or Black. Forty three per cent of our undergraduate students have entry qualifications lower than those normally demanded by other UK universities (reflecting the open access policy); more than 12,000 declare they have a disability and more than 47,000 receive some form of financial support (many related to widening participation schemes). Research funding from grants and income increased by 14% over 2007/08, and the University climbed 23 places to stand 43rd out of 159 in the most recent ranking of research in universities.

The University celebrated its fortieth anniversary in 2009; at a reception to celebrate this, the former Prime Minister, Gordon Brown (himself a former Open University tutor), applauded its work as follows.

> *The success of distance learning, pioneered 40 years ago by the Open University, has been nothing short of a revolution for higher education. It has opened the doors to a whole new audience of students who have not only seen academic success but reaped the wider rewards learning brings*.

Students at The Open University study to achieve a range of ambitions. They include, for example:

- those studying part-time committed to gaining a taught full degree qualification at undergraduate or postgraduate level;
- campus-based postgraduate research students studying full-time;
- students entirely unsure of their abilities registering for a single module with little confidence that they can succeed and progress to further study;
- those registering for a programme tightly linked to a profession (nursing, law etc.);
- those already well established in a career or who have completed their working life;
- those who are anxious to sustain their intellectual life and ability to fulfil a role in the community; and

- those studying a small segment of professional updating material.

The University seeks to meet these diverse aspirations and to be open, accessible and diverse, enabling changing patterns of participation in higher education, and gears its structures to meet this variety of study pattern. Looking back, the story of the University perhaps appears a little different, a move from the original single 'Open' award to more and more specialized awards, and from a module-based system to programme-based ways of working more typical of the sector as a whole.

The evidence of student behaviour however convinces the University of the continuing value of 'open' structures and that to adopt exclusively programme or qualification-based systems for registration, quality assurance, curriculum design etc. would be inappropriate. Very many students achieve their ambitions temporarily or even long-term after studying one module, but more often two or three. The University manages its processes to meet a complex situation and assure equally robustly standards in:

- the award of credit for a single module;
- a partially completed qualification;
- a full qualification.

The capacity to work in this way is particularly important for a student who, for example, begins study at The Open University, takes a break, and then wants to complete an award full-time at the OU or elsewhere.

Technology to support students and the University's mission

Technologies have always played a central role in The Open University's approach. The University makes extensive use of the Web to support its students through, for example, the extensive online resources of the Library, the customer relationship management system and use of podcasting and social networking tools. OpenLearn, described below, is just one manifestation of the strong and strategic vision developed by the University to deliver its Mission – others are the Virtual Learning Environment and the current iTunesU initiative. Implementation of that vision is incremental but the overall drivers are clearly expressed in a challenge from the University's Chancellor, Lord Puttnam:

> *'is the OU's high point going to be the point at which it did a brilliant job given the limitations of the technology or is the OU's high point accepting the new challenges of almost limitless technological reach and stepping up and meeting it?*

And former Vice Chancellor Professor Gourley's remark in her last speech to the residential meeting of Council about the way Web 2.0 delivers:

> *'a much more interactive, participatory experience', and thus 'a new, enriched learning landscape [that] has a marvellous capacity to facilitate personalised learning as well as social learning via media-rich virtual learning environments'*.

This does not remove the responsibilities of the teacher; 'the quality of the selected content, the quality of the learning experience and its outcome are consequences of the intervention, not the withdrawal, of the guiding hand of the teacher'. What it provides, however, is an education closer to the 'real world of work [that] is a lot more like the team-based and collaborative attributes encouraged by Web 2.0'. The current Vice-Chancellor, Martin Bean, recently stated that:

> *'[technology] is really about enabling people to move in and out of education as and when they need it. But it is also important to understand that it is not one size fits all. The thing the OU has always done well is to apply appropriate technology at the*

> *right time in the right way. That is often because we have such great research and scholarship that feeds our understanding of the appropriate way of using technology'.*

With a mission set by its founding chancellor, Lord Crowther, in 1969 'The Open University is open as to people, places, methods and ideas' (The Open University, 1999), the Open University has no entry qualifications to its modules or programmes, is only limited in the number of students on a module by the availability of sufficient tutors (to date, the greatest number on any single presentation of a module has been 14,000), and allows students to register for one module at a time rather than requiring commitment to a complete degree programme.

The Open University also invests in providing pedagogically robust, multiple-media educational materials produced by teams of academic and media experts. There is a high degree of coherence and congruence between the contributions of the team, and contrasting views can be expressed. The media are also chosen carefully to have the most impact for that area of learning.

A further layer of mediation is provided: The University employs tutors for set groups or batches of students working on an individual module. Recognising that different students have different learning styles and approaches, the tutors help the students in their groups to navigate and approach the materials in ways that suit each student's individual needs. The tutor therefore facilitates the learning process as much as directly re-interpreting parts of the teaching embodied in the educational materials. This gives greater control of the learning process to the students themselves and gives students much greater flexibility in how and when they study, allowing them to meet other commitments to family and work.

Furthermore, while individual modules are timetabled, students have more flexibility in the order and times they study them, even allowing for breaks in study. Thus, whereas most universities usually have particular cohorts of students studying together on the full course or programme, the OU has a particular cohort on individual modules and not on full courses or programmes. For some students, studying one module is enough. However, students may also complete programmes over time.

The OU has an open access policy: No prior qualifications are needed to register for the courses, and there is no age restriction (generally students must be at least 18, but the OU does have special schemes allowing those under 18 to study modules alongside their school level qualifications). Over one third of those who enrol in the OU annually do not have the educational qualifications that would normally ensure their entry to other UK universities. Many of these "under qualified" people successfully complete all or part of a programme; their success demonstrates the efficacy of the levels of support provided and suggests that good exit achievement is readily attainable without any entry selection.

Lastly, the OU recognises and gives credit for certified study at other institutions. The OU also assesses prior experiential and work-based learning, enabling learners to access more learning opportunities. These services acknowledge and support the mobility of the learners: They can learn where they want, when they want, unrestricted by rigid schedules and specific locations.

Our model of supported open learning is rated highly by our students. The OU has consistently placed in the top 10 UK universities for the quality of its teaching, as assessed by the UK's Quality Assurance Agency over a number of years and has been in the top 3 HEIs in

the National Student Satisfaction Survey from 2005 to 2009[57], the first five years of this government-sponsored initiative.

The University's open access policy has from the beginning put widening participation at its heart, along with developing support systems that enable students to succeed with a Widening Participation Strategy to recruit and support students that have no previous higher education experience and who live in areas of deprivation.

The implementation of the mission to be open to all has necessarily changed as the context of Higher Education in the UK has changed. For example, when the Open University was founded in 1969 those over 25 had reached school leaving age at a time when the number of university places was very limited. Expansion of provision had begun in 1962 and has continued to this day so that the number of over 25s who feel they missed access to Higher Education because of restrictions on places has diminished. That said, the take up of new places has been uneven across the socio-economic spectrum and access among lower income groups to HE continues to be low. There remains an important mission in widening participation here and among the still significant numbers who, for whatever reason, did not succeed at school or for other reasons did not have the opportunity to benefit from higher education. The University also has a key role in providing opportunities for students who find it difficult to attend a campus university, for example particular groups with disabilities, members of the Armed Forces who may be regularly on tours of duty overseas, prisoners, and those who for cultural reasons may not attend face-to-face institutions.

As part of its Widening Participation strategy, the University has been strengthening outreach activity with community-based partners such as schools, children's centres and community and voluntary organisations. Pilots for example in Bradford, London, Scotland and Northern Ireland are now forming the basis of a major expansion of outreach activity that seeks to embed Widening Participation as a core function of every region and nation. This and similar activities are a key means for the University of managing its targets for the recruitment of students from areas of social disadvantage.

The University also takes to itself a responsibility for education for students who identify themselves as having a disability or additional requirements – the category encompasses a wide range of temporary and permanent situations – and has a much higher proportion of such students than any other UK university; there are currently around 12,000 such students registered. Support structures are in place to provide on-course support in a wide range of media through regional and national centres and centrally by Disabled Student Services. Students are regularly supported in matters relating to funding through support in securing the Government Disabled Student Allowance, to employment and to careers - the range of needs here is wide, with entry into employment and career change being particularly important.

The University is the main provider in the UK of HE opportunities for prisoners; there are around 1300 OU students at any one time, in about 170 separate prisons. This provision is managed through regional and national centres; prison students are allocated to associate lecturers in the same way as others. Additional support is provided indirectly to these students through the prison staff.

Open Educational Resources at The Open University

A two year start-up project was initiated in April 2006 (McAndrew, 2006) with substantive grant support from The William and Flora Hewlett Foundation which has since become known as OpenLearn[58]. It was devised as a large Institutional project that would help to

[57] See BBC News at http://www.bbc.co.uk/news/education-11001891
[58] www.open.ac.uk/openlearn

answer some fundamental questions through action research - about the potential role and impact of free educational content and an open, web based, learning environment on the work of the OU in particular (Gourley and Lane, 2009), and systems of education in general (a major research report has been published on the findings of the first two years – McAndrew et al, 2009). The major planned outcomes were:

- Enhanced learning experiences for users of OER;
- Greater involvement in higher education by under-represented groups and empowerment for various support networks that work with them;
- Enhanced knowledge and understanding of OER delivery, how it can be effective, and the contribution it can make to further development of e-learning;
- Enhanced understanding of sustainable and scalable models of OER delivery.

We could not claim that any one of the above aspects of our initiative was unique but it was the combination and configuration of them in one project that we believed was unique at the time.

The official website was ready for launch in October 2006, using the open source product Moodle as the basis of the learning environment and with 900 hours of published current content from OU sources. The site was divided into two parts: one named a LearningSpace aimed mainly at learners, and another named a LabSpace, mainly for educators. By the end of the start up period in April 2008 the project had achieved 5400 hours of current content in the LearningSpace, and that same content plus a further 8100 hours of archived content in the LabSpace, together with an enhanced learning environment with various tools and technologies to support users of the site. Much of the content is available in eight alternative formats for downloading/taking away by users of both the LearningSpace and LabSpace with the ability to upload repurposed content, or even new content, only to the LabSpace. It is hoped that the LabSpace will encourage educators throughout the world to share, contextualise, repurpose and translate content, and then put it back on the site for others to use and alter to suit their purposes. As well as continuing to add content to OpenLearn (at least another 5,000 hours) there are now over 400 hours of material from other educators in the LabSpace.

The OpenLearn initiative is increasing our understanding of the impact on learners and teachers of materials developed specifically for self study, whether for formal or informal learning, whether for pleasure or for professional development. In particular, by placing as much emphasis on the environment, tools and support as on the content itself, we are reinforcing our belief that learning does not take place in a social vacuum. (Many of the publications arising from the initiative can be found on The Open University's Open Research Online website[59]). The key benefits are summarised below.

With nearly 16 million unique visitors and 220,000 registered users in the first 4 years of operation of the website, OpenLearn is being used by more and more people for study, either individually or in groups. Most of the resources on OpenLearn can be viewed by any browsing visitor but users need to register – for free and providing minimal information - if they wish to use the various communication and collaboration tools. The benefits they gain depend upon the requirements of the user as a learner, educator or facilitator of learning experiences (Lane, 2008a). We are also investigating all the potential barriers to using the site and its resources (Lane, 2008b). To date we have evidence from observations and surveys for the following benefits to individual learners who primarily engage with the LearningSpace study units (and that may apply to widening participation students as well):

[59] See http://oro.open.ac.uk/

- A place for improving study skills;
- The opportunity to sample higher education study before enrolling on a taught course;
- A way of choosing an Open University course on which to enrol;
- A way to begin study of a course and converse with fellow students before the formal start date of the course;
- An opportunity to pursue in depth a topic that interests them, perhaps as an addition or enrichment to their formal courses;
- A place to discuss topics and share knowledge and experiences with others;
- A way to test their English language skills;
- A place to keep a formal record of their informal study.

The observed and reported benefits to lecturers or other educators of both the LearningSpace and the LabSpace are equally diverse but include:

- Investigating The Open University approach to teaching a particular topic;
- Directly referring their students to a study unit as additional reading or a set text for their face-to-face or online course;
- Downloading units for incorporation into their own courses, whether online, blended or face-to-face;
- Versioning and localising units for their own purposes and their own contexts (this includes translation);
- Sharing their materials and ideas with other educators worldwide;
- Collaborating with others in developing new OER;
- Contributing to research into the effectiveness and uses made of OER.

There are also benefits for organisations with whom we currently work to have further access to, and be able to participate in, both formal and non-formal learning opportunities. Both the University of the Third Age[60] and Unionlearn[61] in the UK have begun to use OpenLearn study units in volunteer-run study groups, which has led to some participants subsequently enrolling on formal courses. Some Open University staff in our Regional Centres have used resources on OpenLearn in outreach and widening participation schemes such as with women from Asian communities in Yorkshire (Khokar, 2007). Much of this study is not necessarily online but takes place in blended learning situations or for increasing individuals' confidence in web and IT skills necessary to support online learning. In fact OER lend themselves to supporting networking effects between users because they are openly available (Lane, McAndrew and Santos, 2009).

A final point is that our surveys of registered users of OpenLearn indicate a large and often unfulfilled desire for learners to gain some form of recognition for their study and/or be able to convert or trade-in their informal studies for more formal or readily recognised credits, certificates or qualifications given by organisations or their peer community. This is the lifelong learning agenda where individuals may operate a personalized portfolio approach to their post secondary education, picking up formal bits of education from different providers, mixing it with non-formal learning experiences and expecting recognition of their achievements to come from trustworthy professional organizations, e.g. universities, professional associations and/or peer review by a trustworthy community of people working/active in the same field as they are. In other words open education potentially opens up not only who produces the 'content' and the 'context' in which the 'content' is

[60] See http://www.u3a.org.uk/
[61] See http://www.unionlearn.org.uk/

learned, but also who validates that learning so that it has currency in the labour and/or interest markets.

We are now exploring the possibilities that new technologies open up for the recognition of achievements gained through individual, group based or long term participatory learners, but there is a lot more work to be done to create cost effective and credible systems and processes. A first step has been to use technology to track registered users' activity within study units such that they can print out a statement of activity to show others – such as employers or professional bodies. Another step has been to enable the inclusion of study through OpenLearn within accredited courses dealing with the assessment of prior learning.

However, much more work will be required to enable more effective articulation and movement between informal and formal learning.

Use of OER as part of addressing Widening Participation

Our experience is that OER on their own offer little respite to the barriers noted above. Yes, in principle, they are cost free to the learner and do not require any prior qualifications. They may enable some to study materials on their own without any social or cultural pressures. But they do require computers and internet access unless someone can produce low or no cost hard copies instead, and these problems are often exacerbated in rural/remote locations.

Another way to think about this is to consider the types of support required to encourage learning in any situation where educational resources are involved (Lane 2008b) separately from those that enable learning to happen at all (such as social and financial support). In this respect there is a need to also consider the learning environment in which the resources are located and that is done by reference to features of the OpenLearn website based on the open source software Moodle:

1. Pedagogic support built into the educational resources, such as exercises and activities that challenge students and enable them to assess for themselves the learning they are achieving (examples of these can be seen in OpenLearn units);
2. Personal support through encouraging self-reflection and guidance within some of the in-text activities, but also in formal assessments and underpinned by a broad range of guidance material on study skills and the recording of learning and achievements in e-portfolios or learning journals (examples of which are also on OpenLearn);
3. Peer support providing mutual reflection and guidance created within tutorial groups that can meet physically or virtually (each unit on OpenLearn has an associated forum or video conferencing meeting);
4. Professional support, the expert reflection and guidance provided by subject tutors available through face-to-face meetings, telephone calls or an online conference, and the guidance provided by support specialists whether individually or collectively through comprehensive online systems. Indeed, new technologies have greatly facilitated the mobility of support so that the supporter and supported do not need to be in the same country or communicate at the same time (this is not directly provided by the UK Open University for OpenLearn although others could do so using the site or its content).

In other words if learners are to engage with educational resources then that process can be mediated by structuring of the resource, their own capabilities, the inputs of fellow learners and the interventions of professional teachers/support workers (Lane 2008c). Digital resources and digital environments can substitute for physical resources and physical

environments but they are different and the need to learn and understand how to navigate and use such resources must not be underestimated (Lane, 2009). So, just what type of mediated support is required to make open educational resources useful to excluded communities?

To illustrate some of the ways that open educational resources can help reduce the barriers to widening participation by non traditional groups we include below four mini case studies where OpenLearn has been used by people inside and outside the OU. Each mini case study is described in the actual words of key leaders of the separate projects.

Mini Case 1: Billy Khokhar, Assistant Director, OU in Yorkshire

"We have set up a series of `taster` events and awareness sessions in community centres where we are using OpenLearn as a conduit into and catalyst for the Open University. We show the materials to groups of students (and individuals) for them to be able to see how electronic engagement works, what our materials look like and what is expected of them.

A very specific example of this is our work with Black and Minority Ethnic groups where we have met 2 sets of Asian Women Adult Education students at Bradford College. One group is completing ESOL (English for Speakers of Other Languages) courses and the other studying health and working with children. We have created partnerships with this college on a local operational level to allow us to visit these students at `pinch points` before the end of the courses to introduce our materials. Where we have Internet access, we are using OpenLearn as our main vehicle to enable the students to make conscious decisions. They can also try the materials as can their tutors which then starts the process of preparedness and achievement that I mentioned earlier.

Many of these women would be lost to the system as they can only go to Community centres but their next natural progression would be to main campus from which they are often familially and culturally excluded. This is where we can provide the symmetry to allow progression as the colleges we are working with know that these students would be lost to academia anyway and therefore this is a complementary avenue of progression for them. Our challenge is to integrate this initial activity into our core practice and to systemise our approach to Widening Participation, Total Inclusion, and Equality.

Even though this may be resource intensive at the outset I feel that as a form of preparedness for the students this is an excellent tool. I consider that this approach will impact positively on our recruitment, retention and achievement statistics and is therefore a sound model. Moreover it is also an academically sound approach as our potential learners (and their families) can make informed decisions about their learning journeys."

Mini Case 2: Sue Morris, Associate Lecturer, OU in the North West

"Leasowe on the North coast of the Wirral in the UK has large areas of deprivation and is isolated from amenities and services. Leasowe Development Trust offers a range of services, including OU courses, to residents. OpenLearn has been used to help introduce people to online study and supplement their current study programmes with study skills support. The group I worked with consisted of seven students, all highly motivated, but with few or no qualifications. I used material about analytical thinking which allowed me to provide the students with an understanding of academic study, whilst material on the process of thinking gave them an insight into the way they approach problems and their approach to study. Exercises such as those from Extending and Developing Your Thinking Skills demonstrated how to unpick and analyse the effective argument. A visit to the Tate Gallery highlighted the growth in confidence and ability to think, question and analyse. As a tutor I found the materials on OpenLearn to be an extremely valuable resource. The quality of resources is excellent and I have recommended it to other tutors as well as students."

Mini Case 3: Meriel Lee, Assistant Director, OU in the South West

"The South West Higher Level Skills Pathfinder Project has funded a project focusing on development of a learning organisation within Plymouth City Council's Children's Services. The project aims to form a model for adoption by other Councils. To date, OpenLearn has been used to generate interest in higher education and foster development of e-learning skills. Four OpenLearn workshops have now taken place and been evaluated. It has become apparent that for some employees use of IT presents a real challenge, as does regular access to a computer for learning. However, the workshops have raised confidence and motivation for e-learning and some employees are now accessing OpenLearn units for self-development. Some staff indicated that they have no current interest in engaging with more formalised courses, but find OpenLearn very useful for learning. Foster carers, who work from home, find the units useful because they can study from home at a time that suits them. Relevant OpenLearn units have been identified as the first step of qualifications escalators (currently for Children's Services, Youth Services and Management, with potential for Foster Care and other social care workers). Nine students have progressed from the OpenLearn workshops to registration on four of the OU's Openings Programme courses, with a further cohort being identified for the June Openings start."

Mini Case 4: Aidan Hobson, New Zealand Cricket Players Association

"100 players each year participate in a leadership programme focusing on skills that are linked to high performance sport such as communication, self management/reflection, motivation and teamwork. One of the major challenges in designing the programme is finding learning materials that are not too high brow but have a good level of QA, relevancy, structure, and fit our budget. Of the hundreds of websites I've looked at, OpenLearn was the only one that provided a good range of topics that would allow players to take up study in areas of personal interest or skills development. While there is a lot of free information on the web it is lightweight. We also have a business mentoring programme for players to learn about different career pathways and the workplace generally, supporting them for careers after sport. Given the diversity of players' interests and learning styles and the fact most players are away from home seven months of the year on tour or in the UK playing in the off-season, we have explored other, more informal ways for them to build their knowledge. So OpenLearn fits a number of needs of informal, self-directed learning. It is structured and quality assured but very flexible. Because of their time commitments the players cannot attend classes or keep up to date with the assessment requirements of formal online learning programmes. Many of the players don't have any positive academic learning experiences so it is great for them to access knowledge without someone looking at their grades, without the pressure of them doing assignments."

Summary points

- Widening participation has been a strong theme in national HE policy for some years with special funding and targets set for HEIs in recruiting non-traditional students from groups suffering multiple deprivation. This has also led to substantive research and evaluation effort into what constitutes widening participation and what makes it more cost-effective.
- The OUUK has always had widening participation within its mission and has been largely addressing this through optimising its open access policy and taking a student centred approach in it supported open learning model. This also involves addressing both barriers to particular types of students and trying to change its own ODL processes to better suit target groups.

- The OUUK has also embarked on a significant number of OER initiatives which have variously tested out or helped research and evaluate the impact of OER on students and HE learners in general.
- Research on OpenLearn, the most significant initiative, has shown that individuals and groups have been able to use OER to undertake informal and non-formal study for interest and for particular work related needs and also to help orient or prepare them for HE study. The role of informal or formal organisation or groups that act as intermediaries between the OER and the learners has often been crucial to success.
- The OUUK is now using OER to support and enhance many of its existing systems and processes as well as looking at how it may provide new business models or ways of constructing and delivering ODL. However it also sees OER as critical to its social justice mission and in supporting capacity development in developing and emerging economies.

3.8 Case study 8 from the Universidad Nacional de Educación a Distancia (UNED)

Spanish National Educational Policy for Widening Participation in HE

Currently there is no national educational policy for WP in HE in Spain. Educational institutions make their own decisions regarding WP.

UNED's Policy and Projects for Widening Participation in HE

In 2006, The Universidad Nacional de Educación a Distancia (UNED) developed an ambitious strategic plan aiming to improve the educational and learning processes within the University in order to satisfy the wider educational needs of society. The plan was established with three main blocks: 'Society', 'Students' and 'Quality, Efficiency and Innovation'. All the projects under the Society block have been designed in order to expand and promote research and knowledge dissemination, they also aim to promote lifelong learning for a knowledge-based society and consolidate UNED's social functions.

The Students block aims to facilitate the integration of students in the University, to improve their academic performance and to promote their incorporation into the labour market.

WP in HE entails a major part of UNED's strategic plan. It has been designed in order to promote cooperation with other HE institutions as well as other entities that are leading towards a knowledge-based society in Spain and other countries. It also pays special attention to those groups who are in need of help to access HE (prisoners, immigrants, handicapped people, etc.). UNED is currently not only working to improve education within the Spanish borders, but it is also present in eleven countries (in Europe, America and Africa) with more than two thousand registered students across Spanish speaking countries.

Other key actions within this plan are to:

- Promote gender equality policies;
- Increase the University's presence in Web 2.0;
- Increase participation in the field of human development cooperation; and
- Promote OER.

Use of OER as part of addressing Widening Participation

Open Educational Resources are playing an essential part of UNED's strategic plan for a knowledge-based society. UNED's OCW site[62] is not only conceived to offer materials specifically designed for classes, but also to help learners to access HE. The first action that took place was to include the OCW into the Universia network[63], which is currently the largest University network in the world. During March 2010 the OCW site had been visited by 60,608 users from 107 countries; this represents an increase of the 186% from 2009. By promoting the courses in international networks and translating the descriptions of the courses into several languages, UNED has reached a far wider audience than before.

'Cursos 0' have been proved to be of a great help for students aiming to obtain the necessary qualifications to get into HE in Spain. 'Cursos 0' have been designed by UNED's teachers thinking of the students' needs.

In order to promote lifelong learning and help society in general, several OER have been developed for those who may need them or are interested in them. Some examples of these

[62] See http://ocw.innova.uned.es/ocwuniversia
[63] See http://ocw.universia.net/es/

resources are the health education, social education and driving theory courses.

Biblioteca UNED 2.0[64] is another example of UNED's work to promote WP in HE. It is the open library of the UNED and it offers several open tools for any user:

- *User support chat*: can be used at anytime by those users requiring any kind of help regarding the library.
- *Up-to-date research resources blog*: contains activities, news, and links of interest for researchers.
- *Research resources by areas of expertise*: contains essential research materials on each area of expertise of the UNED.
- *Online Library 2.0*: contains a catalog of resources at the Library.
- *Bookmark blog*: aims to promote outstanding books that are not yet widely known.
- *Mediablog*: aims to raise awareness of the media collection of the central library.

Summary points

- Spain does not nave national policies on widening participation.
- UNED has a string set of policies that seek to both increase and widen participation by certain groups in society.
- UNED has begun publishing OER in a number of ways to support entry into HE at their own institution and more widely.

[64] http://portal.uned.es/portal/page?_pageid=93,4250322&_dad=portal&_schema=PORTAL

3.9 Case study 9 from the Università Telematica Internazionale UNINETTUNO (UTIU)

Introduction

This case study brings together results from research activities and best practices at UTIU. UTIU has an increasing and widening participation rate in its HE programmes by using OER to reach commonly excluded sectors of the population by satellite and analogue TV broadcasting. The video lessons can be freely accessed without any registration with the University through two TV channels (RAI NETTUNO SAT1 and RAI - Radiotelevisione Italiana RAIDUE terrestrial channel).

The main controversial issue this case study poses is the violation of license and terms of use of open and freely distributed educational resources in order to make economic profit. Open educational resources are prone to undergo fraudulent exploitation for commercial use by private people or companies.

Background information

The data for the case study includes both the national and international ICT technology and infrastructure development; and the socio-demographic profiles (age, provenance) of students enrolled in UTIU.

This data shows that 54.3% of Italian families have a computer and 47.3% have Internet access (43% in 2007, 42% in 2008), lower than the European average (60%)[65]. The lack of funding to improve and maintain the Italian phone network has made internet access incomplete and outdated, and many urban, hill and mountain areas in Italy are not covered by broadband internet: 39% of Italians do not have the 20 megabits per second that guarantee high-speed access[66] . Additionally, the list of digitally divided areas includes, in addition to Calabria, Basilicata, Abruzzo and Molise, regions like Friuli-Venezia Giulia, Marche, Trentino-Alto Adige and Valle d'Aosta. All these mountainous regions pose serious problems for infrastructure development and therefore access to eLearning opportunities.

In comparison with broadband internet access, 95% of Italians have a television and RAI (Radiotelevisione Italiana) terrestrial channels cover the entire national territory, including the previously mentioned remote Northern and Southern mountain regions. Furthermore the spread of satellite technology in Italy is increasing (more than 5 million people own satellite television receivers), mainly due to the absence of widely distributed alternatives such as cable TV on optical fibre or ADSL; and the Digital Terrestrial Television (DTTV or DTT).

The RAI NETTUNO SAT 1 satellite channel is accessible through Eutelsat's W3A satellite and able to cover the Mediterranean Basin and the whole of sub-Saharan Africa providing direct connectivity to Europe. UTIU students also come from the aforementioned regions and from rural and urban areas of Sicily (more than 16%). The students who reside abroad represent 20% of the total and come from: Belgium, Brazil, Bulgaria, Czech Republic, Egypt, France, Germany, Greece, Morocco, Nigeria, Netherlands, Russia, United States of America, and Switzerland.[67]

The adult population is an important target group for UTIUninettuno: 45% of the enrolled students are more than 40 years old and 15% more than 50 years old[68]. Whilst taking into account internet infrastructures and TV access, people aged between 15 and 24 have the

[65] Source: ISTAT 2009
[66] Source: Osservatorio Banda Larga, Nov 2009
[67] Source: Ufficio di Supporto al Nucleo di Valutazione, UTIUninettuno
[68] Source: Ufficio di Supporto al Nucleo di Valutazione, UTIUninettuno

highest familiarity with the Internet (more than 71%) and that this percentage decreases rapidly with increasing age. Among people between 55 and 64 only 20.5% use a personal computer and 18% browse the Internet.[69] The adult population is much more familair with (terrestrial and satellite) TV.

UTIU's OER Strategic Model

The NETTUNO system uses two different "web channels"[70] for its courses and learning content delivery. The UTIU portal[71] provides free access to the informative sections, such as those relating to institutional communications and University research activities; however, access to educational resources is reserved for those who have a registered profile (administrators, teachers, tutors, students, Faculty Deans). Access profiling is due to several features introduced within the UTIU portal concerning: student's personalization of both individual and group learning activities, student's activities tracking and student's performance reporting, teachers' and tutors' content uploading capabilities, as well as privacy issues.

The Consorzio NETTUNO portal[72] is fully open, and allows access to web streaming video lessons, to related didactic contents (slides, bibliographies, websites selections, papers) and online exercises, as well as a selection of "special video lessons" not directly related to specific curricula, but still held by university professors, recognized experts, and public figures. Approximately 25,000 video content titles related to degree programmes are available on the Consorzio NETTUNO portal, and more than 12,000 pages of online exercises.

TV broadcast video lessons are the main resource UTIU currently offers as open educational material for students that cannot rely on fast (enough) internet connection. This is particularly relevant for students from Euro-Mediterranean countries, in particular from rural areas not provided with fast internet connection, and from the Northern and Southern Italian mountain regions.

Users can freely access OER that are broadcast by two TV channels:

- *RAI NETTUNO SAT 1* is the first television channel in the world that delivers its content in 4 languages with the video courses aired 24 hours a day. In particular 300 Undergraduate courses related to 10 bachelor degree programmes under 6 Faculties are broadcasted via RAI NETTUNO SAT 1 satellite TV channel in equal distribution among first, second and third year courses. Each course includes an average of 24 video lessons. Four Post-graduate Master programmes are also offered as OER through RAI NETTUNO SAT1. They include 6 courses for Basic Literacy in learning how to read and write in Arabic and 15 courses for the Master's Course in Euro-Mediterranean Cultures and Policies. Both these two programmes are broadcast via the RAI NETTUNO SAT 1 TV channel
- *Radiotelevisione Italiana RAIDUE* terrestrial channel during NETTUNO's broadcasting schedule: everyday from 04:15 a.m. to 05:45 a.m. A selection of the best and innovative courses, especially Humanities, Psychology and Communication. Special academic video lessons are scheduled for specific periods of the year (e.g. Christmas, New Year's Day, Academic Year Opening, etc.). In these periods TV scheduling ranges from contemporary arts courses (e.g. music, theatre, etc.), to artistic performances, to video contents related to specific events (like Nobel Prize ceremonies). Three Master programmes are also offered: the CBVE-Cross-Border

[69] Source: Istat 2009
[70] See http://www.uninettunouniversity.net and http://www.consorzionettuno.it/
[71] See http://www.uninettunouniversity.net
[72] See http://www.consorzionettuno.it

Virtual Entrepreneurship Master's programme includes then 10 courses broadcast in three languages (Italian, English and Spanish), the Master's programme in Euro-Mediterranean Cultures and Policies and Archeomap - Archaeological Management Policies Master programmes, both including 15 courses.

Open Educational Resources Quality

The quality of UTIU open video lessons is guaranteed by internal procedures, such as the adoption of the UTIU psycho-pedagogic model and the video professors' selection procedure. The video lessons are the focus of the UNINETTUNO teaching model, at least from the perspective of individual study based on the teaching materials available to the student, thus not taking into account interactive activities, collaborative learning experiences and online tutoring. The video professors are expected to learn new languages and new ways of teaching, in order to produce complex material such as a video-lesson, presented to students not just as a "learning object", but in the context of a hypermedia and modular environment, linked to other heterogeneous learning materials (such as text, slides, bibliographies, websites selections, exercises, virtual labs) and to interactive activities managed by the tutors and professors during the course delivery.

The video lessons are developed following the UTIU psycho-pedagogic teaching and learning model and this involves changing the university teachers' traditional teaching competences. The use of a tool such as television changes any traditional didactic communication. In the new didactic model, the professors have to learn a new way of explaining, synthesising and presenting their knowledge to a virtual student in order to trigger a critical and reflective learning process.

With regard to the development of learning, it is important to note that the study strategies set up during digitised video lessons allow UTIU to set up a learning process where it is the student who masters their study time. Actually, the student, through on-screen controls such as play, stop, fast forward, rewind, is able to manage his time with the teacher and the lecture; they can watch and replay parts of the video lessons as many times as they wish according to individual needs; they can pause to think and see if they need to consult further sources, they can review what they have already seen to enhance storage in long-term memory; they can see parts of the video that can have interesting connections with other materials or sources. These are not only technical functions linked to the styles of use of the video lessons, but they refer also to meta-cognitive strategies that can facilitate self-evaluation of one's own comprehension activities. During a traditional lesson it is not always easy to stop the professor to make him repeat what has been explained, and it is practically impossible to stop to reflect or consult other sources.

The second process guaranteeing high quality is the selection procedure of video professors. The video professors selected for the preparation of the video lessons are widely recognized in the academic and scientific community as major domain experts. In addition, some of the priorities that the UTIU gives to itself as business model are the:

- Quality of the video professors, selected from the 'best' Italian and foreign universities;
- Quality of the educational structures achieved thanks to a variety of full professors, regular and associated faculty, recruited through selection procedures.

As reported by UTIU's Students Secretariat, the high quality of the open video lessons is witnessed by the number of requests that UTIU periodically receives. They include information, purchase and enrolment requests. For instance, on December 4th, 2009, Dr. Marina Dacco, a marketing professional, asked for access to video lessons for her personal

learning interest. Another request was received from Dr. Mustapha Ghanim, Directeur de l'école Alwafae Driouch, Morocco, asking to receive the "Basic Literacy to learn how to read and write in Arabic" course of 150 video lessons as a result of a collaboration between the Ministry of Italian Foreign Affairs, the Ministry of National Education of Morocco and the UTIU.

The reported mails and others received in the last few months confirm that TV video lessons are recognized as valuable high quality OER in a worldwide scenario by professionals and academics. Open and broadcasted educational resources are thus appealing to improve personal learning and for institutional learning initiative. This is the main reason UTIU open educational resources are prone to undergo fraudulent exploitation for commercial use by private individuals or companies that can and actually do speculate on the sale of video lessons.

Fraudulent exploitation of OER

UTIU's OER are freely accessible since they are broadcast and their openness has encouraged improper use. Ownership and authorship of the educational content is ignored and OER are exclusively used to make economic profit in an illegal way: UTIU's OER have been exchanged in peer-to-peer networks. Internal research carried out during 2007 reported that the main P2P networks indexed and shared UTIU video lessons, both single lessons and entire collections. Since 2007, thousands of UTIU files and collections were shared in several P2P networks; UTIU internal research focused on three well-known P2P networks: eMule-eDonkey, Torrent and NeoModus Direct Connect; eMule searches gave thousands of results; forums, blogs and torrent search engine indexed thousands of links to UTIU video lessons, and in some cases also to UTIU didactic materials.

Further internal research carried out during 2009, reported that UTIU open educational resources are illegally on sale as DVD in several national sites - like *Annunci.net; Bakeca.it; SuQui.it; ForumStudenti.it; Annunci.it* - and some international shopping websites, and on centralized networks for posting online classified advertisements, like eBay and Kijiji.

The research reported that complete UTIU courses, especially related to Engineering and ICT, but also regarding Psychology, Economic Studies, etc., are on sale as single or multiple DVDs containing the video lessons with DviX satellite ripped quality. Such video lessons have been recorded, ripped and digitised from satellite broadcasting and put on sale by private individuals or companies.

OER are designed, developed and published / broadcasted not to make profit but in order to pursue the primary objective of HE Institutions, included UTIU: the promotion of knowledge, learning and teaching. Moreover the development of technical solutions that guarantee appropriate content licensing is recognized as one of the major challenges in OER domain.

In Europe the UTIU is considered as a reference model as t regards distance teaching processes: the upward trend of the latest matriculations shows a 100% increase of new matriculations dating from the 30th November 2008. This growth in enrolments results from the overall quality of the services that the UTIU offers to the students and that have given rise to a favourable grapevine that can be found in the blogs and forums of the enrolled students and of young people who exchange information about universities on the Web.

Further examples of this trend are the fragments of the video lessons posted on social networking sites such as YouTube. Video lessons' extracts are used as open educational resources to support discussions on specific topics (such as the relationship between Psychology and Ethology) within the community that spontaneously arise around subjects of interest. Fragments of video lessons included in social networking portals receive positive appreciation and catalyze the interest of the participants in the discussion.

The circulation of open educational resources (such as texts, ppt presentations, video lessons) in P2P networks and national and international shopping websites represents one of the main factors having a positive impact on the reputation of the Institution on the web and, as a consequence, over the number of the users interested in joining the University.

Summary points

- UTIU has extensively used terrestrial and satellite broadcasting to make some of it educational material more available and more accessible to people in Italy and throughout the Mediterranean region. This is in part to overcome the issues of access to such material through the Internet in remote and mountainous regions.
- Careful consideration is given to the development of these broadcast resources and they have found to be popular and to increase enrolments in formal programmes.
- Most of thus material is openly accessible but not openly licensed for reuse. Despite this a large number of people are illegally reusing the broadcast lectures.

3.10 Case study 10 from the Universitäre Fernstudien Schweiz (UniDistance)

Swiss National Educational Policy for Widening Participation in HE

The Swiss higher education system is comprised of the federal institutes of technology (2), the cantonal universities (10), the universities of applied sciences (7), the teacher training colleges (14) and other university level institutions. Some 250,000 students are currently enrolled in these different universities. More than half of them – 127,000 students, including 50% of female students and 26% of foreign students for the 2009/2010 academic year – attend the ten universities and two federal institutes of technology.

The Confederation has jurisdiction over the two federal institutes of technology. Each Swiss canton has jurisdiction over the universities located within its boundaries[73]. The cantonal universities are subsidised by the Confederation and by the other cantons under the terms of an inter-cantonal agreement. Therefore, not all the Swiss cantons are university cantons.

Art. 63a of the Swiss Federal Constitution stipulates that the Confederation and the cantons must together ensure the competitiveness and quality of the higher education system. The bases of this principle are set out in the Federal Act on funding of universities and coordination of the higher education system in Switzerland (LAHE)[74]. The Confederation and cantons are even currently developing a project called "Swiss Higher Education Landscape", the aim of which is to enact legislation regulating the entire tertiary education sector (cantonal universities, universities of applied sciences, federal institutes of technology).

The question of increasing participation of the Swiss population in higher education is a regularly occurring theme. However, to our knowledge, there is no specific political decision to encourage "Open educational content" at the moment. There are however isolated attempts. This is the case for example for the SWITCH-Collection project. But here too, copyright issues prevent full access.

Since the start of the 1960s, this is particularly the case for the Canton of Valais, where a system of public financing has been set up. Art. 66 of the Swiss Federal Constitution specifies that the Confederation can allocate contributions to the cantons to grant funding for education aimed at students of universities and other higher education institutions. It can encourage standardisation between the cantons with regard to funding for education and set out principles for granting it. In addition to the cantonal measures and in compliance with cantonal autonomy with regard to state education, it may also take measures itself to promote education. However, it must be noted that for some years now the Confederation's contribution has been falling. Furthermore, the Bologna Process makes it difficult to carry out salaried work at the same time as studying for certain subjects.

The UniDistance's Policy and Projects for Widening Participation in HE

In 1992, in the canton of Valais, a non-university canton, a private initiative supported by the Department of state education created the first bases of what was to become the first Swiss distance learning institutions: the Distance Learning University and the Swiss Distance University of Applied Sciences.

In 2010, more than 2,200 students chose to study at the Distance Learning University, proof that a specific need exists. As a comparison, the smallest university in Switzerland, that of

[73] See http://www.sbf.admin.ch/htm/themen/uni_fr.html
[74] See http://www.hfkg.admin.ch/index.html?lang=fr

Lucerne, has 2,300 students. Distance university studies therefore play an important role in increasing participation in higher education in Switzerland.

Open Educational Resources at The UniDistance

The question of opening up course content has not really been posed until now.

In fact, the role of broker played by the Distance Learning University in the first years of its existence – the content of the teaching given comes under the jurisdiction of the partner university – prevented it. However, this is not the only obstacle, since the recent launch of independent programmes has, to date, not changed this reality. For its own courses, the Distance Learning University hires teachers from traditional universities as a lecturer for each module. The teaching content is their responsibility. The question of making it available online has not been addressed. All the energy has been channelled into launching and developing these new programmes.

Two elements could change these issues. Firstly, our participation in this OER-HE project. Observations and results are regularly passed on to management and discussions take place. Secondly, the process of 'academisation' in which the institution is involved will undoubtedly provide the chance for new positioning. As soon as teachers are hired directly by the Distance Learning University, a trend towards the opening up of teaching content can be established more easily.

This could be motivated by an argument that already seems to have been advanced – the possibility of attracting new students as soon as they have the capacity to freely consult the content of the teaching given.

Summary points

- Switzerland is trying to increase and widen participation in HE study but this is not very structured.
- As an ODL institution, UniDistance has been trying to increase the numbers of people participating in HE study.
- As yet there has not been any use of OER to help increase or widen participation.

4. Key messages on best practices

OER have been purposefully published for over 10 years but much of that time has involved institutions in gradually assessing and beginning to publish OER as part of a wider movement to unlock knowledge. Even now only a very small proportion of HEIs around the world, or just in Europe, are involved with publishing OER although the momentum is increasing greatly as OER are adopted into national and/or institutional policies. It is only in the past 4 years that there has been any significant examination and testing of the proposition that OER can widen engagement or participation in HE study as opposed to just making educational materials more available and more accessible to more people, and distance teaching universities have been in the vanguard in this area because their very existence and missions have been driven by widening opportunities for HE study. Nevertheless, even amongst the countries and partners examined in this study there is wide variation in how far OER are being published and used (some resources are open access only and not openly licensed) and also how far those countries and institutions are addressing the requirement to widen participation through formal study programmes (achieved mostly through open and distance learning in this report) let alone through OER.

There are a number of innovative and far sighted initiatives to widen participation in HE study amongst the partners as well as innovative and successful OER initiatives that help contribute to widening participation. A key finding so far is that many, many people are valuing the experience of being able to freely access and learn from self study OER taken from distance teaching universities. Some use this informal learning to act as a bridge to formal learning but others see it as an end in itself, often as part of a wider set of life long learning activities. This latter point raises questions over how we should define and record participation in higher education study as opposed to the more standard definition of participating in higher education by being registered on and successfully completing a formal programme at an accredited HEI (there is a related issue of how much formal or informal study constitutes engagement or participation).

OER provide some freedoms that can address the barriers to higher education for people and communities who may otherwise be excluded from meaningful opportunities. It is still very early in the development and use of OER to fully understand how big an impact they may make. The initial experiences of the partners do, however, highlight the significance of targeted interventions made by key individuals or organisations at a local or contextual level. In other words, OER are fine for confident and experienced learners (auto-didacts) but most people who are targeted as part of widening participation schemes are unlikely to be so confident and will require other support mechanisms to achieve participation.

The issue of localisation or contextualisation (for example changing the language of instruction or changing case studies and examples to be more culturally and socially familiar ones) is often aired around the issue of reworking or remixing OER for a specific purpose and yet much can probably be done by contextualising the support needed to study or reuse the content as is. In other words it is the peer and professional support that is changed, not the pedagogical support in the content itself. This is not to argue against reworking or remixing, merely to point out that reuse may be the better starting option where resources are scarce and the needs of different small, excluded communities so large.

Next, there is emerging evidence that the form and nature of OER, particularly if used in an e-learning setting, may be unfamiliar or technically inaccessible to inexperienced learners and that considerable effort is needed to encourage and enable learners to develop personal support strategies. This is well known for formal learning, the lesson of good quality OER in a

good learning environment is that they can empower the informal or non-formal learner because they are the ones in control and not having to perform for someone else's benefit.

Lastly, the emerging evidence from the literature and the case studies is that more effort may be needed on the part of educators and institutions to design and present OER (and associated ODL programmes) in ways that are suited to the learners as much as the educators and the institution. This is, in part, to reflect the practical requirements for meeting the differing needs of diverse life long learners throughout their ever changing lives and in part to reflect how openness in all its forms is changing systems of educational provision. Openness as a philosophy is important but something being freely available (as open access or open educational resources) is insufficient to enable many people to successfully engage with a more open educational provision. This report has also argued that it is how that openness is instantiated or structured to meet the particular needs of excluded groups that makes the difference, with mediation between the various actors in the teachers' and learners' contexts (that is third parties who support either or both) being a necessary element.

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