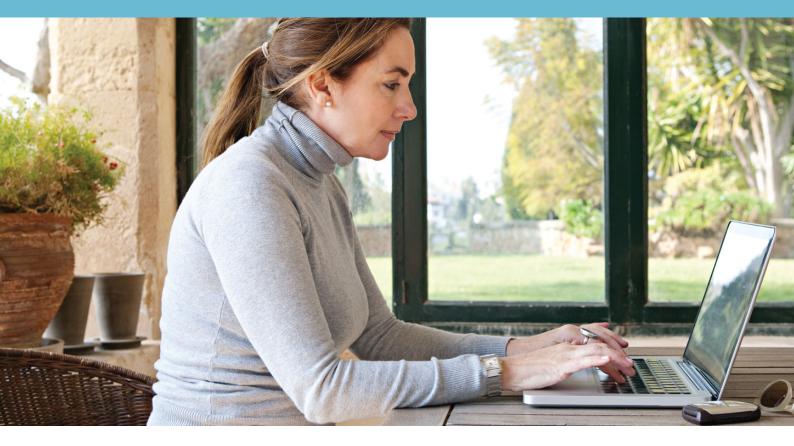
Impact of Distance Education on Adult Learning



Distance education in European higher education -the offer-

Report I (of 3)











Distance education in European higher education – the offer

Report 1 (of 3) of the IDEAL (Impact of Distance Education on Adult Learning) project.

Project number: 539668-LLP-1-2013-1-NO-ERASMUS-ESIN

Authors: Chripa Schneller and Carl Holmberg

Published in 2014 by

International Council for Open and Distance Education Lilleakerveien 23 0283 Oslo Norway

UNESCO Institute for Lifelong Learning Feldbrunnenstrasse 58 20148 Hamburg Germany

StudyPortals B.V. Torenallee 45 - 4.02 5617 BA Eindhoven The Netherlands

© UNESCO Institute for Lifelong Learning, International Council for Open and Distance Education and StudyPortals B.V.

The content of this report does not reflect the official opinion of the European Commission. Responsibility for the information and views expressed in therein lies entirely with the authors.

Acknowledgements: The authors would like to thank the project team members and colleagues as well as the IDEAL project advisory board for their valuable input and feedback.

The IDEAL project is supported by:



(Project number: 539668-LLP-1-2013-1-NO-ERASMUS-ESIN)

About us

International Council for Open and Distance Education

The International Council for Open and Distance Education (ICDE) is the leading global membership organization for open, distance, flexible and online education, including e-learning, and draws its membership from institutions, educational authorities, commercial actors, and individuals.

ICDE has consultative partner status with UNESCO and shares UNESCO's key value – the universal right to education for all. ICDE further derives its position from the unique knowledge and experience of its members throughout the world in the development and use of new methodologies and emerging technologies.

Founded in 1938 in Canada as the International Council for Correspondence Education, the organisation today has members from over 60 countries worldwide. ICDE's Permanent Secretariat is in Oslo, Norway, and has been hosted by this country on a permanent basis since 1988. ICDE is supported by the Norwegian Ministry of Education and Research and by membership fees.

UNESCO Institute for Lifelong Learning

The UNESCO Institute for Lifelong Learning (UIL) is a non-profit, policy-driven, international research, training, information, documentation and publishing institute. One of seven educational institutes of UNESCO, UIL promotes and develops lifelong learning policy and practice with a focus on adult learning and education, especially literacy and non-formal education and alternative learning opportunities for marginalized and disadvantaged groups. UIL's mission is to see to that all forms of education and learning – formal, non-formal and informal— are recognized, valued and made available to meet the demands of individuals and communities throughout the world.

StudyPortals

StudyPortals has the mission to empower the world to choose (for) education. We want to increase accessibility and stimulate people to develop and pursue an education (choose for education). Furthermore we want to inform and help them to choose the institute, program and environment that fit them best (choose education). Our ultimate ambition is to make study choice transparent, globally. We do this through operating student-focused online study choice platforms. We focus on quality from both a student as well as a university perspective. Since 2007 have we informed and stimulated students to choose the best (international) university course, and have helped universities to reach out to the right students, worldwide.

Table of Contents

Introduction	6
Notes on Distance Education	10
Terminology	17
Research methodology and data sets	19
Empirical part	24
Institutional study	24
Programme study	50
Conclusion	80

Introduction

The present report is the first in a series to be published by the IDEAL project¹. IDEAL stands for the 'Impact of distance education on adult learning'. It is a joint project of the International Council for Open and Distance Education (ICDE), the UNESCO Institute for Lifelong Learning (UIL), and StudyPortals (SP). It runs from October 2013 to September 2015 with financial support from the EU Lifelong Learning Programme (sub-programme Erasmus Multilateral Projects: Project number: 539668-LLP-1-2013-1-NO-ERASMUS-ESIN).

Purpose of the project and research questions

The IDEAL project has been designed to get a better understanding of distance education offered by higher education institutions and to examine how higher education institutions can contribute to adult learning by way of distance education.

The project aims to:

- offer insights on the needs of adult learners to both policy makers and distance education providers;
- strengthen the social dimension of higher education by better meeting the needs of adult learners:
- increase the participation of adult learners in higher education through distance education.

The central research question of the project is: How can the distance education offer of European higher education institutions be better matched to the needs of adult learners?

To address the central research question, a number of sub-questions have been formulated:

- 1. What distance education is offered?
- 2. What are students looking for?

_

¹ See: www.idealproject.eu

- 3. What are the intended target groups?
- 4. What is the current student body?
- 5. Who is showing interest in distance education?
- 6. What are the motivations of students to consider distance education?
- 7. What are the main barriers to access?
- 8. What kind of support do adult learners (expect to) get during their studies?

Policy background

Distance education may not have replaced on-campus education, but through its flexibility in teaching and learning it can be seen as an alternative for learners who are not able or wish not to take on-campus education. This alternative constitutes an important element of lifelong learning. Lifelong learning has been emphasised as a policy objective at European Union level (foremost the Europe 2020 Strategy², the European Union's Strategy for growth) and in the context of the Bologna Process, starting with the Prague Communiqué of 2001 and re-affirmed in the 2012 Bucharest Communiqué³. UNESCO has defined Ensuring equitable and inclusive quality education and lifelong learning for all by 2030' as the overarching goal of the post-2015 education agenda (see Muscat Agreement of the Global Education for All (EFA) Meeting, 2014⁴). Its specialised UNESCO Institute for Lifelong Learning, a partner of the IDEAL project, promotes, among others, adult learning and education. Working together with the UNESCO (on formal consultative status) is the International Council for Open and Distance Education (ICDE), also a partner in the IDEAL project: it globally supports policy development concerning distance education and works towards increasing the openness in education systems. It is the continuing emphasis of lifelong learning as a policy objective that sets the background to the present research: The IDEAL project wishes to examine the potential of distance education as an alternative way of education delivery for adult learners, i.e. those that are returning to higher education.

² European Union, Europe 2020: http://ec.europa.eu/europe2020/index_en.htm

³ Bologna Process, Ministerial Conferences (documents): http://www.ehea.info/article-details.aspx?ArticleId=43

⁴ UNESCO, Muscat Agreement: http://unesdoc.unesco.org/images/0022/002281/228122e.pdf

The present report in its context

The present report is the first of three independent, yet complementary research components of the IDEAL projects. Study 1 examines the European distance education offer - what is offered and whom is it designed for? For this study, the programmes and course units listed on www.DistanceLearningPortal.com ⁵ are analysed and a survey is carried out among distance education providers. Study 1 constitutes the present report. Study 2 consists of a survey among adult learners enrolled in distance education to analyse their social profile, their motivations, the barriers they encountered etc. Study 3 focuses on prospective distance education students – who are they, what do they look for, what are the barriers? For this purpose, the browsing and search behaviour on the DistanceLearningPortal is analysed and five experts are asked to conduct a meta-analysis of existing research for five country cases. The term 'better' is used in the central research question ('How can the distance education offer of European higher education institutions be better matched to the needs of adult learners? ') to indicate that the project will look at *both* the demand and the offer side of distance education. The three studies, which are published as single online reports, are brought together in a final publication by the end of the year 2014.

Outline of the present report

The aim of Study 1, i.e. the present 'Report 1 (of 3): Distance education in European higher education - the offer' is to examine the distance education offer of European higher education institutions and to identify the intended target groups, in particular adult learners. The report is divided into 6 chapters.

Following this chapter (1. Introduction), we will present a brief overview of the emergence, spread and current provision of distance education at European level. We will recur to these notes for the presentation of our data sets and for putting our findings into perspective (2. Notes on distance education). The report will then introduce the key concepts used in the IDEAL project (adult learners, distance education, etc.) and in this report in particular (3. Terminology). Fourth, we will outline the research

⁵ DistanceLearningPortal, launched in 2012, is the single largest database on distance and blended education in Europe. It is managed by StudyPortals, a member of the IDEAL project consortium.

methodology and describe the data sets used (4. Research methodology and data sets). The empirical part (5. Empirical part) is split in two, first presenting the findings of the institutional study (5.1. Institutional study), followed by the data collected at programme level (5.2. Programme study). Chapter 6 provides a summary of the findings and general conclusions (6. Conclusion).

Notes on Distance Education

This report will present data on the current provision of distance education in Europe. To better understand the situation today, a brief look at the history of distance education may be conducive. We will therefore try to give a basic overview of the emergence, spread and the current provision of distance education based on literature in the field. In areas where there is little existing research, we recur to the views of experts, namely the members of the IDEAL project advisory group⁶.

So when did distance education start? Distance education is not a new phenomenon, even though the spread of Internet access and technology have made new modes of delivery, interaction and cooperation between participants possible. In his work *The* evolution, principles and practices of distance education Börje Holmberg shows that 'organised distance education in the form of correspondence instruction can (...) be dated back to the eighteenth and nineteenth centuries, but letter writing for the purpose of teaching is probably as old as the art of writing itself' (Holmberg 2005, p.13). His book describes the various generations of distance education as they have developed related to new technology. The first correspondence schools used the printed and written word as their core medium for reaching out to adult learners. Up to the 1960s, all large-scale distance-teaching organisations had been private correspondence schools. It was then, in the 1960s, that publicly supported and established universities began to use correspondence-education methods. Holmberg names the University of South Africa as 'an outstanding pioneer in this respect'. It started teaching at a distance in 1946. In 1962, a governmental decree formally established the University as a distance-teaching university.

For Holmberg, the 1970s also marked the beginning of a new era: the term *distance education* itself began to be used. The international community officially adopted it in 1982 when the *International Council for Correspondence Education* changed its name

⁶ The members of the IDEAL Task Force are: European Association of Distance Teaching Universities (EADTU): George Ubachs; European Association for the Education of Adults (EAEA): Susana Oliveira European Distance and E-Learning Network (EDEN): Diana Andone; European Foundation for Quality in E-Learning (EFQUEL): Ingeborg Bø; European Society for Research on the Education of Adults (ESREA): Sofia Nyström.

to the *International Council for Distance Education* (today: the *International Council for Open and Distance Education*, *ICDE*, the consortium leader of this project). The change was triggered by the ever-growing use of new media for education provision. This new phase of distance education finds clear expression in the founding of the British Open University in 1971. Since then new forms of technology-enhanced learning (TEL) referring to the successive introduction of radio, television and video, CDs and DVDs have given education providers new tools for educational organisation and pedagogy (Holmberg 2005, p.10). The advent and the wide spread of the Internet constitute another landmark for distance education. Ever since, new scenarios for communication, forms of presentation and interaction have been created.

Several European countries found inspiration in the British Open University and in many cases used it as a model. Early followers of the British Open University in Europe were the Fernuniversität Hagen in Germany, the Open Universiteit in the Netherlands and the Universidad Nacional de Educación a Distancia (UNED) in Spain. But not all countries have opted for the model of Open Universities. In Sweden, Norway and Finland for example, distance education has since the 1970s been systematically introduced across almost all universities to take advantage of the developments in educational technologies and as a way of reaching out to non-traditional students. In Paulsen's 2003 review Online Education. Learning Management Systems, we learn that the widespread provision of distance education in the Nordic countries is linked to their strategic decision not to opt for Open Universities, as the UK and Germany have done for example, but for dual-mode types of universities, i.e. universities that use both face-to-face and distance teaching methods (Holmberg 2003, p. 249). In Open and Distance Learning. Trends, Policy and Strategy Considerations of 2002, UNESCO also addresses this parting of the ways in Europe: 'The UK Open University has set the standards for a particular type of university institution, the open universities. Flagship institutions have been established in other European countries including most notably Spain with the Universidad Nacional de Educación a Distancia (UNED) and the Universitat Oberta de Catalunya (UoC), Germany with the Fernuniversität, as well as the Open Universiteit of the Netherlands and the Universidade Aberta of Portugal. In other countries the dual-mode type of universities represent the dominant model, and in recent years various consortia models have been introduced, including virtual and distributed universities. European distance education is currently at a stage of major

strategic development, where national provision is being extended across borders.' (UNESCO 2002, p. 54)

The past two decades have indeed seen major developments. Not only have campus-based and distance modes of delivery become increasingly blurred with the spread of new technology. In fact, the *types* of providers have changed. The massively growing demand for higher education has lead to the creation of both so-called 'mega universities' and 'borderless networks of universities'. Daniel defined a *mega university* as 'a distance teaching university with a unitary management structure that enrols over 100,000 students annually' (Daniel 1996, p. 29). He identified ten such mega universities worldwide in 1996 - since then their numbers has grown considerably. Exemplary of this demand-driven boost in higher education provision is the approval of six mega universities by the Nigerian government last year⁷.

But not only the scale of provision has been changed by technological developments. Distance-education technologies have also given providers a possibility to cross geographical borders and to reach out to students in other countries⁸. UNESCO and the OECD, in their *Guidelines for Quality Provision in Cross-Border Higher Education*, define the latter as 'higher education that takes place when students follow a course or programme of study that has been produced, and is continuing to be maintained, in a country different from the one in which they are residing. Cross-border higher education may include higher education by private and/or for-profit providers.' The rise of distance education/cross-border education has been distinctly marked by the latter. In the US in particular, a number of private university networks have been created in the past years. One of the largest players, Laureate International Universities, has grown to include over 75 institutions in 30 countries throughout North America, South America, Europe, Asia, and Africa by now. Institutions within the network operate both campus-based and online programmes and include a total enrolment of more than 800,000 students⁹.

⁷ See: http://www.universityworldnews.com/article.php?story=20130426173337745

⁸ The presentation by Sir John Daniel at the Second World Summit of Mega Universities gives a very good overview of the challenges and opportunities of cross-border education. See: http://www.col.org/resources/speeches/2005presentations/Pages/2005-09-25.aspx

⁹ See: http://www.laureate.net

How can the situation today in distance education in Europe be best described? Above all, there is no single type of distance education provider. DE providers are as multifaceted and 'non-traditional' as their potential target groups. Specialised distance teaching universities may be among the largest providers of DE in terms of student numbers, but they are few in absolute numbers - and they are not alone. The number of specialised distance-teaching universities in Europe, based on the membership (open and distance universities) in the European Association of Distance-Teaching Universities is eleven. As explained previously, not all countries have opted for the model the model of the British Open University. In many European countries, 'conventional' or 'traditional' campus-based universities have introduced distance education as new pedagogical tools and a means for reaching out to non-traditional learners. The number of EADTU members constituting associations or consortia of conventional universities is in fact higher than the number of open and distance universities (14). Indeed, dual-mode universities, i.e. teaching both on-campus and at a distance, are the rule today, rather than an exception. The European University Association in its Trends VI report of 2010 reported that slightly more than half (53%) of all European HEIs provide some distance education (EUA 2010, p. 68). One should, however, keep in mind that for single countries, e.g. the Scandinavian ones, that percentage would be much higher as almost all universities there provide some form of distance education.

The number of students enrolled in distance education in the European Higher Education Area is difficult to assess. Enrolment numbers in European distance-teaching universities alone exceed at least 2 million¹⁰. It should be noted that these enrolment numbers do not only refer to students that are resident within the European Higher Education Area. Considering the high share of higher education institutions offering both campus-based and distance education across Europe, we may assume that the overall number of students taking some form of distance education (included blended learning) must be considerably higher. A look at the US situation offers the following insights: More than 6.7 million students had taken at least one online course during the autumn 2011 term (a more than 9% increase compared to 2010). And thirty-

¹⁰ Information provided by EADTU.

two percent of higher education students were taking at least one course online in the same year (Babson, 2012 Survey of Online Learning).

The diverse political and economic environments have also had an impact on distance education development and student numbers. For Central and Eastern Europe and the former USSR, UNESCO 2002 outlines that 'the political and economic transformations have had important implications for education, and have already led to fundamental reforms and restructuring of national education systems. In most of the countries, distance education based on correspondence studies combined with faceto-face 'consultations' was developed and served large populations. However, student numbers decreased very much after the political transformation, partly due to lack of support from employers. The model is now often met with some reserve regarding both status and quality. Open and distance learning is still a priority for most of the governments in this sub-region, but it is in need of fundamental reform and upgrading, as is the education system as a whole.' (UNESCO 2002, p. 54). It is interesting to note that one of the founding goals of the European Distance and E-Learning Network (EDEN), established in 1991 as an international educational association and not-forprofit organisation dealing with e-learning, and – more broadly speaking – open and distance education, was to ease just these transformation processes¹¹.

What about the MOOCs? While some higher education institutions may not even have identified distance education as a delivery method for their educational offer, so-called Massive Open Online Courses (MOOCs), as a particular new form of courses, have entered the market since 2008. What are they? In their January 2013 paper on MOOCs, the European University Association describes them as follows: they are online courses; with no formal entry requirement; no participation limit; they are free of charge; and they do not earn any credits. MOOCs providers are often 'either for- or non-profit private companies, partnering with universities or individual scholars, and providing services for them. The usual division of tasks is that the universities or the individual academics are responsible for the content (and the quality) of the courses, whereas the company is in charge of the production and its technical facilitation.' (Gäbel 2013, p. 3). It should be noted that also higher education institutions

¹¹ See: http://www.eden-online.org/introducing-eden.html

themselves create and run MOOCs without external firms by now (see: Gäbel 2014). As MOOCs usually do not have any formal entry requirements, it could be argued that they are an effective tool for opening access to higher education. And indeed, MOOCs are not categorically excluded in this study. However, as they usually do not award credits or assess performance appropriately, and students do not need to officially enrol at the institution, they are in practice not part of our study (on the issue of credits see also: Gäbel 2014, p. 27).

Of particular interest in the context of the data presented in this report is the relationship between distance education and adult learning. We will therefore round off the notes on distance education by a brief discussion of adult learning policies in higher education. Distance education provision has, since the early days of the private correspondence schools, been a way of reaching out to adult learners (Holmberg 2005, p.10). In 2011, the European Commission, DG Education and Culture, launched the study Opening Higher Education to Adults (HEAD). It shows that since 2008, several European countries, namely Austria, Cyprus, France, Greece, Ireland, Latvia, Slovenia, and Serbia, have made significant progress towards the implementation of a national lifelong learning policy or strategy. They differ, however, greatly in the extent to which they embrace higher education as part of the lifelong learning continuum, and with regard to their implementation. In legislation, fields of action that are conducive to opening higher education to adults include the implementation of recognition of prior learning (RPL), credit transfer and regulations on flexible learning provision including distance learning. The authors stress that one of the biggest challenges is to overcome conflicting goals between national and institutional strategies, which may lead higher education institutions to concentrate on traditional, young full-time students rather than on opening up to more diverse student groups. According to their findings, the provision of programmes for adults seems to 'depend considerably on the type of institution (e.g. open and distance universities) or on the initiative of individual staff and/or departments rather than on a coherent institutional strategy'. The HEAD study further shows that the participation of adult learners is directly affected by the degree of flexibility of the educational offer. While there is no 'one-size-fits-all' solution for all countries, the authors demonstrated that distance and blended teaching methods, among others, are an important element of the flexibility of education (European Commission 2013, pp. 4-7).

Terminology

For Study 1 of the IDEAL project, the following terminology is used:

Adult education

'General or vocational education provided for adults after initial education and training for professional and/or personal purposes, and which aims to:

- provide general education for adults in topics of particular interest to them (e.g. in open universities);
- provide compensatory learning in basic skills which individuals may not have acquired earlier in their initial education or training (such as literacy, numeracy) and thus to;
- give access to qualifications not gained, for various reasons, in the initial education and training system;
- acquire, improve or update knowledge, skills or competences in a specific field: this
 is continuing education and training' (Cedefop 2008).

Adult learners

Learners of any age returning to education after a period of work, unemployment, parental leave etc.

Blended education

A course unit or programme that blends online and face-to-face delivery; a substantial proportion (30-79%) of the content is delivered online.

Course unit

'A self-contained, formally structured learning experience. It should have a coherent and explicit set of learning outcomes, expressed in terms of competences to be obtained, and appropriate assessment criteria. Course units can have different

numbers of credits¹².' What courses have in common with (->) degree programmes is the award of credits.

Degree programme

'A set of coherent educational components, based on learning outcomes, that are recognized for the award of a specific qualification through the accumulation of a specified number of credits and the development of specified competences¹³.'

Distance education

A generic term for modes of education in which the student and the teacher are separated in time and space. It includes online education (≥ 80% of the content delivered online) and blended education (30-79% of the content delivered online) as well as modes of education using printed material delivered by post and/or other tools for bridging the distance.

European higher education institutions

For the purposes of this survey, only higher education institutions that are on IAU's List of Universities of the World¹⁴, accredited by their competent national authorities and that are based within the European Higher Education Area¹⁵ (EHEA) are considered.

Online education

Most or all of the content (≥ 80%) is delivered via the Internet only. Online education is not synonymous with distance education, even though in many developed countries with extensive Internet access it may be the most widely spread form of distance education.

¹² See: Tuning Educational Structures in Europe - Glossary of terms: http://www.unideusto.org/tuningeu/documents/glossary- of-terms.html

¹³ Ibidem

¹⁴ IAU, List of Universities in the World: http://www.iau-aiu.net/content/list-heis

¹⁵ EHEA countries: http://www.ehea.info/members.aspx

Research methodology and data sets

Embedded in the overarching research question 'How can the distance education offer by European higher education be better matched to adult learners' needs?' the present report sets out to answer the following sub-questions:

- 1. What is offered? (Availability of distance education in European higher education, subject areas offered, degree structure, etc.)
- 2. What are the intended target groups? (Motivations of HEIs to offer distance education, institutional strategies, accession criteria, etc.)

The IDEAL project presents new empirical data collected from higher education institutions in Europe, both at institutional and programme level, to address these questions.

Programme data

There are two data sources used for the present study. The first set of data, i.e. programme data, is available to the project through its unique access to www.DistanceLearningPortal.com (hereinafter referred to as DistanceLearningPortal or DLP). DistanceLearningPortal, launched in 2012 is the single largest database on distance and blended education in Europe. DLP is managed by the Dutch organisation StudyPortals, one of the consortium members of this project. In June 2014, it contained information on almost 3,000 programmes and courses delivered at a distance in European higher education. This constitutes the data set used for the present study. Higher education institutions themselves, e.g. the programme coordinators, enter the data in DLP via a standardised questionnaire. They can also request StudyPortals to insert their information against cost price on their behalf, in which case they need to identify the source of the information (typically their website or brochure). The interface of the platform is available in four major European languages (English, French, German, and Spanish). HEIs can insert their courses and programmes taught in any language, and are requested to describe their course or programme in the language of instruction.

The information items available for analysis on the DistanceLearningPortal include the following:

- Basic information about the programme (types of degree, discipline);
- Access (what are the formal entry requirements (prior degree, language proficiency, work experience) and are there alternative entry routes?);
- Organisation of the programme/course (delivery mode (blended or not), physical attendance; availability of part-time options; maximum time to complete the programme/course);
- Tuition fees (amounts; funding opportunities available?);
- Support offered (interaction opportunities with teachers; with students; others)

The questionnaire also contains some open text fields, where the respondents can enter a general description or comment on numerical data provided, etc. For each table/figure in this study, the type of question collecting the information will be described. It is important to keep in mind that the present analysis describes information *available* in the DistanceLearningPortal (DLP) database. A lack of information on specific items should not tempt the reader to draw conclusions on the actual provision. Rather, it shows the extent to which distance education providers use the DistanceLearningPortal to reach out to their potential students.

By the time the project had started (October 2013), the DistanceLearningPortal contained information on ca. 1,700 distance education programmes. A preliminary review of the DLP data showed that UK-based institutions delivered a vast majority of the programmes and courses listed (almost 50%), and that more than 80 percent of the programmes/courses were offered in English. This could be related to the fact that StudyPortals databases attract internationally oriented higher education institutions. To have a better picture of the geographic coverage of the distance education offer, the project team decided to carry out an additional survey among European higher education institutions. Furthermore, a number of items had been left blank for the programmes entered in DistanceLearningPortal and information on alternative entry routes and on support to students had not been collected at the launch of the database in 2012. StudyPortals used the time until the institutional survey was carried out to collect the missing data for the purpose of the IDEAL study.

Institutional data

From 27 April to 25 May 2014, an institutional survey was carried out in addition to the available programme data to:

- 1. obtain a clearer picture of the availability of distance education in European HE;
- 2. complement the data at programme level with information at institutional level on the following aspects:
 - Number, types and levels of programmes offered;
 - Drivers for distance education, target groups and student support;
 - Future expectations on the development of distance education.

A standardised questionnaire with items covering the above aspects was developed. The project team would like to acknowledge the kind support of the US-based Babson Survey Research Group ¹⁶ and the European University Association ¹⁷ (EUA), who have shared experiences on related topics with us and have given permission to use parts of their questionnaires. EUA had carried out a survey among European universities on the issue of Massive Open Online Courses in 2013; the Babson Survey Research Group has been monitoring the provision and use of online learning in the US for a number of years.

The institutional questionnaire was sent to ca. 4,000 higher education institutions based in the European Higher Education Area. The criterion for inclusion is defined in Chapter 3 (Terminology). This wide approach was taken in order to cover a variety of countries, types of institutions and forms of distance education. It was made possible with the support of the International Association of Universities (IAU¹⁸) and its World Higher Education Database (WHED¹⁹) as well as through the joint networks of the project partners (the International Council for Open and Distance Education (ICDE), the UNESCO Institute for Lifelong Learning (UIL) and StudyPortals). The questionnaire was addressed to the heads of the institutions. A reminder was sent on 12 May 2014.

¹⁶ Babson Survey Research Group: <u>www.babson.edu/Academics/faculty/provost/Pages/babson-survey-research-group.aspx</u>

¹⁷ EUA: <u>www.eua.be</u> ¹⁸ IAU: <u>www.iau-aiu.net</u> ¹⁹ WHED: <u>www.whed.net</u>

To encourage institutions to participate, the inclusion of up to five programmes in the DistanceLearningPortal was offered free of charge (or an update, if they were already listed). In almost half of the cases only general e-mail addresses (info@...) were available. The envisaged response rate had therefore cautiously been set to 100.

The number of respondents in the institutional survey was 237. Almost 70 had to be excluded as they were incomplete or not valid, e.g. the institutions were not based in the European Higher Education Area. Of the remaining 167 valid responses, 33 HEIs reported that they do not deliver any distance education, which leaves 134 positive respondents for analysis. As some participants did not answer to every question, the number of respondents is indicated for each table.

In the following chapter, the *institutional* data is presented first, followed by the data on distance education *programmes*. The terminology introduced in Chapter 3 applies to the two data sets. This means that by 'programmes' – if not specified otherwise - we understand both full degree programmes *and* courses, delivered partially or fully at a distance. What they have in common is the award of some form of credits and/or appropriate performance assessment, for which students usually need to enrol at the institution. Considering that the vast majority of Massive Open Online Courses (MOOCs), a particular new form of courses, do not award credits, they are not systematically included in the data.

Last but not least, a word of caution is necessary. Neither the institutional data with its small number of respondents (167 higher education institutions) nor the programme data with its roughly 3,000 programmes claim representativeness of all the countries covered in this project. The data for single countries should not be read as characteristic case studies. It is good to recall that the IDEAL project will specifically publish five country case studies as the last of the three online reports of the project. These case studies will look in detail at the provision (and the use) of distance education in the countries in question. Instead of providing representative data for all European countries, this first report strives to map the current provision of distance or blended education as reported by the participating higher education institutions and, by way of doing so, to give the reader clear insights into some present and future developments in the field of distance (higher) education in Europe.

Empirical part

This Chapter is divided into two parts. The first part shows the findings of the institutional survey (5.1. Institutional study). In the second part, the data collected at programme level from the DistanceLearningPortal is presented (5.2. Programme study).

Institutional study

The institutional study sets out to map the current provision of distance or blended education at higher education institutions in the European Higher Education Area. In other words, it presents data collected from tertiary education institutions in May 2014 on their offer of programmes and courses, which are delivered (partially or fully) at a distance. The presentation is structured around five topics including:

- (1) Availability of distance education in European higher education (geographic spread, location of DE in the higher education institution);
- (2) Number, types and levels of programmes;
- (3) Drivers for distance education, target groups, and student support;
- (4) Numbers of students in distance education; and
- (5) Future expectations.

(1) Availability of distance education in European higher education

In relation to on-campus education, the types of European higher education institutions as providers of distance education can be classified into four categories:

- a) Specialised single-mode distance education institutions;
- b) Dual-mode institutions, in which distance education is offered next to face-to-face education;
- c) Institutions with a (very) low focus on distance education, mainly delivering faceto-face education;
- d) On-campus institutions that do not offer any distance education.

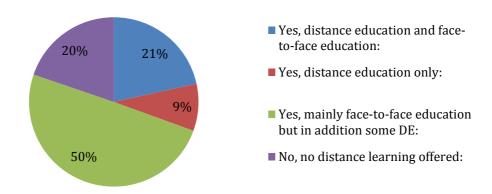
Half of the 167 institutions responding to the survey had a (very) low focus on distance education, i.e. delivering mainly face-to-face education, but with some distance or blended education in addition (see Figure 1). The percentage of dual-mode institutions in our data set, i.e. offering both distance and on-campus programmes, was slightly higher (21%) than that of pure on-campus institutions that do not provide any distance or blended education programmes at all (20%). The remaining 9 percent of the responding institutions are primarily or entirely devoted to distance education.

Figure 1: Availability of distance education

Question: Do you deliver any distance education?

167 respondents

(Answers in percent)



In our data set, 80 percent of the responding higher education institutions offer at least some distance or blended education. One of the few other sources available, the EUA

Trends VI of 2010 indicated that slightly more than half (53%) of European HEIs provide some distance education (EUA 2010, p. 68). As mentioned in Chapter 2 (Notes on distance education), the situation across single countries can be very diverse. In the Nordic countries, dual-mode institutions are the rule, not an exception. The discrepancy between the two data sets may also be due to the following:

- The IDEAL institutional survey specifically addressed the topic of distance education. Some recipients of the invitation to the survey may not have accessed the questionnaire to indicate that the HEI does not offer any distance education. The percentage of HEIs that are providers of distance education would thus be higher in the IDEAL data set than it actually is;
- In the same light, the overall number of respondents to the IDEAL institutional survey is lower than for Trends VI. The IDEAL data set could therefore be more biased:
- The question asked in the Trends VI report about distance education may be understood as excluding programmes/courses provided in a blended form (partially at a distance and on-campus). The latter are included in the IDEAL institutional survey;
- The Trends VI data is from 2009/2010. The provision of distance education may have risen in the past four years.

Geographic spread of distance education

Table 1 shows the geographic spread of those respondents that reported to provide distance education (groups a) to c) in the previous section). France, Germany, Spain and the UK have the highest number of respondents providing distance education in our data set. As the numbers are very small, we refrain from relating them to the number of universities in each country and from drawing conclusions on the respective availability of distance-education based on our data. The previous chapter discussed the emergence of distance education. It showed that distance education is not a niche phenomenon anymore today and that many European universities that traditionally offered campus-based education have adopted some form of distance education (including blended education) by now. And yet, the policy for making use of new media

in education differed across countries. As mentioned in the previous Chapter, the Nordic and the Baltic countries, for example, have not opted for the Open University model as in the UK, but have introduced distance education as a way for reaching out to non-traditional learners across *almost all* universities. Our data set reflects the wide spread of such dual-mode universities in these countries: of all respondents to our survey, a relatively high number are from Finland, Sweden and Norway (18), Estonia, Latvia, and Lithuania (9).

Table 1:Number of responding HEIs providing distance education by country 134 respondents

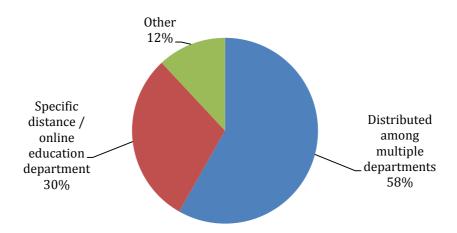
	Number of		Number of	
Country	respondents	Country	respondents	
Armenia	2	Lithuania	3	
Austria	1	Luxembourg	1	
Belgium	2	Macedonia	3	
Bulgaria	3	Netherlands	2	
Cyprus	1	Norway	7	
Czech Republic	1	Poland	2	
Denmark	2	Portugal	7	
Estonia	3	Romania	2	
Finland	4	Russia	8	
France	12	Slovakia	1	
Georgia	1	Slovenia	3	
Germany	11	Spain	10	
Greece	1	Sweden	7	
Hungary	1	Switzerland	1	
Ireland	5	Turkey	2	
Italy	6	Ukraine	6	
		United		
Kazakhstan	1	Kingdom	9	
Latvia	3			

Location of distance education in the HEI

Where in the HEIs is distance education located? Figure 2 shows that about one third of the respondents have a specific distance/online education department. In the majority of cases (58%), however, distance education is distributed among multiple departments. A fourth of the 'other' respondents (3%) even stated that it was in the hands of some professors or specific to one department only. Another fourth of the

'other' group are very small institutions. The remaining half of the 'other' respondents (6%) specify that they are purely open, distance or online universities.

Figure 2: Location of distance education Question: Where in the HEI is distance education located? 134 respondents (Answers in percent)



While there is little current literature on this issue, our observation in the Nordic countries is that the general trend has been to leave the responsibility with the departments and in some cases to have a central unit supporting the departments with expertise. For example, Lund University, one of the largest universities in Northern Europe, earlier had a specific unit supporting the development and provision of distance education. Now, the responsibility lies with the departments. In some cases, such as Norway, there are national agencies supporting universities in the development and use of distance education. The agency there is called Norway Opening Universities²⁰.

(2) Number, types and levels of programmes

²⁰ Norway Opening Universities: http://norgesuniversitetet.no/about

Number and types of programmes offered by HEIs

All respondents were asked about the number and types of degree programmes offered at their institution. Several HEIs reported that they had difficulty providing this sort of data. The answers are therefore presented including the number of non-respondents to each sub-set of questions. To understand the picture, it must be kept in mind that a missing answer can mean two things: a) the precise data was not available to the respondent at the time the questionnaire was completed and the entry was therefore left empty, or b) the question was not applicable to an institution's context. Full distance education providers would, by definition, not offer any on-campus programmes. Instead of entering '0' for the number of on-campus programmes, some could have left this field empty.

As Figure 3 shows, the number of on-campus programmes delivered by the respondents range from 1 to up to over 1,000 by one provider. A third of the HEIs in this study, however, offer between 10 and 99 on-campus degree programmes (33%). Some larger universities offer several hundreds face-to-face degree programmes (22%). Not surprisingly, the providers of pure distance education offer none (here: 10% of the respondents).

Online programmes, as the predominant form of distance-education programmes, are offered by 58 percent of the respondents. Only few offer more than 40 programmes (3%). The majority of HEIs offer between 1 and 9 online degree programmes (39%).

Other types of distance education programmes (e.g. paper-based distance education) are provided only by very few respondents (8%). The number of these kinds programmes reported does not exceed 30 for a single institution.

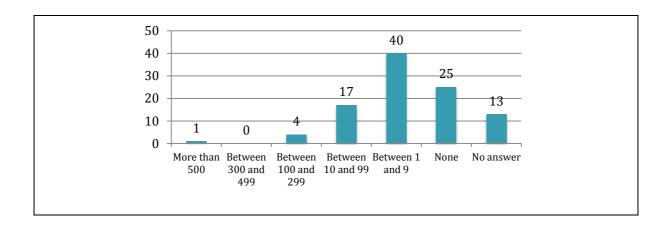
The numbers of blended education programmes are reported by 62 percent of the respondents. The majority of HEIs offer between 1 and 9 blended degree programmes (40%). Very few institutions (5%) offer more than 100 such programmes. The one Ukrainian institution reporting more than 500 programmes stands out alone. Again, to not much surprise, the single-mode distance education institutions in this study did not report any blended education programmes.

Figure 3: Number and type of degree programmes

Question: Please indicate the number and type of degree programmes offered at your institution (multiple answers possible).

89 respondents (Answers in percent)





For HEIs that mainly deliver on-campus education, the ratio of distance (and blended) education programmes to face-to-face programmes in this data set is approximately 1:10 This is in line with some national literature on this issue, for example from Sweden (Högskoleverket 2011). The report also shows that the gap between face-to-face education and distance education is closing.

Number and levels of distance education programmes

The respondents were also asked about the number of distance education degree programmes offered at various levels (Bachelor's, Master's, PhD or respective equivalents, and others). Again, several HEIs found it difficult to provide data on this issue. The 'no answers' to each sub-question are included here as well. When reading Figure 4, it should be kept in mind that the respondents that have not answered might have done so because their data was not easily available, or simply because the question was not applicable to their context (e.g. an institution that is only offering undergraduate programmes may have left the other information items empty).

As Figure 4 shows, most of the HEIs offering distance education programmes do so at Bachelor or Master's level (68% and 85% respectively). 19 percent of the respondents in this study state to offer PhD-level programmes delivered via distance education, 18 percent offer programmes at other levels.

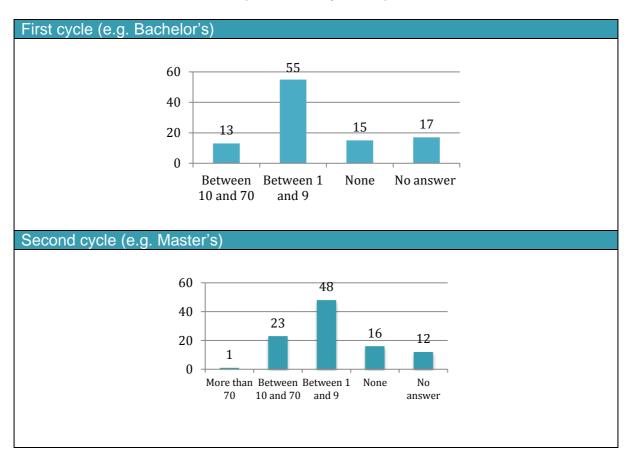
The number of distance education programmes per institution at Bachelor's level ranges somewhere between 1 and 9 in more than 50 percent of the cases (55%). At Master's level, the picture is similar: 48 percent of the institutions offer between 1 and

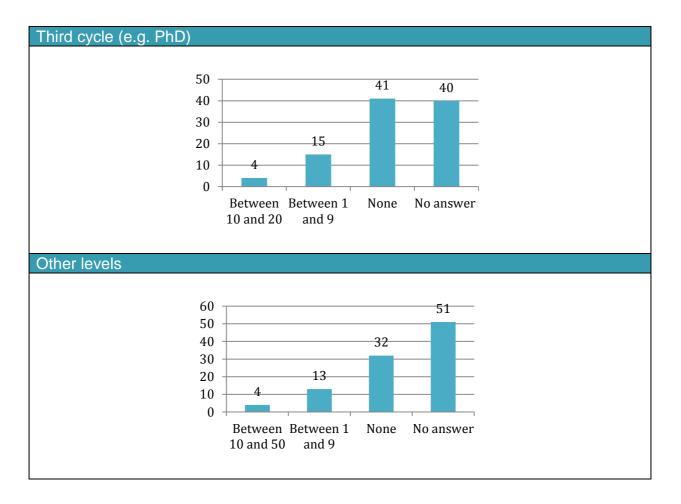
9 Master-level distance education programmes, 23 percent offer up to 70 programmes. The majority of those HEIs offering PhD-level programmes at a distance offer no more than 10 programmes each (15%). Also, mainly between 1 and 9 programmes per institution are offered for 'other' levels (13%).

Figure 4: Number and levels of degree programmes

Question: Please indicate the number of distance education degree programmes offered at your institution at different levels.

75 respondents (Answers in percent)





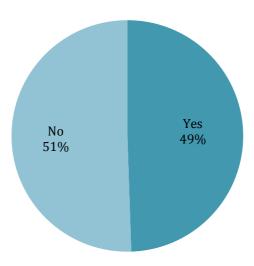
As Figure 4 shows, the majority of distance education programmes are Bachelor or Master-level programmes. This is also the case for the data available for Sweden, for example. The majority of distance education delivered in Sweden is first cycle single courses (Högskoleverket 2011).

Enrolments in individual course units

Figure 5 shows that in almost 50 percent of the responding institutions, students can enrol in individual course units without having to enrol in a full degree programme. It is also our observation that in several countries large parts of the distance education offer are single courses (for Sweden, see also: Högskoleverket 2011). The programme data presented in the next chapter will also look at the offer of single courses versus full degree programmes.

Figure 5: Enrolment in individual course units

Question: Is it possible for students to enrol in individual course units without having to enrol in a full degree programme? 93 respondents (Answers in percent)



(3) Drivers for distance education, target groups, student support

Motivations to offer distance education

Among our respondents, the core motivation for higher education institutions to offer distance education is to provide more flexible learning opportunities (83% of the respondents to this question, see Table 2). The demand from (potential) students was indicated by 43 percent as an important driver for distance education. Education provision for adult learners is named as the third most important motivation. 34 percent of the institutions are experimenting with innovative pedagogy. Marketing issues (increasing visibility, competition with other higher education institutions, income generation, all at 22%) and business aspects (demand from employers, cost reduction, both at 11%) play a much less important role as drivers for distance education. The three institutions naming 'other' motivations are pure online or distance-teaching universities, i.e. distance teaching is their 'original purpose and political mandate', as one respondent put it.

Table 2: Motivations to offer distance education

Question: Which of the following are the main motivations for your institution to offer distance education (please select up to three answers)?

87 respondents

(Answers in percent)

Motivation	Respondents
To provide more flexible learning opportunities	83%
Demand from (potential) students	43%
To attract adult learners	40%
To experiment with innovative pedagogy	34%
To increase the visibility of the institution	22%
To compete with other higher education institutions	22%
To generate income	22%
To explore cost reductions	11%
Demand from employer	11%
Other	3%

Holmberg explains that distance education has been a way of reaching out to adult learners since the early days of correspondence schools (Holmberg 2005, p.10). The HEAD ('Opening up higher education to adults') study also shows that all European countries included in the analysis either have national lifelong learning policies in place

and or have made significant progress towards the implementation of a national lifelong learning policy or strategy (European Commission 2013, p.4). It is therefore not surprising that 'attracting adult learners' is named as the third most important motivation to offer distance education. The important objective of 'providing more flexible learning opportunities' shows that distance education is understood as an opportunity for making pedagogic approaches more flexible in general.

Distance education and HEI strategy

In the context of an institutional strategy, distance education is considered as a very important way to: a) increase student access, b) increase opportunities for continuing and/or professional education c) improve student progression and completion, d) provide pedagogic improvements and e) enable adult learners to enrol. Of these, increasing student access is named as the single most important issue (Table 3). While the objectives of enabling adult learners to enrol and pedagogic improvements are not highlighted as strongly as the others, they are still important in the institutional strategies. In essence, the table shows that the difference in importance between the various objectives is not striking. And for the vast majority of HEIs, these objectives are not mutually exclusive.

Table 3: Institutional strategy

Question: How important is it strategically to your institution to...?

86 respondents

(Answers in percent)

	Importance (respondents)					
Strategic objective	Very important	Important	Somewhat important	Not important	No answer	Total
Increase student access	56%	35%	6%	1%	2%	100%
Increase opportunities for continuing and/or professional education	53%	31%	12%	0	4%	100%
Improve student progression and completion	52%	36%	7%	1%	4%	100%
Provide pedagogic improvements	47%	40%	9%	1%	3%	100%
Enable adult learners to enrol	46%	40%	12%	1%	1%	100%

Main target groups

As the aim of the IDEAL project is to find out how distance education can contribute to adult education, the question about the main target groups of distance education provision is particularly insightful (see Table 4). Two thirds of the HEIs (67%) consider adult learners with certain work experience as the main target group of their distance education offer, followed by adult learners with a degree (65%). Adult learners with no previous degree are considered to be an important target group by 48 percent of the institutions. In terms of degree holders, distance education is offered mainly for Bachelor's degree holders (49% of the institutions said so). 35 and 31 percent respectively hope to attract Master's degree holders and high school graduates. The distinction between national and international students as target groups gives us an idea about the offer of distance education in the context of internationalisation. While the majority of institutions primarily target national students (55%), almost as many say that they are also interested in attracting international students with their distance education offer (48%).

Table 4: Main target groups of DE

Question: What groups of students does your institution primarily target with the distance education offer (multiple answers possible)?

85 respondents

(Answers in percent)

Target group	Respondents
Level	
High school graduates	31%
Bachelor's degree holders	49%
Master's degree holders	35%
Adult learners	
Adult learners with no previous degree	46%
Adult learners with a degree	65%
Adult learners with certain work	67%
experience	
National/international	
National students	55%
International students	48%
Other	1%

In one of the comments received an institution specified that they were particularly interested in national students who are working abroad. Another one said that their 'target is (...) anyone who is interested in earning a degree.' Their ex-post observation, rather than their ex-ante target, is that half of their students are adult learners and half are young students with specific interest in distance education activities.

Figure 4 in the previous section showed that the majority of distance education programmes are offered at Bachelor or Master's level. Usually a previous degree would be required (e.g. a degree at high school level for Bachelor-level programmes and one at Bachelor's level for Master-level programmes). The information presented in Table 4 (Target group: adult learners with a degree, 65 %) confirms this. As an even larger part of the respondents (67%) indicated to be interested in adult learners with certain work experience, we may assume that there are a number of flexible access arrangements in place. The HEAD study looked at the implementation of recognition of prior learning (RPL) and validation of non-formal and informal learning in a several European countries and confirms the existence of such practices. Their distribution, however, varies. The authors could show that 'though in most countries legal arrangements are in place or in the process of development, the country reports and case studies which refer to flexibility in terms of validation and recognition reveal considerable differences in implementing flexible access arrangements.' (European Commission 2013, p. 5). In Finland, Ireland, Sweden and the UK RPL and validation of non-formal and informal learning are already common practice, while the other countries covered by the study, namely Austria, Cyprus, France, Germany, Greece, Hungary, Italy and Spain, have limited experience with RPL and validation (or regulations on RPL and validation are in progress/have only recently been introduced).

Student support in distance education

In order to gain insight into the support provided to students in distance education the questionnaire contained a list with some common services. The majority of HEIs (93%) offer at least administrative/organisational support to their distance education students (see Table 5). Learning material developed or adapted specifically for distance education also plays an important role, and is offered by 84% of the institutions, followed by material supporting students' work (study guides) and technical support

(both offered by 82% of the respondents). The types of support reported by the 'Other' respondents is composed of 1) specific library services, 2) opportunities for student interaction, 3) special online tutoring and 4) the same kind of services as offered to fully on-campus students (each of these make up one fourth of the 'Other' responses). Only one institution reported that no specific services were offered to distance education students. This institution was among those that reported that distance education was in the hands of some professors only (see Figure 2).

Table 5: Support to DE students

Question: What kind of support does your institution offer to distance education students?

90 respondents
(Answers in percent)

Kind of support	Respondents
Administrative/organisational support	93%
Learning material developed/adapted specifically for	84%
distance education	
Material supporting students' work (study guides)	82%
Technical support	82%
Other	67%
Moral support; psychological support/counselling	61%
Access to local learning centres/study centres	52%
None	1%

Holmberg, who also reviewed student services in the aforementioned book *The evolution, principles and practices of distance education* summarises that in his view 'the best possible assistance that can be given to students, and thus an antidote against unwished-for discontinuation, is the empathy approach that produces conversation-like real and simulated communication and personal relations between students and tutors, thus supporting students' motivation.' (Holmberg 2005, p.128). The empathy approach, which he earlier called didactic dialogue, is closely related to moral support. In our data set, moral support is mentioned by 61 percent of the respondents. Even though this kind of support is hence provided by more than half of the respondents, it is the second last to 'Access to local learning centres' (named by 52%).

(4) Numbers of students in distance education

It is not known how many students are actually enrolled in distance (higher) education across Europe. Enrolment numbers in distance-teaching universities alone exceed at least 2 million. The European Association of Distance-Teaching Universities (EADTU) provides the following approximate numbers for their largest members: Anadolu University, Turkey: 1,360,000, Open University UK: 250,000, Universidad Nacional de Educación a Distancia, Spain: 250,000, Universitat Oberta de Catalunya, Spain: 80,000, Fernuniversität Hagen: 80,000, Fédération Universitaire de l'Enseignement à Distance/Centre national d'enseignement à distance, France: 50,000, Open University, The Netherlands: 20,000. It should be noted that these enrolment numbers do not only refer to students that are resident within the European Higher Education Area. As explained in Chapter 2 and illustrated in Figure 1, distance-teaching universities may be the largest distance education providers in terms of student numbers, but they are far from being the sole providers using this mode of delivery. In Germany, for example, of around 133,000 students taking distance higher education, a bit more than one tenth (18,000) are enrolled in dual-mode institutions²¹. In Sweden and Finland, for another example, the distinction between on-campus teaching and distance education has become increasingly vague as the technology and the methodology initially used only for distance education is now also used on campus. The number of Swedish students combining distance with on-campus education has roughly tripled since the beginning of the century to 15,000 students in the autumn semester 2013. This constitutes almost one fourth of the number of students opting for pure distance education (around 57,300 in 2013²²). In the Finnish statistics, it is not even possible to identify the number of fully online students anymore: not only is their number supposed to be very small, but for almost all on-campus students a varying proportion is delivered online²³. Considering the high share of HEIs offering both campus-based and distance education across Europe, we may assume that the overall number of students taking some form of distance education (included blended learning) must be higher than 3 million.

The IDEAL data set delivers some further insights into this issue. The number of students enrolled in online education, other forms of distance education and blended forms of education in our data set is presented in Figures 6 and 7. The data is shown for national (Figure 6) and international students (Figure 7) respectively.

²¹ Numbers for the year 2012 from Forum Distance Learning, Germany.

²² Information provided by the Swedish Higher Education Authority in August 2014.

²³ Information provided by the Education Ministry in Finland.

For national students, the majority of respondents report to have between 20 and 500 students enrolled in online education (30% of the respondents). Of those reporting to have more than 2,000 students in distance education (17% of the respondents), the single highest number of students is 18,718, by a Nordic dual-mode university. Most of the other large providers of distance education in terms of student numbers in online education are purely distance teaching universities.

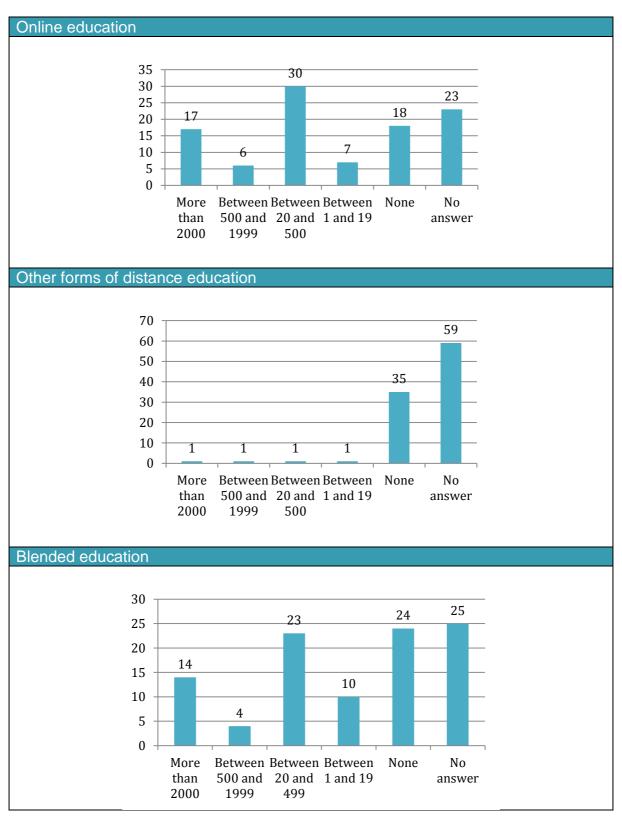
Very few providers reported numbers on students enrolled in other forms of distance (4%), namely the main German distance teaching university with 78,739 students, and three dual-mode universities in Russia and Poland with 1,680; 202 and 1 student enrolled respectively.

For blended education, most responding institutions report to have between 20 and 500 students enrolled (23%), similar to full online programmes. The total number of those reporting to have more than 2,000 students enrolled, however, is higher on average than for pure online programmes, with the top seven institution enrolling 118,776 students together.

Figure 6: Number of national students

Question: Please indicate the number of students enrolled in distance education at your institution during the academic year 2012/13.

71 respondents (Answers in percent)

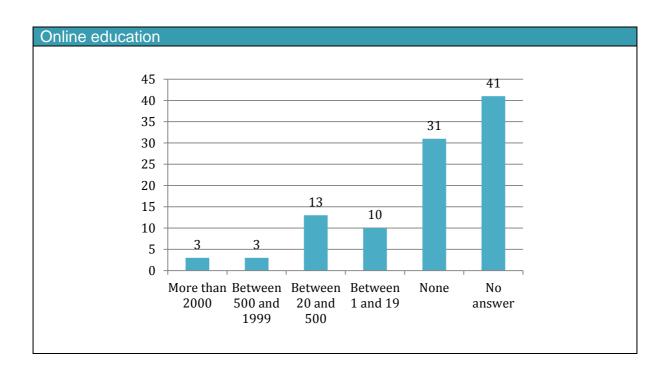


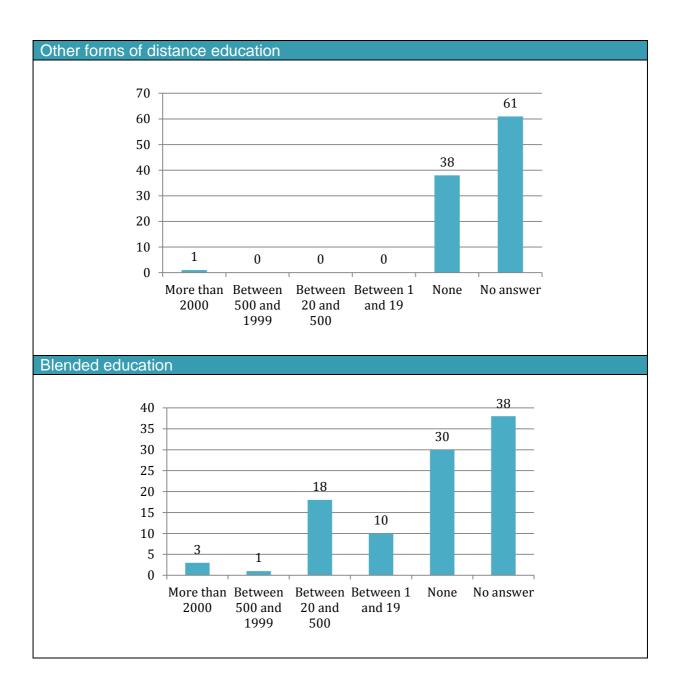
The picture of international students numbers in distance education (Figure 7) is similar to that of national students for all three types of programmes asked for (online education, other forms of distance education and blended education). Most institutions report to have between 20 and 500 students enrolled in online or blended education. The reported numbers for international students in online education reaches up to 10,000 for one Turkish distance-teaching institution. A German distance teaching university states to have 8,153 international students enrolled. These last two numbers are, however, rather an exception than the rule. In general, the number of international students is lower than for national ones in our data set. On average, the number of international students is one tenth of the number of national students across all three types of programmes.

Figure 7: Number of international students

Question: Please indicate the number of students enrolled in distance education at your institution during the academic year 2012/13.

71 respondents (Answers in percent)





As the student numbers in Figure 7 show, international students may not be the main target group of distance education, but distance education surely also serves some higher education institutions as a means for that aspect of internationalisation.

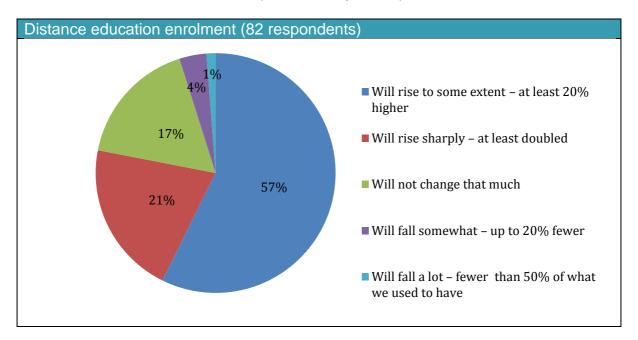
(5) Future expectations

Figure 8 provides insights into how institutions expect distance education to develop in the five years to come. More than half (57%) expect overall enrolments in distance education to rise to some extent, and to be at least 20 percent higher than today. 21 percent of the respondents expect enrolments even to double, while 17% are not as enthusiastic, saying that enrolments will not change much. Only few predict a fall of up to 20 percent or more than 50 percent (4 and 1% of the respondents think so respectively). Figure 8 also shows the expectations for the enrolments of adults returning to HE after a period of leave (work, unemployment, parental leave, etc.). The picture is similar to the general expectations, with 61% expecting a growth of adult learners' enrolments.

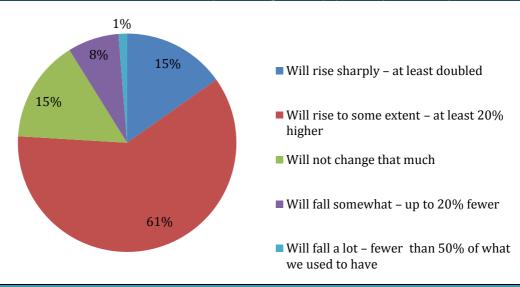
Figure 8: Future expectations

Question: How do you expect the enrolments in distance education to change the next five years?

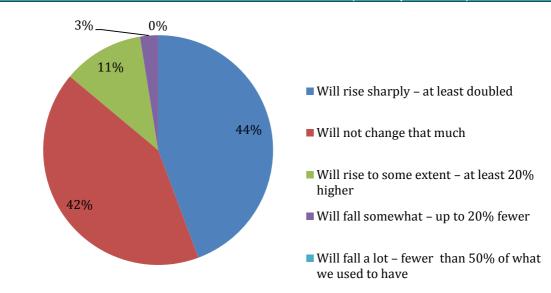
(Answers in percent)



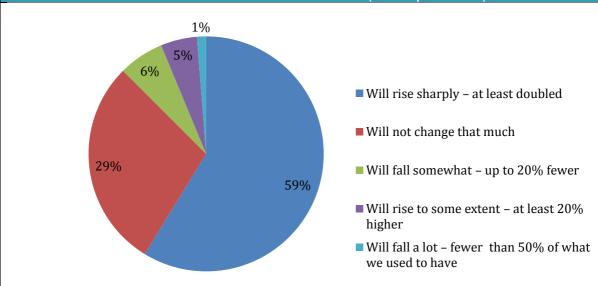




Distance education enrolment of international students (79 respondents)



Distance education enrolment of national students (80 respondents)



The figure also shows the respondents' expectations for the enrolment of national students and international students respectively. The growth in distance education enrolment is expected to be higher for national students than for international students. Only few expect enrolments of national or international students to actually fall in the next five years. However, almost one third expects enrolments of both national and international students not to change significantly in the same period (29% and 33% respectively).

Barriers to the growth of distance education

Figure 9 shows the perceived barriers to the growth of online teaching and learning, as the most widespread form of distance education. The highest importance was attached to the additional efforts required to develop distance education (31% of the respondents). This may be illustrated by a comment received from one HEI: 'Network and computer-based learning has a huge potential. For a university the challenge is to get the majority of the teachers to make use of the full potential of network and computer-based learning, and to find their new role in the digitalized world.' In this light, a lack of acceptance by academic staff is reported as the second 'very important' barrier to the growth of online education (20%), and additional efforts required to deliver distance education (19%) are considered among the most 'important' barriers. From an institutional perspective, the discipline that students need to succeed is also named among the most 'important' barriers (45%). Factors that are considered less important are the presumably lower retention rates (41%) in distance education and the lack of acceptance by potential employers (37%). A majority of respondents state that there is no lack of student demand to hinder the growth of online education (37%).

Figure 9: Perceived barriers

Question: How important do you believe each of the following is as a barrier to the growth of online teaching and learning? 83 respondents

(Answers in percent)

Barrier	Importance (respondents)		s)	
	Not important	Somewhat important	Important	Very important
Lack of acceptance by potential employer	31	37	22	10
Lack of acceptance by academic staff	28	17	35	20
Lower retention rates compared to face-to-face education	24	41	28	7
Students need more discipline to succeed	17	24	45	14
Additional effort required to develop distance education	7	15	47	31
Additional effort required to deliver distance education	10	25	46	19
Lack of student demand	37	24	29	10

What can be drawn from Figure 9 is that perceptions of barriers vary widely among the respondents. Much rather than a single factor, it seems to be a mix of factors that could hinder or promote the growth of online education, and distance education in general. Read with the information contained in Figure 8 in mind, which shows that most HEIs expect distance education enrolments to rise, it can be concluded that we will see rather more than less distance education in European higher education in the future. Especially if institutions decide to adapt their range of courses and programmes to the expected developments.

Programme study

The previous chapter set out to map the current provision of distance or blended education at the level of European higher education *institutions*. This chapter, i.e. the programme study, takes a closer look at *courses and programmes*. The data presented here was collected from the DistanceLearningPortal.com, Europe's largest database of distance learning programmes, in June 2014. The data set comprises of 3,006 distance education programmes and courses. As explained in Chapter 4 (Research methodology), the information is entered in a standardised questionnaire by the higher education institutions themselves. It is important to keep in mind that the present analysis describes information *available* in the DistanceLearningPortal (DLP) database. A lack of information on specific items should not tempt the reader to draw conclusions on the actual provision. Rather, it shows the extent to which distance education providers use the DistanceLearningPortal to reach out to their potential students.

The presentation of the data is structured around the following 5 topics:

- (1) Basic information about the programmes/courses;
- (2) Entry requirements and alternative access routes;
- (3) Flexibility of the delivery;
- (4) Tuition fees; and
- (5) Support to students.

(1) Basic information about the programmes/courses

This section presents the geographic spread of the programmes listed in the DistanceLearningPortal database, the level and types of degree offered, the disciplines available, the language of tuition, as well as the availability of credits.

Geographic spread

A look at Table 6 reveals that our data set has a very strong UK focus. Of the 3,006 programmes/courses listed on DistanceLearningPortal, UK institutions offer more than half (1,788). A considerable number of programmes/courses is provided by institutions in the Netherlands (424), Germany (168), Spain (114), Italy (105), France (68), Ireland (53), Greece (52) and Sweden (41). The strong concentration of UK programmes/courses in the DistanceLearningPortal database is certainly linked to the fact that StudyPortals, the organisation operating the DLP, traditionally attracts internationally oriented higher education institutions, and thus also mainly programmes taught in English – an issue that will be discussed further below in this section.

Table 6: Number of DE programmes delivered by country 3,006 respondents

Country	Number	Country	Number
Austria	18	Lithuania	23
Belgium	11	Luxembourg	1
Bulgaria	6	Macedonia (FYROM)	2
Croatia	2	Malta	1
Cyprus	24	Montenegro	1
Czech Republic	4	Netherlands	424
Denmark	19	Norway	8
Estonia	3	Poland	1
Finland	11	Portugal	12
France	68	Russia	8
Hungary	2	Slovakia	1
Greece	52	Slovenia	1
Germany	168	Spain	114
Ireland	53	Sweden	41
Italy	105	Switzerland	33
Latvia	1	United Kingdom	1,788

A closer look at the names of the institutions showed that some of them are part of an international network of universities, so-called 'cross-border education' institutions. Chapter 2 (Notes on distance education) described the emergence of such (often private, for-profit) networks of universities, e.g. Laureate International, that have entered the scene in the last two decades. We know that at least 311 of the programmes/courses listed on DistanceLearningPortal are offered by such international networks, sometimes on behalf of 'traditional' on-campus universities. The institutions that we could identify as part of such networks indicated to be located in the Netherlands.

Similar to Table 1 in the previous chapter, which shows the geographic spread of the respondents to the institutional survey, the data for single countries in this table should not be considered as representative of the respective offer. For example, it is known that in Finland, Norway and Sweden almost all universities operate in dual mode and offer some form of distance education. Much rather, Table 6 tells us about the availability of information in the DistanceLearningPortal database, and thus also about the extent to which providers of distance education use this (international) channel for reaching out to their potential students. Keeping the UK bias in mind, the data presented further in this chapter will help us to examine the potential of distance education for adult learners.

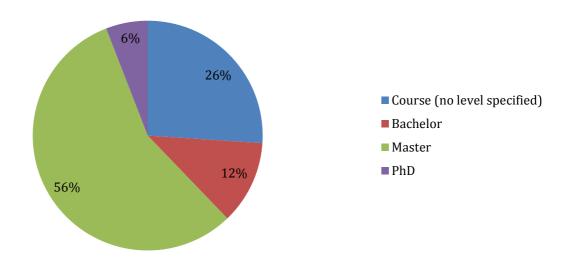
Level and type of programmes

DistanceLearningPortal collects information on the type of degree awarded and the equivalent level in a standardised way. Answer options for the equivalent level of the degrees are: Bachelor's; Master's; PhD; course. The latter is used for all those types of offers that do not lead to a degree. Figure 10 shows that almost three quarters of our data set are full degree programmes. The majority of the full degree programmes (and 56% of the total) are provided at Master's level or equivalent. Bachelor's and PhD programmes — including their equivalents - constitute 6 and 12 percent respectively. Information on whether students can enrol in single courses of such degree programmes is not systematically collected by the DistanceLearningPortal questionnaire. The institutional study showed that this option is provided by a

considerable number of institutions (51% in our institutional data set offer the possibility to enrol in single courses, see Figure 5).

The remaining 26 percent of the DLP data set are single courses. Information on the level of the courses is not collected. As described in Chapter 3 (Terminology), a course is a 'self-contained, formally structured learning experience.' A course does not lead to a formal degree. The majority of courses listed on DistanceLearningPortal (DLP) are short courses, i.e. with a duration of up to 3 months. Most of them include enrolment, assessment and the award of credits.

Figure 10: Equivalent level of the programme 3,006 respondents (Answers in percent)



The high share of *degree* programmes in our data set shows the potential of distance education for adult learners to increase their attainment levels, i.e. to obtain higher degrees. For single courses, the award of credits is also an important aspect of increasing attainment levels. Credits document academic achievements and can be acknowledged by other universities.

What about MOOCs (Massive Open Online Courses) in our data set? Not even one percent of the entries refer to themselves as a 'MOOC'. MOOCs, as a particular new form of courses, are not categorically excluded in DistanceLearningPortal. In practice,

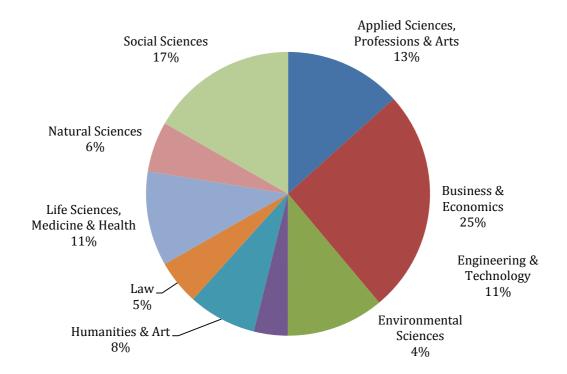
however, hardly any of the self-proclaimed MOOCs in our data set can be described as such: all of them award credits based on assessment. On the other hand, as the European University Association writes: 'this is very much in line with the prediction that MOOCs will morph into MOCCS – Mid-Sized Online Closed Courses that would either provide learning support, assessments and credit for a fee, or be delivered through licensed provision in the context of a university.' (Gäbel 2014, p. 28).

Subject Areas

The most common subject area in our data set of distance education programmes is 'Business & Economics' (25%), followed by 'Social Sciences' (17%) and 'Applied Sciences, Professions & Arts' (13%) (see Figure 11). Only 4, 5 and 6 percent of the programmes respectively are offered in 'Environmental Sciences', 'Law' and 'Natural Sciences'. The two subject areas 'Life Sciences, Medicine & Health' and 'Engineering & Technology' constitute 11 percent each of the subjects on offer. Eight percent of the programmes/courses are in the field of 'Humanities & Arts'.

It should be noted that the data is collected with multiple answer options and the table presents the weighted percentage of 4,437 entries. The most common combinations are 'Humanities & Art' with 'Social Sciences'; 'Business & Economics' with 'Engineering & Technology'; and 'Business & Economics' with 'Social Sciences'.

Figure 11: Subject Area
3,006 respondents; multiple answers: 4,437
(Answers in percent)



Language of tuition

Information on the language of tuition is collected in a standardised way. Respondents can select one up to all European languages. The vast majority of the programmes/courses in our data set are offered in English. Their number (2,544) is higher than the total of programmes/courses from the UK and other English-speaking countries (see Table 7). This means that several of these programmes/courses are provided by institutions based in countries where English is not the native language. As discussed before, this illustrates the tradition of StudyPortals in general to attract internationally oriented institutions, rather than the actual situation in Europe.

For programmes/courses taught in English and/or another language (132 in total), Italian (25) and German (20) lead our list, followed by combinations of English with French/Italian/Arabic (19) or English with Spanish/Catalan (7).

Language of tuition 2,980 respondents

Language of tuition	Number of respondents
English	2,544
English plus another or more	132
Single other language than English	296
Minimum two languages other than English	8
No information available	26
Total	2,980

The main single other languages (296 in total) reported were German (125), Spanish (81), Greek (35) and French (26). Four of the 8 programmes taught in non-English language combinations are delivered in both Spanish and Catalan.

Credits

DLP collects information on the award of credits in a standardised way. Respondents can fill in the number of ECTS²⁴ credits in a numerical field. If alternative credits are available, the information can be entered in a separate field. 816 of the programmes/courses listed in DLP state that they award ECTS credits (Table 8). This constitutes a little more than one fourth. The credits awarded are in the range of single credits for short courses to 360 credits for a Bachelor's programme. 320 programmes/courses provide information on alternative credits, e.g. Scottish Credit and Qualifications Framework (SCQF) credits and others. Yet, for most of the alternative credits it is not possible to obtain information on their kind from the DistanceLearningPortal database as in a vast majority of cases only a number has been entered. What is very interesting to note is that credits are awarded for 344 of all (783) courses (see above on the share of courses, Figure 10). In particular, all of those that describe themselves as MOOCs (Massive Open Online Courses) state to award credits. From our current knowledge, this is unusual for MOOCs, as the award of credits requires assessment and hence registration or even enrolment.

²⁴ On the European Credit Transfer System, see: http://ec.europa.eu/education/tools/ects en.htm

The remaining 1,870 did not provide any information on credits. As stated initially, this does not mean that they do not award any credits. Rather, it shows that information on credits is not well communicated.

Table 8: Information on credits 3,006 respondents

Information available on	Number of programmes/courses
ECTS credits	816
Other credits	320
No information provided	1,870
Total	3,006

(2) Entry requirements and alternative access routes

This section will discuss the entry requirements for our set of distance education programmes/courses, and their openness for adult learners.

Degree requirements

2,654 programmes/courses state that a previous degree is required, while 177 explicitly state the contrary (Table 9). For 175, no information is available.

Table 9: Previous degrees 3,006 respondents

Previous degree required	Number of respondents
Yes	2,654
No	177
No information provided	175
Total	3,006

A look at Table 10 shows that degrees are required for 1,598 Master's programmes, 589 courses, 299 Bachelor's programmes and 168 PhD programmes. Most of the distance education offer where no degree is required are courses (151). They are thus more easily accessible to adult learners. By definition, however, they do not award a degree. In combination with the award of credits, on the other hand, they can very well contribute to increasing attainment levels of lifelong learners.

Very few degree programmes state that they do not require a previous degree. This is the case for 16 Bachelor's, 9 Master's and 1 PhD programme(s) respectively. They are more open in terms of formal entry requirements.

175 courses/programmes do not provide any information on degree requirements.

Table 10: Degree required by level 3,006 respondents

Level	Number of respondents			Total
	Yes, degree is required	No degree required	No information available	
Course	589	151	43	783
Bachelor's	299	16	39	354
Master's	1,598	9	85	1,692
PhD	168	1	8	177
	2,654	177	175	3,006

What kind of degree is required? As the majority of programmes in our data set are Master-level programmes, it comes to no surprise that the main type of degree required is one at Bachelor's level (1,743, see Table 11). What is interesting to note is the number of Master and PhD-level degrees required (200 and 1 respectively). They exceed the number of PhD programmes (177). Indeed, a closer look at the data shows that for some twenty courses and circa ten Master-level programmes, a previous Master's degree is required. The latter are programmes that lead to horizontal differentiation (same level of degree in a different field), rather than to vertical differentiation (a higher degree than the one previously attained). Considering the high number of programmes in our data set that require a prior degree at a lower level, we can conclude that distance education has a clear potential for increasing vertical degree mobility, i.e. leading to higher degrees for their students.

Table 11: Level of previous degrees required 2,466 respondents

Level of degree required	Number of respondents
High school	522
Bachelor's	1,743
Master's	200
PhD	1
Total	2,466

Alternative access routes

Of all programmes/courses listed, 334 provide information on alternative access routes. The information is collected in an open way, i.e. in an open text field in which respondents can comment on formal entry requirements such as prior degree and work experience. Table 12 shows the entries with information on alternative access by types of programmes. As can be seen, programmes at Master's level in particular provide opportunities for alternative access. If no information is given, we cannot assume that no alternative access routes are available, but rather that they are not well communicated. In terms of openness to adult learners, this is a significant barrier that could be overcome quite easily by making such options more transparent.

Table 12: Information on alternative access routes available 334 respondents

Type of programme	Number of respondents
Bachelor-level programme	24
Master-level programme	288
PhD-level programme	14
Course	8
Total	334

As information on alternative access is not collected in a standardised format but in an open text field, some examples are given here:

- More than half of the texts state that relevant work experience in the field of study can replace academic qualifications, etc.;
- Ca. one fourth of the institutions offer standardised procedures for the recognition of prior learning (RPL). This can mean, for example, that standardised tests can be taken by applicants to prove that they have achieved the learning outcomes needed even without having the formal qualifications;
- The remaining fourth invite applications by anyone with either sufficient 'life experience', a 'name in the field' (e.g. someone with a proven track record in the field) or simply enough confidence for a personal interview. In some cases, individual testing is announced.

English language requirements

1,547 programmes and courses require English-language tests. The data set provides no information on other language exams. The information is collected in a standardised way, asking for the minimum results of a number of international English-language tests (IELTS, CAE, FCE, TOEFL Paper and TOEFL internet).

The high number of programmes/courses that require proofs of English language proficiency confirms that mainly internationally oriented institutions use DistanceLearningPortal to reach out to potential students. English-language tests, as formal entry requirements, may be a barrier to adult learners without sufficient language skills.

Work experience

For the majority of programmes/courses (2,700), no information on required work experience is available (see Table 13). The data is collected in a standardised way, asking respondents to fill in if work experience is required and if yes how many years. 282 respondents report that work experience is a prerequisite.

Table 13: Work experience 3,006 respondents

Work experience required	Number of respondents
Yes	282
No	24
No information available	2,700
Total	3,006

Of these 282 respondents, 28 are single courses. 127, 111, and 16 are Master, PhD and Bachelor-level programmes respectively (see Table 14). It hence appears that distance education programmes at PhD level in particular expect applicants to have acquired work experience prior to their application. Of the 282 programmes/courses that ask for work experience, 35 do no specify the number of years required. For the remaining 247, the number of years range from 0.5, i.e. half a year, to 12 years, with an average of 2.6 years.

Table 14: Work experience required - by type of programme 282 respondents

Type of programmes	Number of respondents requiring work experience
Course	28
Bachelor-level programme	16
Master-level programme	127
PhD-level programme	111
Total	282

(3) Flexibility of the delivery

How flexible are the programmes and courses on DLP, and in which ways do they reach out to adult learners? The present section presents DLP data on the mode of delivery, application and start dates, part and full time options, attendance requirements and time to completion.

Delivery mode

Respondents can indicate in the DLP questionnaire whether a course/programme is offered in blended and/or fully online mode. The data is collected in a standardised way, i.e. respondents can select each option (Blended mode: yes/no. Fully online mode: yes/no). DLP only checks for these two modes of delivery, not for other distance education modes, e.g. paper-based distance education.

Table 15 shows that 1,996 of the programmes/courses are delivered in fully online mode. 64 state that they are offered in both blended and online mode, which means that students can choose between two versions of the course/programme. 788 are only available in blended mode. For 158, no information is provided.

Table 15: Delivery mode

Question: Is the programme/course available - in blended mode?

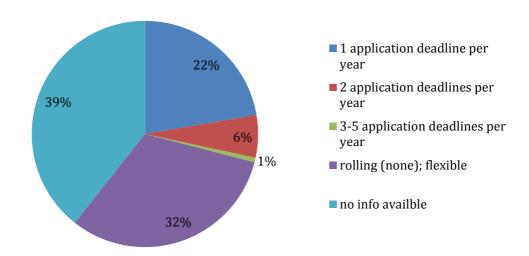
- fully online mode? 3,006 respondents

Delivery mode	Number of respondents
Available only as fully online	1,996
Available as blended or online	64
Available only as blended	788
No information provided	158
Total	3,006

Flexibility in terms of application and start date

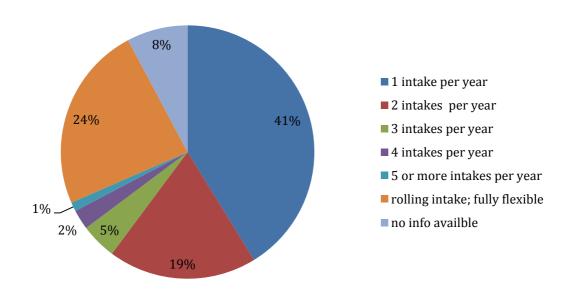
Figure 12 shows the number of application deadlines per year. The information is collected in a standardised way, asking respondents to enter the month(s) of the application deadline(s) per year. A majority of 39 percent has not made this information available on DLP. 32 percent, and more than half of those responding, report to be fully flexible, i.e. not to have fixed but rolling applications. 22 percent have only one application deadline per year. Six and 1 percent have 2 and 3-5 application deadlines per year respectively.





A look at Figure 13 brings more clarity also on those entries where no information on application deadlines is available. Here, only 8 percent have not provided any information on the start date of the programme/course, i.e. on the number of intakes per year. The information is collected in the same format, i.e. asking respondents for the month(s) of the start date(s).

Figure 13: Number of intakes per year 3,006 respondents (Answers in percent)



The majority of entries only have 1 intake per year (41%), even if they have rolling application deadlines. 19 percent have two intakes per year. This might, at first glance, make the overall offer less flexible for second-chance learners. But the figure also shows that 24 percent are fully flexible, i.e. the programmes/courses can be started anytime.

Flexibility: part-time and full-time options

DLP also collects information on part-time and full-time options (see Table 16). Respondents are asked to select if the programme/course is available in full-time and/or in part-time mode.

Table 16: Full-time versus part-time studies

Question: Is the programme/course available as

- full-time study?

part-time study?

3,006 respondents

Part-time versus full-time options	Number of responses
Available only as part-time	1,506
Available only as full-time	763
Available as part-time or full-time	641
No information provided	96
Total	3,006

A majority of courses/programmes is offered in part-time mode only (1,506), and another 641 are available in both part-and full-time mode. 763 are full-time programmes/courses. For 96, no information is available.

Of those answering that part-time is possible, 2,046 say that no minimum hours per week are required. Only 41 state that there are minimum hours per week: on average, these are 16 hrs./week.

In general, we can say that the available options reveal a high degree of flexibility for adult learners with family or job obligations. Three of the comments received on part-time options help to illustrate this:

Comment 1: 'You decide by yourself if you want to finish the course in 4, 6, or 8 semesters. The intensity depends on your knowledge and the time you have for your studies. Every semester you can choose the modules you want to attend. We will assist you in finding the optimal programme for your needs and time.'

Comment 2: 'This programme is for those who wish to continue their education to Master's level - in their own time, at their own pace, and from anywhere in the world.'

Comment 3: 'The programme is organised in a fully flexible way. The weekly workload is approximately 15 hours. All our students are employed, most of them in challenging jobs that require travelling or deployment on missions abroad. Therefore, we try to meet these special needs by organising our programme as flexible as possible.'

Flexibility and attendance

An important aspect of the flexibility of distance education is the amount of attendance required. DLP collects information on this issue in a standardised way. Under the heading 'Attendance required', respondents can select if any of the following options apply: no attendance at all; attendance at exams, graduation; regular optional meetings; regular mandatory meetings. It is not possible from the way the data is recorded to say whether the 'no' responses to any of these items mean a deliberate 'no' or whether these fields have simply not been filled in. The data must be read with this in mind.

Table 17 shows that 1,507 courses/programmes require no attendance at all. 264 report that attendance is needed for regular mandatory meetings. 183 offer regular optional meetings.

Table 17: Attendance requirements 1,954 respondents

Attendance requirements	Number of respondents
No attendance at all	1,507
Exams, graduation	0
Regular optional meetings	183
Regular mandatory meetings	264
Total	1,954

None of the respondents have indicated that attendance is required for exams and graduation. Comments in a free text field show, however, that exams are sometimes held back-to-back with attendance seminars and that attendance of graduation ceremonies are optionally possible.

Comment 1: 'There is no travel required for our programmes. When you graduate, you can attend the graduation ceremony in (...) if you wish, but this is not mandatory.'

Comment 2: 'The exams will be held at the end of each module during the attendance seminars.'

Comment 3: 'Attendance is mandatory for 10 academic weekends per year (including examination weekends).'

Flexibility: time to completion

How long does it take to complete a distance education programme or course? DLP collects this information in a standardised way. Respondents can enter the number of months needed for completion in a numerical field. If they have indicated that the programme/course is available in part-time mode (see above), they can enter an alternative number of months if the time to completion differs.

Table 18 shows the number of months needed until completion for Bachelor's programmes. A vast majority of 109 Bachelor's programmes require 36 months, i.e. 3 years. For 58 programmes, 40-48 months are needed. 25 Bachelor's degree programmes last for 6 years. These are programmes delivered only in part-time mode.

Table 18: Time to completion for Bachelor's programmes 354 respondents

Number of months	Number of respondents
72 months	25
54 to 60 months	10
40 – 48 months	58
36 months	109
25 - 33 months	2
24 months	41
18 months	4
12 months	29
No information	76
Total	354

77 of the Bachelor's programmes have indicated a different time frame for part-time options. These range from 12 to 60 extra months (30 months on average). Comments are collected in a free text field. The following describes the flexibility of a Bachelor's programmes in much detail: 'Time to complete studies can range from 4 to 16 years depending on how many credits are studied each year. You will need to find enough study time every week, depending on how quickly you want to achieve your qualification, and the module(s) you are studying each year: 30 credits: around 8 to 9

hours per week; 60 credits: around 16 to 18 hours per week; 120 credits: around 32 to 36 hours per week (equivalent to studying full time).'

Most Master-level programmes (500) take 20 to 24 months for completion (see Table 19). There are, however, almost as many (457) that require 10 to 12 months. 277 can be completed in 25 to 36 months, another 156 in 13 to 18 months.

Table 19: Time to completion for Master's programmes 1,692 respondents

Number of months	Number of respondents
72 months	3
60 months	29
37 to 48 months	18
25 to 36 months	277
20 to 24 months	500
13 to 18 months	156
10 to 12 months	457
Up to 9 months	40
No information	212
Total	1,692

224 respondents provide information on different time frames for part-time Master's programmes. The extra months offered range from 2 to 58, with an average of 20 months. The open comments inform us that for some programmes an extra fee is charged for a prolongation.

Table 20 shows the time frames for the completion of the PhD programmes in the DLP database. The majority of those providing information are programmes with a duration of 36 months. The 13 programmes with a time frame of 66 months are part-time PhD programmes. Another 19 have provided information on flexible time options for part-time students. They offer between 12 and 36 additional months (average of 30 months).

Table 20: Time to completion for PhD programmes 177 respondents

Number of months	Number of respondents
72 months	1
66 months	13
60 months	1
54 months	4
48 months	12
42 months	1
36 months	35
24 months	2
12 months	1
No information	107
Total	177

Table 21 looks at the duration of courses. A majority last between 1 and 3 months (283). 126 are courses with a duration of 7-12 months. All courses with a duration of more than 13 months listed here are part-time courses. In the case of the 4 courses with a duration of 36 and 48 months respectively, the time indicated is the maximum time allowed for completion. In the open text field, the respondents specify that on average two years are needed.

19 courses provided additional information on flexible time frames. They range from half a year to 60 extra months, with an average of 17 months.

Table 21: Time to completion for courses 783 respondents

Number of months	Number of respondents
Up to 21 days	48
1 - 3 months	283
3.5 - 6 months	55
7 - 12 months	126
13 - 23 months	6
24 months	29
36 months	2
48 months	2
No information	233
Total	783

In general, we see a considerable amount of flexibility in the time needed/available for the completion of the programmes listed in the DLP database. Distance education has a great potential for lifelong learners in this respect.

(4) Tuition fees

DLP collects information on fees for distance education programmes. Respondents are asked to indicate the currency, the amount and the reference (per year or per module). Furthermore, they can specify if fees are different for national or international students, with a distinction made between EEA²⁵ and Non-EEA students. We are presenting the data for EEA students here. A total of 2,079 respondents have provided information on fees. Table 22 presents them by type of offer. It should be noted that several countries, in particular the Nordic ones, do not charge any tuition fees at all. It is therefore likely that these countries have not entered any information on tuition fees.

Table 22: Information on fees 2,079 respondents

Type of programme	Number of respondents providing information on fees
Course	652
Bachelor-level programme	239
Master-level programme	1138
PhD-level programme	50
Total	2,079

The following four tables present average fees for courses as well as for Bachelor's, Master's and PhD programmes respectively. As stated, respondents could choose to indicate if fees are charged per module or per year. The timeframe for modules is, however, understood very differently, and it is not possible to say how they compare to a year in general. Therefore, the data is presented for years and modules separately. Currencies are also presented discretely. In the latter case, this will help to distinguish between UK and non-UK programmes.

Table 23 shows that 135 (127) courses charge 1,257 EUR (1,434 EUR) per year (per module) on average. For courses charged in British Pounds, the average for 125 (137) respondents is 804 GBP (1,290 GBP) per year (per module). Only 4 courses have

²⁵ EEA stand for European Economic Area. It includes all EU countries plus Iceland, Liechtenstein and Norway.

indicated to charge an average of 1,138 USD. These are courses offered by European-based subsidiaries of US institutions. 124 of the courses providing information on fees are actually free of charge.

Table 23: Fees for courses 652 respondents

Fees	Number of respondents	Average amount
Per year in EUR	135	1,257 EUR
Per module in EUR	127	1,434 EUR
Per year in GBP	125	804 GBP
Per module in GBP	137	1,290 GBP
Per module in other	4	1,138 USD
currencies		
Free of charge	124	-

Table 24 presents the data on fees for Bachelor's programmes. 74 (18) Bachelor's programmes charge 4,816 EUR (5,838 EUR) per year (per module), and 56 (77) charge 5,618 GBP (4,478 GBP) per year (per module). 14 state to be free of charge. As mentioned previously, it must be kept in mind that, in general, none of the Nordic countries (Sweden, Finland, Norway) charge any tuition fees. Therefore, the number of free-of-charge programmes would probably be even higher.

Table 24: Fees for Bachelor's programmes 239 respondents

Fees	Number of	Average
	respondents	amount
Per year in EUR	74	4,816 EUR
Per module in EUR	18	5,838 EUR
Per year in GBP	56	5,618 GBP
Per module in GBP	77	4,478 GBP
Free of charge	14	-

Master's programmes charge a higher level of fees (see Table 25). 446 (74) programmes cost 7,521 EUR (6,645 EUR) per year (per module). For UK institutions, 371 (144) programmes report to charge 6,974 GBP (5,101 GBP) on average. Other currencies reported are Australian Dollar and US Dollar, with one programme (4 and

10 programmes) charging 2,700 AUD (8,218 USD and 1,111 USD) per module (module and year) on average. 86 Master's programmes are reported to be free of charge. The actual number is probably higher, as some of the providers are based in countries where no tuition fees are charged.

Table 25: Fees for Master's programmes 1,138 respondents

Fees	Number of respondents	Average amount
Per year in EUR	446	7,521 EUR
Per module in EUR	74	6,645 EUR
Per year in GBP	371	6,974 GBP
Per module in GBP	144	5,101 GBP
Per module in other	1	2,700 AUD
currencies	4	8,218 USD
Per year in other	10	1,111 USD
currencies		
Free of charge	86	-

PhD programme fees are highest on average. Table 26 shows that on average (15, 16 and 13 respondents) they charge 9,015 EUR, 8,451 GBP and 8,912 USD per year. Three respondents have provided information per module (11,299 GBP on average). Another 3 programmes report to be free of charge.

Table 26: Fees for PhD programmes 50 respondents

Fees	Number of respondents	Average amount
Per year in EUR	15	9,015 EUR
Per year in GBP	16	8,451 GBP
Per module in GBP	3	11,299 GBP
Per year in other	13	8,912 USD
currencies		
Free of charge	3	-

Tuition fees can constitute a barrier for anyone interested in education. As our data shows, fee levels increase by the level of education. Keeping in mind that DLP contains a majority of UK programmes/courses and generally internationally oriented ones, we cannot assume that the cost of education is similarly high across Europe. Some

countries do not charge any fees at all. And we can only make assumptions about the implications of fees for adult learners. For example, it could be that part-time studies are seen as the better option as they are easier to combine with a job, i.e. with earning income.

Funding opportunities

DLP also collects information on available funding opportunities, however not in a standardised way. In an open text field, respondents can enter any kind of information related to funding. The heading of the text field is 'Is there any funding available for students to follow this programme?' A total of 1,389 respondents have answered to this guestion (see Table 27).

Table 27: Information on funding opportunities 1,389 respondents – multiple answers

Type of information provided	Number of respondents
Detailed description of funding opportunities	552
List of funding sources	425
Very basic information	235
'Contact us'; link	172
No scholarships available	23
Information about fees only	46
Total	1,389

Of these 1,398, 23 state that no funding opportunities are available. 46 have entered information on fees for the course/programme, rather than funding opportunities.

The information on funding opportunities by the remaining 1,319 is highly diverse. A fairly detailed description of funding sources is given by 552 respondents, of which 122 include full information on amounts available, deadlines and application requirements. But even for the majority of those with rather detailed explanations, information on who is *eligible* is hardly available. 425 provide a list of scholarships/funding opportunities without any descriptions. The kind of sources that are named here are very diverse.

Among them are foundations, research councils, professional associations, institutional scholarships, etc. 235 give very basic information only, e.g. 'Funding is available', 'We have partial scholarships', etc. Some just give an application deadline, but do not say for what students can apply. 172 give a link or ask students to contact them.

As the text fields contain very diverse pieces of information, it is difficult to assess what kinds of funding opportunities are offered. As mentioned above, some list scholarship providers but also specific programmes by foundations, research councils, etc. What is interesting to note is that *student loans* are mentioned by more than one third of the respondents as one type of funding opportunity. *Alumni loyalty discounts* and *early payment discounts* are mentioned as funding opportunities by ca. one fifth. A fourth of the respondents list scholarships that seem to be *merit-based*, i.e. requiring proofs of performance. Much fewer, ca. 100, mention *scholarships based on needs*, e.g. for people on welfare (7), students with families/children (34), people with disabilities (65) or pensioners (2). Two respondents mention that their institutions do not charge any tuition fees. Compared to the high number of fee-charging HEIs and the amounts required, the absence of tuition fees in some countries could indeed by interpreted as a fee waiver for students choosing between institutions based in different countries.

At first glance, information on funding opportunities seems easily accessible. The complexity of the information and the predominant lack of eligibility criteria, however, might make it difficult for potential students to choose and secure an appropriate funding source without further assistance. This could be a considerable barrier to participation in distance higher education.

(5) Support to students

This section presents data on student support offered. The DLP database contains information on opportunities for student-student interaction and teacher-student. Both are collected in a standardised way. To complement the information on support services, DLP has further collected information dealing with services from the programme websites in an open text field.

Student interaction

Table 28 presents the answers to the question on the interaction opportunities for students. The respondents can choose from the following three answer options for student-student interaction *provided by the institution*: no interaction at all; individual work; online group work. 2,223 have answered the question. 253 report that their institution provides no interaction opportunities for students. 631 say that students can interact with their peers during individual work assignments. In both cases, this does not mean that students could not use other forums to get in touch with their peers. A majority of 1,339 programmes/courses organise online group works as opportunities for student-to-student interaction.

Table 28: Student interaction

Question: How much student interaction do your programmes include?

2,223 respondents

Type of interaction	Number of respondents
No interaction at all	253
Individual work	631
Online group work	1,339
Total	2,223

Teacher-student interaction

Table 29 shows the answers to the question 'How much teacher support do your students get during studies?' The three answer options indicate the amount of teacher-student interaction. Of the 2,186 respondents that answered to the question, 2,156 programmes/courses provide continuous teacher support. In 26 cases, teacher-

student interaction is limited to feedback on assignments. Four respondents state that no teacher support at all is available.

Table 29: Teacher support

Question: How much teacher support do your students get during studies? 2,186 respondents

Type of support	Number of respondents
No support at all	4
Only feedback on assignments	26
Continuous	2,156
Total	2,186

Research in the field considers continuous teacher support, i.e. personal relations between students and tutors, a prerequisite of successful completion, as it keeps students motivated (Holmberg 2005, p. 128). The high number of programmes/courses in the DLP database reporting to offer continuous teacher support could imply that there is a significant potential of these distance education programmes for successful lifelong learning experiences. We would, however, need to be able to examine the content of the support provided. What Holmberg points at is that - apart from support on cognitive aspects, organisation of studies, and technological matters - an 'emotionally coloured dialogue' with the tutor/teacher is of high importance. Based on our data, it is not possible to assess the quality of the student-teacher relationships.

Other support

Information on other support/services is collected in an open text field. It is available for 809 programmes/courses. Roughly half of them state to provide some form of student support, ranging from learning support (e.g. writing skills, qualification courses) to opportunities for interaction with others (e.g. student tutors, associations). Around 300 provide career services, including business mentoring and start-up centres. Library services, health services and psychological counselling are all mentioned by a little over 200 programmes/courses. Day-care and family services are mentioned by ca. 10 percent, IT services and accommodation services by ca. 5 percent each. For ca. 50 programmes/courses, only a general link is available for 'other services'.

It appears that continuous teacher support, as presumably the most important kind of support, is available and well communicated for most of the programmes and courses on DLP. This constitutes a great potential of distance education for lifelong learning. What seems less clearly communicated is specific support to second-chance learners, such as some of those mentioned in the last section (e.g. career services). The majority of programmes/courses in the DLP data set have not provided any information on these. More transparency on such services might increase the participation of lifelong learners in distance education.

Conclusion

Embedded in the overarching research question 'How can the distance education offer by European higher education be better matched to adult learners' needs?' the present report set out to answer two sub-questions: 'What distance education is offered?' and 'What are the intended target groups?'

Chapter 5 (Empirical part) presented two data sets to answer these questions. The data were collected at institutional level via an online survey (5.1. Institutional study) and at programme level from the DistanceLearningPortal database (5.2. Programme study). In addition, the project received expert input from its advisory board (see Chapter 2, Notes on Distance Education).

Chapter 6 (Conclusion) provides a summary of the findings using the following structure. They refer to the sub-questions of the report:

- (1) What distance education is offered?
 - (a) Providers of distance education;
 - (b) Subjects, levels, degrees and credits;
 - (c) Organisation and delivery mode.
- (2) What are the intended target groups?
 - (a) Entry requirements and reported target groups;
 - (b) Costs and funding opportunities for distance education;
 - (c) Flexibility of the distance education offer;
 - (d) Support to students:
 - (e) Drivers for distance education and future expectations.

By way of summarising the findings, we strive to make a concluding assessment of the potential of the distance education offer by European higher education for adult learners based on our data.

(1) What distance education is offered?

(a) Providers of distance education

Who is providing DE?

The institutional data set showed that distance education is provided by a variety of institutions, only very few of which are single-mode distance-teaching universities. Today, there are a considerable number of dual-mode or 'traditional' campus-based universities that offer some form of distance education. Especially in the Nordic countries the boundaries between distance education and on-campus programmes have become increasingly blurred as the technology and the methodology originally used only for distance education is now also used on campus. In these countries, almost all higher education institutions offer distance (or blended) education. Our institutional data showed that in most other countries, distance education programmes are just an add-on to the larger on-campus offer. The technological developments have also spurred the rise of so-called 'cross-border education' networks, some of which are private, for-profit organisations. The programme data further gave insight into this development: cross-border networks account for a good part of the distance education offered to students in Europe.

The geographic spread of both the institutional and the programme data sets are not representative. The programme data, however, provides us with an important piece of information: how the European distance education offer is communicated. It seems that English-taught programmes (mainly from the UK, but also from other countries where English is not the native language) make extensive use of the DistanceLearningPortal to reach out to their potential students.

How much distance education is offered?

Single-mode distance education institutions provide several hundreds of programmes and more. In some countries, the lines between on-campus and distance education have become so blurred that almost all institutions can be said

to provide some form of the latter. In our institutional data set the ratio for 'traditional' higher education institutions, i.e. those for which distance education is just an add-on, is 1 to 10 for programmes delivered via distance education to face-to-face programmes.

Student numbers in distance education are difficult to estimate. We have suggested that there are around 3 million students taking some form of distance education in Europe. Single-mode distance-teaching universities alone cater for several hundreds of thousands of students. The institutional questionnaire had further collected student numbers according to different types of distance education delivered. It showed that numbers are highest in online education, followed by blended education. Other forms of distance education had the lowest student numbers.

Providers of distance education - with a view to adult learners:

There is a considerable offer of distance and blended education in Europe. The first-hand experience from our surveys showed how difficult it is to get a full overview of this offer. The access to information may be the single most decisive barrier for any potential students, and adult learners in particular. It also constitutes an opportunity if we can raise awareness of the offer to help adult learners make informed decisions.

(b) Subjects, levels, degrees and credits

What subject areas are offered?

The analysis of the programmes in the DistanceLearningPortal provided the following information on subject areas. 'Business & Economics' is the most often offered subject area in this data set. Or rather: it is the best communicated/marketed subject area. It is followed by 'Social Sciences' and 'Applied Sciences, Professions & Arts'. The subject areas 'Life Sciences, Medicine & Health', 'Engineering &

Technology' and 'Humanities & Arts' make up one third of the offer in almost equal parts. The smallest number of distance education programmes is reported in 'Environmental Sciences', 'Law' and 'Natural Sciences'.

What levels of distance education are offered?

Both the institutional and the programme study showed that distance education is most commonly delivered at Bachelor and Master's level. In the institutional data set, the amount of programmes delivered at these two levels is similar. In the programme data set, almost three quarters of the offer are full degree programmes. The vast majority of the full degree programmes are provided at Master's level. PhD and Bachelor-level programmes roughly constitute one fifth of the offer, while single courses – irrespective of their level - make up one fourth. This information may also be read in a way that Master-level programmes are particularly well marketed.

Degrees or no degrees?

In the programme data set, as mentioned, almost 75 percent are degree programmes, the rest are single courses. However, our data set does not give us any information if enrolments in single courses of degree programmes are possible. The institutional survey indicated that in half of the distance education programmes that lead to a degree, it is possible to enrol in single courses.

Credits or no credits?

Not even one third of the programmes in the DistanceLearningPortal database provide information on credits, i.e.: whether they are available, what kind, how many, etc. The majority of programmes/courses do not provide information on credits. What we can say is that the information on credits is not well communicated by the providers. Especially for courses not leading to a degree, the availability of credits could constitute an important piece of information for adult learners.

Subjects, levels, degrees and credits - with a view to adult learners:

The high share of degree programmes in our distance education data set shows the potential offered by distance education to increase the attainment levels of adult learners, i.e. to lead to formal (higher) degrees for adult learners.

For single courses, the award of credits is also an opportunity for increasing attainment levels. Credits document academic achievements and can be acknowledged by other universities. The lack of information on credits can constitute a barrier: if better communicated, they could be an important tool for attracting adult learners to take a course/programme.

In line with this, a recommendation to higher education institutions would be to state if single courses that are part of degree programmes can be taken separately for credits.

(c) Organisation and delivery mode

How is distance education organised?

Apart from the single-mode distance-teaching universities, the majority of respondents to the institutional survey said that distance education is located within the departments; in fewer cases there is a specific distance education department. In very few cases, distance is in the hands of some professors.

What are the delivery modes?

The most common *delivery mode* is online education, as reported by the respondents to the institutional study. But also the programme data shows: two thirds of the programmes/courses are delivered in full online mode. Almost one third is delivered in blended mode.

Organisation and delivery mode - with a view to adult learners:

While single-mode distance education institutions have substantial experience in the use of new technologies, the expertise among dual-mode institutions varies greatly, especially among those where distance education constitutes a negligible part of the offer. Furthermore, while some HEIs have not even identified distance education as a delivery method, MOOCs (Massive Open Online Courses) are entering the market. An exchange of experience and best practice among higher education institutions interested/active in distance education would create a great opportunity for adult learners. HEIs should receive support to professionalise their offer.

Online education as the main mode of distance education delivery constitutes an opportunity, on the one hand, as it is well accessible and close communication between teacher/tutor and student is possible. It also constitutes a barrier for those learners that do not have access to equipment and Internet and are not experienced in their use. As this type of distance education provision is on the rise, it is important to ensure access.

2. What are the intended target groups?

(a) Entry requirements and reported target groups

What are the degree requirements?

The DLP data shows that a minority (less than one tenth) do not require a degree, more than two thirds do. The institutional study also revealed that two thirds of the respondents to our survey are very interested in adult learners with a degree. In the majority of cases in the programme data, the level of degree required is lower than the programme/course it is required for.

Is work experience required?

About as many respondents in the institutional survey that said they were interested in adult learners with a degree stated to be targeting adult learners with some work experience, i.e. also around two thirds. And half of all respondents even mentioned that they were interested in adult learners without a degree. In the DLP dataset, the information on required work experience reveals that distance education programmes at PhD level in particular, but also several at Master's level, expect applicants to have acquired work experience prior to their application.

Are there any language requirements?

As described in the programme study, the data set is biased towards the UK and English-taught programmes in general. This explains the high number of programmes that require English-language testing - a circumstance that is certainly not representative of the offer in all European countries. For this data set, we can, however, say that English-language tests, as formal entry requirements, may be a barrier to adult learners without sufficient language skills.

Is alternative access possible?

While the institutional study showed that many HEIs have a clear interest in adult learners who qualify not only by a previous degree, but also through work experience, we have little information from the programme data on alternative access. Less than 10 percent provide information on this issue. Of those that do, programmes at Master's level in particular offer opportunities for alternative access. We cannot assume for vast majority that no alternative access routes are available. Rather we can say that - if they exist - they are not well communicated.

What are the reported target groups?

As already mentioned, the institutional survey identified adult learners with certain work experience as the main target group, closely followed by adult learners with a degree (both are named by ca. two thirds of the respondents). The institutional survey also found that half of the responding HEIs are interested in Bachelor's degree holders as potential students. This could mean that they are mainly recruiting for Master-level programmes. For national versus international students, there seems to be a slightly stronger focus on the first.

Entry requirements and reported target groups - with a view to adult learners:

Considering the high number of programmes in our data set that require a prior degree at a lower level, we can conclude that distance education has a clear potential for increasing attainment levels, i.e. leading to higher degrees for their students.

Formal entry requirements, on the other hand, constitute general access barriers. These could be overcome and turned into opportunities if institutions consider offering individual alternative access routes. In fact, adults with work experience (and no degrees) are also reported to be a main target group: if options for the recognition of prior learning (RPL) or more generally for the recognition, validation and accreditation of formal and informal learning (RVA) are available accordingly,

this could constitute a great potential for second-chance learners without the formal qualifications.

The general lack of communication on alternative access opportunities is a significant barrier for the openness of higher education to adult learners. This barrier could be overcome quite simply by making such options more transparent. To increase the participation of adult learners in higher education, institutions should further work towards standardised procedures. And they could offer support in getting the required qualifications, e.g. language proficiency, credits, etc.

(b) Costs and funding opportunities for distance education

Tuition fees

Ca. two thirds of the respondents in the programme data set provided information on tuition fees. The data shows that fee levels for distance education increase by the level of education, up to several thousand Euros/Pounds/etc. per year/module. It must be kept in mind that the data set contains a majority of UK programmes/courses and internationally oriented ones in general: it does not allow us to draw general conclusions for fee levels in Europe. Furthermore, some countries do not charge any fees at all. Very few such free programmes/courses were reported in our data set.

Are there any funding opportunities?

At first glance, information on funding opportunities seems easily accessible. Almost half of the programmes/courses in the programme data set provide some kind of information on this issue. The complexity of the information and the predominant lack of eligibility criteria, however, might make it difficult for potential students to choose and secure an appropriate funding source without further assistance.

Costs and funding opportunities for distance education - with a view to adult learners:

Tuition fees can constitute a barrier for anyone interested in higher education, not only for adult learners. It is therefore essential that information on funding opportunities, in particular eligibility criteria, be well communicated along with the information on fees. Students should also be able to receive assistance in choosing and securing an appropriate funding source.

The absence of tuition fees in some countries may constitute an opportunity for adult learners. Compared to the number of fee-charging higher education institutions and the amounts required, the absence of tuition fees in these countries could indeed by interpreted as a fee waiver for students choosing between institutions based in different countries. Such institutions should be advised to better communicate that they do not charge any fees if they are recruiting across borders.

(c) Flexibility of the distance education offer

Are there any application deadlines?

The programme data reveals that around one third of the programmes/courses have fully flexible application deadlines, i.e. no set application deadlines. Ca. one fifth has only one deadline per year. Not even ten percent have several application deadlines per year. For more than one third, no information on application deadlines was made available.

What are the start dates?

The programme data also collected information on start dates, i.e. intakes: even if they have rolling application deadlines, the majority of programmes/courses only have one intake per year (ca. two fifths). Almost one fifth have two intakes per year.

Just one fourth of the programmes/courses are fully flexible, i.e. they can be started anytime.

Part-time versus full-time?

Half of the programmes/courses in the programme data are offered in part-time mode only, one fifth are optionally available in part-time or full-time mode, and one fourth are full-time programmes. Only very few have not provided any information on this issue. Of those answering that part-time is possible, almost all state that no minimum hours per week are required. A negligible number of these programmes/courses report an average of 16 hrs./week as a required minimum.

What are the attendance requirements?

Half of the programmes/courses in the programme data set do not require any physical attendance at all. Not quite one tenth report that attendance is needed for regular mandatory meetings. Even fewer offer regular optional meetings.

Time to completion

The majority of the programmes in the DLP data set report time frames that are similar for on-campus programmes at the respective level. However, many of them also reveal a considerable amount of flexibility in the time available for the completion at varies levels. It is, however, not clear if prolongations are always free of charge.

Flexibility of the distance education offer - with a view to adult learners:

A central aspect openness of distance education is to give students the possibility to start studies when they need and are available. Only few programmes currently offer this degree of flexibility. An increase would constitute a considerable opportunity for adult learning.

The availability of part-time studies/options reveals a high degree of flexibility for adult learners with family or job obligations.

The limited attendance requirements and the time frames for completion also constitute an opportunity for lifelong learners, as a great degree of flexibility is offered. On the other hand, extra fees for extended time frames may create barriers for lifelong learners. Therefore, greater transparency of costs is needed. Providers should further assist students in securing an appropriate funding source for the successful completion of their studies.

(d) Support to students

What are the interaction opportunities for students?

The programme study shows that student-to-student interaction opportunities provided by the institutions are limited. Very few offer possibilities for student group work, which means that students have to recur to other forums to interact with their peers. On the other hand, a high number of programmes/courses report to offer continuous interaction with the teacher/tutor.

What support services are provided?

The responses to the institutional survey showed that the support provided to students is mainly administrative. Moral support is offered by almost two thirds of the respondents. The programme study found that – further to continuous teacher support – information on other support services is difficult to access. In particular, specific support to second-chance learners is not well communicated. The majority of programmes/courses in the programme data set have not provided any information on these.

Support to students - with a view to adult learners:

The limitations in student-to student interaction possibilities constitute a barrier in distance education. Working together with study mates is of high importance for the success of studies. It is therefore recommended to include such interaction options in distance education programmes.

The widespread availability of continuous teacher support for distance education students constitutes a great potential for lifelong learning. To ensure its effectiveness, teaching staff need to be ready to enter into an empathetic dialogue with distance education students – they should be trained to be able to provide support that goes beyond cognitive aspects, organisation of studies, and technological matters.

Other support services, in particular on specific support to second-chance learners, are not well communicated. For adult learners, more transparency on such services might increase the participation of lifelong learners in distance education.

(e) Drivers for distance education and future expectations

Why do HEIs provide DE?

The institutional survey showed that the core motivation for higher education institutions to offer distance education is to provide more flexible learning opportunities: more than four fifths name this. Attracting adult learners is the third most important motivation, but only half as many respondents mention it. This might show that distance education is understood as an opportunity for making pedagogic approaches more flexible in general.

The institutional survey also asked about the strategic importance for institutions to increase student access, progression, completion, etc. The data shows that enabling adult learners to enrol is named by a bit less than half of the respondents. It is thus not highlighted as strongly as for example student access (mentioned by a bit more than half of the respondents). But it is still important in the overarching institutional strategies.

Future expectations

Almost three quarters of the respondents in the institutional data set expect enrolments in distance education to rise in the next five years. Only very few predict a fall of enrolments. The picture is similar for adults returning to higher education after a period of leave (work, unemployment, parental leave, etc.): a vast majority expects a rise in adult learners' enrolments. There is only a slighter higher expectation for growth in distance education enrolment of national students over international students.

Barriers to growth

The respondents in the institutional data set attached the highest importance as a barrier to the growth of distance education to the additional efforts required to develop and deliver it. In this light, a lack of acceptance by academic staff is reported as the second 'very important' barrier to the growth of distance education. A majority of respondents state that there is no lack of student demand to hinder the growth in this field.

Drivers for distance education and future expectations - with a view to adult learners:

The expected growth for distance education along with the institutional objective of enabling second-change learners to enrol constitutes an opportunity for adult learning. A considerable challenge for many institutions will be the efforts needed to develop and deliver distance/online education and to resolve conflicting goals (e.g. attracting 'traditional' learners versus second-change learners). At the same time, institutions will need to motivate faculty to enter into the world of distance education and to give them the organisational prerequisites and tools to realise it: only when they see it as pedagogic opportunities for learners will they let it happen.

References

Cedefop (2008), Terminology of European education and training policy. A selection of 100 key terms, Luxembourg: Office for Official Publications of the European Communities

Daniel, John (1996), Mega-Universities and Knowledge Media: Technology Strategies for Higher Education, Kogan Page.

European Commission (2013), prepared by Dollhausen, Karin, Developing the Adult Learning Sector. Brussels: Publications Office of the European Union.

European University Association (2010), Trends VI, Brussels: EUA.

Gäbel, Michael (2013), Massive Open Online Courses (MOOCs), EUA Occasional Papers, Brussels: EUA.

Gäbel, Michael (2014), Massive Open Online Courses (MOOCs), An Update of EUA's first paper (January 2013), Brussels: EUA.

Högskoleverket (2011), Kartläggning av distansverksamheten vid universitet och högskolor. Högskoleverkets rapportserie 2011:2 R. Jönköping: Rydheims Tryckeri AB.

Holmberg, Börje (2005), The evolution, principles and practices of distance education, Studien und Berichte der Arbeitsstelle Fernstudienforschung der Carl-von-Ossietzky Universität Oldenburg.

Holmberg, Carl (2003), On the Move Towards Online Education in Sweden in Paulsen, Morten Flate. Online Education. Learning Management Systems. Global e-Learning in a Scandinavian Perspective, Bekkestua (Norway): NKI Forlaget.

Paulsen, Morten Flate (2003), Online Education. Learning Management Systems.

Global e-Learning in a Scandinavian Perspective. Bekkestua (Norway): NKI Forlaget.

UNESCO (2002), Open and Distance Learning. Trends, Policy and Strategy Considerations, Paris: UNESCO.

Web links (all last retrieved in September 2014)

Babson Survey Research Group, Survey of Online Learning (2012): http://www.babson.edu/news-events/babson-news/pages/130107-2012-survey-of-online-learning-results.aspx

Bologna Process, Ministerial Conferences (documents): http://www.ehea.info/article-details.aspx?ArticleId=43

European Commission: Information on the European Credit Transfer System (ECTS): http://ec.europa.eu/education/tools/ects_en.htm

European Distance and E-learning Network (EDEN), history: http://www.eden-online.org/introducing-eden.html

European Higher Education Area (EHEA), List of countries:

http://www.ehea.info/members.aspx

European Union, Europe 2020 Strategy:

http://ec.europa.eu/europe2020/index_en.htm

Forum Distance Education, Germany, Distance education statistics (2012): http://www.forum-distance-learning.de/fernunterrichtstatistik

International Association of Universities (IAU), List of Universities of the World: http://www.iau-aiu.net/content/list-heis

Sir John Daniel, 'Cross Border Delivery: Experiences of Mega-Universities', presentation at the 2nd World Summit of Mega-Universities, September 2005: http://www.col.org/resources/speeches/2005presentations/Pages/2005-09-25.aspx

UNESCO: Guidelines for Quality Provision in Cross-border Higher Education (2005): http://www.unesco.org/education/guidelines_E.indd.pdf

UNESCO, Muscat Agreement, May 2014: http://unesdoc.unesco.org/images/0022/002281/228122e.pdf

University World News, 'Six mega universities approved in Nigeria', April 2013: http://www.universityworldnews.com/article.php?story=20130426173337745

Tuning Educational Structures in Europe, Glossary of terms: http://www.unideusto.org/tuningeu/documents/glossary- of-terms.html

World Higher Education Database (WHED): http://www.whed.net