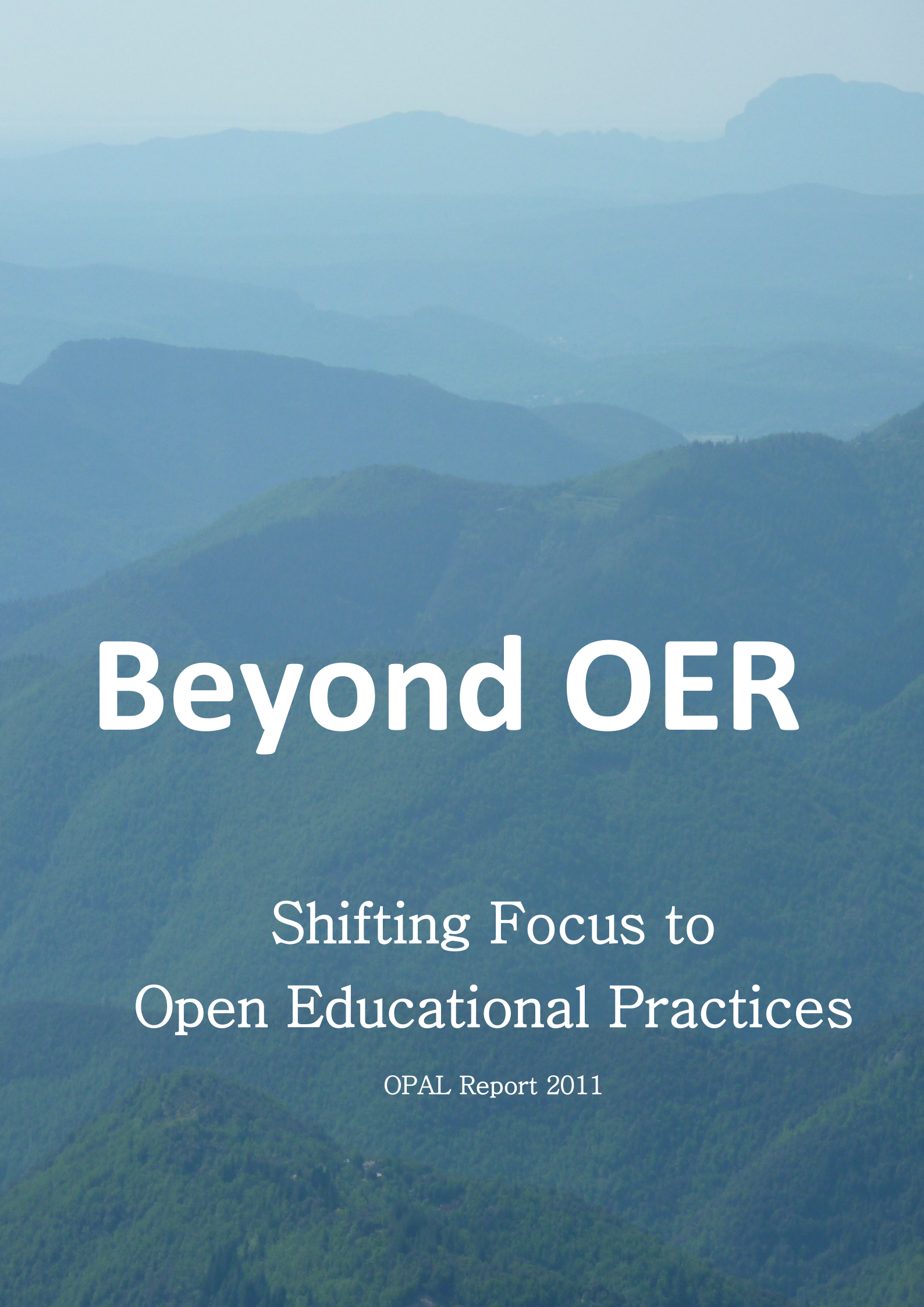

Beyond OER

Shifting Focus to Open Educational Practices

OPAL Report 2011

The "**Op**en Educational Qu**al**ity Initiative" is an international network to promote innovation and better quality in education and training through the use of open educational resources. It is partly funed by the European Commission. OPAL is initiated through international organisations like UNESCO, ICDE and EFQUEL and a number of Universities like the Open University UK, the Aalto University in Finland, University Duisburg-Essen and the Catolic University in Lissabon, Portugal. It's aiming at establishing a forum which works to build greater trust in using and promoting open educational resources. The Open Educational Quality Initiative will focus on provision of innovative open educational practices and promote quality, innovation and transparency in higher and adult education. The OPAL Initiative focusses beyond the access to open educational resources (OER) on innovation and quality through open educational practices (OEP).

The OPAL Initiating Organisations

The project runs through a time span of around two years (2010-2011) and includes the following partners:

University Duisburg-Essen (Germany)

Coordination

Aalto University (Finland)

The Open University (UK)

European Foundation for Quality in E-Learning (Belgium)

Universidade Católica Portuguesa (Portugal)

ICDE & ICDE member institution (Norway)

UNESCO (France)

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Table of contents

List of Figures

List of Tables

Executive Summary

This study presents the findings of a quantitative study on the use of Open Educational Resources (OER) and Open Educational Practices (OEP) in Higher Education and Adult Learning Institutions. The study is based on the results of an online survey targeted at four educational roles: educational policy makers; institutional policy makers/managers; educational professionals; and learners. The report encompasses five chapters and four annexes. Chapter I presents the survey and Chapter II discloses the main research questions and models. Chapter III characterises the universe of respondents. Chapter IV advances with a detailed survey analysis including an overview of key statistical data. Finally, Chapter V provides an exploratory in-depth analysis of some key issues: representations, attitudes and uses of OEP. The table of contents and the complete list of diagrams and tables can be found at the end of the report.

The OPAL 2011 "Report Beyond OER" advocates for building trust in OER in order to increase the actual usage of OER in combination with open learning architectures in order to transform learning. OER is reported to have an effect on institutional innovation culture, in higher education as well as in adult education institutions. It may thus be concluded that, regardless of educational professionals considering OER to be important for themselves or for others (*e.g.*, students), the lesser the fear, insecurity or discomfort vis-a-vis OER, the higher the frequency of OER use. As regards the existence of open resources' programmes or initiatives in the institution, individuals from institutions where such programmes/initiatives already exist did show a higher frequency of OER use.

When considering the various strands of institutional policies around OER, it becomes obvious that they are still quite far from impacting on the educational institutions as a whole. The perception by respondents that using OER can lead to institutional innovations does not seem to translate, to the same extent, into the existence of organisation-wide implementations, which points to the need for considerable efforts to be made in this regard. This is further compounded, on the one hand, by the modest levels of types of support to factors that induce or enable open educational practices to be firmly established in educational institutions, and on the other hand by the level of importance attached by respondents to institutional policy barriers to the use of OER.

An exploratory principal components analysis enabled the identification of five relevant dimensions in representations of barriers with which individuals are faced when they want to use OER. The following table shows the result of this analysis and respective identified dimensions, which we sought to name according to the content of their main indicators: 1) Lack of institutional support; 2) Lack of technological tools; 3) Lack of skills and time of users; 4) Lack of quality or fitness of OER; 5) Personal issues (lack of trust and time).

The report is structured into several clear sections to elicit macro and micro factors to explain the slow uptake of OER within organisations.

A. A policy environment for supporting the usage of OER is important:

1. The analysis of the survey data according to the macro level conditions of OER supply elicited views from the respondents that point to several areas of public policy and institutional policy intervention. These policies would favour OER and open educational practices (OEP) in

breaking away from individualistic or closed group settings to become mainstream in higher education and adult learning institutions.

2. The report also points to a great awareness amongst educational professionals for the importance of public policies to further OER developments. This awareness is a notorious fact not only among educational policy makers but equally across the four educational roles targeted by the OPAL survey. Whenever rating the relevance of specific areas for policy intervention, a clear majority of respondents provided positive or very positive scores.

B. Institutional support strategies are fostering open educational practices:

1. Institutional support/recognition concerning OER projects/ initiatives is demanded by educational professionals and by higher education policy makers.
2. The support for localisation/ adaptation/translation of existing OER and a support in implementing appropriate licensing schemes regarding copyright are viewed as very important to facilitate the usage of OER, whereas infrastructure, access and availability are seen as necessary conditions but not as critical success factors any longer in institutions.
3. The promotion of quality assurance for OER is views as necessary and receive a very high rating. Respondents mark this requirement as very important particularly in the perspective of the higher education policy sector.

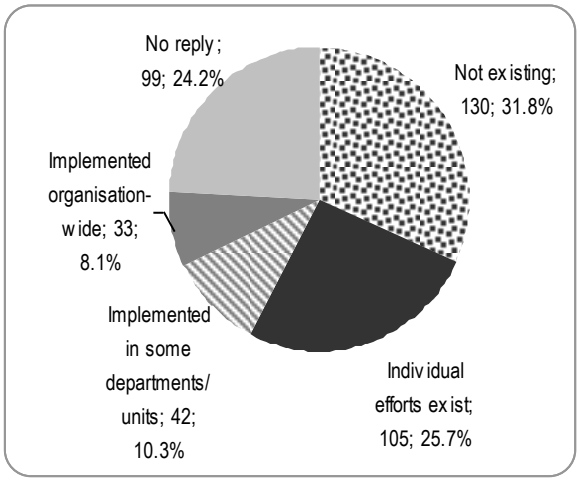
C. Networks of Innovation play an important role for shaping OER developments and open educational practices

1. As a supporting factor to the use of OER, 54.0% of all respondents stated that a partnership with other organisations existed in the three varying degrees presented in the question. The prevalence of such partnerships augments from the lowest values registered for organisation-wide implementation to the highest values recorded for the existence of individual efforts (with the exception of adult learning, where the implementation category in some departments/units supersedes the individual efforts).
2. As a pointer for future work, it seems a timely suggestion that in future OER related support initiatives focus their attention more on partnerships with other institutions to various other forms of networks of innovation, and also including perceptions regarding their potential value in moving forward both effective OEP and enabling communities of practice shaped around collaborative OEP.

D. ***Specific quality assurance processes for OER are viewed necessary***

1. For higher education and adult learning, there is a prevalent notion that there are no specific quality assurance processes in place for OER, totalling 31.8% of all responses, followed by the item indicating individual efforts. The least represented item regards the implementation of OER quality assurance processes across the organisation, with only 8.1% of all responses. This pattern is fairly identical in both sectors, with the exception of adult learning, where individual efforts rank higher and the non-existence of quality assurance processes ranks lower.

Diagram 1 – Specific quality assurance processes for OER



E. Open educational practices are supported through cultures of innovation and in turn provide innovation in organisations

1. The evidence of the existence of cultures of innovation, both within organisations and regarding individual's practices, is of particular interest for OPAL, in that OER and OEP are closely associated with pursuing new forms of facilitating learning for individuals and customising learning resources to the particular needs of the individual learner.
2. In the view of the respondents, the use of OER stimulates improves the quality of education, leads to pedagogical changes and increases the participation of learners in educational scenarios. The use of OER leads to new pedagogical practices
3. By way of conclusion, there is a clear positive opinion in all education roles and across the two sectors surveyed that the use of OER and the implementation of OEP lead to innovations in pedagogical terms, in learning strategies and at institutional level. It should be stressed also that there is a recognition that such innovation poses challenges to organisations, and institutional leaders seem to be quite aware of this.

Chapter I – Background of the Study

Although open educational resources (OER) are high on the agenda of social and inclusion policies and supported by many stakeholders of the educational sphere, their use in higher education (HE) and adult education (AE) has not yet reached the critical threshold which is posing an obstacle to a seamless provision of high quality learning resources and practices for citizens' lifelong learning efforts. This has to do with the fact that the current focus in OER is mainly put on building more access to digital content. There is little consideration of whether this will support educational practices, promote quality and innovation in teaching and learning. To provide educational opportunities for all citizens we suggest therefore, extending the focus beyond 'access' to 'innovative open educational practices' (OEP).

Many well-known OER initiatives such as MIT's Open Course Ware (OCW), Stanford's iTunes or Rice University's Connexions have been funded and are now coming into their sustainability phase. Funding in many cases cannot be cannot be relied on for ongoing development and operations. Until now OER have been in development and use, often pioneering, since 2002. Roger's technology adoption lifecycle would suggest that OER have come through the innovation phase, are striving for adoption, and aspire to cross into early majority (Rogers, 1983).

In an analysis of publicly funded and foundation funded OER initiatives worldwide Stacey (2010) shows that focus of current well known OER initiatives is on creation and publication of OERs. Use and reuse are still somewhat underrepresented; strategic aspects like business models, incentive strategies for creation use and reuse are not broadly touched upon.[1] In this situation, a model of factors which outlines the surrounding and influencing factors for the creation, use, sharing and reuse of OER for individuals, organisations and policy is indispensible. Such a model has to suggest the shift from a phase in which the preliminary focus was on opening access to resources to a phase in which the primary aim is to embed OER into learning and teaching practice.

The OER movement has been successful in promoting the idea that knowledge is a public good, expanding the aspirations of organisations and individuals to publish OER. However as yet the potential of OER to transform practice has not being realised. There is a need for innovative forms of support for the creation and evaluation of OER, as well as an evolving empirical evidence-base about the effectiveness of OER. However, recognition of the importance of investment and effort into promotion of the use and uptake of OER is evident is the prominence given to OER developments in a recent major report on Cyberlearning, commissioned by the National Science Foundation (NSF, 2008). One of the five higher-level recommendations in the conclusion to the report is to 'adopt programs and policies to promote Open Educational Resources.'

The main properties of OER are: free access 'enabled by information and communication technologies' and a 'non-commercial purpose' (UNESCO 2002, p.24). OER is intended to make "high-quality educational material freely available worldwide in many languages". (Keller and Mossink, 2008). McAndrew and Santos (2009) argue that despite some terminological differences (Hylén, 2006) open educational resources are largely digital assets (music, images, words, animations) put together into a logical structure by a course developer who has attached an open license to it. In other words, the content is openly available (it can readily be found or discovered), is openly accessible (it is in a form which others can take it away) and openly re-usable (the user can easily

[1] Stacey, P. (2010). Foundation Funded OER vs. Tax Payer Funded OER - A Tale of Two Mandates. In Open ED 2010 Proceedings. Barcelona: UOC, OU, BYU. [Accessed: dd/mm/yy].< http://hdl.handle.net/10609/5241>]

modify it and is allowed under the license to do certain things with it without having to ask the creator's permission first).

From the current research into the field of OER we can deduce that up to now a main focus has been on building access to OER, building infrastructure, tools and repositories. On policy level this can be viewed through public funding schemes (analysed by Stacey 2010) and on private level through private foundation funding (ibid.) We conclude that OER is currently in an intermediate phase which we would like to call phase 1, which focuses on creation and open access.

Phase two is about using OER in a way that learning experiences improve and educational scenarios are innovated. It is about quality and innovation. It is the next phase in OER development which will see a shift from a focus on resources to a focus on open educational practices. These comprise a combination of open resources use and open learning architectures to transform learning into 21st century learning environments in which universities', adult learners and citizens are provided with opportunities to shape their lifelong learning pathways in an autonomous and self-guided way. Phase 2 is characterized by the following aspects:

- Bilds on OER
- Goes beyond access into open learning architectures
- Focus: learning *as* construction + sharing
- Quality improvement through external validation
- Change of educational cultures
- OER as value proposition for Institutions

OEP are defined as practices which support the (re)use and production of OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path. OEP address the whole OER governance community: policy makers, managers/ administrators of organisations, educational professionals and learners.

The presented study is starting from this point. It is called "Beyond OER" because it shows that stakeholders of OER are concerned about OER beyond access and are striving to find solutions how to mainstream OER. It shows that trust has to be built and that it is necessary to find ways how to build quality learning experiences and innovation. The study is investigating the current use and the perceived quality of OERs. It is furthermore making the next step and is investigating the second phase: How do educators use OER in practice? What are their attitudes? Do organisational leaders understand the importance to shift from a resource focus to a practice focus?

Chapter II – Methodological Design of the Survey

A. Objective of the Survey

The survey research is intended to carry out a quantitative study on the use of Open Educational Resources (OER) and Open Educational Practices (OEP) in Higher Education and Adult Learning Institutions. The activity was carried out as an online survey available in four languages (EN, ES, FR and PT) covering more than 8 EU countries[2]. It is part of the OPAL initiative, the Open Educational Quality Initiative which has been designed to map the use of OER and to find out the extent to which they contribute to improve the quality of educational practices. Furthermore, the survey researches the impact of OER and OEP on changing learning scenarios and educational institutions and looks at the strategies of policy makers and institutional leaders to support OEP in their regions and institutions. Thus, the survey elicits quantitative information from four educational stakeholder groups:

- Educational Policy Makers
- Managers/Administrators (also institutional policy makers)
- Educational Professionals
- Learners

The main conceptual definitions inspiring the survey design, implementation and processing are:

- ***Open Educational Practices (OEP)*** *are a set of activities around instructional design and implementation of events and processes intended to support learning. They also include the creation, use and repurposing of Open Educational Resources (OER) and their adaptation to the contextual setting. They are documented in a portable format and made openly available.*
- ***Open Educational Resources*** *are digital materials for educators and learners to be used and/or reused for teaching, learning and research that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others.*[3]

The definition of **Open Educational Resources** (**OER)** includes:

1. Open courseware and content.
2. Open software tools (*e.g.* learning management systems).
3. Open material used for the e-learning capacity building of educational professionals.
4. Repositories of learning objects.
5. Free educational courses.

The survey targets adult education institutions as well as higher education institutions. Within these Educational sectors the survey addresses the stakeholders which are listed in table 1.1. below.

[2] The questionnaires are available in Annex 4.

[3] Based on the definitions provided in OECD-CERI, *Giving Knowledge for Free*, 2007, p. 30, and in Atkins, D., Seely Brown, J., Hammond, A., *A review of the Open Educational Resources movement: Achievements, challenges and new opportunities*, 2007, p. 8).

Table 2.1 – Survey stakeholders

Level	Higher education	Adult learning
Policy maker level	European, national, regional, local (communal)	European, national, regional, local (communal)
Management and administration level	Rectors/ Vice-chancellors of higher education institutions, heads of administration, leaders of technical departments, institutional policy makers, intellectual property experts	Directors of Adult Learning Centres (ALCs) or initiatives, leaders of administrative units within adult learning centres, leaders of technical departments within ALCs, institutional policy makers, intellectual property experts
Educational level *(teachers, professors, curriculum designers, etc.)*	Teachers, professors, curriculum designers, learning material designers, assessors and validators of learning, teacher trainers, pedagogical advisors and consultants, support staff related to educational processes, technical editors converting materials into online format, quality assurance professionals, etc.	Teachers, facilitators (also learners can become teachers in adult learning), material and curriculum designers, validators/ assessors, teacher trainers, pedagogical support staff, advisors, technical editors converting materials into online format, quality assurance professionals, etc.
Teaching and learning level	Students in formal learning contexts, lifelong learners, informal learners	Students in formal learning contexts, lifelong learners, informal learners

Although the survey has been open and answered by the international community of OER actors, the main respondents came from the following countries: Germany, UK, Portugal, Finland, Spain, France, The Netherlands, Ireland. Furthermore respondents came from the EU countries at large and others regions, as well (open to any respondents from all regions and countries).

The field phase of the survey has been from mid-July 2010, when the first invitations were sent out, to 30 September 2010.

B. Research Questions and Models

Our point of departure rests on the assumption that Open Educational Resources (OER) are generating innovative practices – Open Educational Practices (OEP) – both in higher education and adult learning.

Furthermore, for this strategic change to become effective and sustainable, and concurrently to leverage the mainstreaming of generative OEP, our survey research addresses three macro conditions and three micro attributes. The survey is also directed at portraying actual practices and modalities of OEP within the multitude of higher education institutions and adult learning organisations that were selected as its focus of attention. Under these broad presuppositions the analysis of the data generated by the survey will take in account the following three analytical categories and respective sub-categories:

1. Macro level conditions
    a) Public policies
    b) Networks of innovation
    c) OER supply
2. Micro level attributes
    a) Contexts
        a.1 - Cultures of innovation

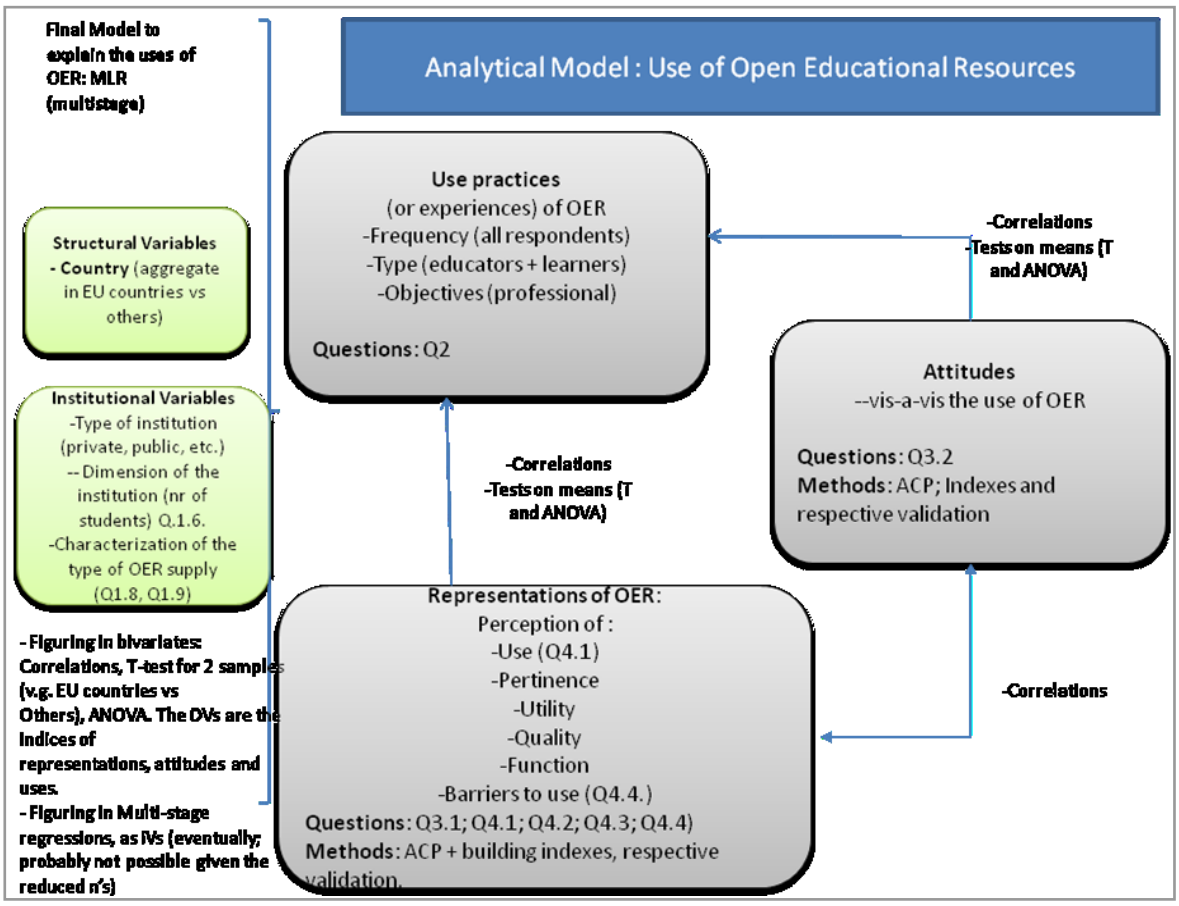
a.2 - Institutional policies
a.3 - Infrastructures
b) Representations
c) Attitudes
3. Practices

The survey research was conducted in order to ascertain that these premises find support in quantitative field evidence. Moreover, the online survey aimed at gaining insights into the above-mentioned conditions and attributes that enact or obstaculise OEP uptake in concrete learning and teaching environments. Thus, a first layer of data interpretation will address each of the macro conditions and micro attributes listed above. A second layer will search for insights on actual practices undertaken in the higher education and adult learning institutions.

C. Models for in-depth analysis of key issues

The concrete design of an analytical model geared at cross-tabulations and in-depth interpretations, stemming from the survey data, is largely dependent upon the adequate selection of core variables (DV and IV) that embody the main intuitions/queries of the entire OPAL researcher team.

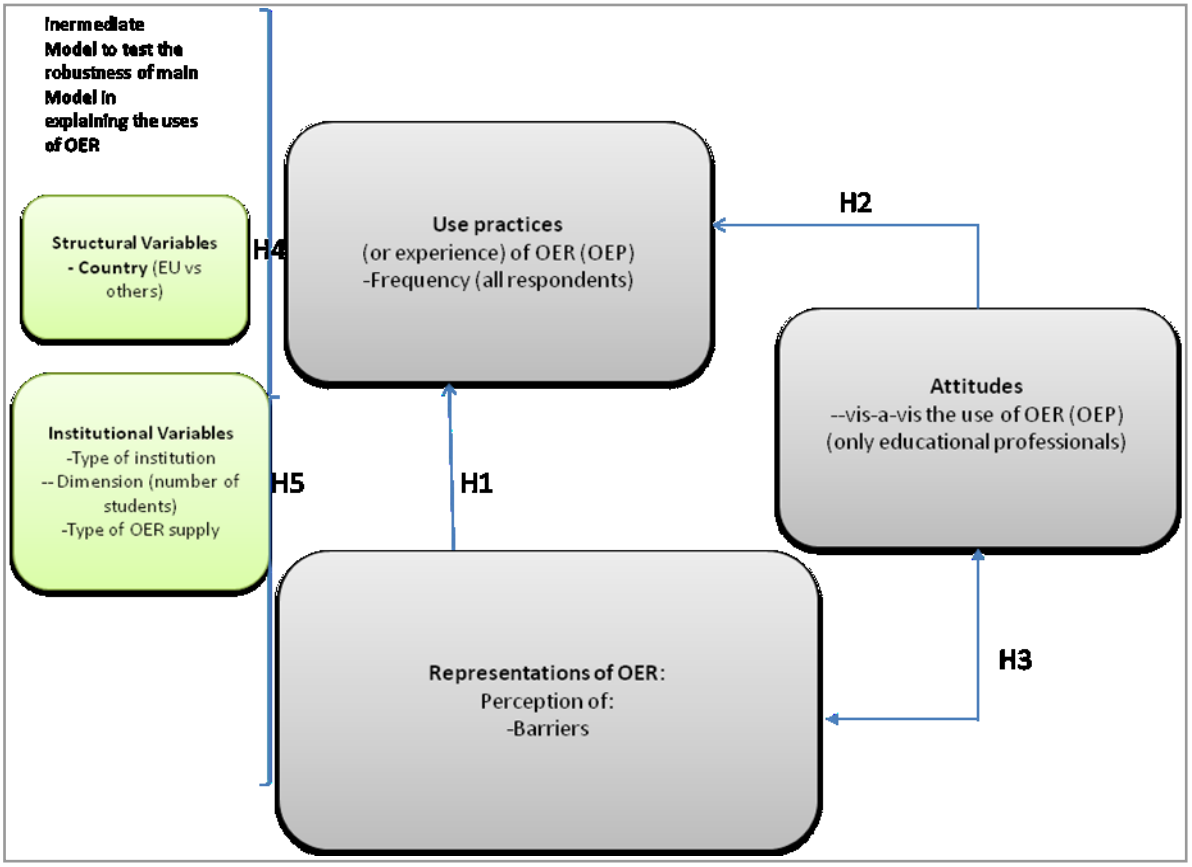
Diagram 2.1 – Analytical model: use of OER



In order to allow a better insight on possibilities and paths conducive to an in-depth analysis the model that follows plays an exploratory role to exemplify the complexities involved in such and endeavour. In this tentative exercise we research possible correlations – distinguishing between co-directionality and causality in regression analysis – involving three variables that were extensively

inquired via the survey: practices (use of OER), attitudes and representations. A first order – more complex – model is depicted in the above diagram. A second order model – simplified version of the first – that can undergo an immediate feasibility test is represented in the following diagram (2.2). This second methodological concept is what we consider an *intermediate model* insofar as its implementation is likely to enlighten the robustness of the main model to explain OER uses and practices (OEP). Notwithstanding its ambition this intermediate version follows a selective, direct and intuitive approach in processing the wealth of empirical data made available by the survey.

Diagram 2.2 – Intermediate model (second order)



The simplified plan consists in applying the same model of analysis by aggregating both survey targets: AE and HE. In other words, save all analyses in syntax and repeat them:

- in each of the surveys (HE and AE);
- within each survey, in each target group, when the filter does not select automatically.

Five work hypotheses would be probed under this plan:

H1: Representations of OER (Open Educational Resources) influence their use.

– H1.1. The more the users represent OER as pertinent, useful, of quality and having a relevant pedagogical function, the higher the tendency to use them.

H2: Attitudes vis-a-vis OER influence their use.

– H2.1. The more open and confident the attitudes, the higher the use of OER.

H3: Representations and attitudes vis-a-vis OER are very much correlated: more open attitudes correlate positively with representations of OER as pertinent, useful, quality and necessary resources.

H4: The country of origin of the respondent influences his/her position vis-a-vis OER, v.g., as regards:

- Representations
- Attitudes
- Practices

H5: The type, dimension and characteristics of the educational institution in terms of OER influence the position vis-à-vis OER, as regards:

- Representations
- Attitudes
- Practices

D. Dimensions and Metrics of Key Vriables

Let us now take each of the three key variables retained to characterize both the dimensions elicited and the related metrics.

(i) Representations: identification of possible dimensions.

- Use (Q4.1)
- Pertinence (Q4.2)
- Utility (Q4.3)
- Quality (Q3.3.) → only p ***policy makers, managers*** **e** ***learners*** *(has filter)*
- Impact (Q3.1) →only p ***managers, educational professionals*** **e** ***learners*** *(has filter)*
- Barriers to use (Q4.4.)

Methods:

- ACP to identify the dimensions; varimax rotation to emphasise the differences between dimensions.
- Validating and building indexes, on the basis of the mean of responses (if validated).
- These new variables become IVs of uses and DVs of the variables in green, in the diagrams.

(ii) Attitudes: identification of possible dimensions.

- Vis-a-vis the use of OER (Q.3.2)

Methods:

- ACP to identify dimensions; varimax rotation to accentuate the differences between dimensions.
- Validating and building indexes, on the basis of the mean of responses (if validated).
- These new variables become IVs of uses and DVs of the variables in green, in the diagrams.

(iii) Uses or Practices: identification of possible dimensions.

- Frequency (Q2.1) → for ***all***
  - Correlations
  - If validated, index on the basis of the sum of the mean of the responses

- Type (Q2.2.) → only p *learners* and *educational professionals* (has filter)
  - It is multiple; better to treat it as dichotomic (in VD)?
- Objectives (Q.2.3) → only p *educational professionals* (has filter)
  - It is multiple. Aggregate the items according to a substantive criterion:
    - Items focused on the **teacher**: 1, 2, 4, 6
    - Items focused on the **student**: 4 e 5
    - Cumulative indexes?

(iv) Structural variables:

- Country of origin of the respondent
  - Aggregate in a dichotomy, opposing EU countries and Others

(v) Institutional variables:

- Type of institution (Q1.5)
- Dimension of the institution (Q1.6)
- Characteristics of the type of OER supply (Q1.8 and Q1.9)

E. Methodologies

In order to allow an in-depth probe of each of the five work hypothesis listed under point C diverse statistical methodologies will undergo testing.

H1:
After identifying and validating the possible dimensions of representations, these new reduced variables may relate to uses, through:

- Correlations (with Q1.6)
- Tests on means, for two (T) and more samples (ANOVA) (Q1.5, Q1.8 and Q1.9)

H2:
After identifying and validating the possible dimensions of attitudes, these new reduced variables may relate to uses through:

- Correlations (with Q1.6)
- Tests on means, for two (T) and more samples (ANOVA) (Q1.5, Q1.8 and Q1.9)

H3:
The new variables pertaining to attitudes and representations may relate through:

- Correlations

H4 and H5:

- Crossing
- Correlations
- Tests on means (T and ANOVA), by reason of the nature of the DV.

F. Final Model: Explaining the Use of OER

- Multiple Linear Regression (MLR), in the event of sufficient cases; in the event of very low numbers, remain at exploratory level – ACPs, correlations.
- Multistage MLR, enter method (regular), with the following IVs coming in order:
  - Structural variables (country)
  - Institutional variables
  - Representations
  - Attitudes
- VD: Index of **Uses or Practices** with Q2.1 (the only item that is responded by all).

Chapter III – Profile of the Respondents

Section I of both survey questionnaires – targeting higher education and adult learning, respectively – focused on gathering information to characterize the respondents, while maintaining their full anonymity.

A. Language

Respondents had the choice of completing the survey in one of four language versions. Their choice favoured English (61.5% of all respondents), followed by Portuguese (24.7%), French (8.3%) and Spanish (5.5%).

Diagram 3.1.a – Survey language used by the respondents

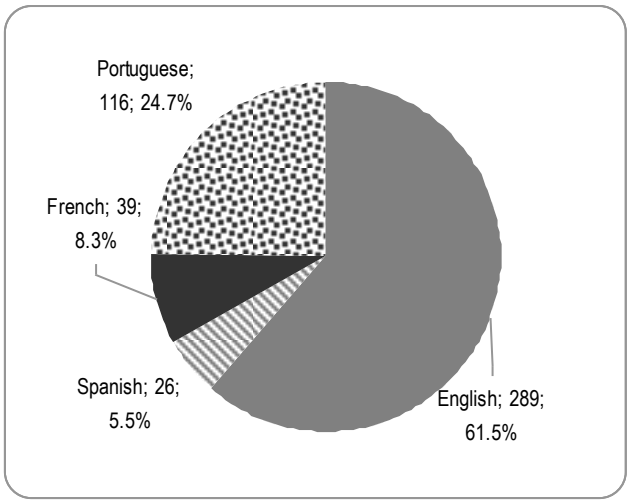
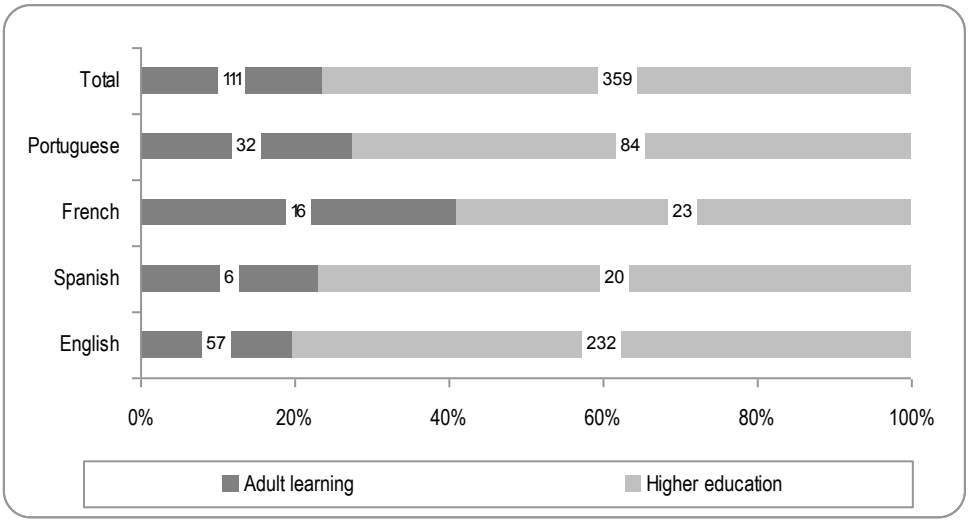


Diagram 3.1.b – Survey language used by the respondents Breakdown per sector



B. Country of work or study

Question 1.1 inquired about the country of work or study of the respondents. 78.7% of the respondents stated the country where they work or study is a member of the European Union, while 21.3% are from outside the EU.

Diagram 3.2.a – Country where respondents work or study
European Union versus other countries

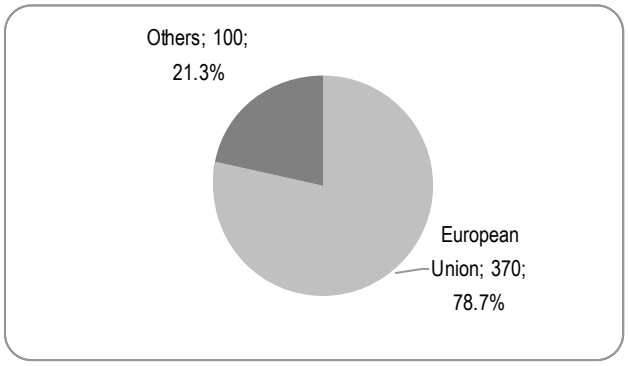
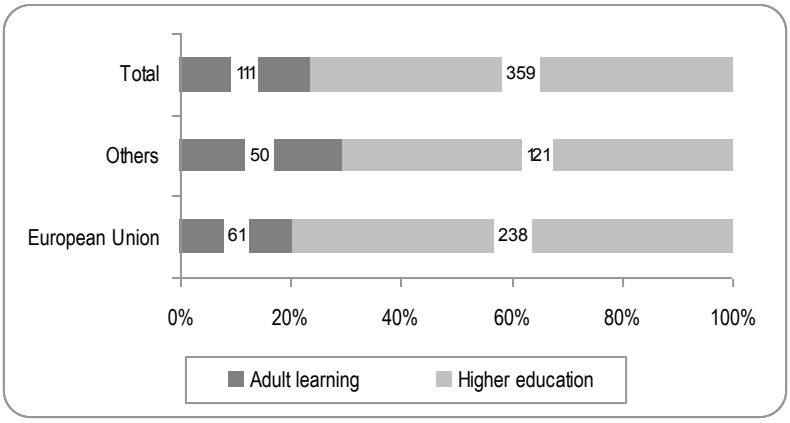


Diagram 3.2.b – Country where respondents work or study – European Union versus other countries
Breakdown per sector



The breakdown of respondents per EU Member State is shown in the following table.

Table 3.1.a – Country where respondents work or study
Breakdown per EU Member State

Country	Frequency	
	Higher education	Adult learning
Portugal	118	32
United Kingdom	67	4
Finland	39	7
France	21	9
Germany	20	5
Italy	19	
Spain	18	3
Romania	14	
Bulgaria	12	
Netherlands	11	1
Belgium	6	
Greece	5	
Ireland	5	
Austria	4	
Hungary	3	

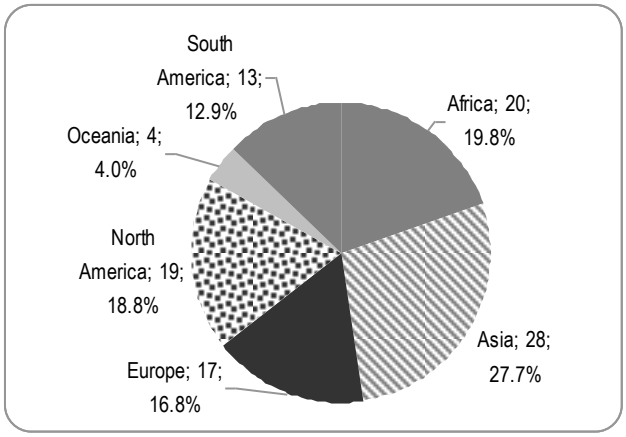
Country	Frequency	
	Higher education	Adult learning
Sweden	2	
Denmark	1	
Lithuania	1	
Malta	1	
Poland	1	
Slovakia	1	
Slovenia	1	
Countries outside the European Union	100	50
Total	*470*	*111*

Table 3.1.b – Breakdown per country outside the European Union

Country	Frequency
India	10
Canada	8
Norway	8
United States	8
Nigeria	5
Australia	3
Brazil	3
Chile	3
Macedonia, the former Yugoslav Republic of	3
Malaysia	3
Albania	2
Argentina	2
Bangladesh	2
Botswana	2
Colombia	2
Côte d'Ivoire	2
Indonesia	2
Morocco	2
Philippines	2
South Africa	2
Thailand	2
Afghanistan	1
Benin	1
Costa Rica	1
Croatia	1
Djibouti	1
Egypt	1
Ethiopia	1
Guyana	1
Haiti	1
Hong Kong	1
Iran, Islamic Republic of	1
Jamaica	1
Kuwait	1
Mauritius	1
Moldova, Republic of	1
New Zealand	1
Nicaragua	1
Qatar	1
Russian Federation	1

Country	Frequency
Saudi Arabia	1
Switzerland	1
Tunisia	1
Turkey	1
Venezuela, Bolivarian Republic of	1
Zimbabwe	1
Total	*101*

Diagram 3.3 – Country where respondents work or study
Breakdown of non-EU countries per continent



C. Age and gender

Question 1.2 asked about the age and gender of the respondents. Overall, as well as per sector, the majority of respondents is concentrated in the age groups 40-49, 30-39 and 50-59.

Diagram 3.4.a – Age of the respondents
European Union versus other countries

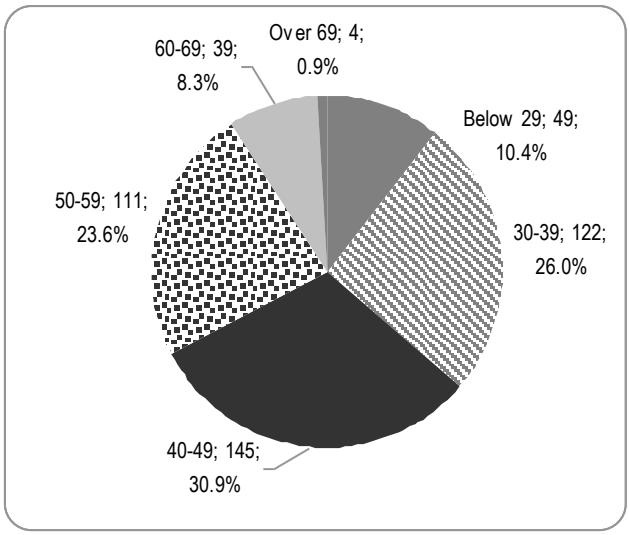
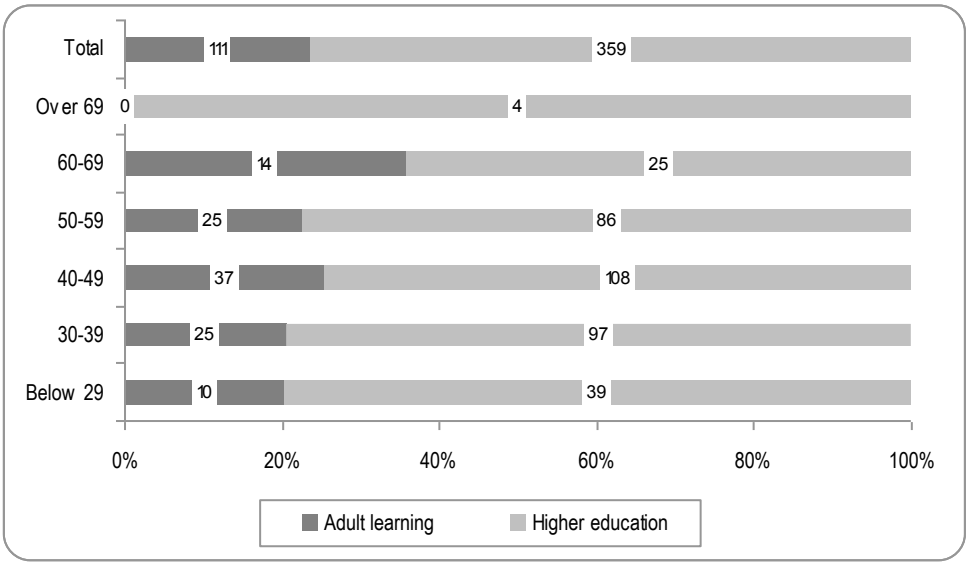


Diagram 3.4.b – Breakdown per sector



As to the gender of the respondents, there is a balance, both when considering all respondents and when analysing their distribution by sector.

Diagram 3.5.a – Gender of the respondents

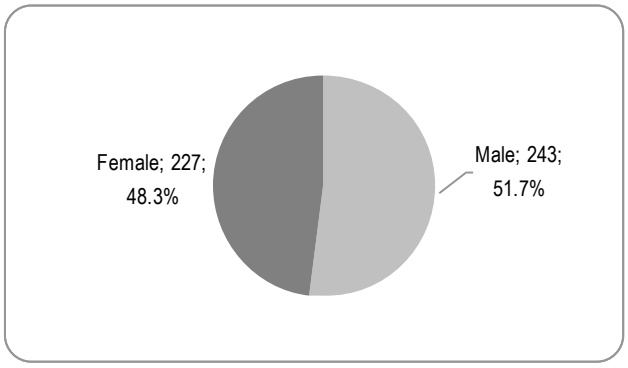
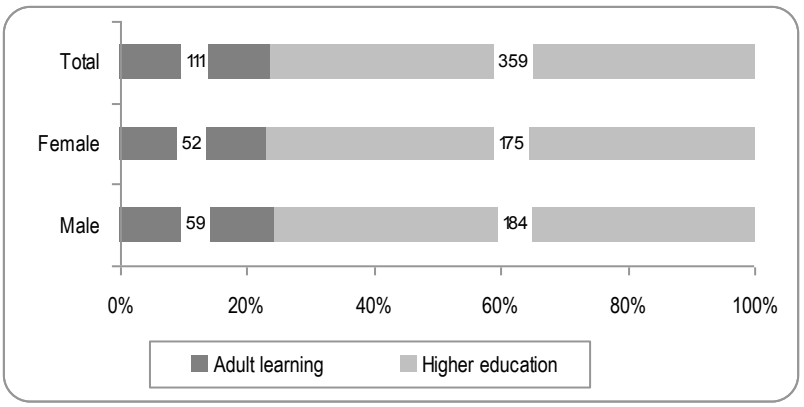


Diagram 3.5.b – Breakdown per sector



D. Educational Roles

Question 1.3 asked the respondents to select one of the following educational roles:

- Educational policy maker at a European/international level (e.g. European Parliament, European Commission), at a national level (e.g. national government, or ministry), at a regional or local level (e.g. municipality, local government);
- Institutional policy maker, or involved in the management or administration of an educational organisation (manager, administrator);
- Educational professional in an educational organisation (professor, teacher, curriculum designer, learning technology specialist, trainer, etc.);
- Learner.

The reply to this question, in combination with the reply to question 1.4, dictated the questionnaire that would be subsequently presented to the respondents.

A clear majority of respondents belong to the educational professional role (68%), followed by the institutional policy maker/manager role (19%), the learner role (9%) and, last, the educational policy role (4%). A similar pattern emerges in the sector breakdown of the replies.

Diagram 3.6.a – Educational role of the respondents

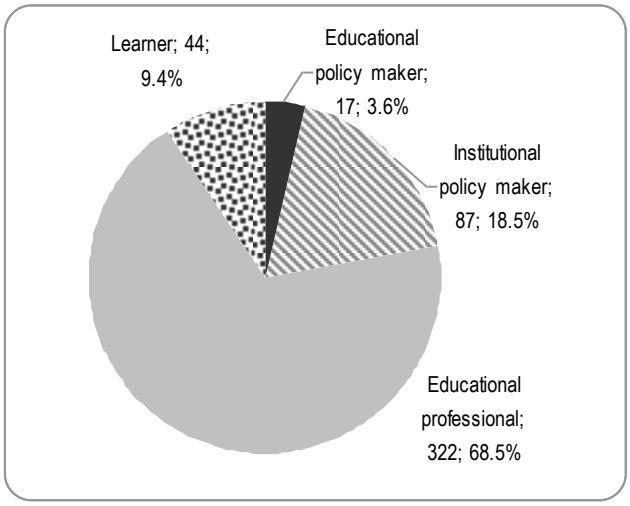
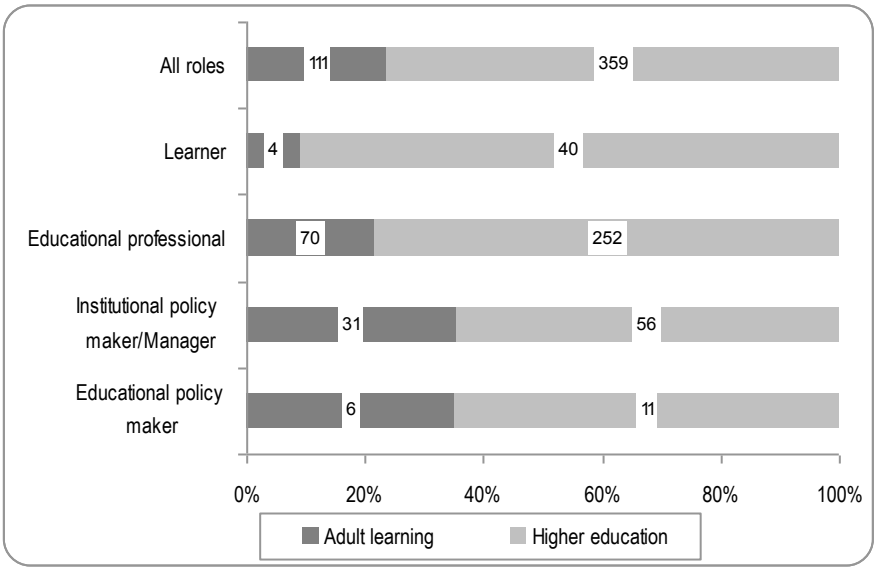


Diagram 3.6.b –Breakdown per sector

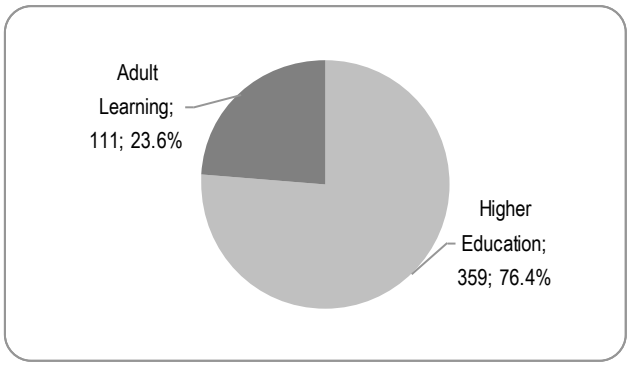


E. Primary area of interest

Question 1.4 asked respondents to choose between higher education and adult learning as their primary area of interest, meaning whether respondents were enrolled in, or worked for, a higher education establishment (university, technical college, etc.), or an adult learning institution, or still if they were engaged in policy making in one of the sectors provided.

Higher education respondents account for over ¾ of the sample while adult learning provided the remaining of those surveyed.

Diagram 3.7 – Primary area of interest (sector) of the respondents



F. Status of the institution

Questions 1.5 to 1.10 were directed at the characterization of the institution where respondents work or study.

When queried about the status of their institution – whether public, private not-for-profit or private-for-profit – the majority of respondents (71%) stated their institution was public. The not-for-profit institutions provide about twice as much respondents as those coming from the profitable private sector.

Diagram 3.8.a – Status of the respondents' institution

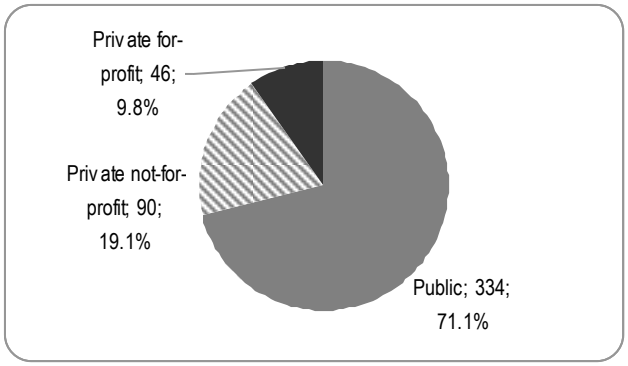
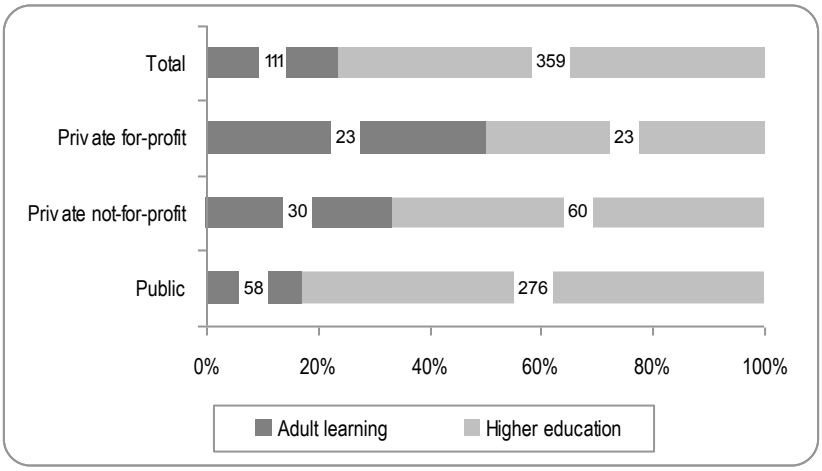


Diagram 3.8.b –Breakdown per sector



G. Size of the institution

The characterization of the size of the institution (in terms of learners) was the object of question 1.6, addressed to all but the educational policy makers (mandatory response for those). 49% of respondents work or study in educational institutions with over 5,000 learners, followed by 22% in institutions with between 1,001 and 5,000 learners.

These figures mean that the heavy majority of respondents come from large and very large institutions: in total, over 70% of the sample.

Diagram 3.9.a – Size of the respondents' institution (no. of learners)

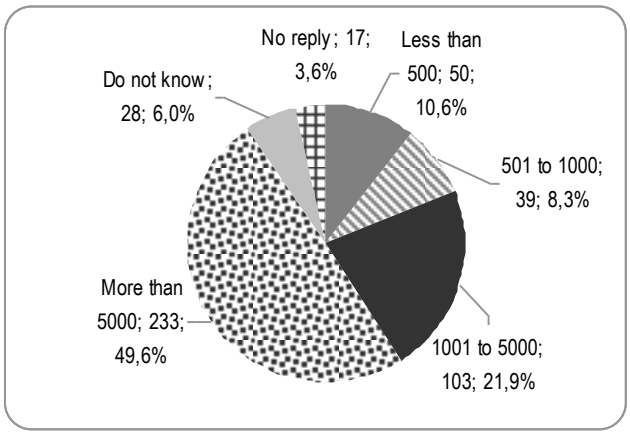
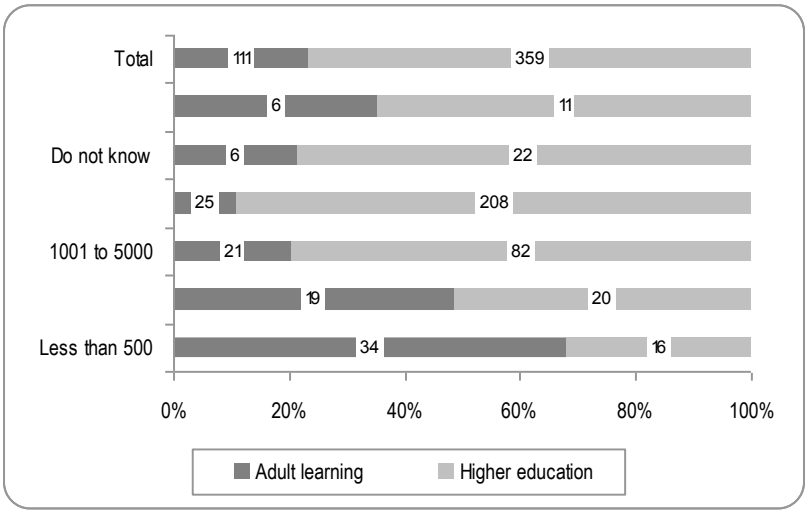


Diagram 3.9.b –Breakdown per sector



H. Location of the institution

Concerning the location of the respondents' mother institution (Q1.7), Portugal, UK and Finland cater for about one half of the total sample. In the remaining list of origins, France, Germany, Italy and Spain account for the next cohort of leading countries of respondents' institution. Finally, the non-EU countries account for 21% of the total institutions sampled.

The next table offers a detailed picture of the countries where the institution is located, broken down by sector.

Table 3.2 – Country of the respondents' institution

	Higher education	Adult learning
Portugal	117	30
United Kingdom	66	4
Finland	39	7
France	19	8
Germany	19	4
Italy	19	
Spain	16	3
Romania	14	
Bulgaria	11	
Netherlands	10	1
Belgium	5	
Greece	5	
Ireland	4	
Austria	3	
Hungary	3	
Sweden	2	
Denmark	1	
Lithuania	1	
Malta	1	
Poland	1	
Slovakia	1	
Slovenia	1	
Countries outside the European Union	95	48
No replies	17	6
Sub-total	470	111
Total	*581*	

I. Kind of education offered by the institution

With regard to the kind of education offered by the institution, respondents were asked in question 1.8 (mandatory for all but educational policy makers) to indicate whether it delivers online and/or distance education/training, conventional (e.g., face-to-face, campus-based) or mixed education/training provision. Half of the respondents stated their institution offered mixed provision, followed by traditional provision, with 37% of the responses.

Diagram 3.10.a – Kind of education offered by the respondents' institution

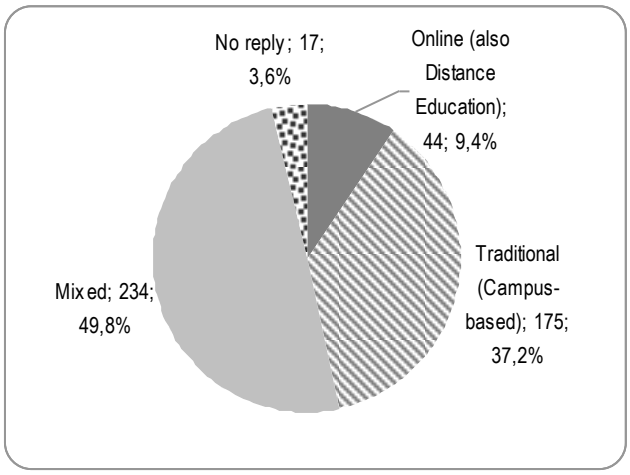
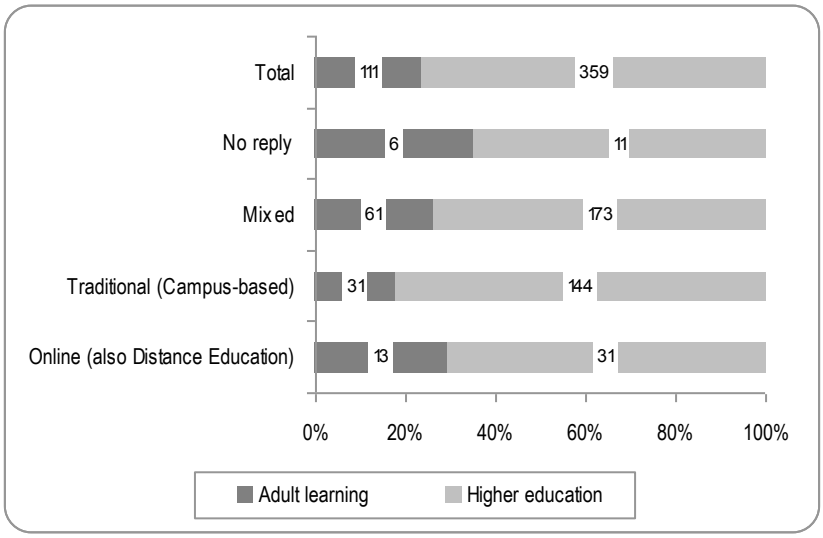


Diagram 3.10.b –Breakdown per sector



J. OER programmes or initiatives in the institution

Question 1.9 (mandatory for all but educational policy makers) inquired about the existence of OER programmes or initiatives in the respondents' institutions. 36.4% of respondents replied affirmatively, and 30.4% negatively. It should be noted that a total of 33.2% of respondents claimed not to be aware of such programmes or did not reply. When taking the two sectors into consideration, the frequency of negative replies is higher in adult learning.

Diagram 3.11.a – Existence of OER programme or initiative in the respondents' institution

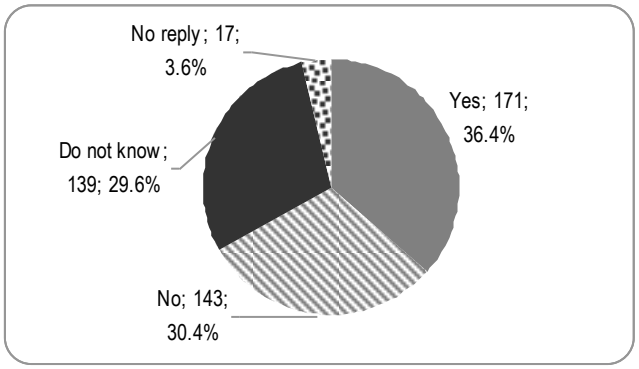
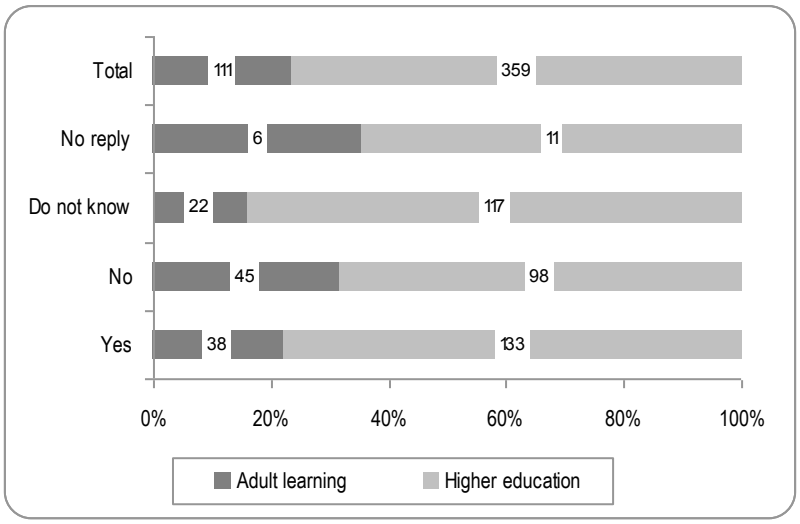


Diagram 3.11.b –Breakdown per sector



For the respondents who replied positively to this question, question 1.10 (not mandatory) invited respondents to provide information about the websites of their OER programme(s)/initiative(s). Overall, 16.4% of respondents provided that information (95 replies), evenly distributed in proportion by sector: 16.4% of respondents from higher education (77 replies) and 16.2% from adult learning (18 replies).

Chapter IV – Survey Data Analysis

This chapter addresses the analytical categories elicited in the framework of the research questions set out for interpretation in Chapter 2 of the present report. In particular it will process the sample data for each of the three macro level conditions as well as for four the micro level attributes.

A. MACRO LEVEL ANALYSIS

1. Public Policies

The first macro level condition of our research model deals with the opinion of respondents regarding the role of public policies in the domains of OER and OEP.

1. One question encompassing a set of three sub-questions addresses the level of public policies that respondents feel are necessary with regard to OER. In the following paragraphs we analyse the sub-questions, individually taken, one at a time.

Educational policy makers; institutional policy makers; educational professionals: This question is about the level of public policies that are needed around OER. Please rate the following statements:
1. The public policies only need to support the access to and availability of OER in higher education institutions/adult learning organisations.
2. There is a need for specific public policies to support and regulate the use of OER in higher education institutions/adult learning organisations.
3. Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.

1.1. Public policies only need to support the access to and availability of OER

Taking into consideration valid responses for the two questionnaires, 52% of respondents strongly agree and agree with the statement (corresponding to 41% of all respondents of the three target groups presented with this question).

Diagram 4.1.a – Public policies only need to support the access to and availability of OER

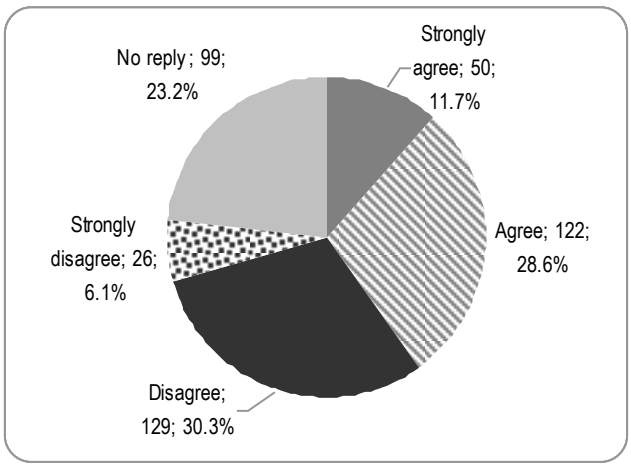


Diagram 4.1.b – Higher education

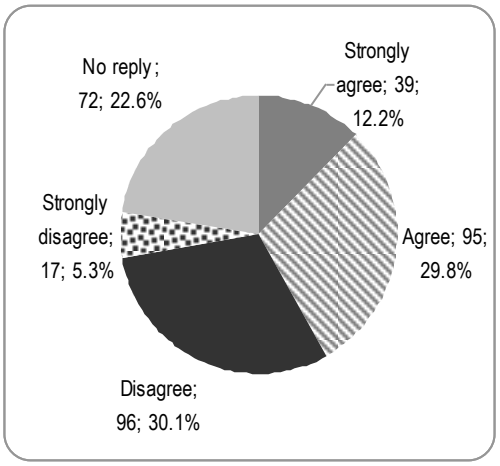
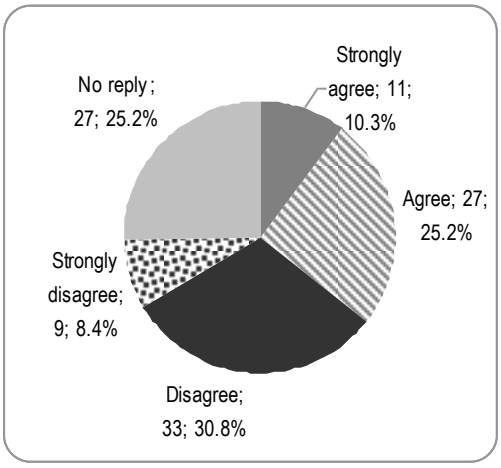


Diagram 4.1.c – Adult learning



There is a similar trend of agree and disagree responses given by higher education alone respondents about the scope of intervention of public policies. Combined strongly agree and agree responses add up to 54.3% of valid responses (corresponding to 42.0% of the three target groups presented with this question), whilst combined disagree and strongly disagree responses barely reach 45.7% of valid responses (corresponding to 35.4% of the three target groups).

However, data from adult learning alone respondents show a different picture: combined strongly agree and agree responses provide a total of 47.5% valid responses (35.5% of the three target groups), whilst combined disagree and strongly disagree responses hit a higher figure, *circa* 52.5% of valid responses (corresponding to 39.3% of the three target groups).

Diagram 4.2.a – Public policies only need to support the access to and availability of OER
Higher education – Breakdown per educational role

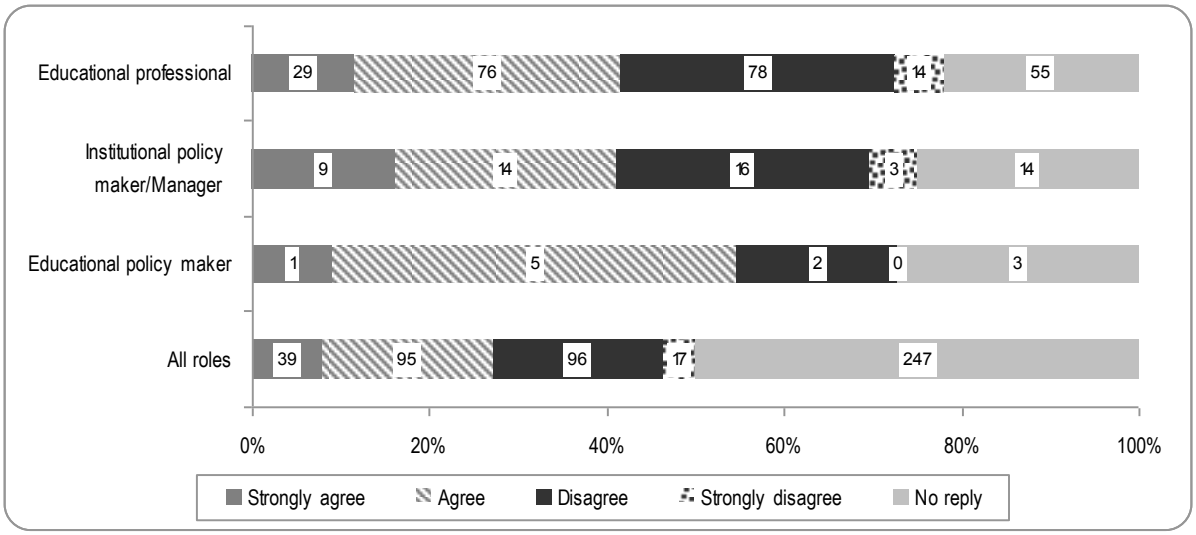
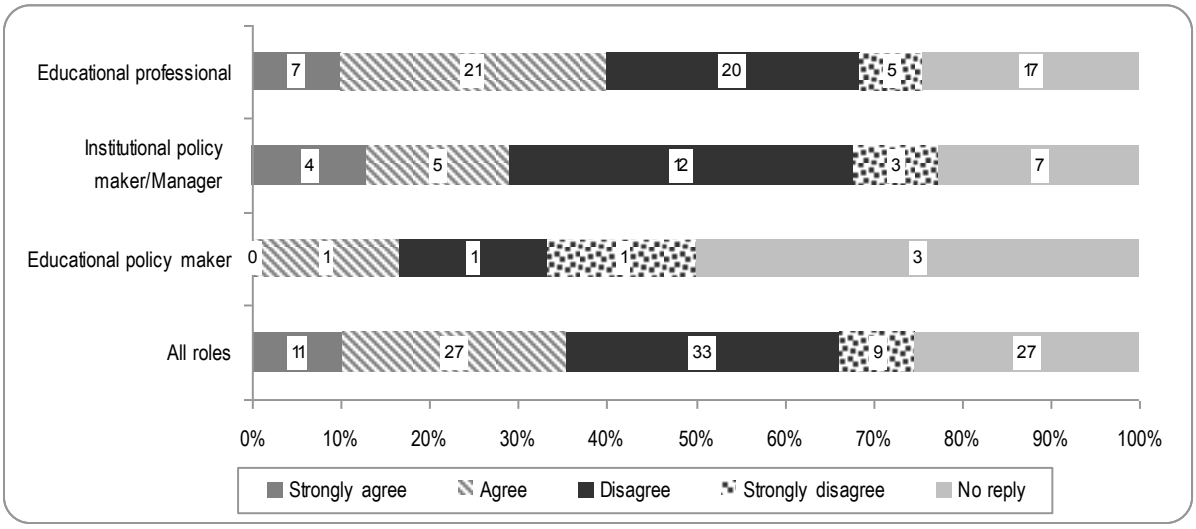


Diagram 4.2.b – Adult learning – Breakdown per educational role



Therefore, while overall data suggest that respondents do not see a need for public policies to support access to and availability of OER, respondents from the adult learning sector seem to favour a larger role of public policies in support of OER.

1.2. Need for specific public policies to support and regulate the use of OER

Valid responses for both questionnaires show that 75% of respondents strongly agree or agree with the statement proposed (58% of all respondents of the three educational groups surveyed). These results support the results from the previous sub-question, insofar that reactions to sub-question 2 call for wider public policy interventions.

Diagram 4.3.a – Need for specific public policies to support and regulate the use of OER

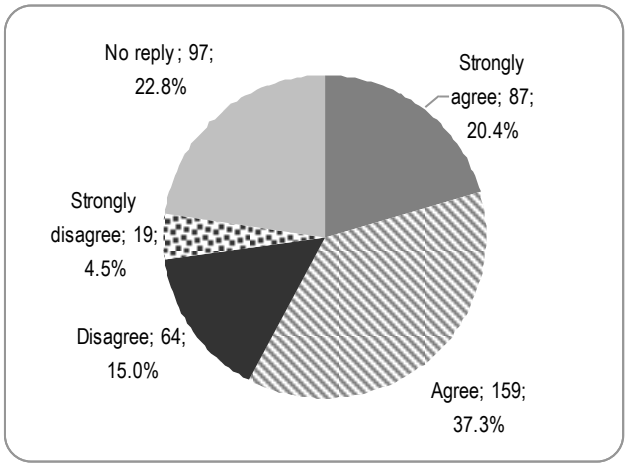


Diagram 4.3.b – Higher education

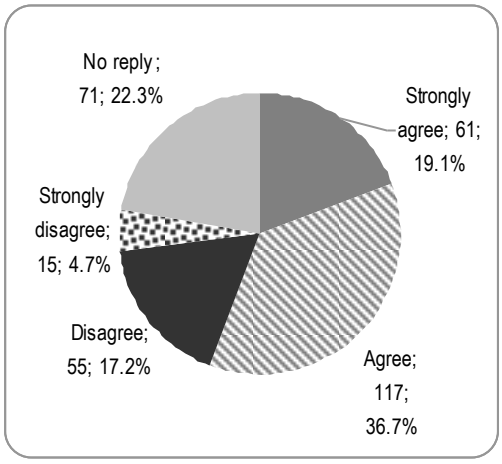
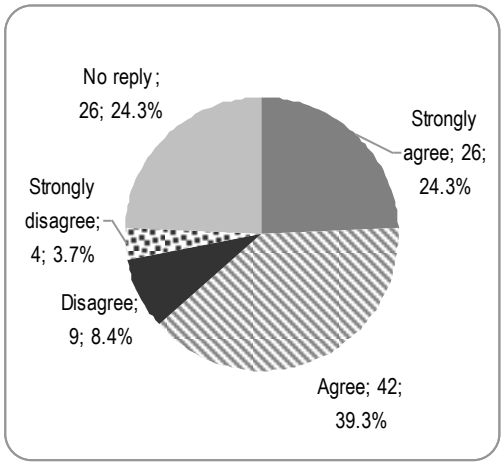


Diagram 4.3.c –Adult learning



The same trend favouring specific policies to support and regulate the use of OER is consistently detected in the analysis of each sector, when data is shown separately by cluster.

Diagram 4.4.a – Need for specific public policies to support and regulate the use of OER
Higher education – breakdown per educational role

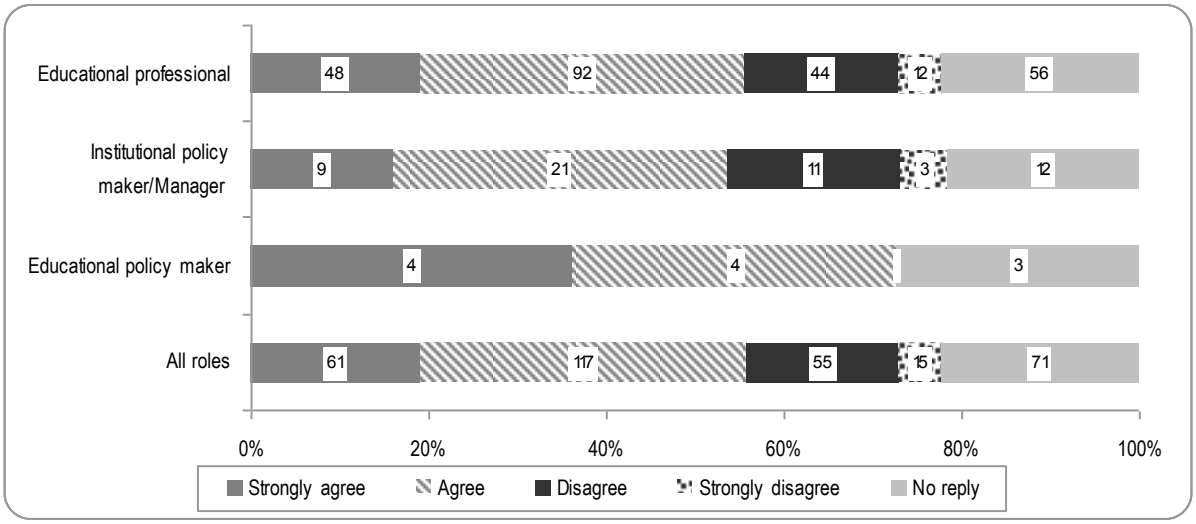
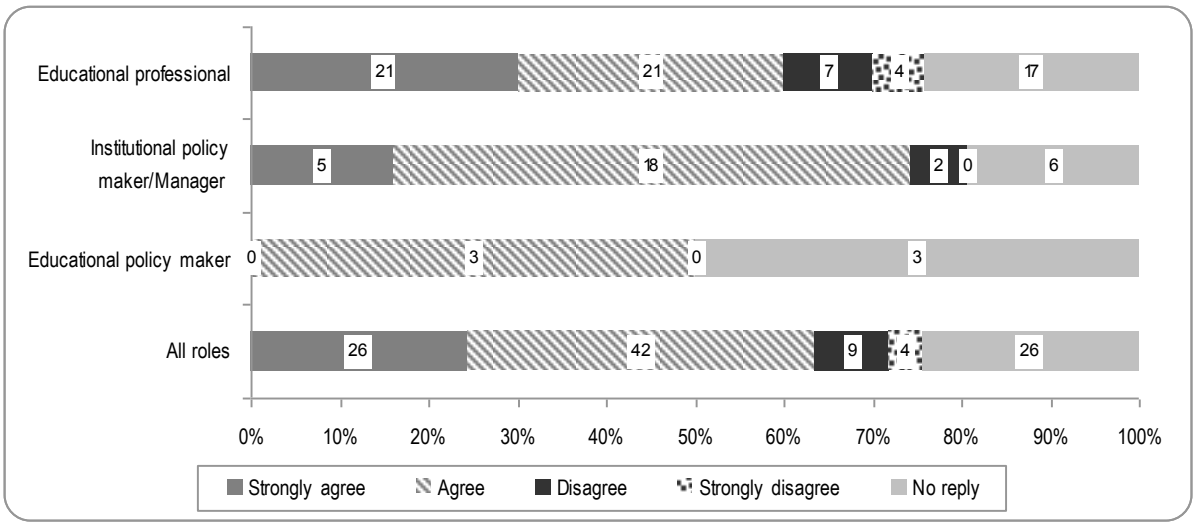


Diagram 4.4.b – Adult learning – breakdown per educational role



1.3. *Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.*

When inquired about the need for public policies aimed at supporting skill development, the vast majority of respondents strongly agrees and agrees with this statement, totalling 69.9% of all responses from the three educational groups surveyed. As with sub-question 2, data here would seem to contradict the results of sub-question 1. Thus, a similar comment is possible concerning the specific wording adopted for sub-question 1.

Diagram 4.5.a – Need for public policies to support skill development

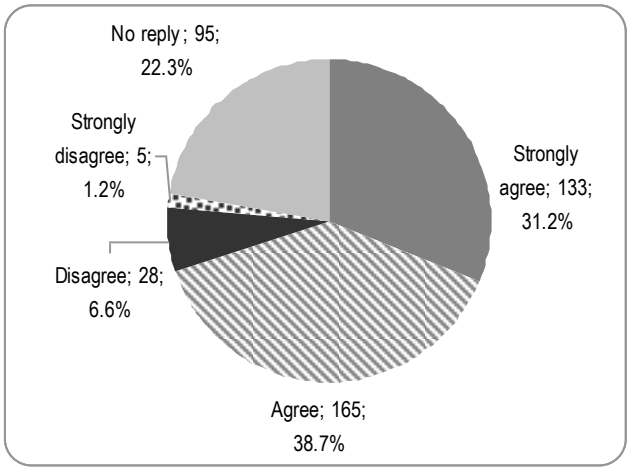


Diagram 4.5.b – Higher education

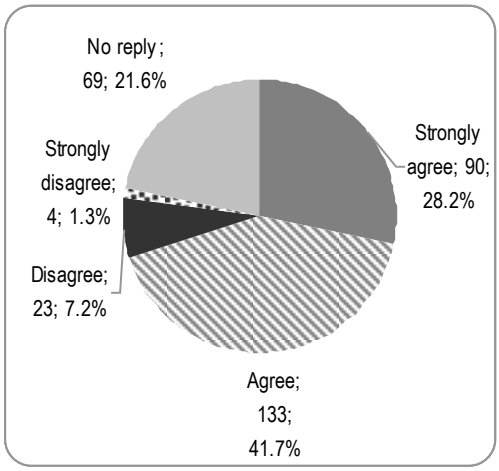
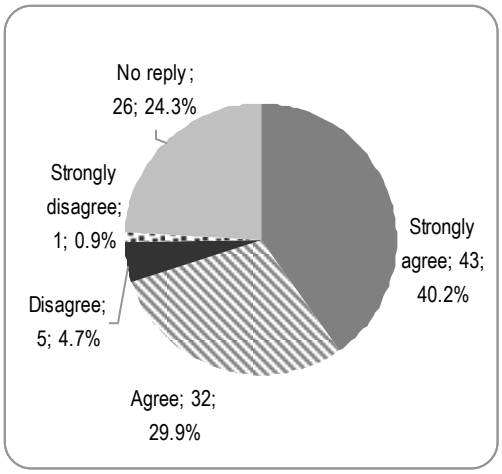


Diagram 4.5.c –Adult learning



The same trend can be observed when analysing responses sector by sector, as results from the breakdown of data provided in the two following diagrams.

Diagram 4.6.a – Need for public policies to support skill development
Higher education – Breakdown per educational role

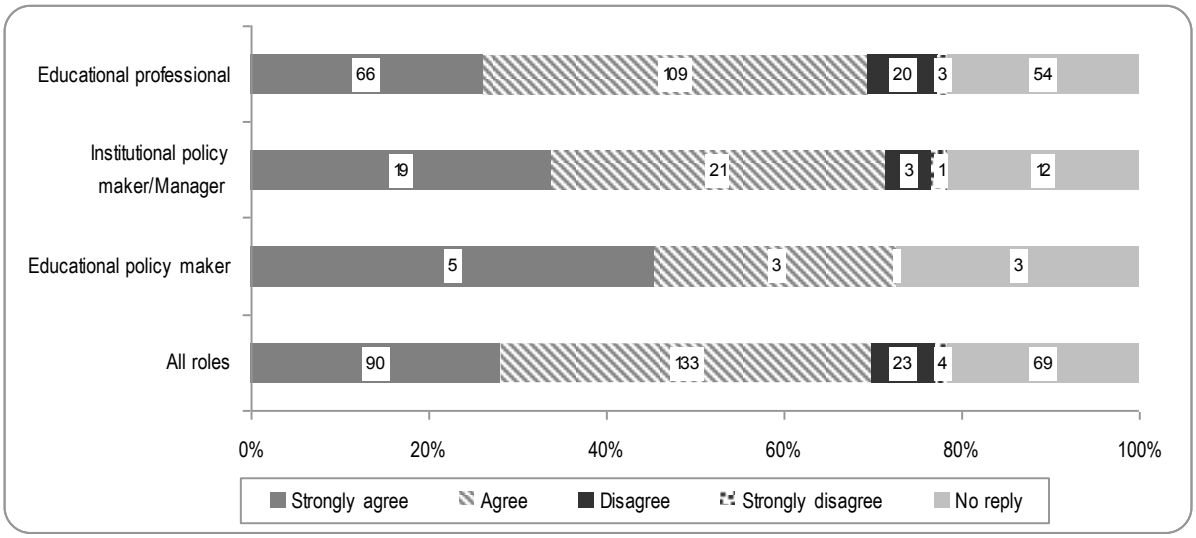
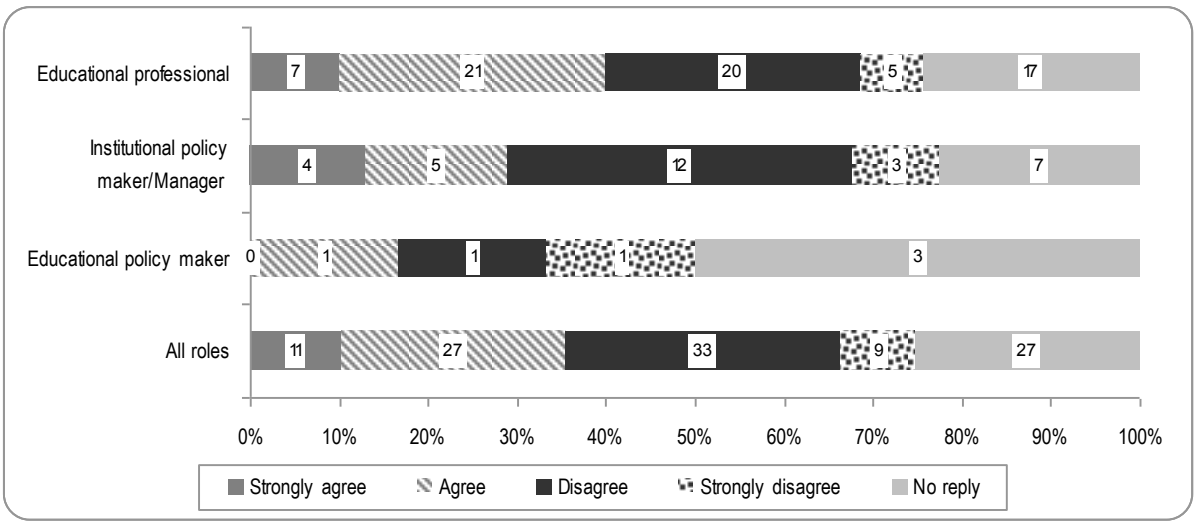


Diagram 4.6.b – Adult learning– Breakdown per educational role



2. Educational policy makers alone were queried about the relevance of eight supporting factors for OER.

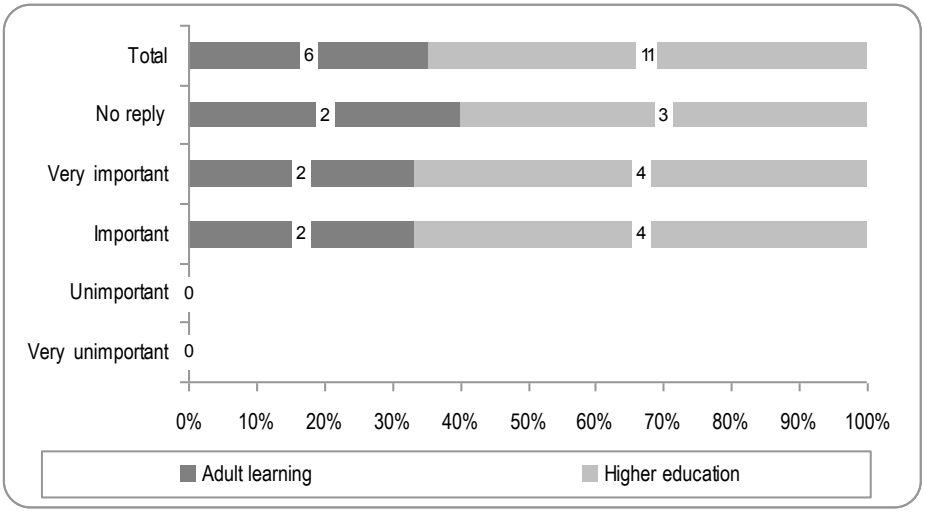
Educational policy makers: In your opinion, and from a policy perspective, how relevant are the following aspects in support of the effective use of OER in higher education/adult learning?
1. Support for OER promotion/awareness building.
2. Institutional support/recognition concerning OER projects/ initiatives.
3. Support for localisation/ adaptation/translation of existing OER.
4. Support in implementing appropriate licensing schemes regarding copyright.
5. Promotion of quality assurance for OER.
6. Access to appropriate technology/infrastructure.
7. Promotion of guidelines/standards for OER creation and use.
8. Provision of financial/sustainability support.

2.1. Support for OER promotion/awareness building

This item was positively rated by the two sectors in a robust and consistent way. The fact that 100% of the valid universe of respondents concurs that OER promotion/ awareness building is very

important or important is an unequivocal signal given both to policy makers and to institutional decision makers.

Diagram 4.7 – Support for OER promotion/awareness building

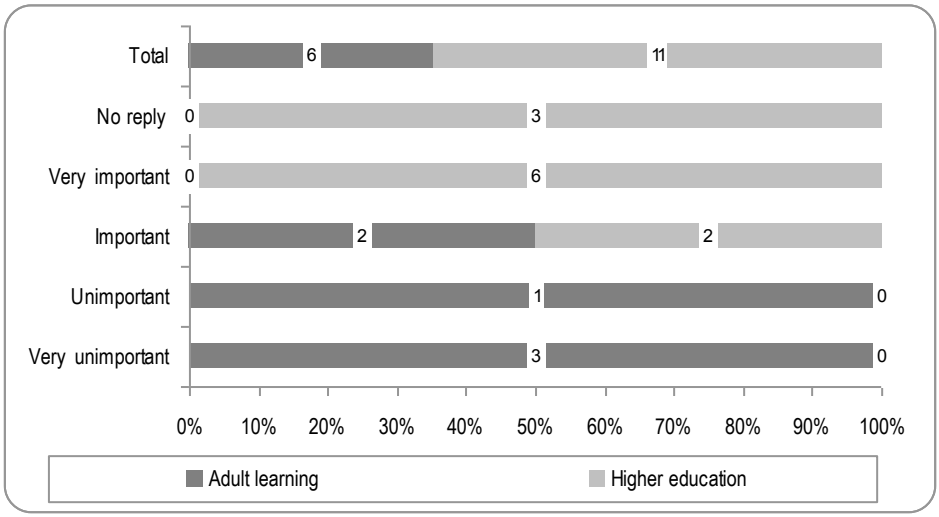


2.2. Institutional support/recognition concerning OER projects/ initiatives

This item of the questionnaire was on the whole positively rated, being regarded as very important by higher education policy makers.

The responses given to this question are totally coherent with the results of the previous item.

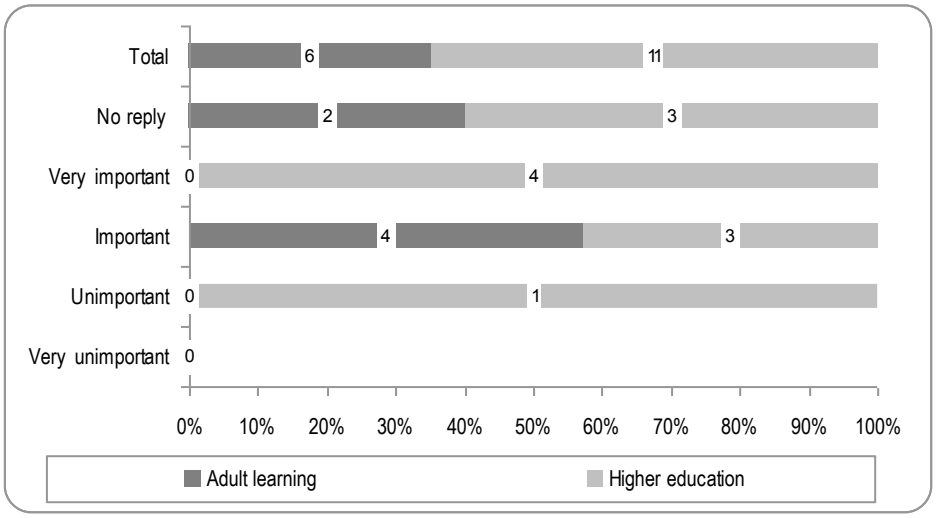
Diagram 4.8 – Institutional support/recognition concerning OER projects/ initiatives



2.3. Support for localisation/ adaptation/translation of existing OER

It is interesting to observe that educational policy makers align in favour of some form of local adjustment of OER to enable uptake and use. The important rating especially from higher education policy makers expresses a very significant demand.

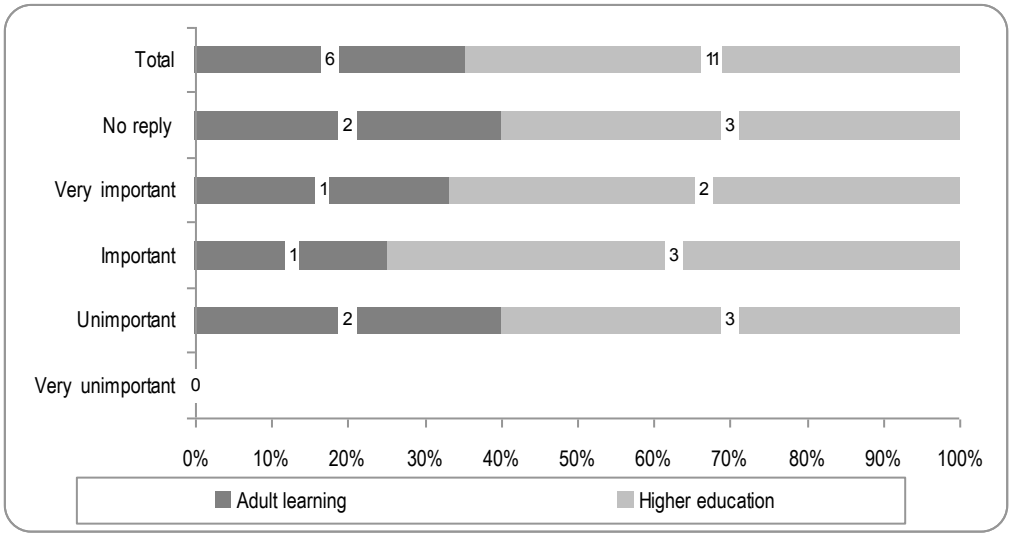
Diagram 4.9 – Support for localisation/ adaptation/translation of existing OER



2.4. Support in implementing appropriate licensing schemes regarding copyright

The scores register a fairly even rating, covering the entire range from unimportant to very important, and including an absence of opinion.

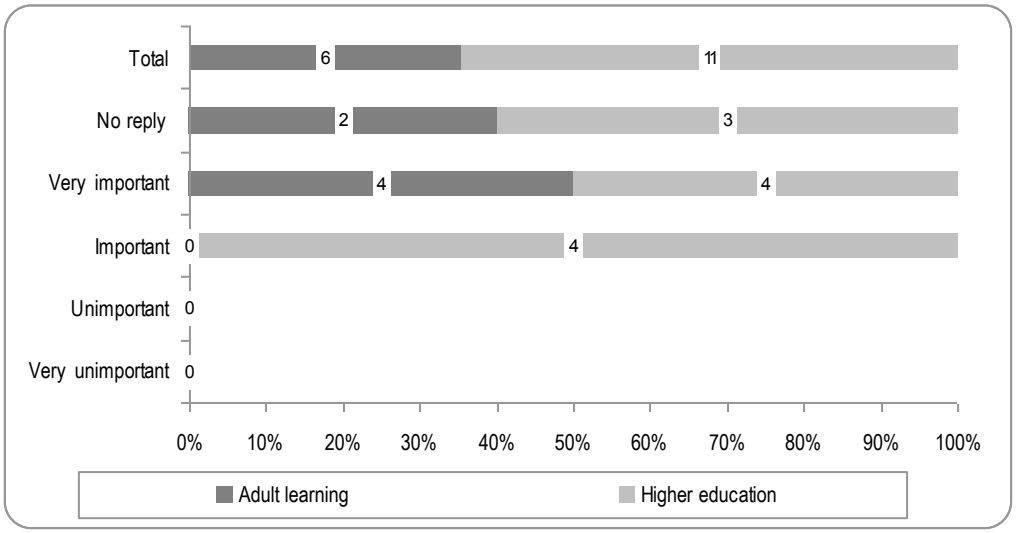
Diagram 4.10 – Support in implementing appropriate licensing schemes regarding copyright



2.5. Promotion of quality assurance for OER

Quality concerns regarding easily available and readily accessible OER receive a very high rating. Respondents mark this requirement as very important particularly in the perspective of the higher education policy sector.

Diagram 4.11 – Promotion of quality assurance for OER

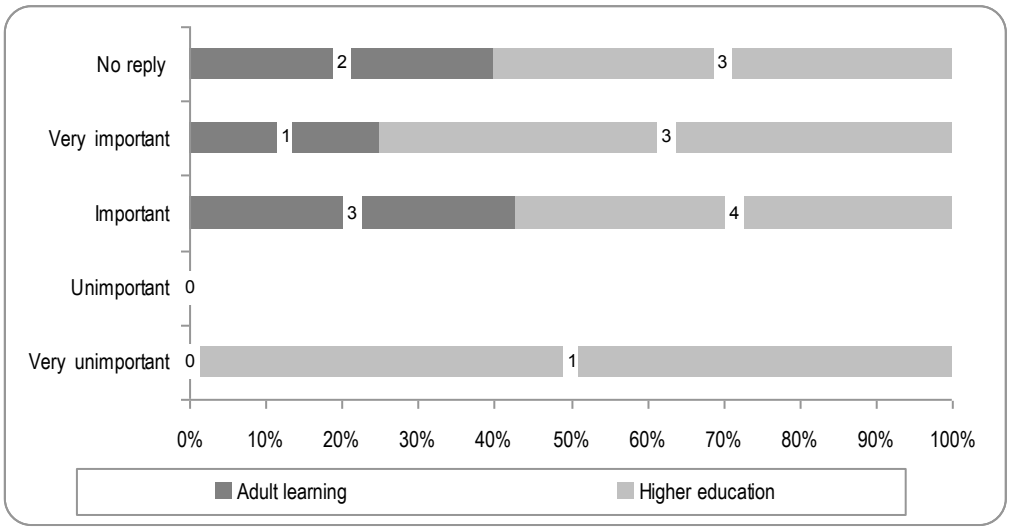


2.6. Access to appropriate technology/infrastructure

Again this item that raises infrastructural pre-conditions is considered by most respondents as important or very important.

By the same token, and consistently, higher education reveals a greater awareness than adult education on the generic enablers that foster a rapid uptake of OER.

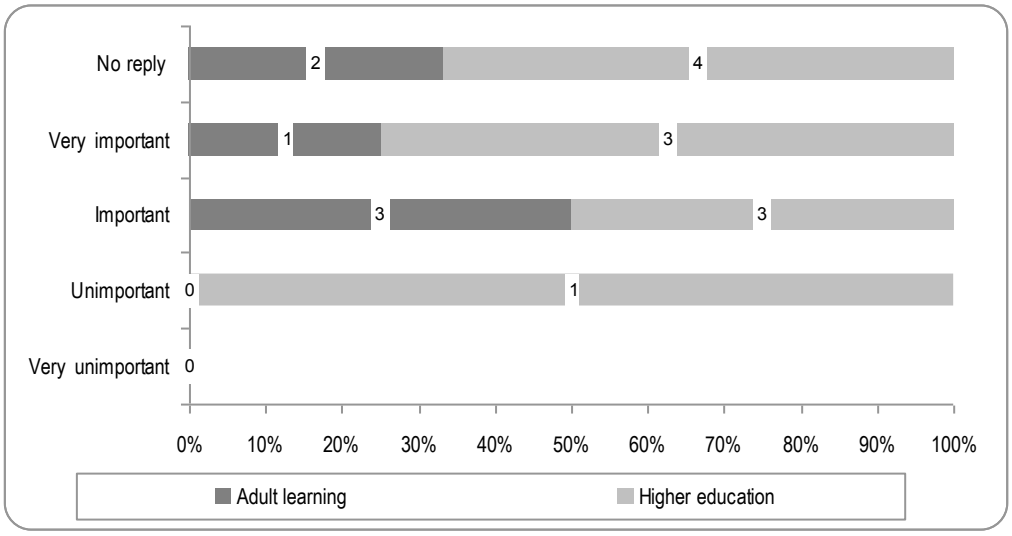
Diagram 4.12 – Access to appropriate technology/infrastructure



2.7. Promotion of guidelines/standards for OER creation and use

Once more, responses show the same pattern. Guidelines and standardisation are deemed important and very important by respondents, being the latter rating emphasised by higher education officials.

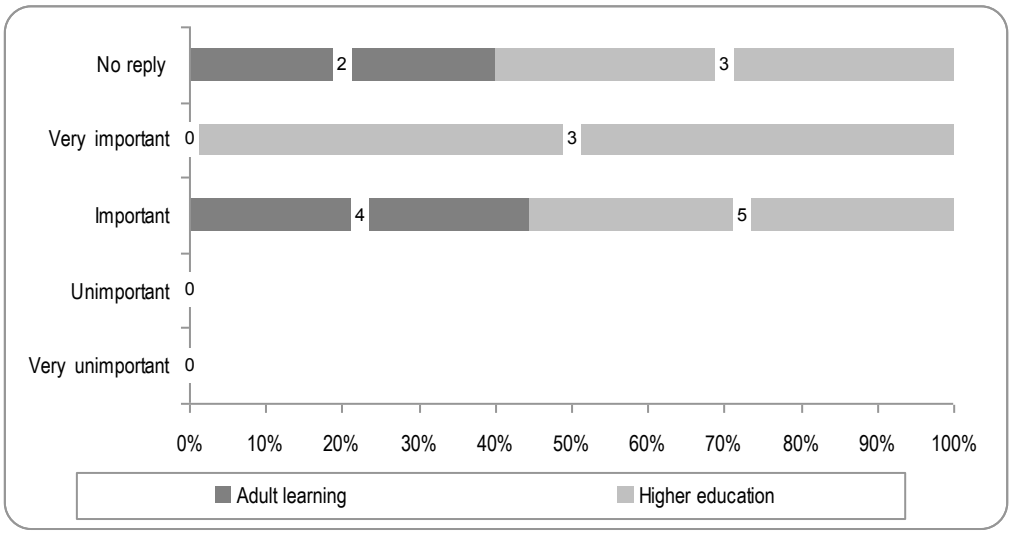
Diagram 4.13 – Promotion of guidelines/standards for OER creation and use



2.8. Provision of financial/sustainability support

In accordance with the high scores granted to the necessity of enacting appropriate incentives to the dissemination and uptake of OER, financial support is deemed important and very important by the majority of policy makers surveyed. Again, the relative weight of very positive responses is skewed toward the higher education sector.

Diagram 4.14 – Provision of financial/sustainability support



When appraising the whole set of policy areas addressed by the eight statements that made up this question, it can be concluded that, although the number of respondents was relatively narrow, there is a clear positive trend in favour of educational policies that address the particular areas targeted by each statement.

This trend is very coherently upheld when breaking down the responses given by the two sectors covered in the survey, with a consistent predominance of respondents coming from the realm of higher education.

3. Educational professionals were asked for their opinion on another statement that can be linked to public policies.

Educational professionals: How would you rate the following statements?
8. In order to stimulate the use of OER, specific skill support is needed.

Agree and strongly agree were the majority opinions retained by educational professionals, with a similar distribution when breaking down responses by sector.

Diagram 4.15.a – Need for specific skill support

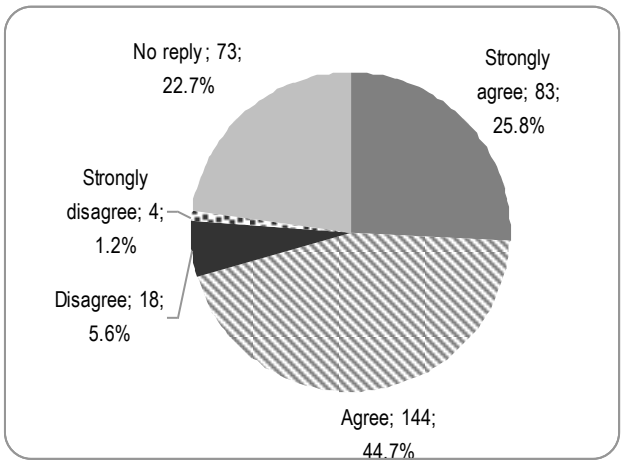


Diagram 4.15.b –Higher education

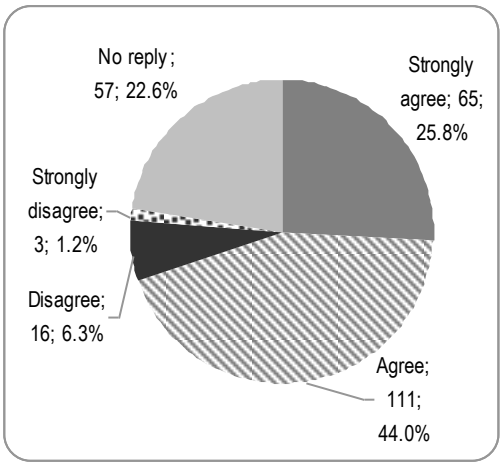
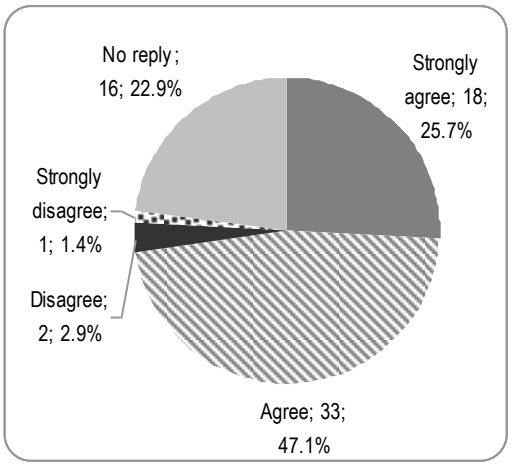


Diagram 4.15.c –Adult learning



4. One other sub-question regarding barriers to the use of OER can also be analysed from a public policies perspective, namely:

All respondents: Please evaluate the relevance of the following barriers to the use of OER from your personal experience:
13. Lack of policies at national/regional level to support the creation or use of OER.

The majority of respondents (60%) leaned toward the idea that a lack of national/regional policies is

an important and very important barrier, with higher distributions in the adult learning sector. The level of no replies is fairly high, at 27.4% overall.

Diagram 4.16.a – Lack of policies at national/regional level to support the creation or use of OER

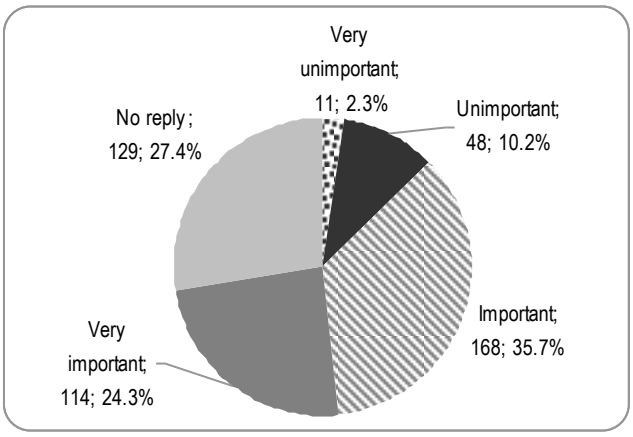


Diagram 4.16.b – Higher education

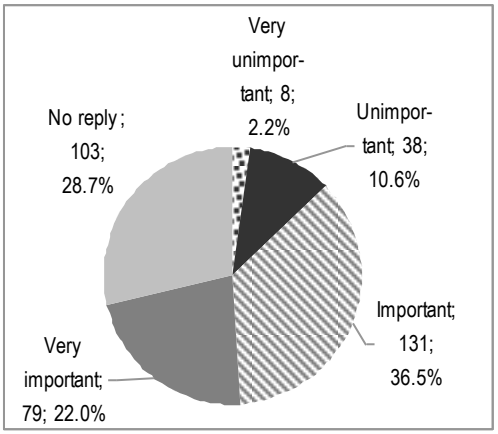
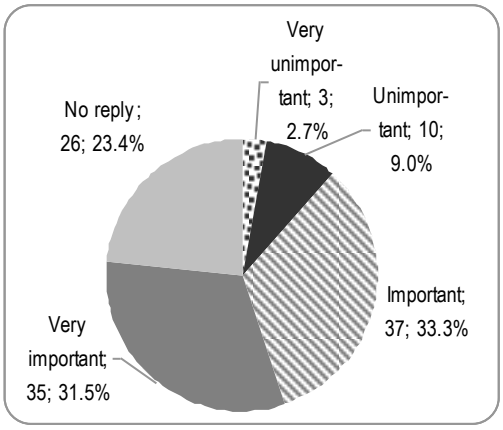


Diagram 4.16.c – Adult learning



The defined trend holds across most categories elicited in the survey within each sector. This consistency reveals a high degree of consensus reached in the entire educational segment surveyed regardless of the levels of responsibility or activity.

Diagram 4.17.a – Lack of policies at national/regional level to support the creation or use of OER
Higher education – breakdown per educational role

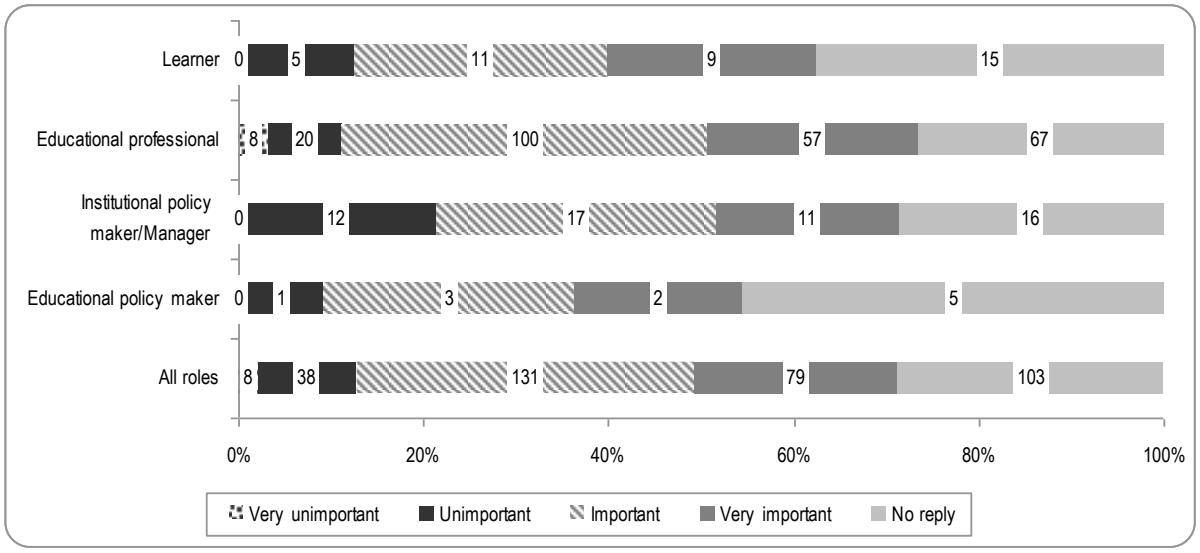
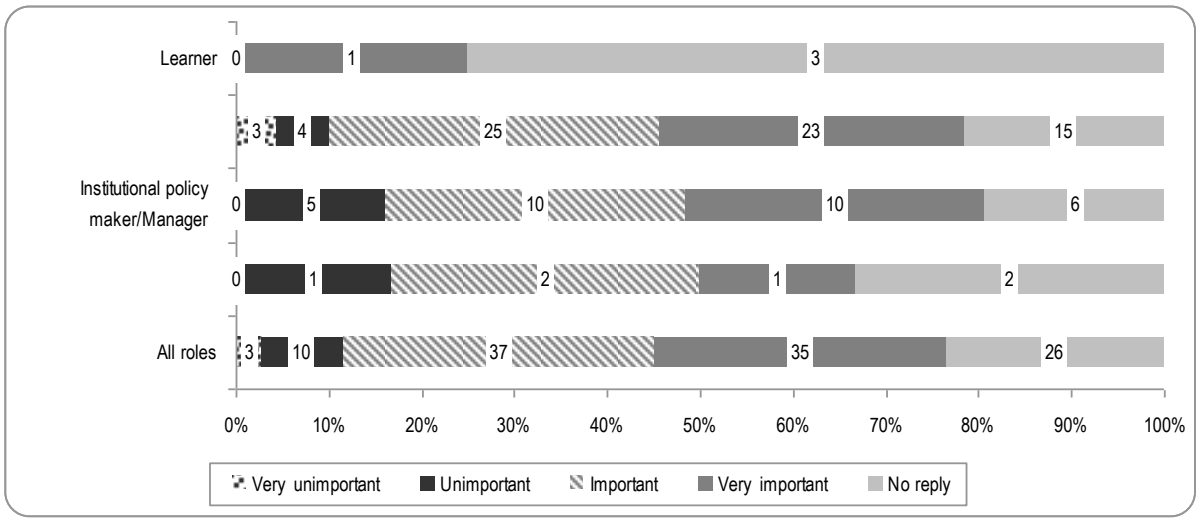


Diagram 4.17.b – Adult learning – breakdown per educational role



In conclusion, the cross-analysis of data regarding questions and sub-questions that were categorised in chapter I as a *macro level condition: public policies*, points to a rather advanced awareness of the importance of public policies to further OER developments. This awareness is a notorious fact not only among educational policy makers but equally across the four educational roles targeted by the OPAL survey. Whenever rating the relevance of specific areas for policy intervention, a clear majority of respondents provided positive or very positive scores.

Moreover, it is noteworthy that the overall percentage of *no* replies to sub-questions (all of which were not mandatory) is not negligible. This could denote the existence of a sizable segment of respondents that are either unaware of OER and OEP or simply do not consider these new digital-driven tools as sufficiently relevant to their core concerns to warrant clear-cut opinions.

2. Networks of Innovation

The second macro level condition of our research model deals with the opinion of respondents regarding the role of networks of innovation in shaping OER developments and open educational practices. One sub-question falls under this analytical category:

> *Institutional policy makers; educational professionals: In your higher education institution/adult learning organisation, how would you rate the following factors in support of the use of OER?*
> *2. A partnership with other organisations.*

As a supporting factor to the use of OER, 54.0% of all respondents stated that a partnership with other organisations existed in the three varying degrees presented in the question. The prevalence of such partnerships augments from the lowest values registered for organisation-wide implementation to the highest values recorded for the existence of individual efforts (with the exception of adult learning, where the implementation category in some departments/units supersedes the individual efforts).

Diagram 4.18.a – A partnership with other organisations

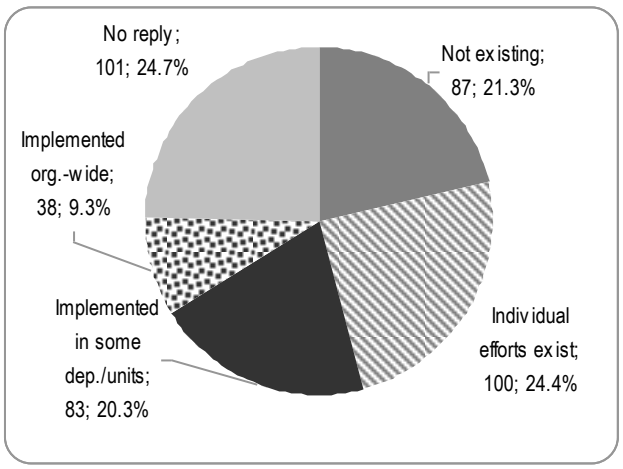


Diagram 4.18.b – Higher education

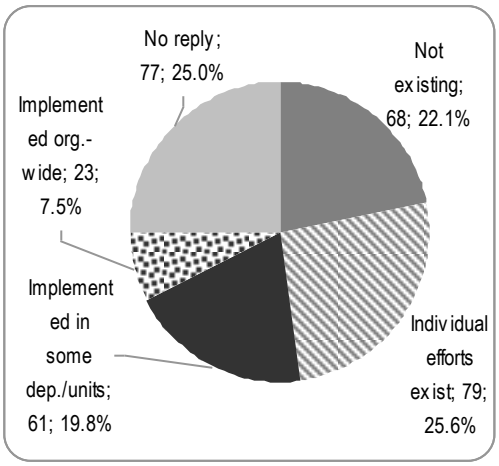
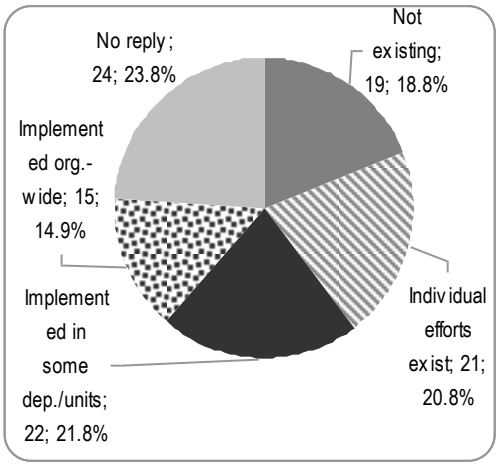


Diagram 4.18.c – Adult learning



The overall trend described above is closely followed in the breakdown by educational roles for higher education and adult learning.

Diagram 4.19.a – A partnership with other organisations
Higher education – breakdown per educational role

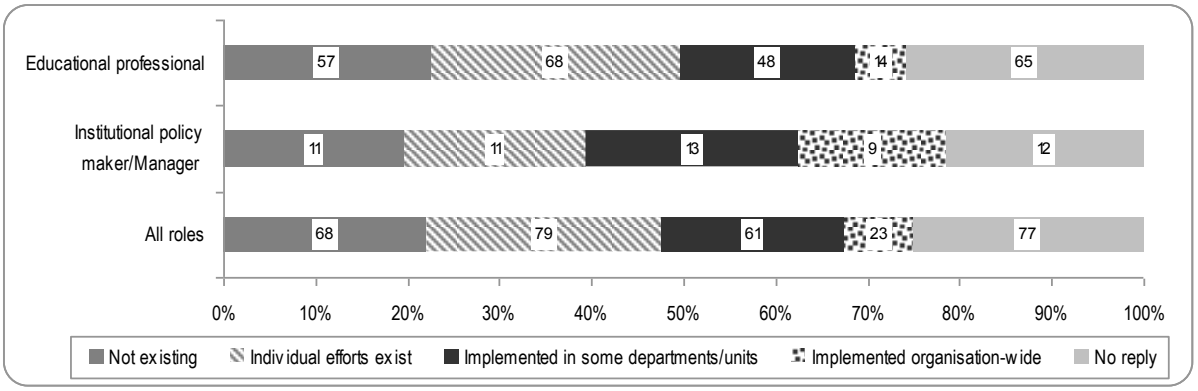
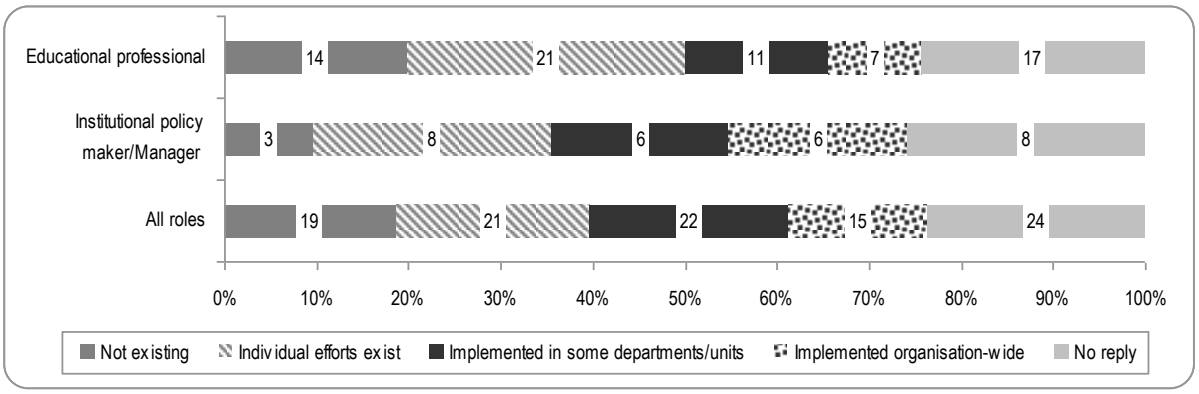


Diagram 4.19.b – Adult learning – breakdown per educational role



As a pointer for future work, it seems a timely suggestion that in future OPAL work greater attention is dedicated to this relevant macro level condition, expanding from the existence of partnerships with other institutions to various other forms of networks of innovation, and also including perceptions regarding their potential value in moving forward both effective OEP and enabling communities of practice shaped around collaborative OEP.

3. OER Availability

This macro level condition of our research model deals with the opinion of respondents regarding the role of OER supply in shaping OER developments and open educational practices overall.

1. One question dealing with the experiences of respondents on barriers to the use of OER tackles several issues pertaining to the supply of OER. We have elicited the following sub-questions:

All educational roles: Please evaluate the relevance of the following barriers to the use of OER from your personal experience:
6. Lack of quality of the OER.
7. Lack of OER that are culturally relevant to the user.
8. Lack of OER in the user's native language.
15. Lack of interest in creating or using OER.

1.1. Lack of quality of the OER

Overall, the majority of respondents stated that this barrier is important or very important (47.4%, against 24.2% who stated it was unimportant or very unimportant). Likewise, the breakdown per sector follows the same pattern.

Diagram 4.20.a – Lack of quality of the OER

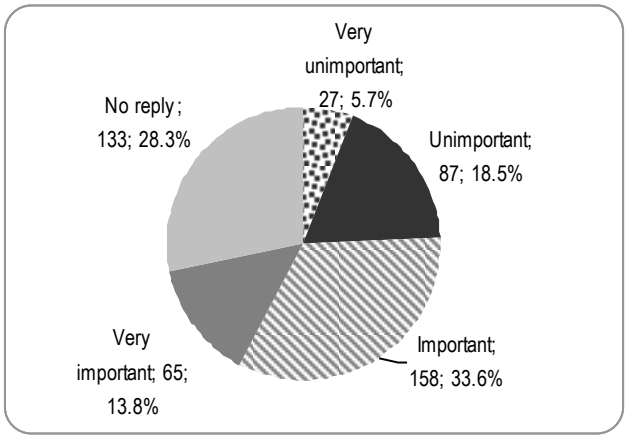


Diagram 4.20.b – Higher education

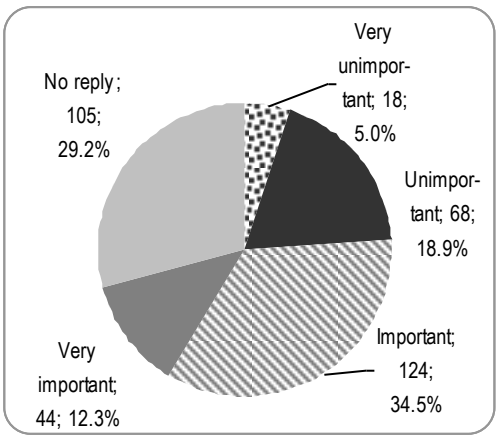
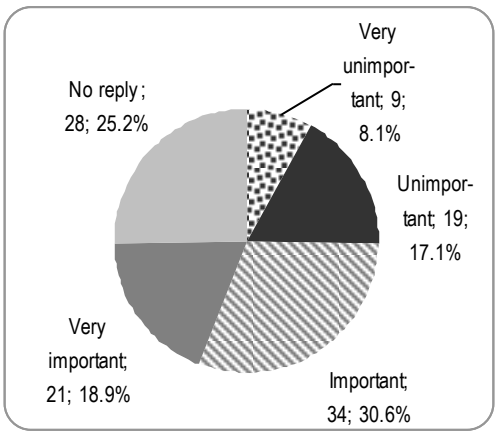


Diagram 4.20.c – Adult learning



The general pattern observed is also followed in higher education by the institutional policy makers/managers and the educational professionals. In the adult learning sector, 62.3% of institutional policy makers/managers rate this factor positively, against 16.1% who rate it negatively, while opinions are more balanced in the educational professionals of this sector, with 45.7% positive replies, against 32.9% of negative ones.

Diagram 4.21.a – Lack of quality of the OER
Higher education – breakdown per educational role

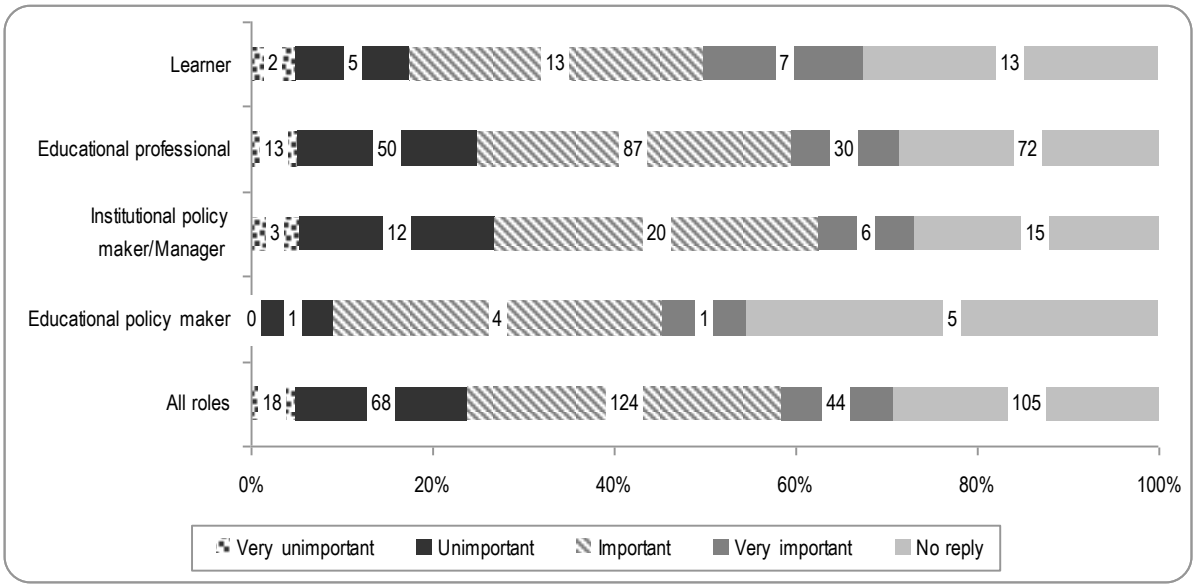
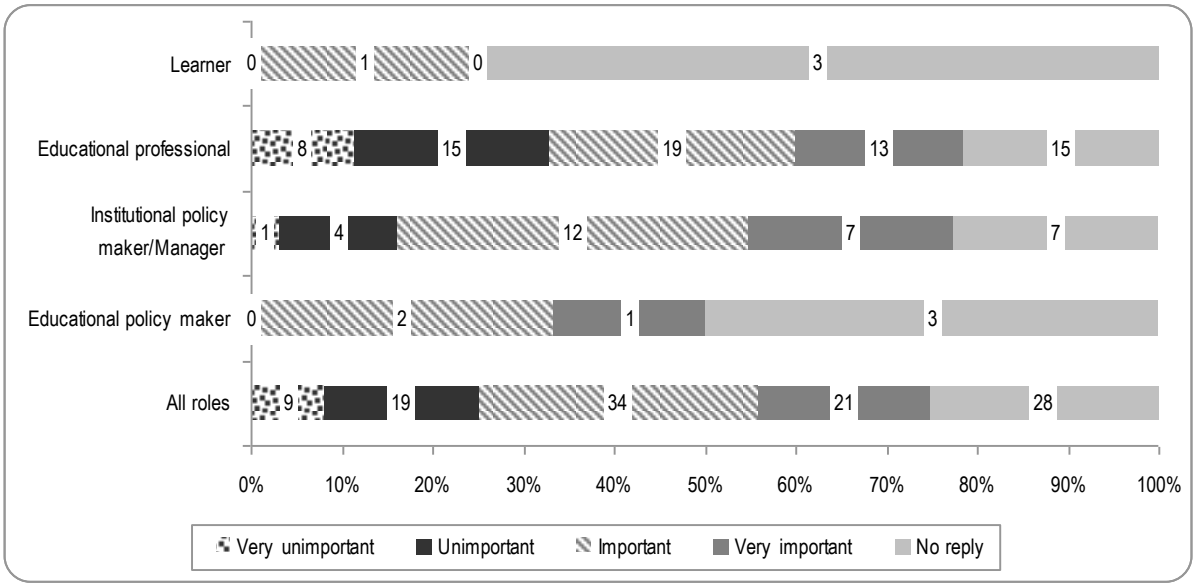


Diagram 4.21.b – Adult learning – breakdown per educational role



1.2. Lack of OER that are culturally relevant to the user

Half of all respondents felt that this barrier is very important or important, with a higher contribution from the adult learning sector, in relative terms. The rating of very unimportant was notably low, and similarly so in both sectors under scrutiny.

Diagram 4.22.a – Lack of OER that are culturally relevant to the user

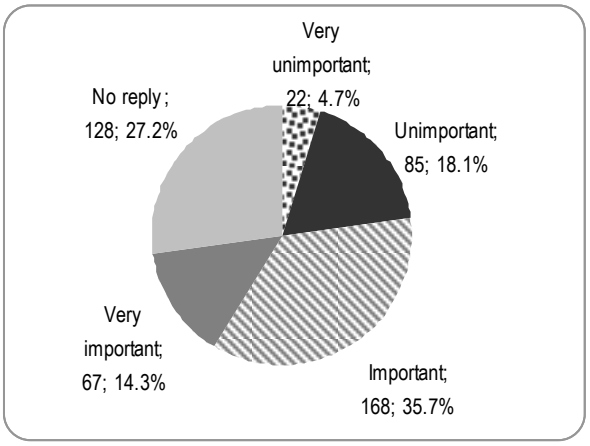


Diagram 4.22.b – Higher education

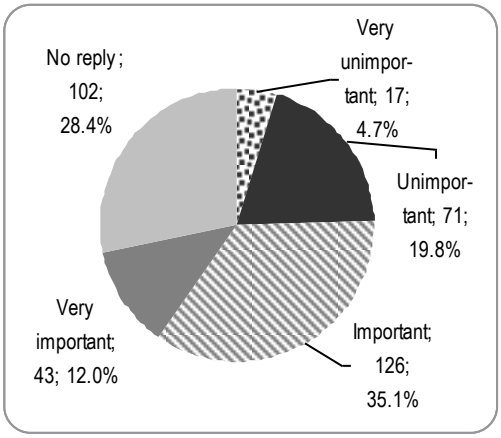
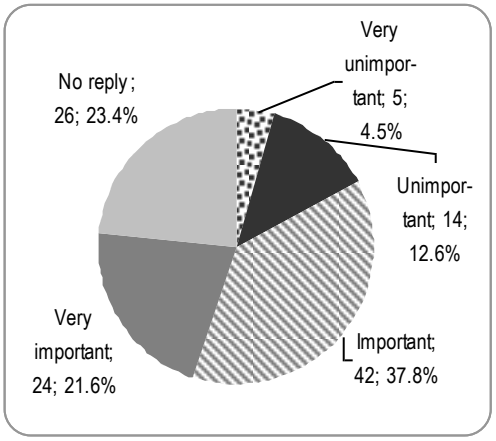


Diagram 4.22.c – Adult learning questionnaire



Considering the breakdown by educational role in the two sectors surveyed, both institutional policy makers/managers and educational professionals share a pattern of *circa* half of the responses with a preference for positive attributes and *circa* a quarter for the negative ones.

Diagram 4.23.a –Lack of OER that are culturally relevant to the user
Higher education – breakdown per educational role

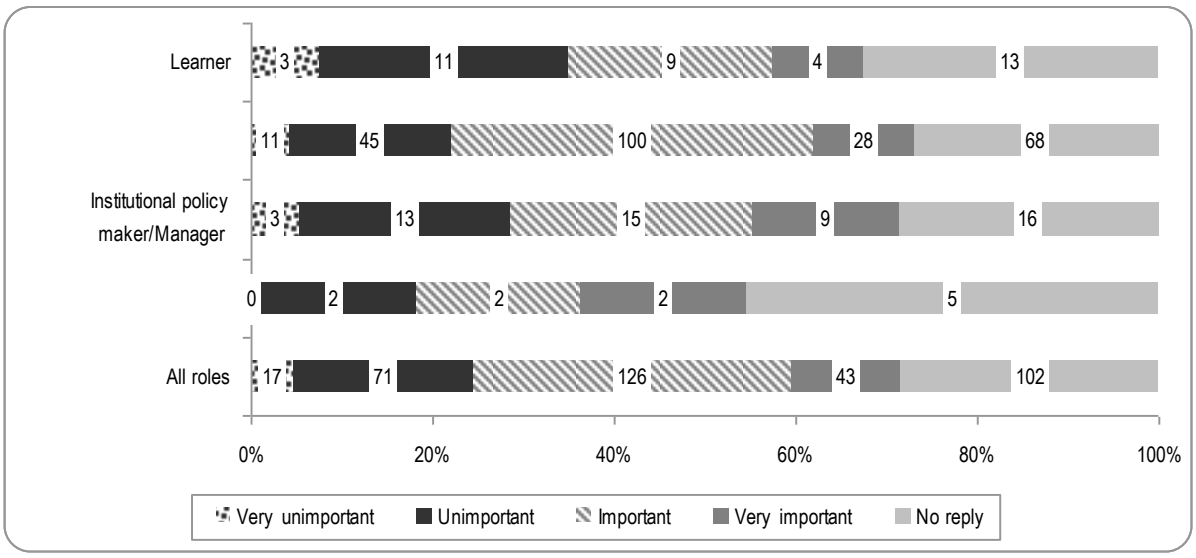
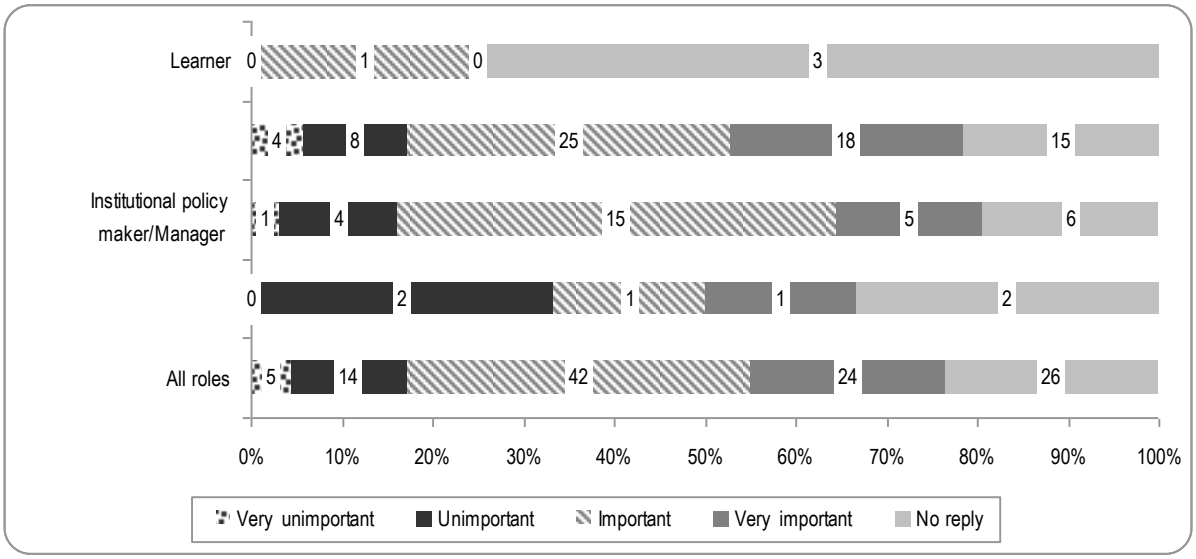


Diagram 4.23.b – Adult learning – breakdown per educational role



1.3. Lack of OER in the user's native language

Near half of all respondents rated this barrier as very important or important; the corresponding score for adult learning respondents was 56.7%.

Diagram 4.24.a – Lack of OER in the user's native language

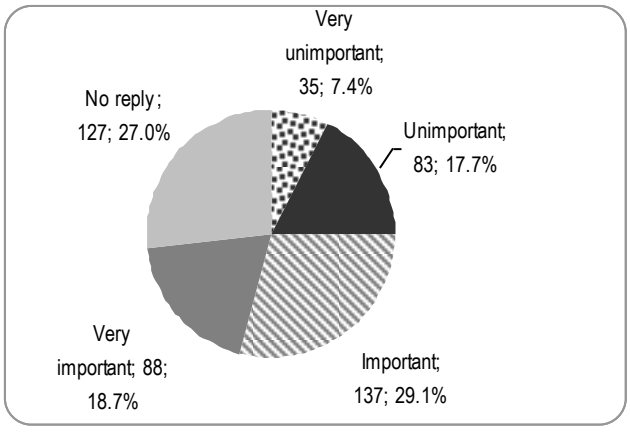


Diagram 4.24.b –Higher education

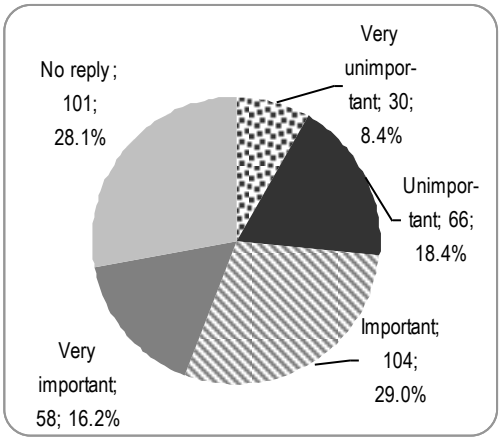
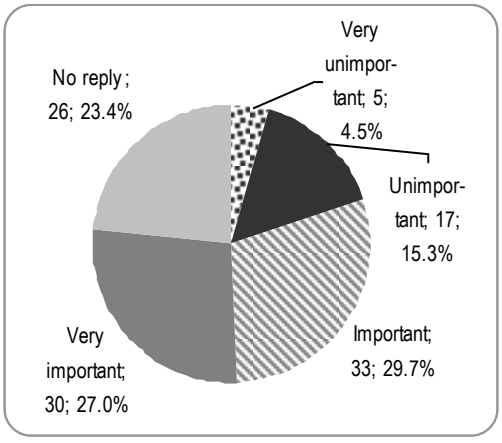


Diagram 4.24.c – Adult learning



The above trend can also be observed in both institutional policy makers/managers and educational professionals of the two sectors surveyed.

Diagram 4.25.a – Lack of OER in the user's native language
Higher education – breakdown per educational role

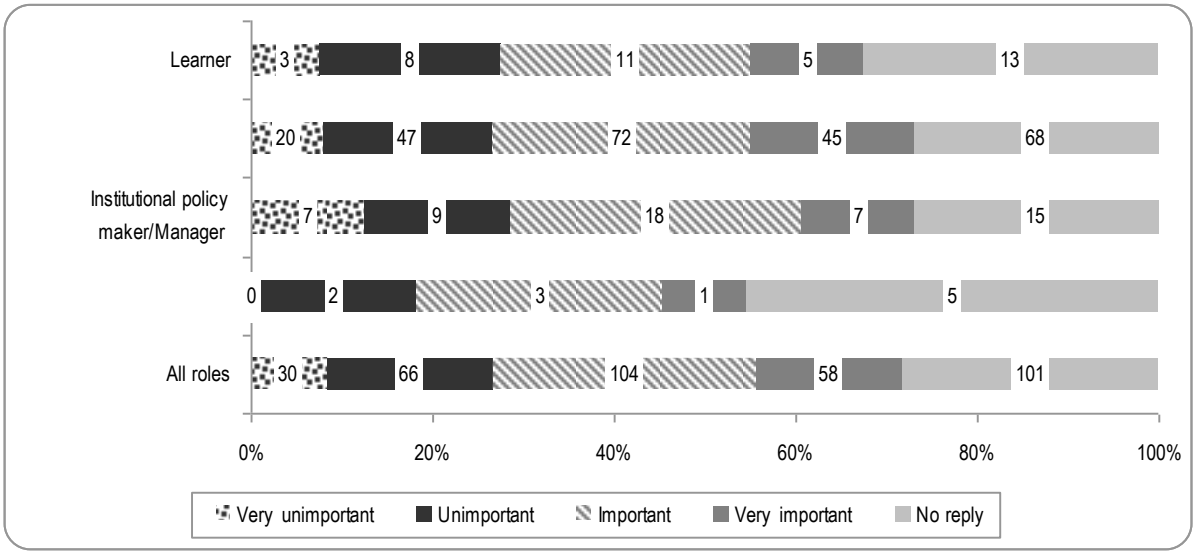
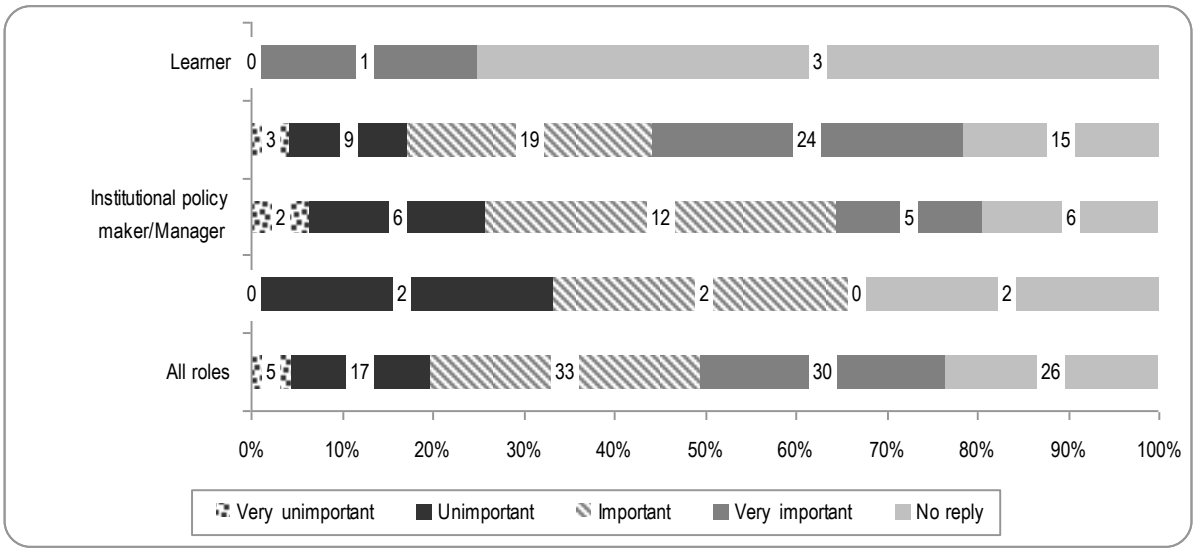


Diagram 4.25.b –Adult learning – breakdown per educational role



1.4. Lack of interest in creating or using OER

A clear majority of respondents (58.5%) feels that this barrier is very important and important. Likewise, the breakdown into sectors provides a similar pattern.

Diagram 4.26.a – Lack of interest in creating or using OER

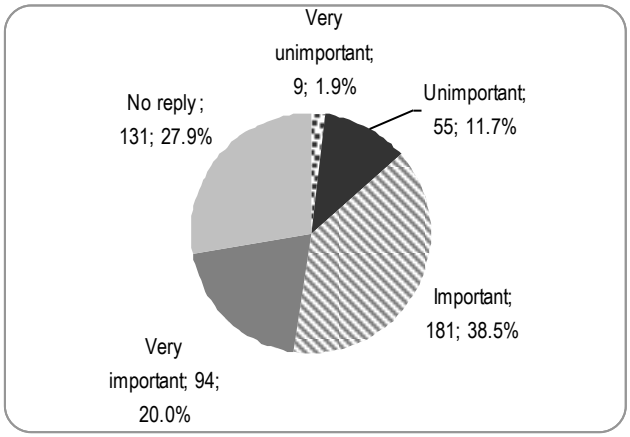


Diagram 4.26.b – Higher education

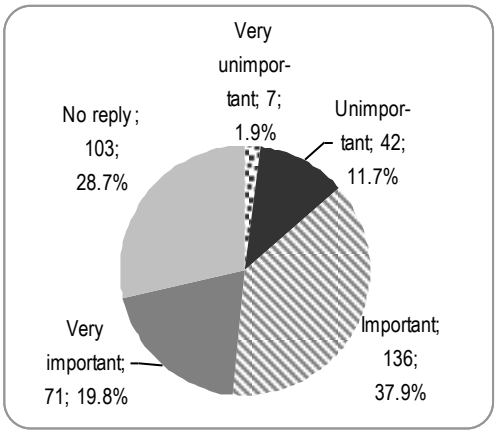
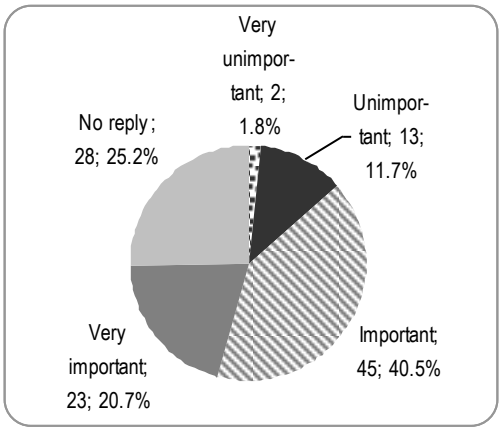


Diagram 4.26.c – Adult learning



In analysing the breakdown per educational role in each sector, one observes that in higher education 50.0% of institutional policy makers/managers rate this sub-question positively, while as much as 61.5% of educational professionals do so; in adult learning, the lead is taken by institutional policy makers/managers, at 67.7% of positive replies, and the educational professionals follow suit, at 61.4%.

Diagram 4.27.a – Lack of interest in creating or using OER
Higher education – breakdown per educational role

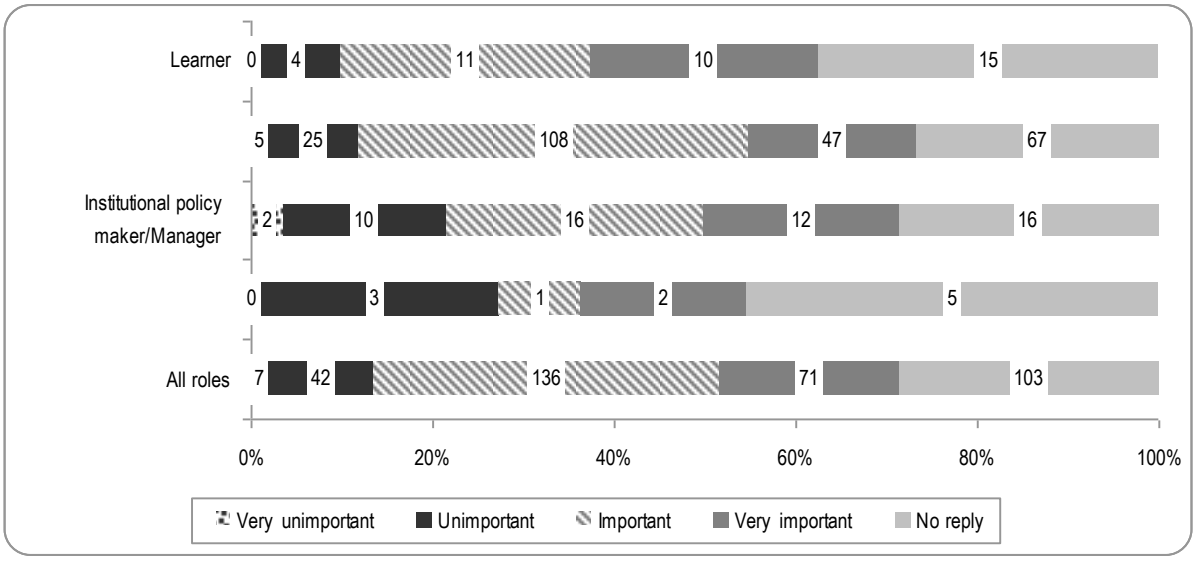
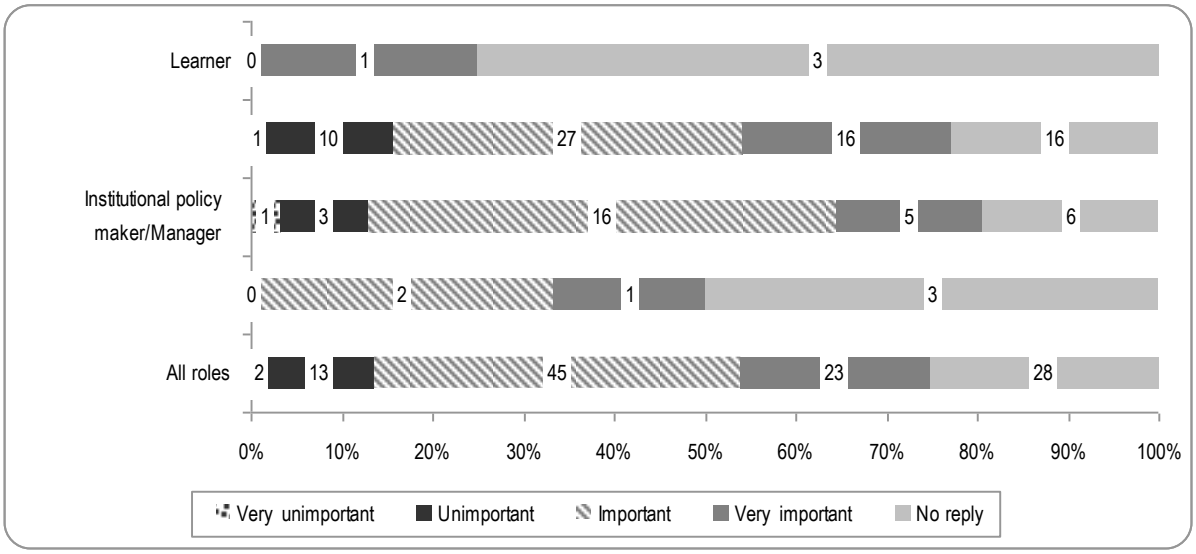


Diagram 4.27.b – Adult learning – breakdown per educational role



2. When probing into a further understanding of the role of OER supply in shaping OER developments, we analysed the responses regarding one of the sub-questions of a question put to two educational roles:

> *Institutional policy maker/manager; educational professionals: In your higher education institution/adult learning organisation, how would you rate the following factors in support of the use of OER?*
> *3. Specific quality assurance processes for OER.*
> *4. Specific technological infrastructure for OER (e.g., an OER repository).*

2.1. Specific quality assurance processes for OER

For higher education and adult learning, there is a prevalent notion that there are no specific quality assurance processes in place for OER, totalling 31.8% of all responses, followed by the item indicating individual efforts. The least represented item regards the implementation of OER quality assurance processes across the organisation, with only 8.1% of all responses. This pattern is fairly identical in both sectors, with the exception of adult learning, where individual efforts rank higher and the non-existence of quality assurance processes ranks lower.

Diagram 4.28.a – Specific quality assurance processes for OER

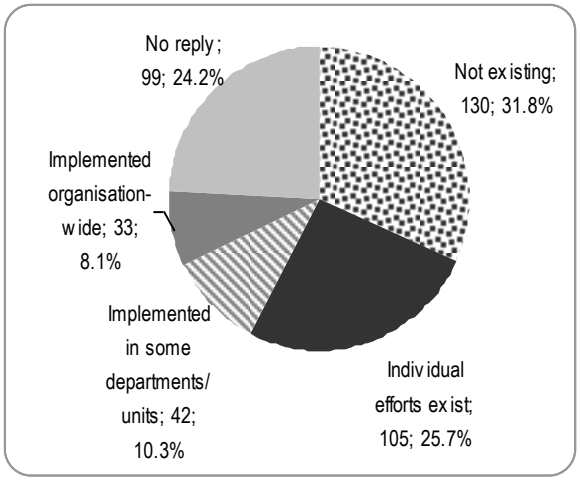


Diagram 4.28.b – Higher education

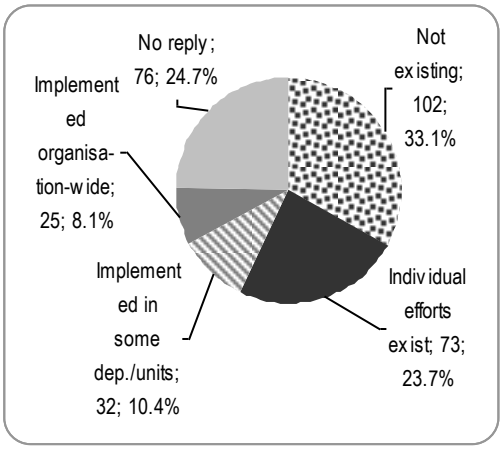


Diagram 4.28.c – Adult learning

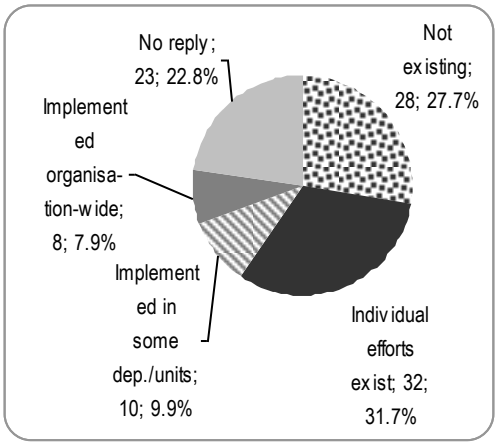


Diagram 4.29.a – Specific quality assurance processes for OER
Higher education – breakdown per educational role

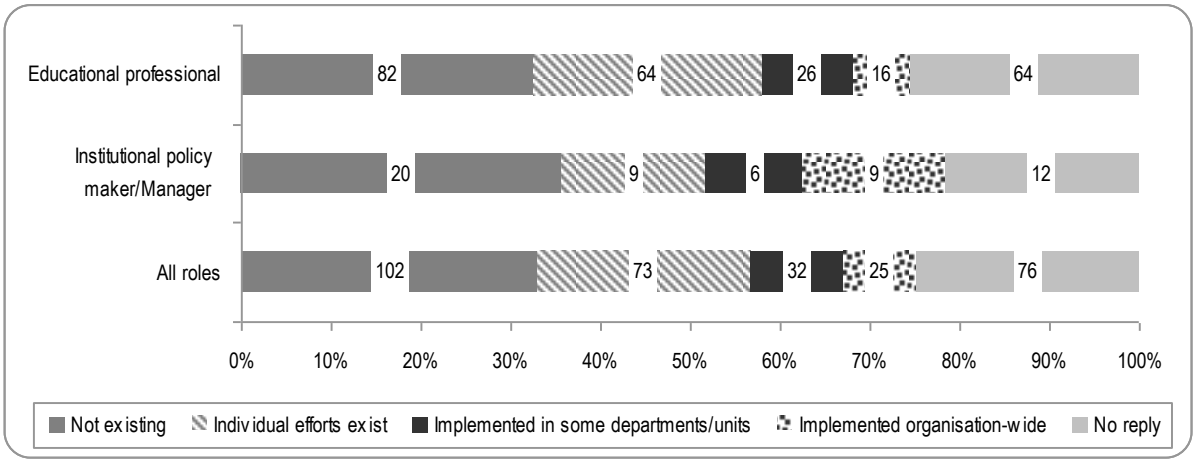
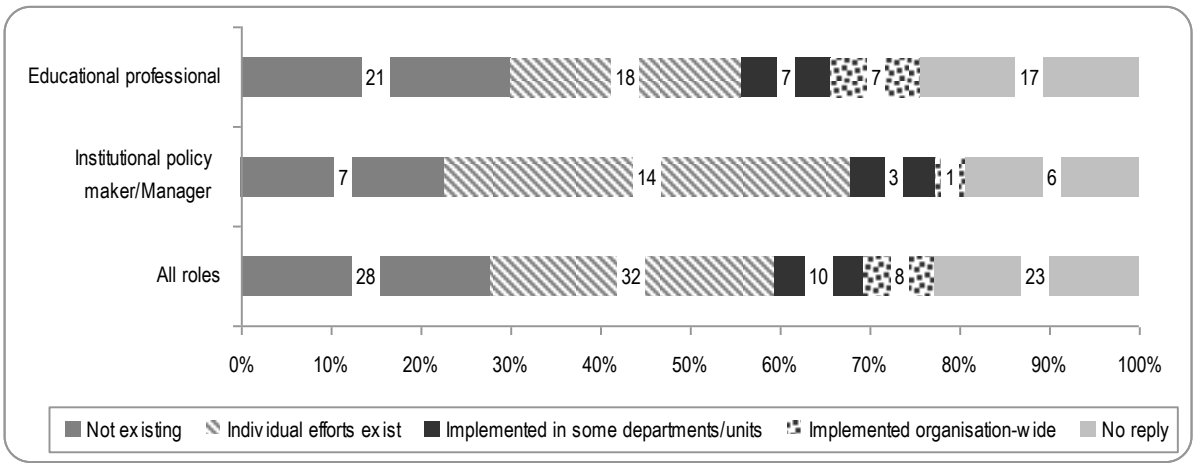


Diagram 4.29.b – Adult learning – breakdown per educational role



When considering the breakdown for the two educational roles concerned with this question, some divergences are apparent, notably as to the percentages regarding the existence of individual efforts and the organisation-wide implementation, particularly among the institutional policy makers/ managers.

Table 4.1 – Specific quality assurance processes for OER

	Higher education		Adult learning	
	Institutional policy maker/Manager	Educational professional	Institutional policy maker/Manager	Educational professional
Not existing	35.7%	32.5%	22.6%	30.0%
Individual efforts exist	16.1%	25.4%	45.2%	25.7%
Implemented in some departments/units	10.7%	10.3%	9.7%	10.0%
Implemented organisation-wide	16.1%	6.3%	3.2%	10.0%
No reply	21.4%	25.4%	19.4%	24.3%
Total	100.0%	100.0%	100.0%	100.0%

The analysis of the data for sub-question 3 points to the need for institutional measures/policies to be adopted in this domain, so that the existing individual efforts may permeate through the whole organisation, and would suggest the need for public policies to support vibrant quality assurance processes for OER.

2.2. Specific technological infrastructure for OER

The responses are spread across the possible replies in a fairly balanced way overall, with the reply on individual efforts leading overall and for higher education. Again, we can see a pattern emerging where the sum of replies on non-existence of technological infrastructures and the existence of individual efforts outweighs the two replies geared towards institutionalised practices.

It's worth noting that in the adult learning sector respondents reported a much lower percentage of organisation-wide implementation of technological infrastructures for OER than those coming from higher education; adult education responses also report the highest percentage of such infrastructures implemented in some departments/units.

Diagram 4.30.a – Specific technological infrastructure for OER

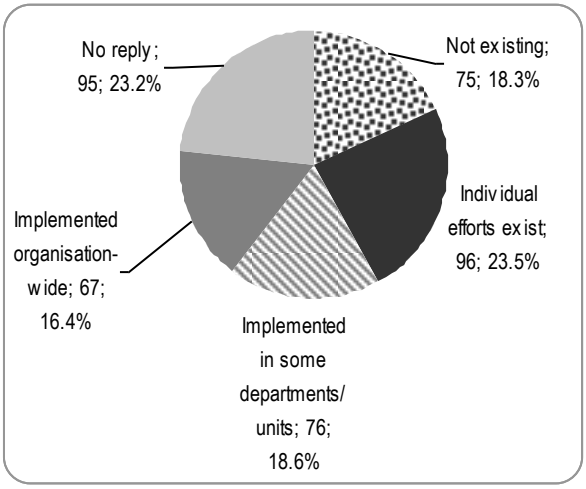


Diagram 4.30.b – Higher education

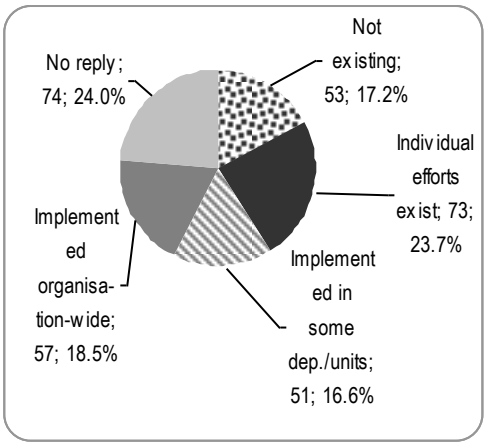


Diagram 4.30.c – Adult learning

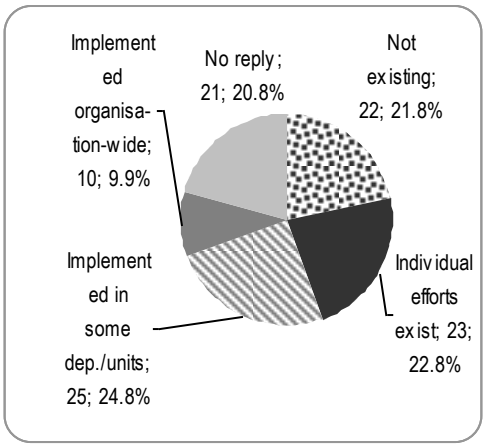


Diagram 4.31.a – Specific technological infrastructure for OER
Higher education – breakdown per educational role

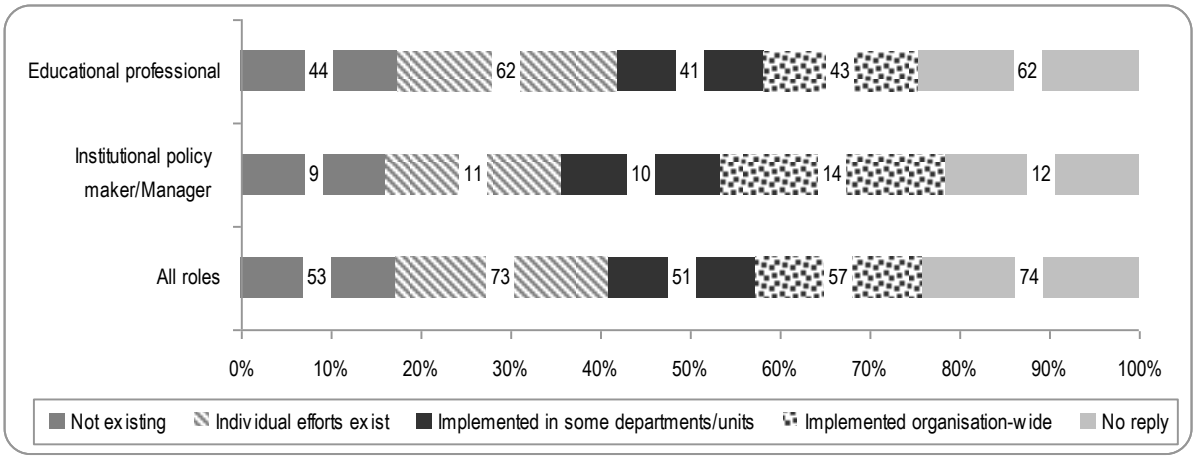
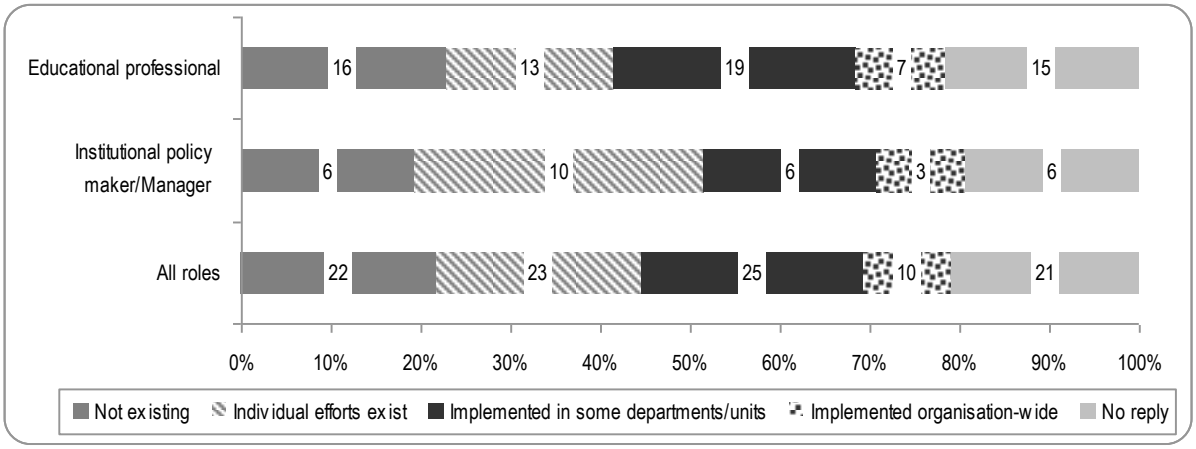


Diagram 4.31.b – Adult learning – breakdown per educational role



As with the previous sub-question, data analysis would suggest that there is room for active policies encouraging the implementation of technological infrastructures for OER where they lack. The same could be asserted about opportunities for widening the scope of practices and supporting structures scaling up individual and unit-based efforts to the entire organisation. Appropriate institutional

policies to address these issues could be helpful in this regard as a complement effort to compound public policies.

3. The survey queried learners about issues related to OER supply, notably in the following two sub-questions:

> *Learners: How would you rate the following statements?*
> *3. As a learner, I am encouraged to develop learning materials myself and share those with others on the Internet.*
> *4. The quality of open educational resources is too diverse for OER to be really useful.*

3.1. Learners are encouraged to develop and share learning materials

Learners from the two sectors spread their opinions across the four attributes, with a higher, similar prevalence on agreement and disagreement, thus making it difficult to extract a clear trend.

Diagram 4.32.a – Learners are encouraged to develop and share learning materials

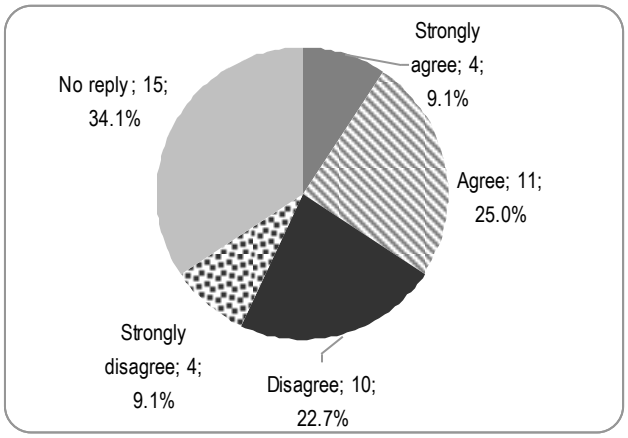


Diagram 4.32.b – Higher education

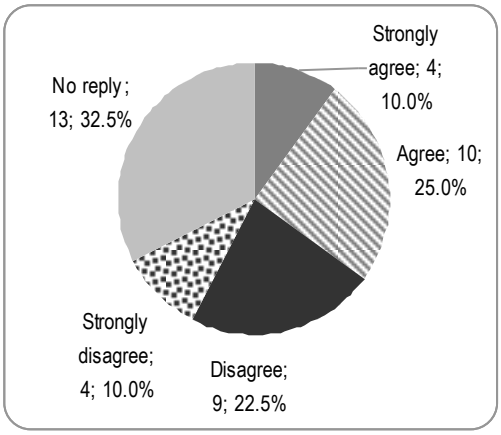
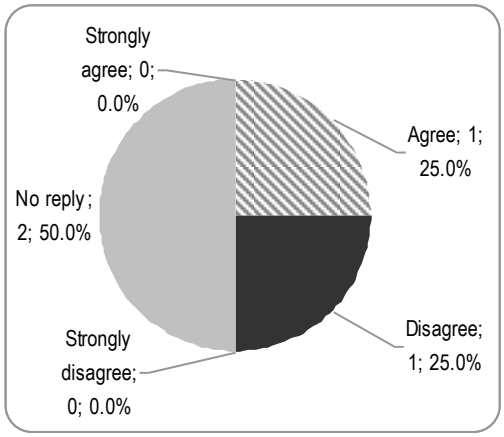


Diagram 4.32.c – Adult learning



3.2. Diverse quality of OER

As to the levels of quality of OER and its impact on their usefulness, a clearer trend can be observed denying the implication that variation in quality levels would necessarily impact on how useful OER can be. It should be noted, that this can be seen as a complementary result to when comparing the results with those for the learner group addressed in point 1.4 above, where a clear majority of learners identified the lack of quality of OER as a barrier.

Diagram 4.33.a – The quality of open educational resources is too diverse for OER to be really useful

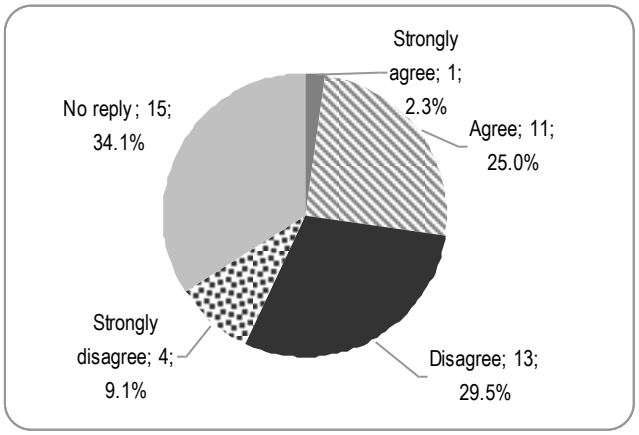


Diagram 4.33.b – Higher education

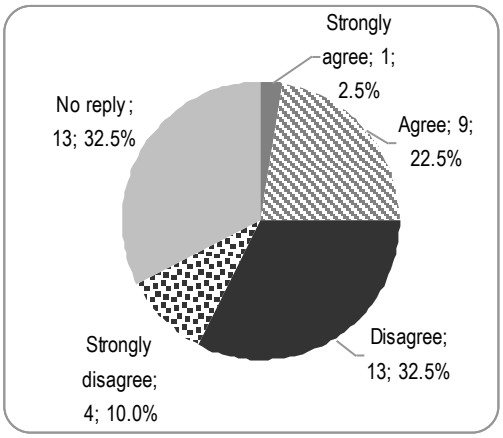
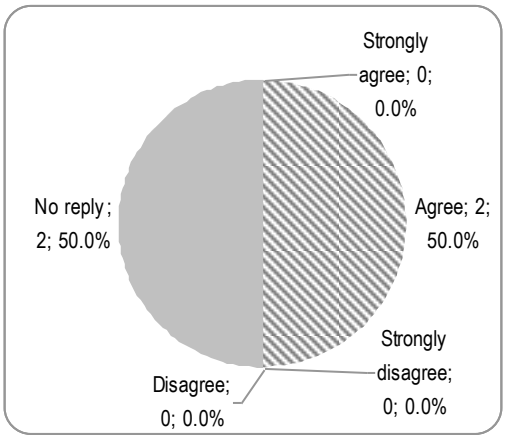


Diagram 4.33.c – Adult learning



4. The analysis of the survey data according to the macro level conditions of OER supply elicited views from the respondents that point to several areas of public policy and institutional policy intervention. These policies would favour OER and open educational practices (OEP) in breaking away from individualistic or closed group settings to become mainstream in higher education and adult learning institutions.

B. MICRO LEVEL ANALYSIS

1. Contexts

A. Cultures of Innovation

The evidence of the existence of cultures of innovation, both within organisations and regarding individual's practices, is of particular interest for OPAL, in that OER and OEP are closely associated with pursuing new forms of facilitating learning for individuals and customising learning resources to the particular needs of the individual learner. In this regard, a number of questions from the OPAL OER/OEP survey enable us to elicit information that sheds light on this important attribute.

1.1. The experience of respondents on the use of OER

The experience of respondents on the use of OER was the focus of the following question:

Institutional policy makers/managers; educational professionals; learners: Q3.1. Based on your experiences, how would you rate the following statements?
The use of open educational resources…
1. …improves the quality of education (formal, non formal, informal).
2. …leads to pedagogical changes.
3. …increases the participation of learners in educational scenarios.
4. …does not affect the teaching process at all.
5. …shifts education/training provision from content to activity-based learning.
6. …shifts the role from teachers/tutors/trainers to facilitators.
7. …shifts the role of learners from passive receivers to active producers.
8. …demands for completely new models of education/training (incl. pedagogy, assessment, organisation of educational institutions).

1.1.1. The use of OER improves the quality of education

The overwhelming majority of respondents rated this statement positively, totalling 80.4% overall. The relative weight of strong agreement and agreement is the reverse when comparing the two sectors surveyed.

Diagram 4.34.a – The use of OER improves the quality of education

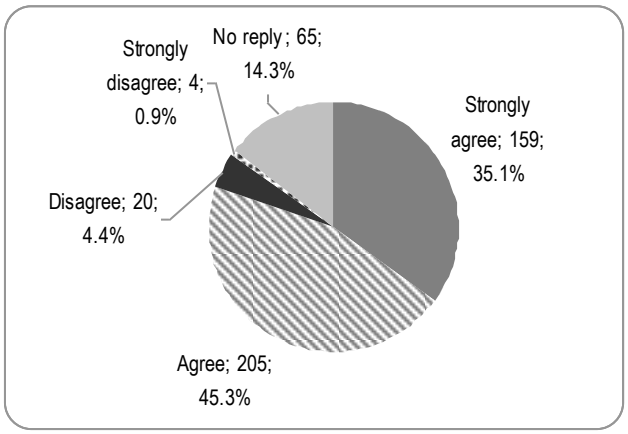
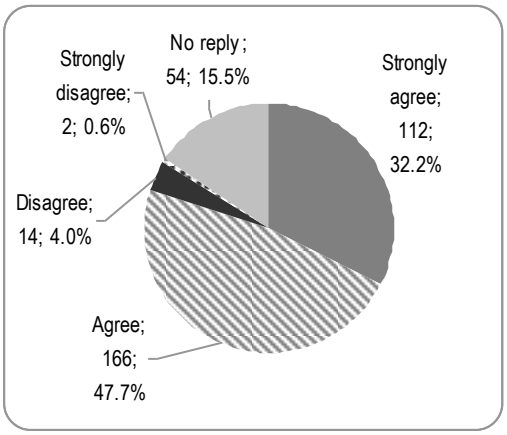
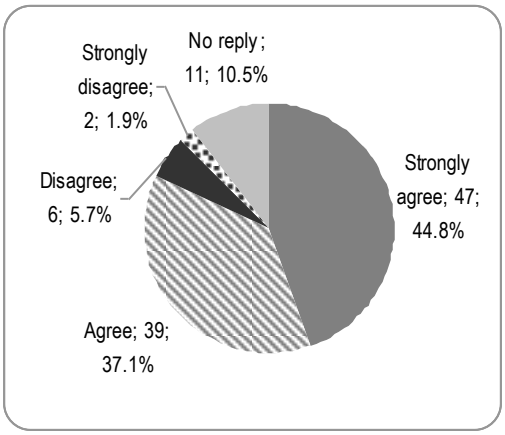


Diagram 4.34.b – Higher education

Diagram 4.34.c – Adult learning





When analysing the distribution of responses by educational role, it is evident that institutional policy makers/managers in both sectors seize the largest share of combined positive ratings, followed by educational professionals and then learners.

Diagram 4.35.a – The use of OER improves the quality of education
Higher education – Breakdown per educational role

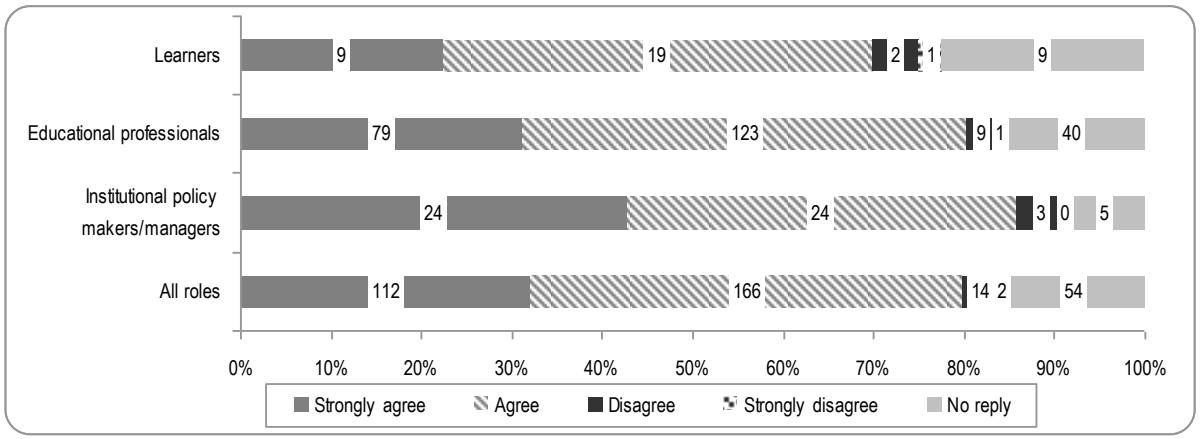
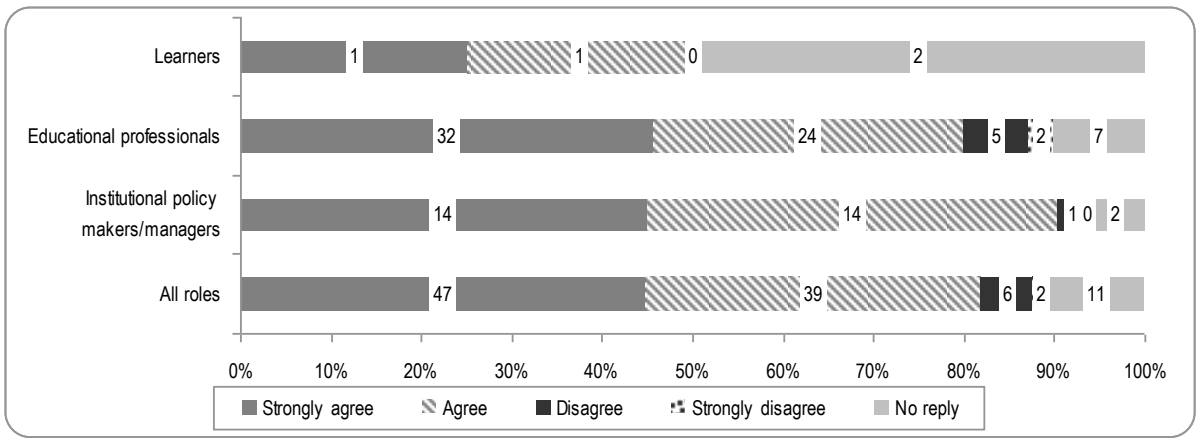


Diagram 4.35.b – Adult learning – Breakdown per educational role



1.1.2. The use of OER leads to pedagogical changes

A clear majority of respondents expressed a combined positive view, at 68.6% overall, a trend closely followed in each sector.

Diagram 4.36.a – The use of OER leads to pedagogical changes

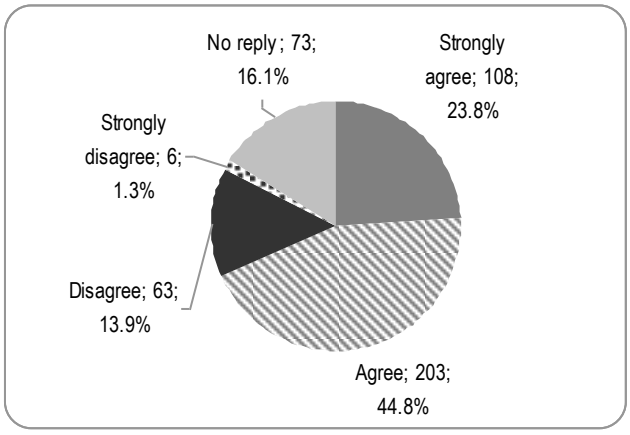


Diagram 4.36.b – Higher education

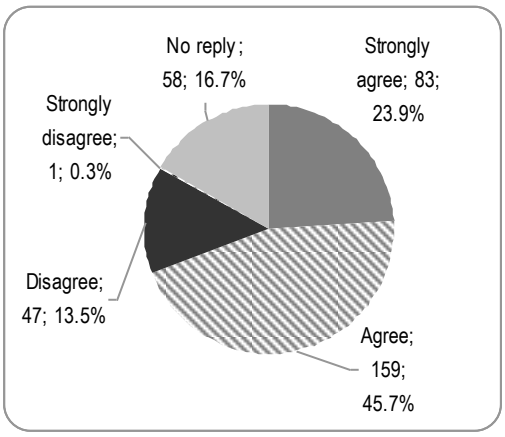
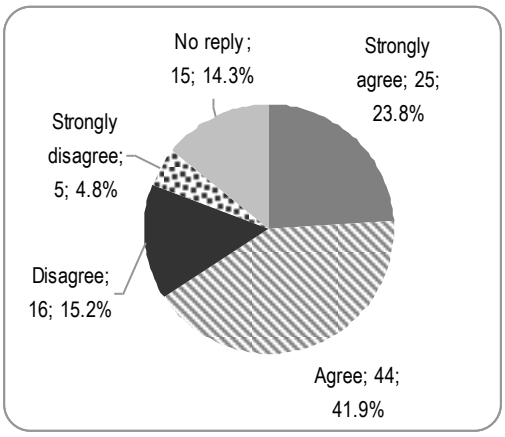


Diagram 4.36.c – Adult learning



The distribution of opinions by educational role reveals a fairly even pattern in higher education; adult learners evidence a diverging pattern in their sector.

Diagram 4.37.a – The use of OER leads to pedagogical changes
Higher education – Breakdown per educational role

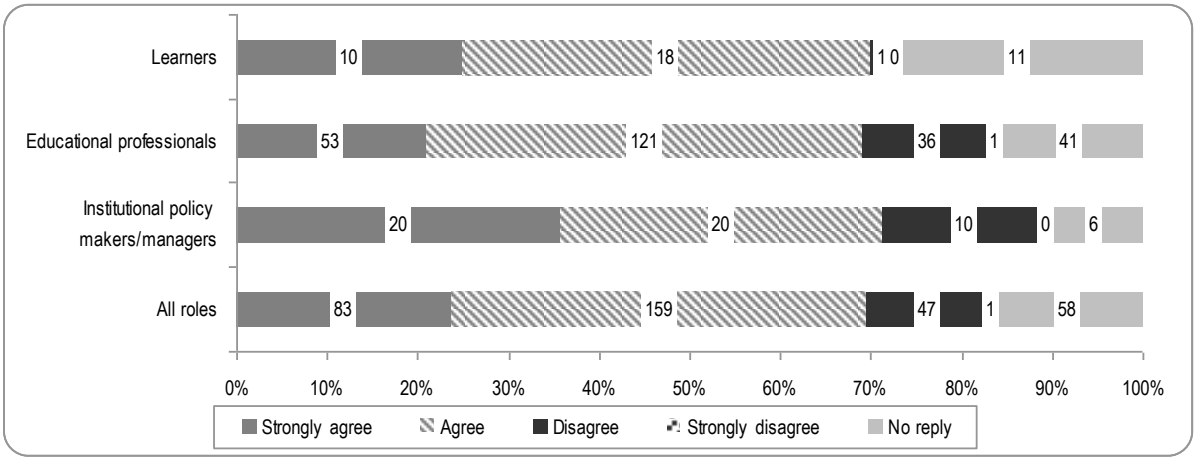
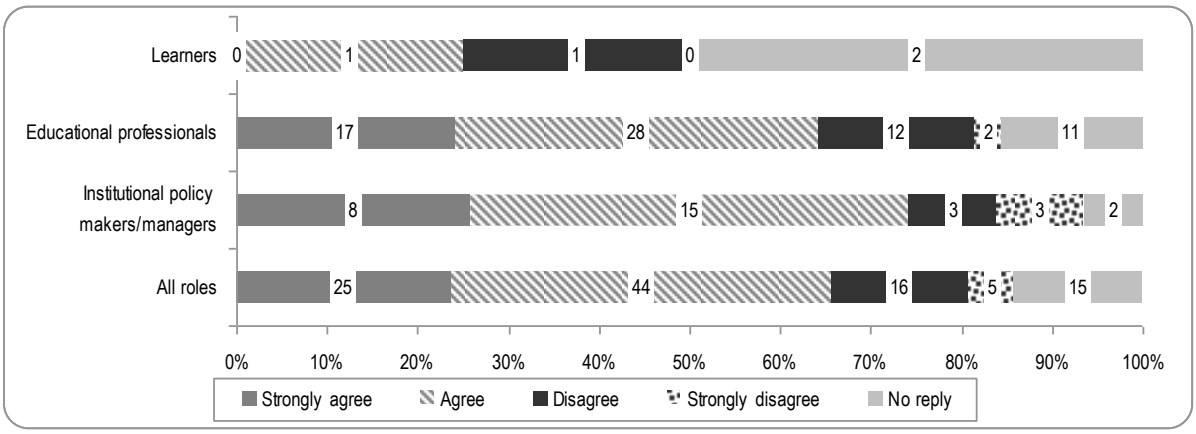


Diagram 4.37.b – Adult learning – Breakdown per educational role



1.1.3. The use of OER increases the participation of learners in educational scenarios

67.8% of the respondents targeted by this sub-question gave a combined positive reply; the corresponding figure in adult learning reached 78.1%.

Diagram 4.38.a – The use of OER increases the participation of learners in educational scenarios

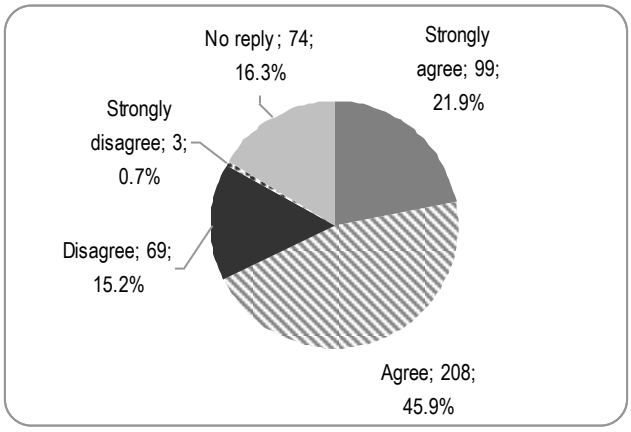


Diagram 4.38.b – Higher education

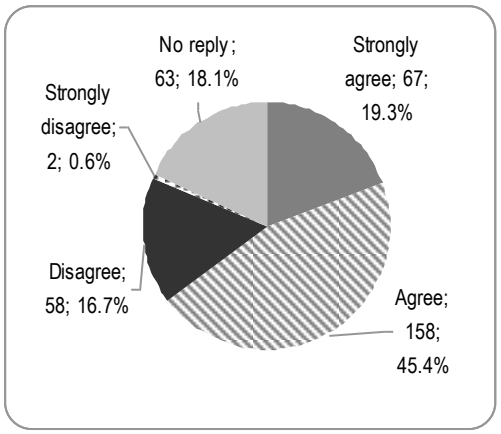
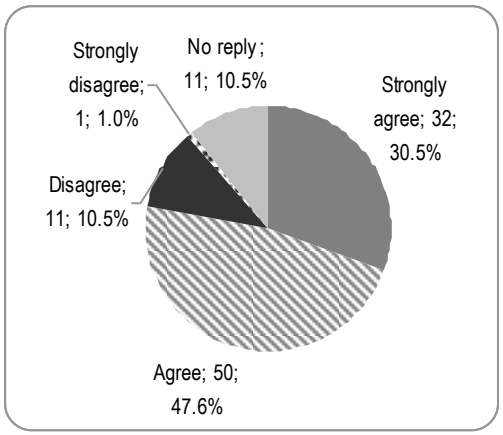


Diagram 4.38.c – Adult learning



The distribution of opinions by educational role reveals a fairly even pattern in both sectors, except for adult learners.

Diagram 4.39.a – The use of OER increases the participation of learners in educational scenarios
Higher education – Breakdown per educational role

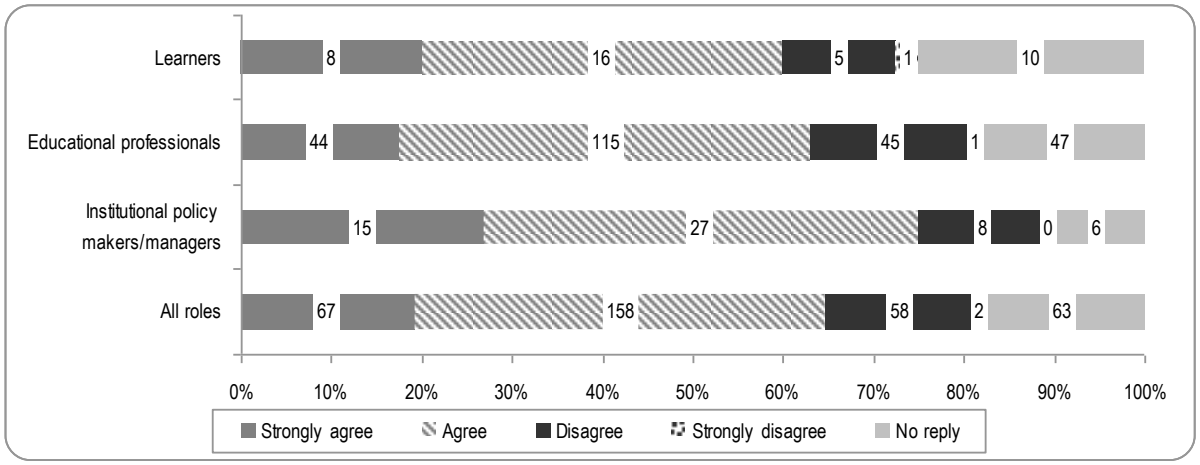
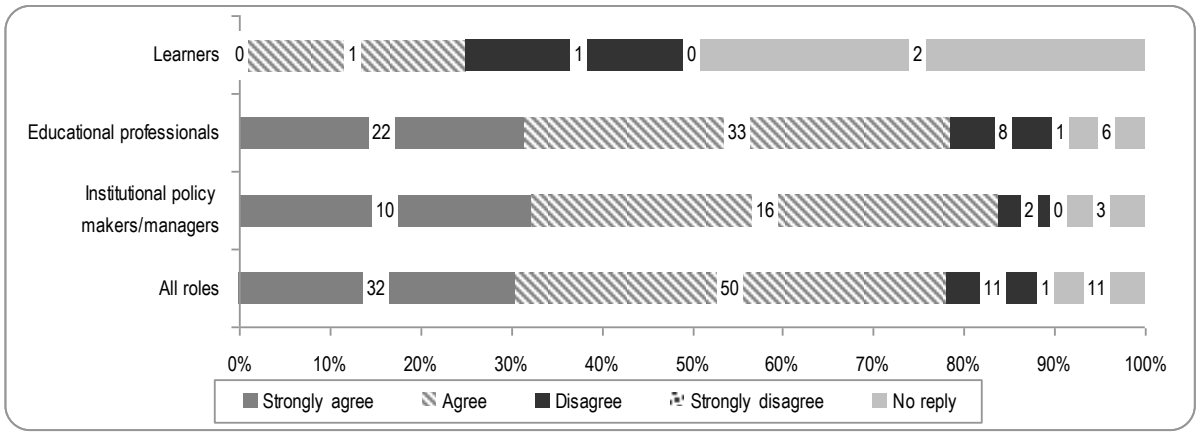


Diagram 4.39.b – Adult learning – Breakdown per educational role



1.1.4. The use of OER does not affect the teaching process at all

The vast majority of respondents (69.1%) consider that OER does affect the teaching process, a trend closely followed by each sector.

Diagram 4.40.a – The use of OER does not affect the teaching process at all

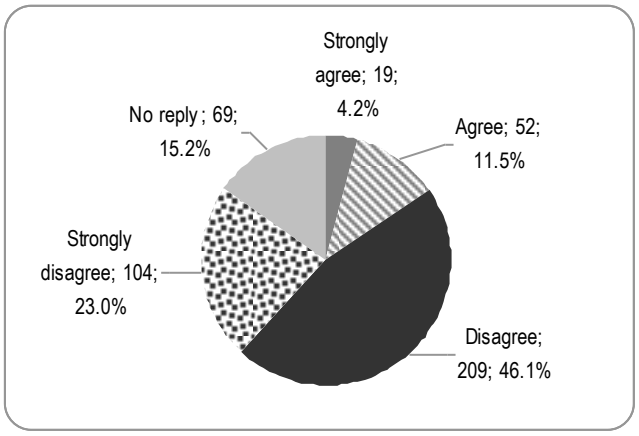


Diagram 4.40.b – Higher education

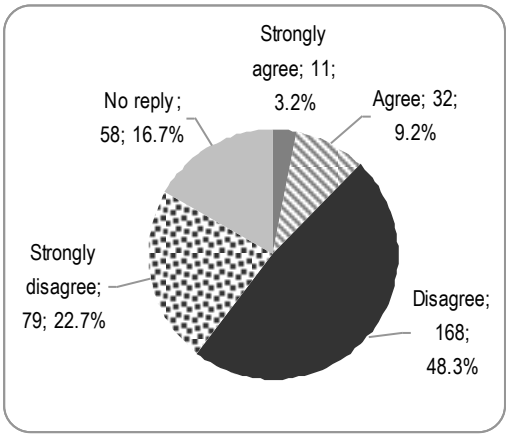
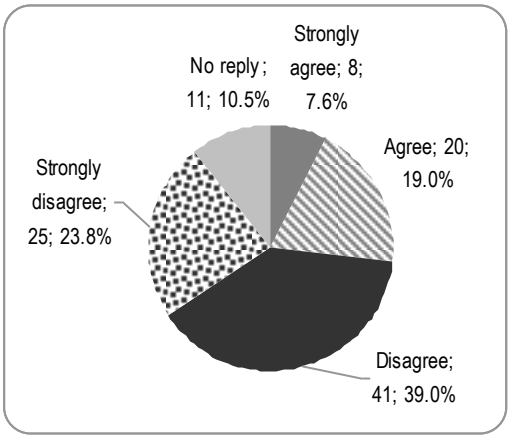


Diagram 4.40.c – Adult learning



When considering each educational role within their respective sectors, the prevailing trend is maintained, with the exception of adult learners.

Diagram 4.41.a – The use of OER does not affect the teaching process at all
Higher education – Breakdown per educational role

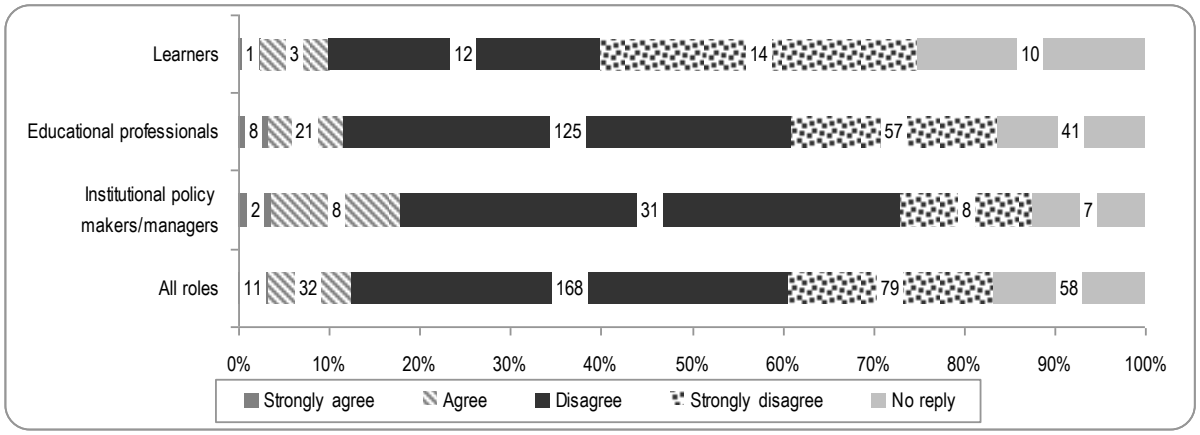
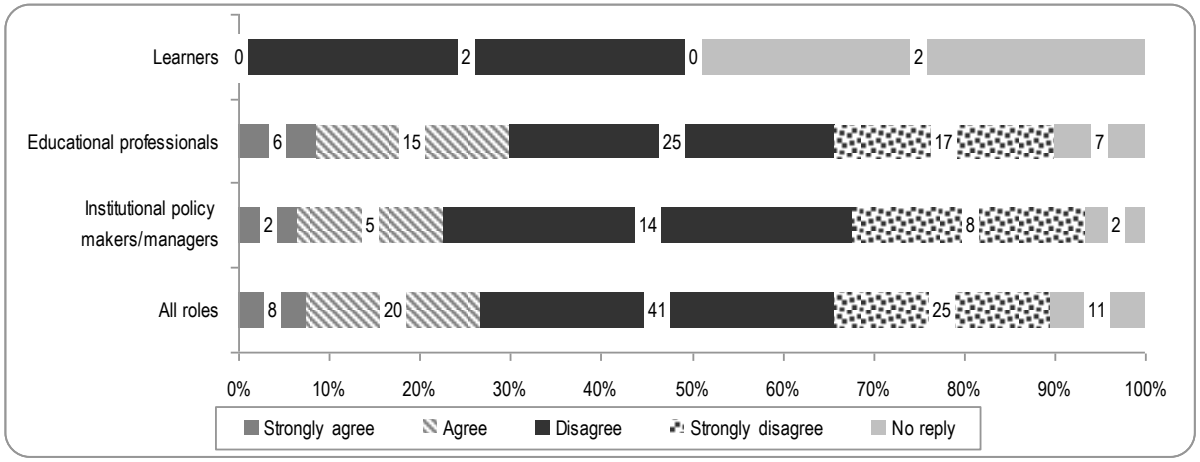


Diagram 4.41.b – Adult learning – Breakdown per educational role



1.1.5. The use of OER shifts education/training provision from content to activity-based learning

Combined agreement with the statement proposed reached 61.4% of all responses; this positive result is higher in adult learning.

Diagram 4.42.a – The use of OER shifts education/training provision from content to activity-based learning

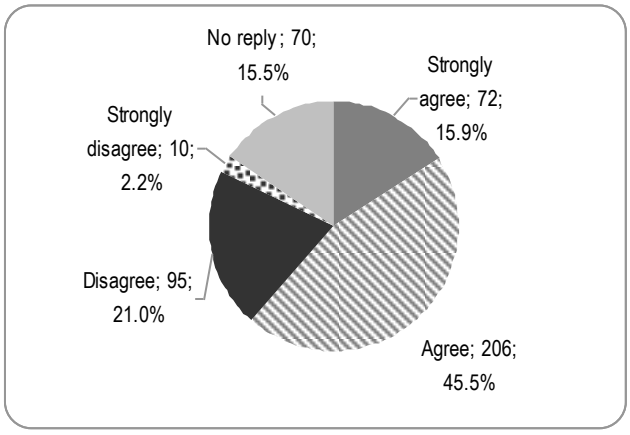


Diagram 4.42.b – Higher education

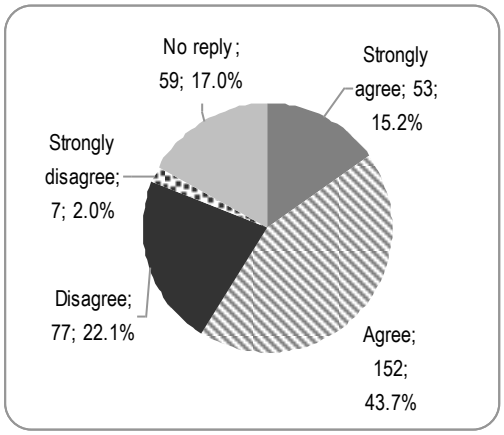
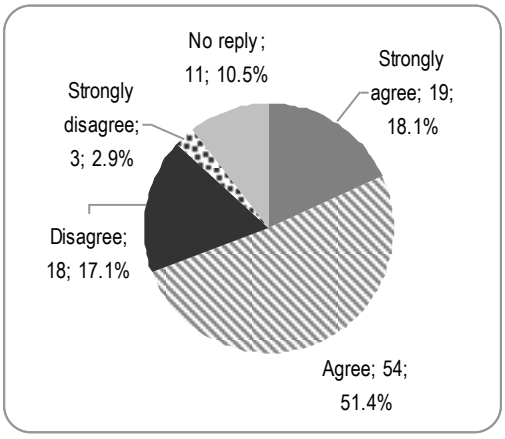


Diagram 4.42.c – Adult learning



In terms of the repartition of replies by educational role, the positive trend of institutional policy makers/managers in adult learning is quite striking, followed by their counterparts in higher educations. In relative terms, educational professionals of both sectors are more restrained in their positive assessments.

Diagram 4.43.a – The use of OER shifts education/training provision from content to activity-based learning
Higher education – Breakdown per educational role

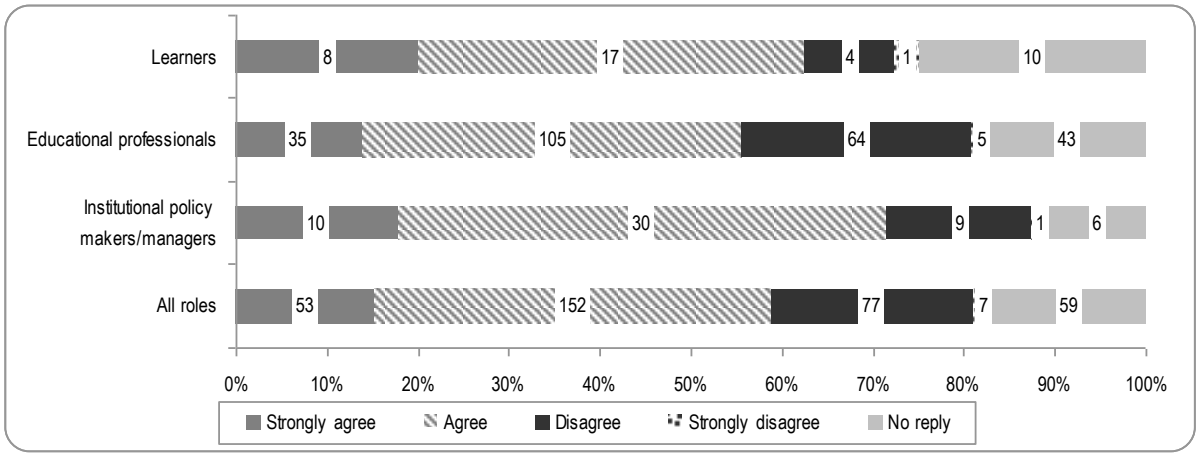
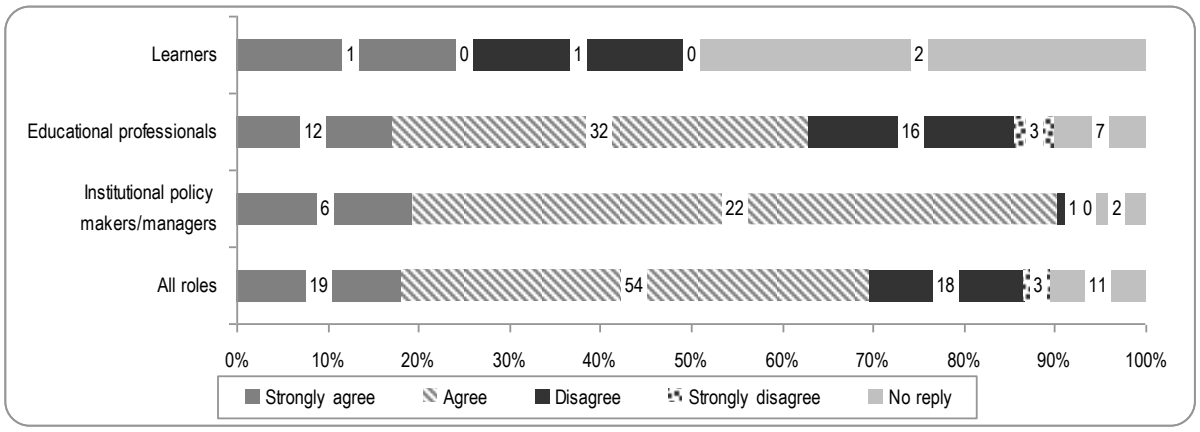


Diagram 4.43.b – Adult learning – Breakdown per educational role



1.1.6. The use of OER shifts the role from teachers/tutors/trainers to facilitators

The majority of respondents rated positively this statement, at 66.4 overall; adult learning provided the highest share of positive ratings in relative terms.

Diagram 4.44.a – The use of OER shifts the role from teachers/tutors/trainers to facilitators

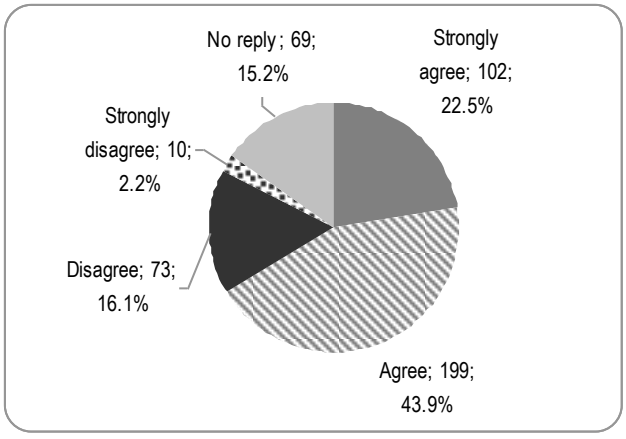


Diagram 4.44.b – Higher education

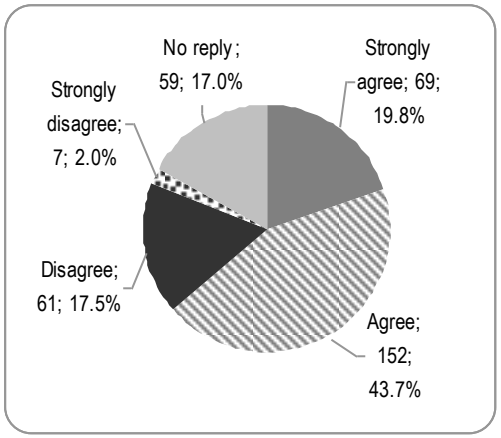
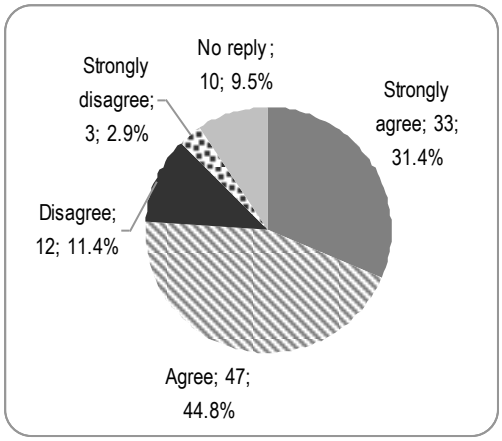


Diagram 4.44.c – Adult learning



Institutional policy makers/managers from both sectors lead the positive ratings, followed closely by educational professionals.

Diagram 4.45.a – The use of OER shifts the role from teachers/tutors/trainers to facilitators
Higher education – Breakdown per educational role

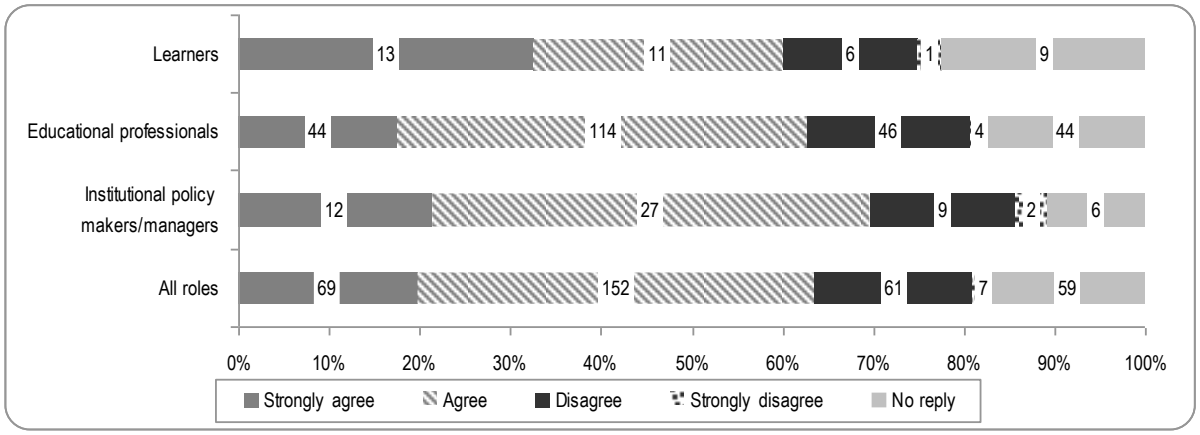
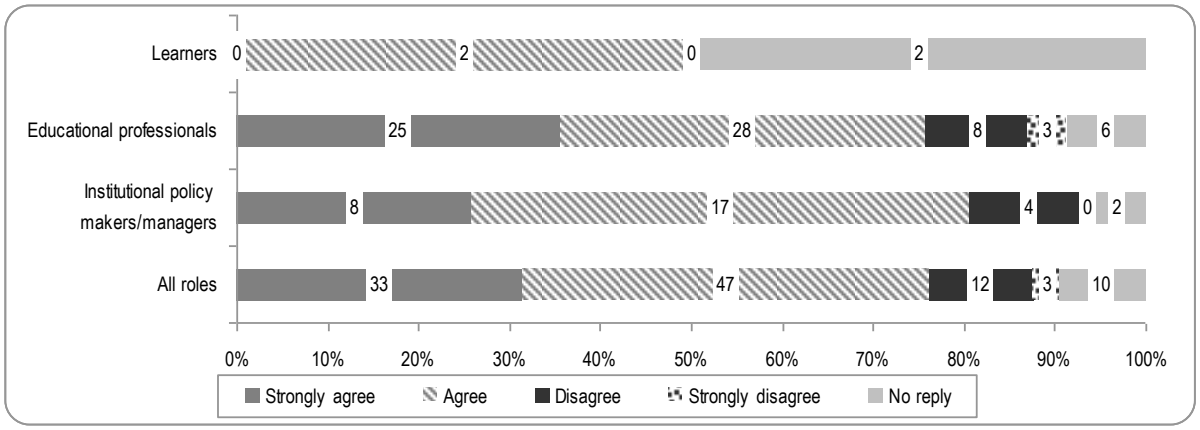


Diagram 4.45.b – Adult learning – Breakdown per educational role



1.1.7. The use of OER shifts the role of learners from passive receivers to active producers

Again, a clear majority of all respondents favour the combined positive assessments, at 63.8%. Adult learning shows the largest share of such assessments.

Diagram 4.46.a – The use of OER shifts the role of learners from passive receivers to active producers

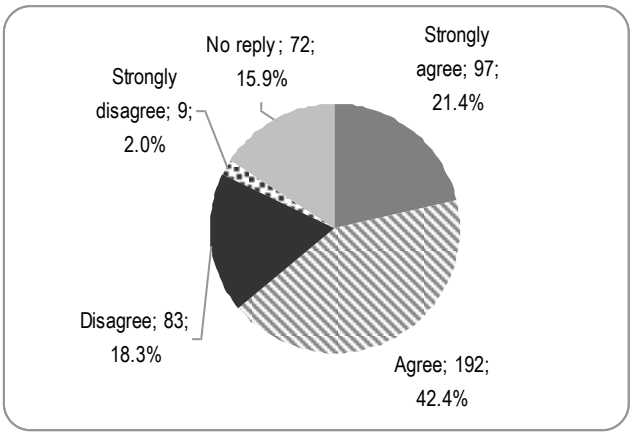


Diagram 4.46.b – Higher education

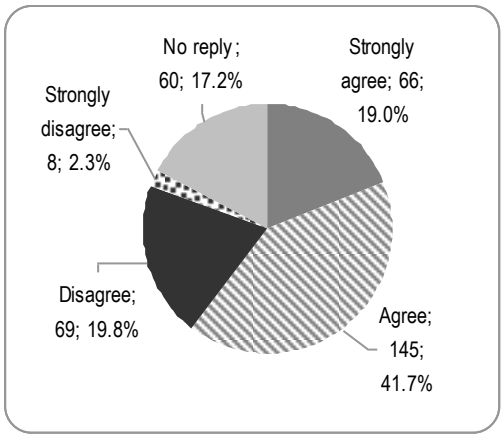
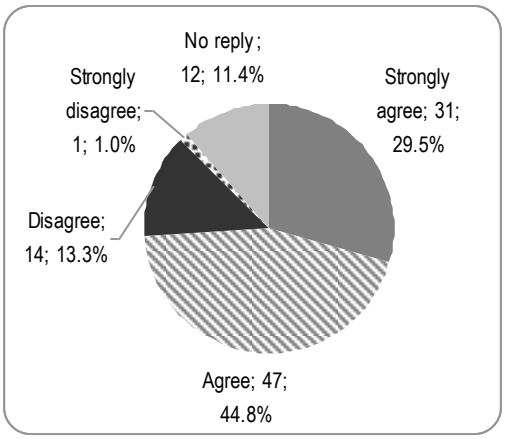


Diagram 4.46.c – Adult learning



The distribution of ratings by educational role follows a fairly similar pattern, with the exception of adult learners.

Diagram 4.47.a – The use of OER shifts the role of learners from passive receivers to active producers
Higher education – Breakdown per educational role

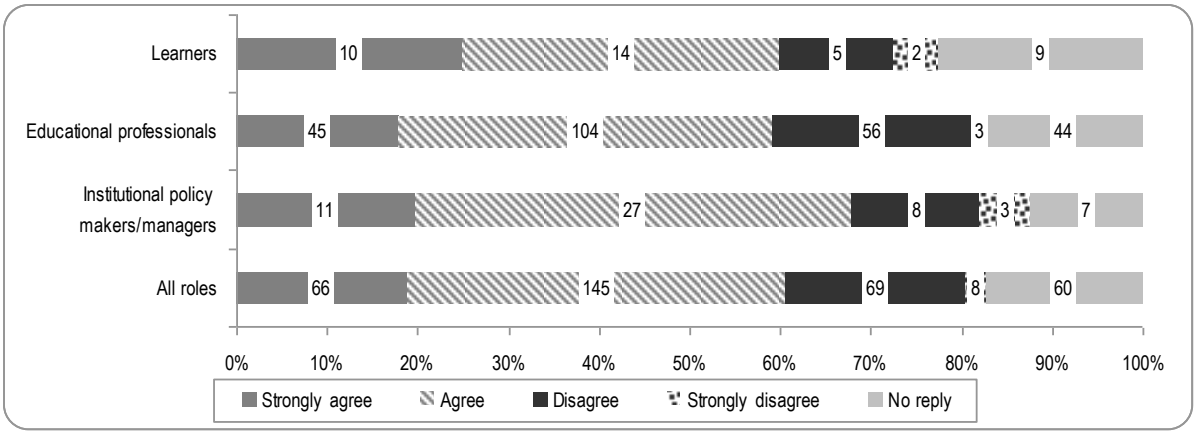
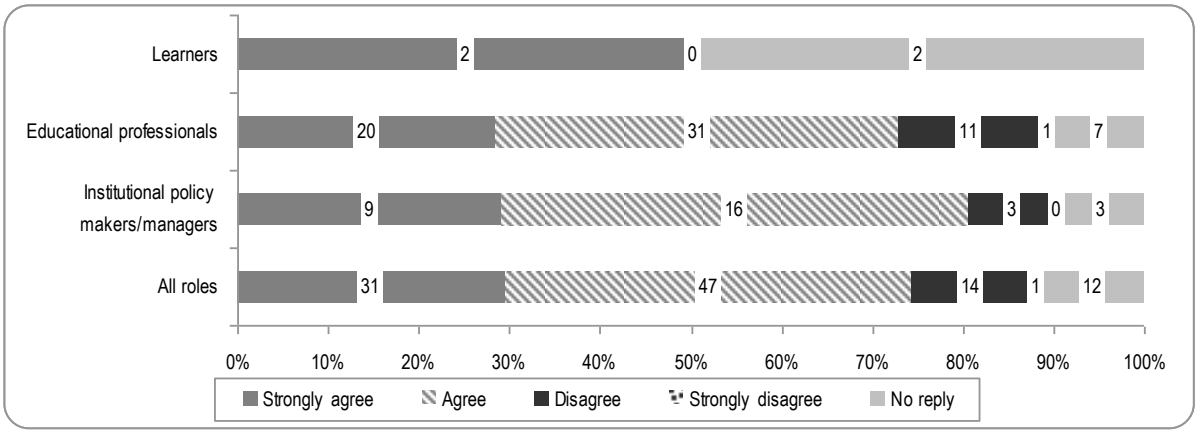


Diagram 4.47.b – Adult learning – Breakdown per educational role



1.1.8. The use of OER demands for completely new models of education/training

The combined positive responses registered very highly, at 68% overall, with the adult learning responses going up to 77.2%.

Diagram 4.48.a – The use of OER demands for completely new models of education/training

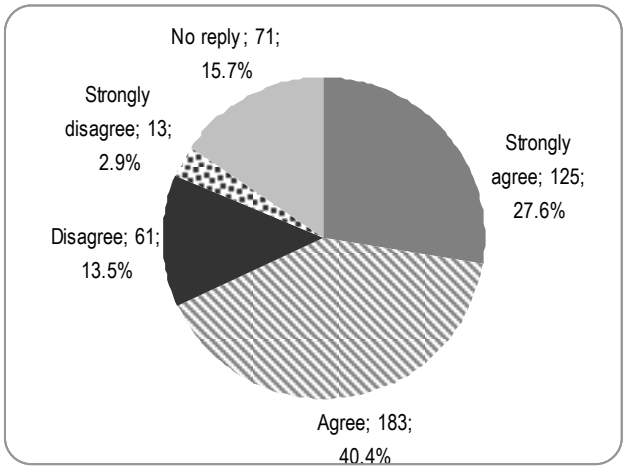


Diagram 4.48.b – Higher education

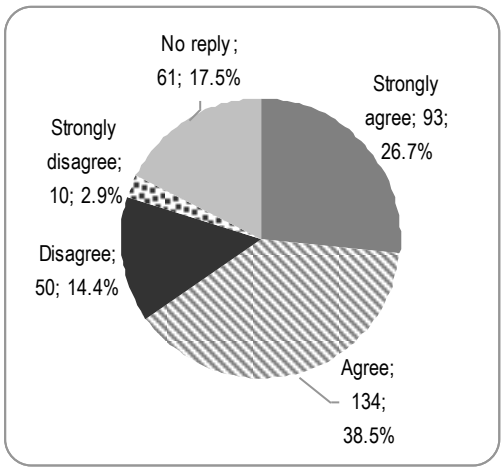
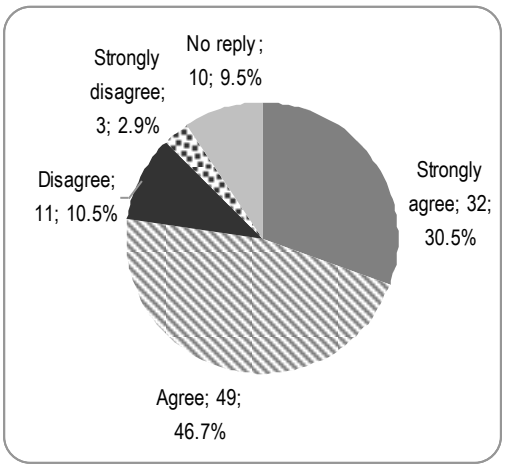


Diagram 4.48.c – Adult learning



Institutional policy makers/managers are again at the lead of the combined positive assessments in both sectors, followed by educational professionals.

Diagram 4.49.a – The use of OER demands for completely new models of education/training
Higher education – Breakdown per educational role

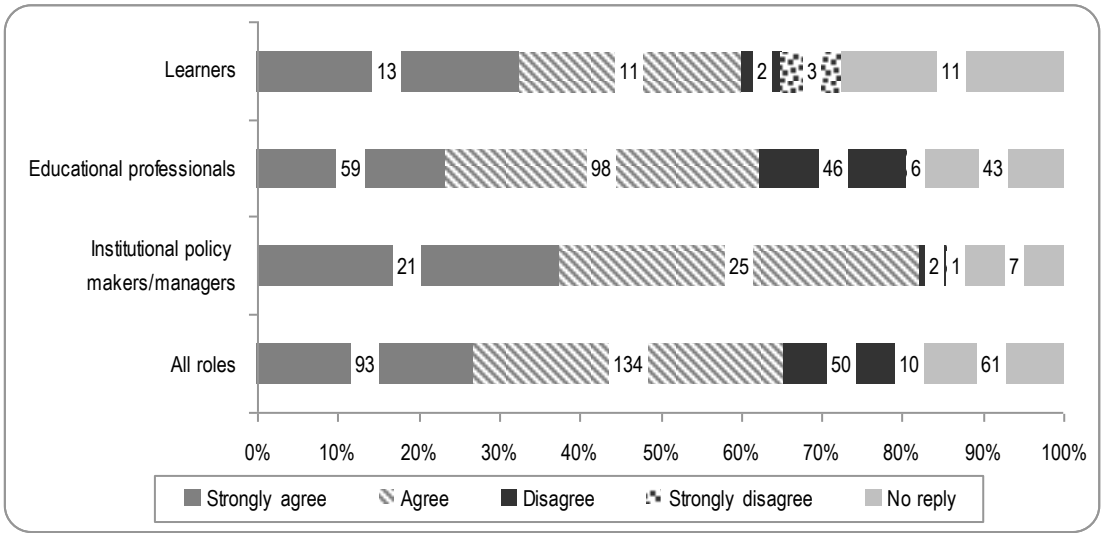
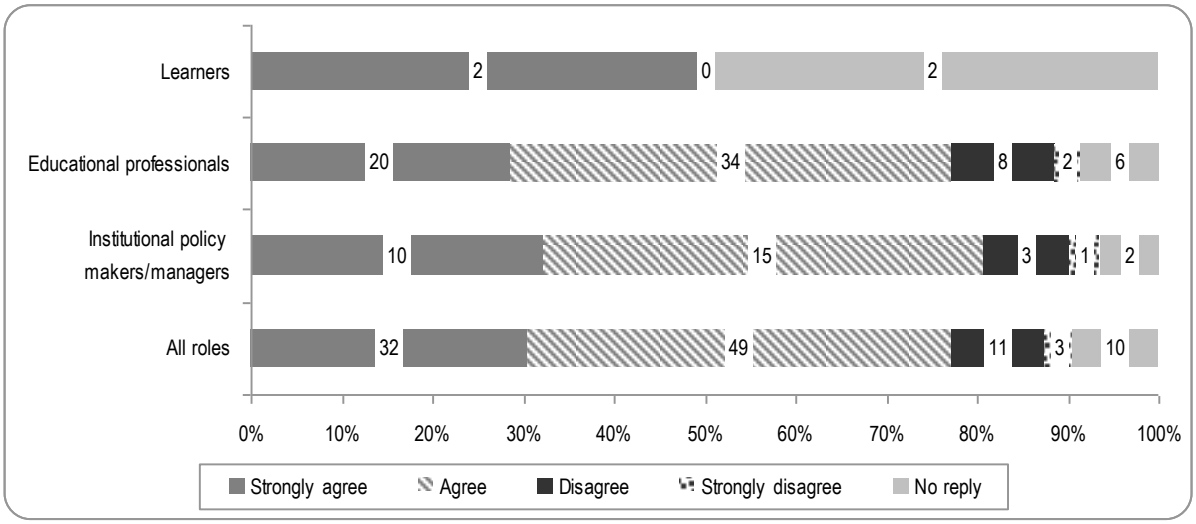


Diagram 4.49.b – Adult learning – Breakdown per educational role



In summary, we should underline strongly the degree of understanding and awareness of respondents, paired with the consistency of the results obtained when queried on the impact of OER in learning and the changes its use entails in relation to traditional forms of education/training.

1.2. Institutional policy makers/managers and educational professionals where queried the following:

> *4.4. How would you rate the following statements?*
> *Institutional policy makers/managers: 1. Using OER also leads to opening pedagogical scenarios.*
> *Institutional policy makers/managers (and educational professionals): 2. (5.) Using OER leads to institutional innovations.*
> *Institutional policy makers/managers: 3. Adopting open practices is challenging for higher education institutions/adult learning organisations.*
> *Institutional policy makers/managers (and educational professionals): 4. (7.) The use of OER leads to new pedagogical practices.*
> *Educational professionals: 6. Adopting open practices leads to institutional innovation.*

1.2.1. Using OER also leads to opening pedagogical scenarios

The overwhelming majority of institutional policy makers/managers gave a positive feed-back, at 73.6% of all replies, a pattern followed by the two sectors surveyed.

Diagram 4.50.a – Using OER also leads to opening pedagogical scenarios

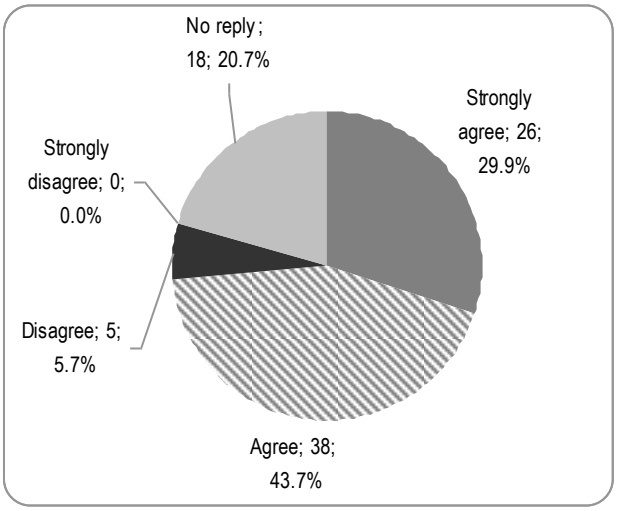


Diagram 4.50.b – Higher education

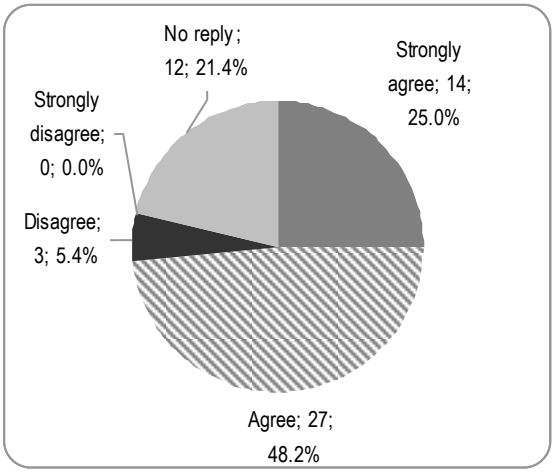
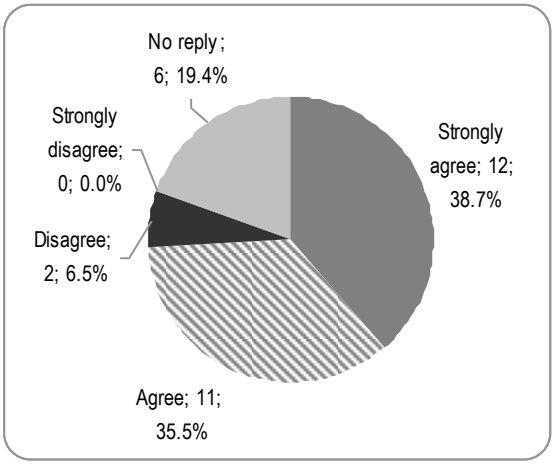


Diagram 4.50.c – Adult education



1.2.2. Using OER leads to institutional innovations

The majority of both targets – institutional policy makers/managers and educational professionals – gave a positive and very positive rating to this assertion, overall and per sector (with the highest values in adult learning, at 71.2%).

Diagram 4.51.a – Using OER leads to institutional innovations

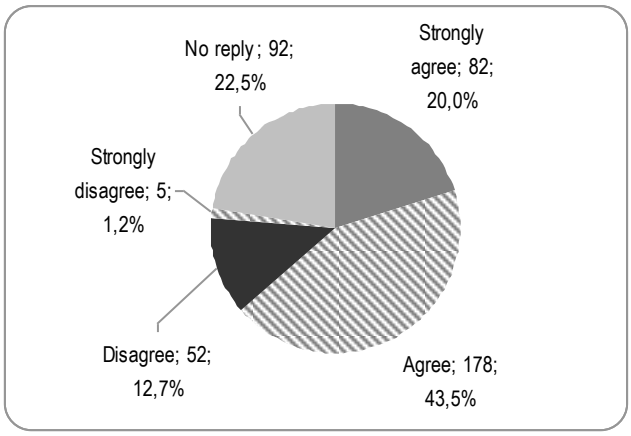


Diagram 4.51.b – Higher education

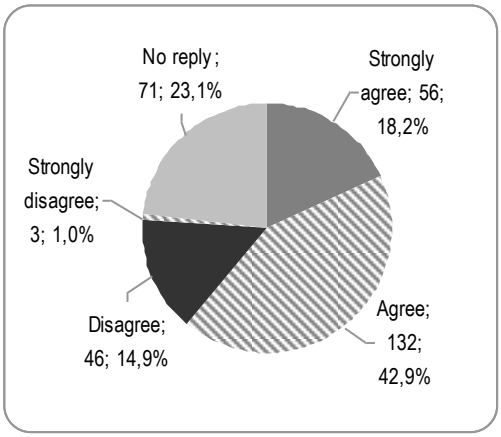
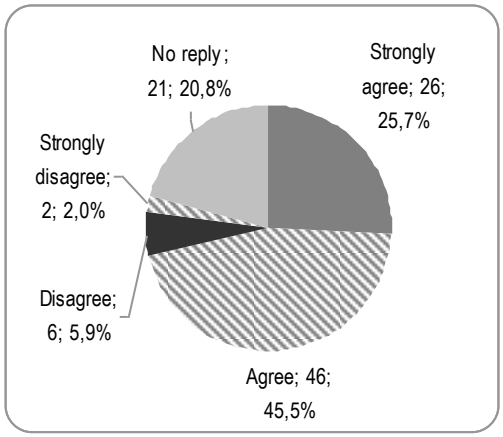


Diagram 4.51.c – Adult education



When analysing the breakdown of these opinions per educational role, institutional policy makers/managers seize the largest share of positive and very positive replies.

Diagram 4.52.a – Using OER leads to institutional innovations
Higher education – Breakdown per educational role

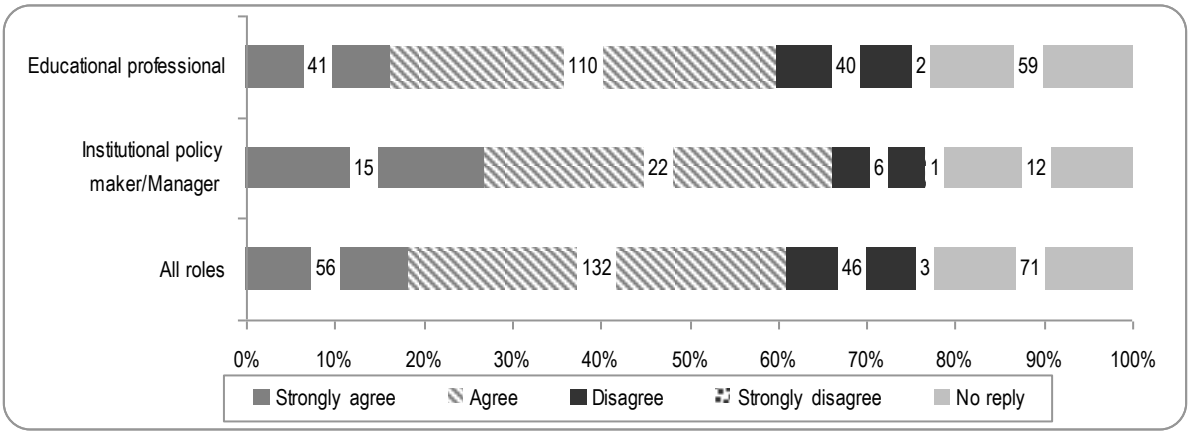
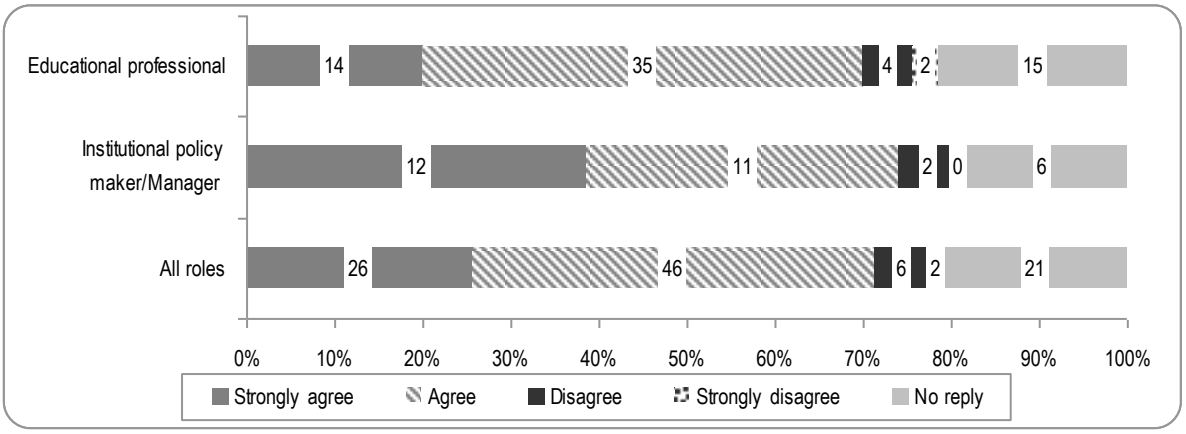


Diagram 4.52.b – Using OER leads to institutional innovations
Adult learning – Breakdown per educational role



1.2.3. Adopting open practices is challenging for educational institutions

A very expressive majority of the replies by institutional policy makers/managers agreed and strongly agreed (78% overall, with a similar pattern per sector).

Diagram 4.53.a – Adopting open practices is challenging for institutions

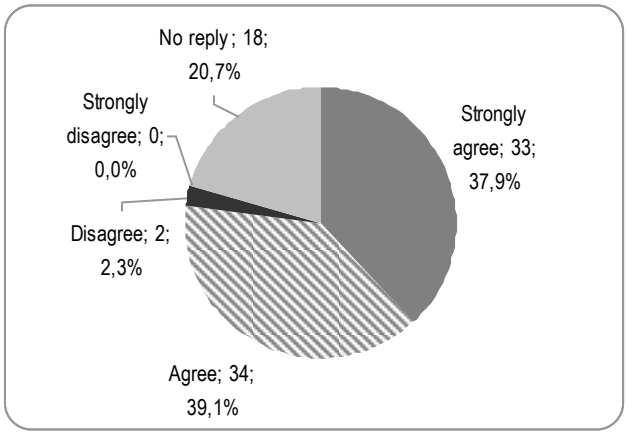


Diagram 4.53.b – Higher education

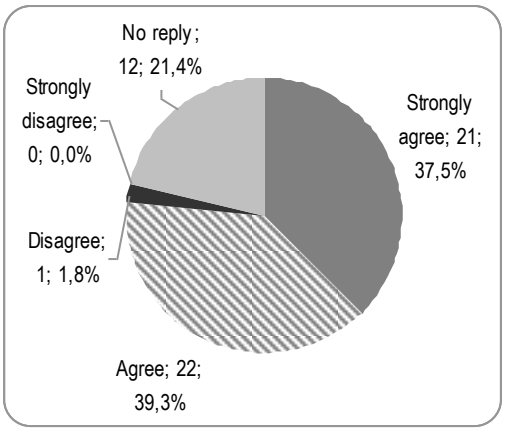
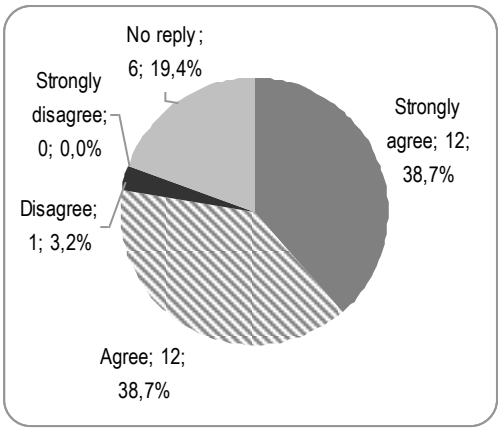


Diagram 4.53.c – Adult education



1.2.4. The use of OER leads to new pedagogical practices

66.8% of all respondents agreed with the assertion, the higher quota belonging to adult education, at 73.2%.

Diagram 4.54.a – The use of OER leads to new pedagogical practices

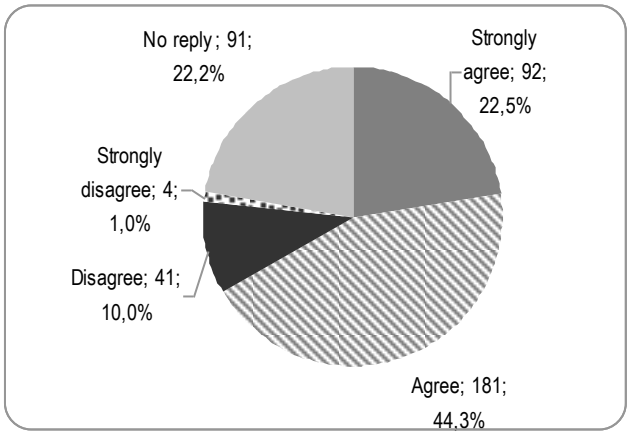


Diagram 4.54.b – Higher education

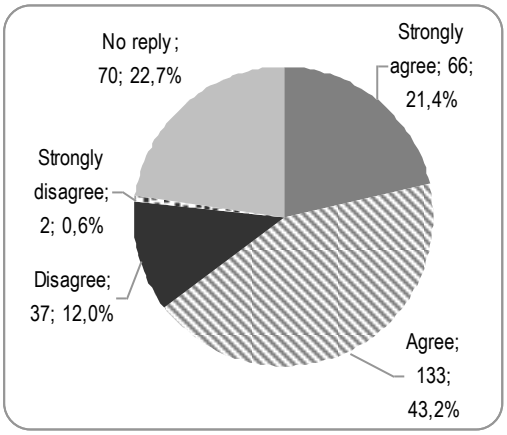
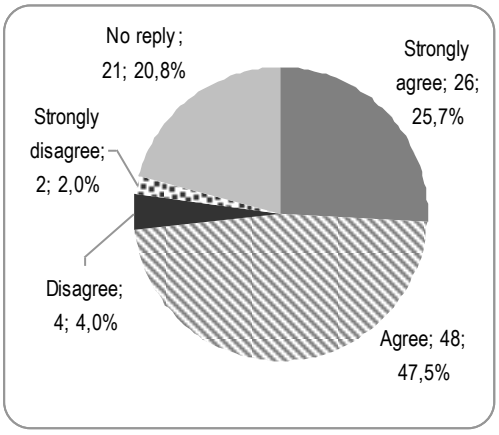


Diagram 4.54.c – Adult education



A breakdown per educational role reveals that institutional policy makers/managers show the highest rate of positive feed-back.

Diagram 4.55.a – The use of OER leads to new pedagogical practices
Higher education – Breakdown per educational role

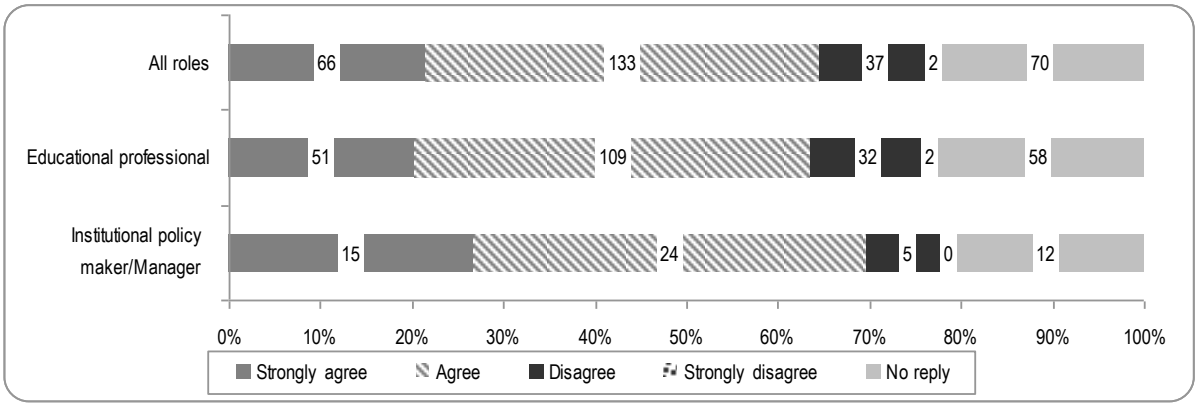
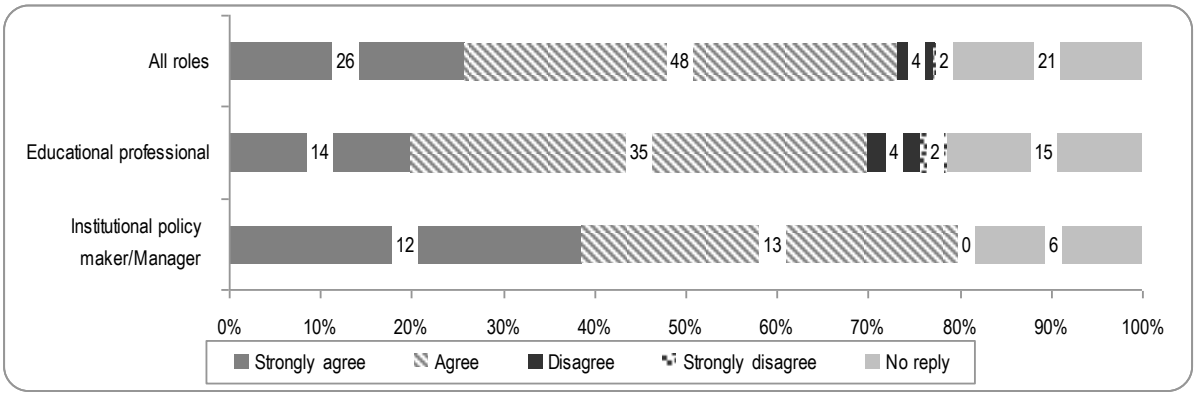


Diagram 4.55.b – Adult learning – Breakdown per educational role



1.2.5. The adoption of open practices leads to institutional innovation

Educational professionals responded positively, with 68.3% agreements and strong agreements, a pattern closely followed by the two sectors surveyed.

Diagram 4.56.a – Adopting open practices leads to institutional innovation

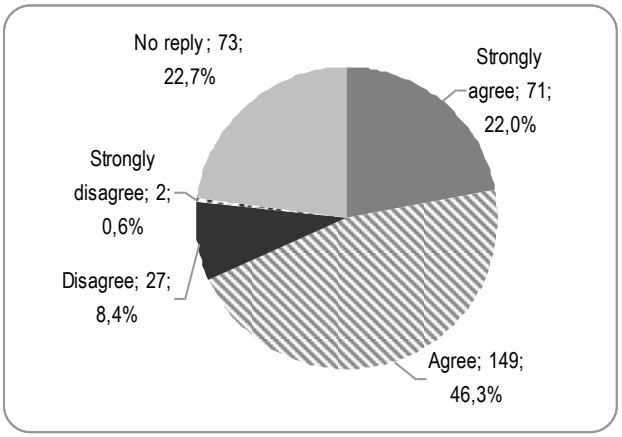


Diagram 4.56.b – Higher education

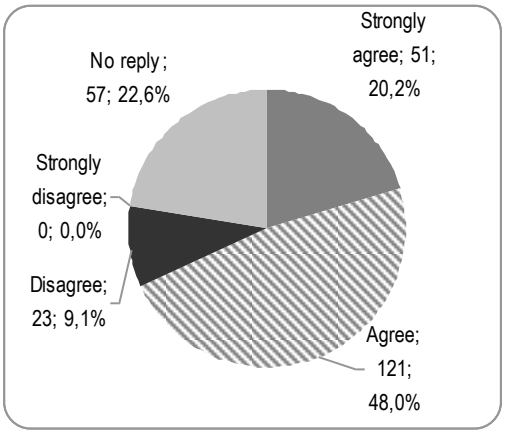
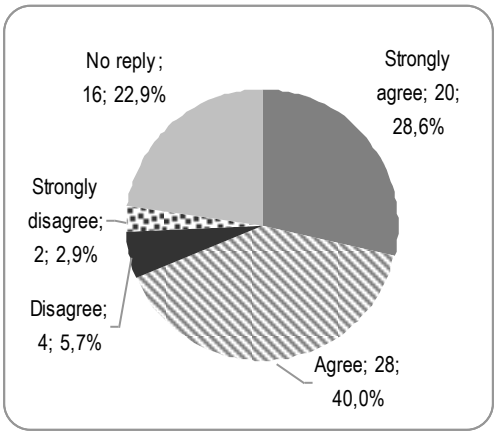


Diagram 4.56.c – Adult education



1.3. Three sub-questions regarding the barriers to OER use can be analysed as innovation issues:

All educational roles: Please evaluate the relevance of the following barriers to the use of OER from your personal experience:
9. OER are not embedded into the learning scenarios
11. Lack of interest in pedagogical innovation among educational professionals.
15. Lack of interest in the creation or use of OER.

1.3.1. OER are not embedded into the learning scenarios

More than half of all respondents rate this sub-question positively (52.8% of important and very important ratings), with slightly higher results from the adult learning sector. The negative assessments are fairly balanced between the two sectors.

Diagram 4.57.a – OER are not embedded into the learning scenarios

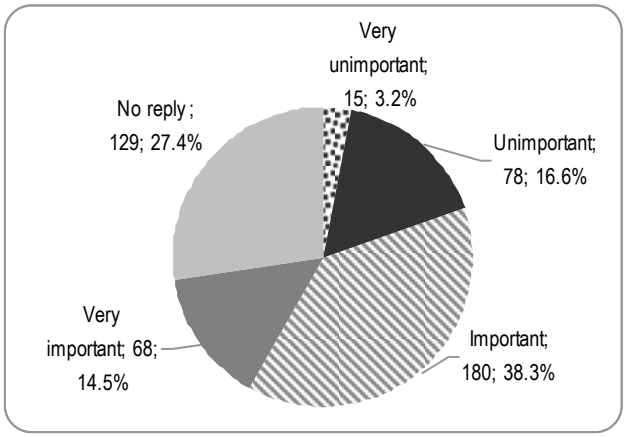


Diagram 4.57.b – Higher education

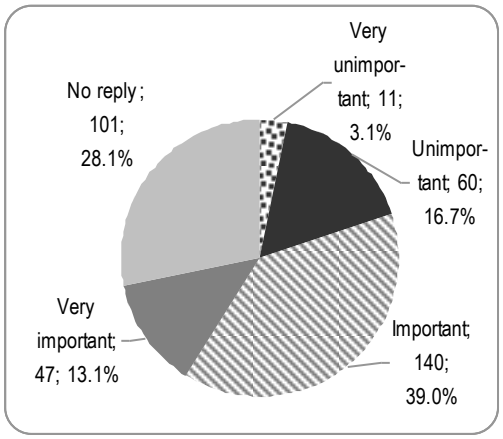
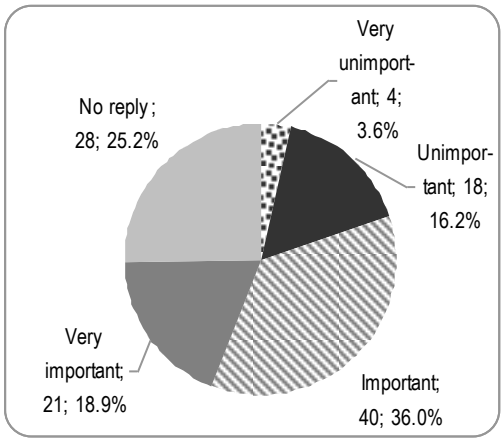


Diagram 4.57.c – Adult learning



When comparing the results of institutional policy makers/managers and educational professionals, we see that the former provided the higher positive assessments (64.5% in higher education and 61.3% in adult learning, against the latter, at 50% in higher education and 54.3% in adult learning).

Not surprisingly, educational policy makers and learners are the educational roles that provided higher results of no replies to this sub-question.

Diagram 4.58.a – OER are not embedded into the learning scenarios
Higher education – Breakdown per educational role

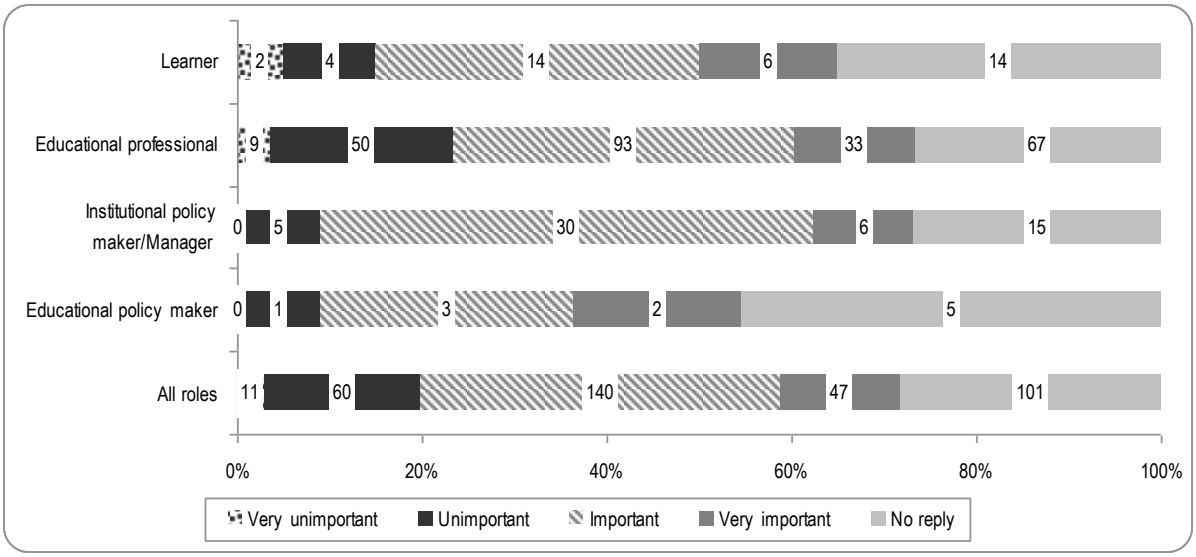
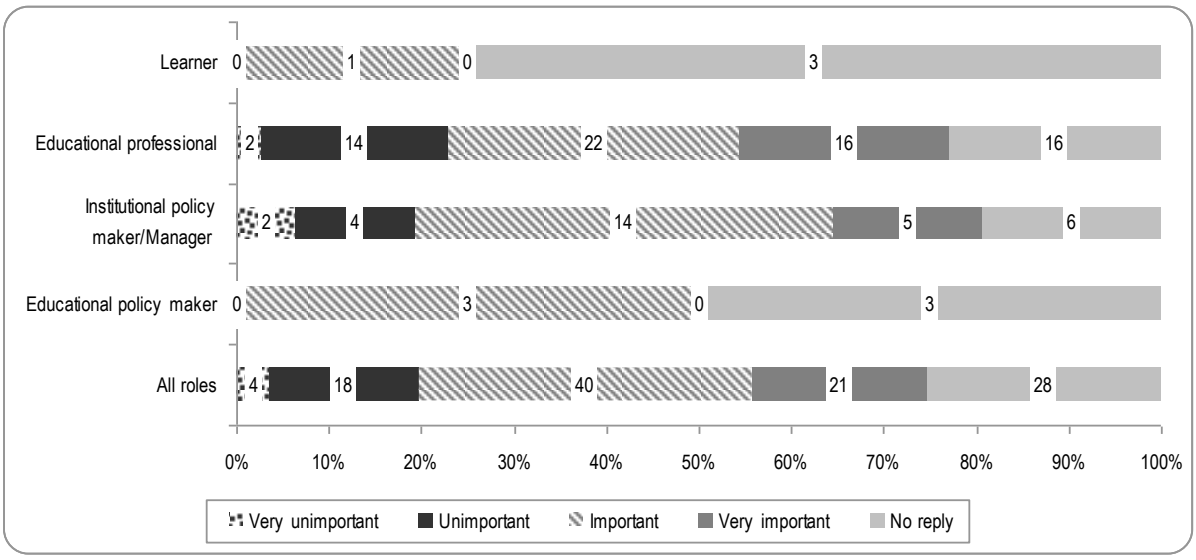


Diagram 4.58.b – Adult learning – Breakdown per educational role



1.3.2. Lack of interest in pedagogical innovation among educational professionals

More than half of all respondents felt that lack of interest in pedagogical innovation among educational professionals was an important and very important barrier to OER use, and over one quarter did not register a reply. The pattern is similar in each sector surveyed.

Diagram 4.59.a – Lack of interest in pedagogical innovation among educational professionals

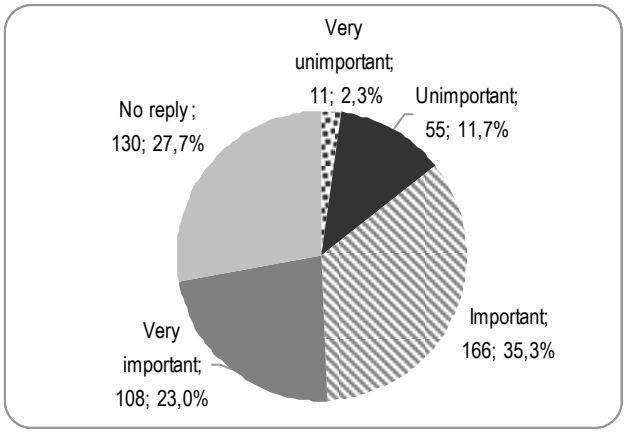


Diagram 4.59.b – Higher education

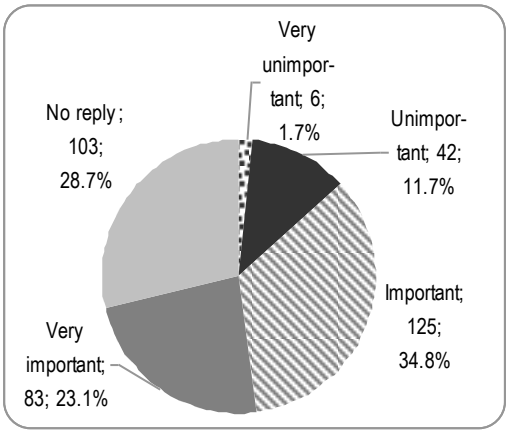
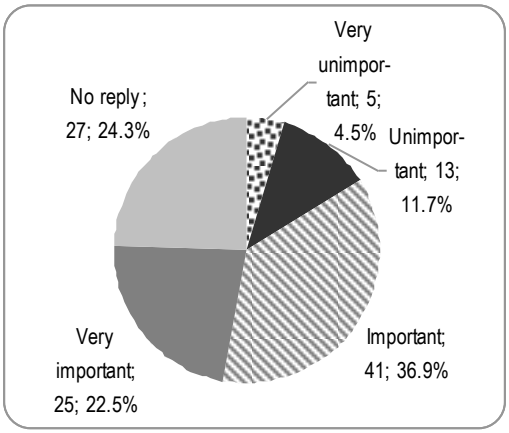


Diagram 4.59.c – Adult learning



The breakdown analysis per educational role does not show remarkable deviations from the pattern described above.

Diagram 4.60.a – Lack of interest in pedagogical innovation among educational professionals
Higher education – Breakdown per educational role

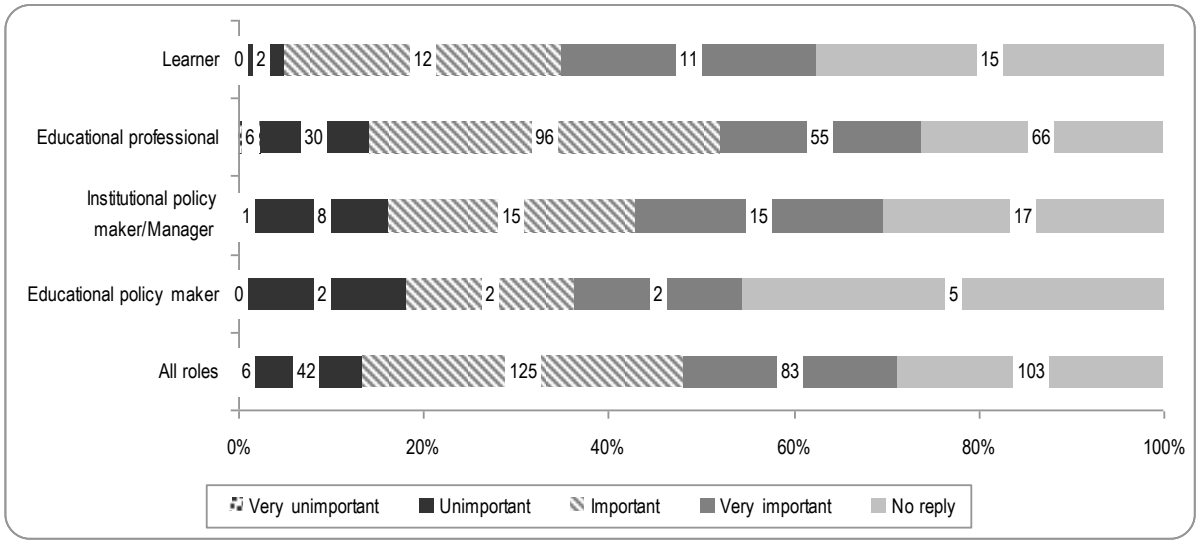
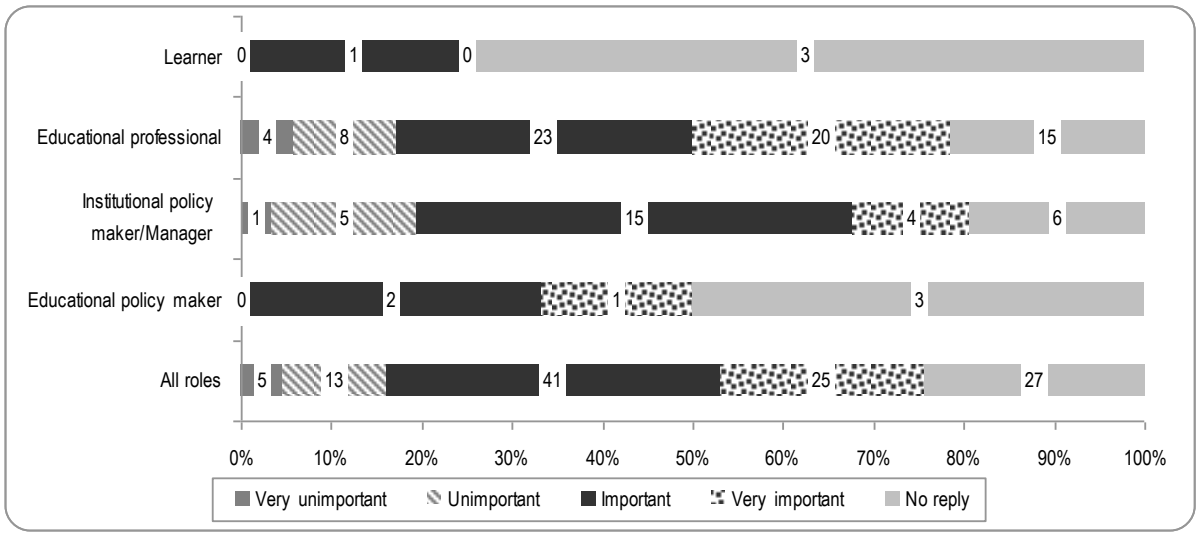


Diagram 4.60.b – Adult learning – Breakdown per educational role



1.3.3. Lack of interest in the creation or use of OER

The data on sub-question 15, dealing with the lack of interest in the creation or use of OER was presented earlier in this report in the analysis of OER supply (chapter IV.I, section C, 1.7). As it was stated, a clear majority of respondents (58.5%) feels that this barrier is very important and important. Likewise, the breakdown into sectors provides a similar pattern.

1.4. Two of the questions addressed to learners shed some insights on cultures of innovation:

Learners: Q4.1 How would you rate the following statements?
3. As a learner, I am encouraged to develop learning materials myself and share those with others on the Internet.

8. In order to use OER I would need a different form of learning environment in my higher education institution/adult learning organisation.

1.4.1. Learners are encouraged to develop and share learning materials

This sub-question was dealt with previously, when discussing the macro level condition of OER supply. There we argued that learners from the two sectors spread their opinions across the four attributes, with a higher, similar prevalence on agreement and disagreement.

1.4.2. Learners need a different form of learning environment

40.9% of the overall replies concur with this statement. The pattern varies between sectors, but that is not significant given the low number of respondents from adult education in this educational role. To be noted the significant percentage of no replies (34.1% overall).

Diagram 4.61.a – Need for a different form of learning environment

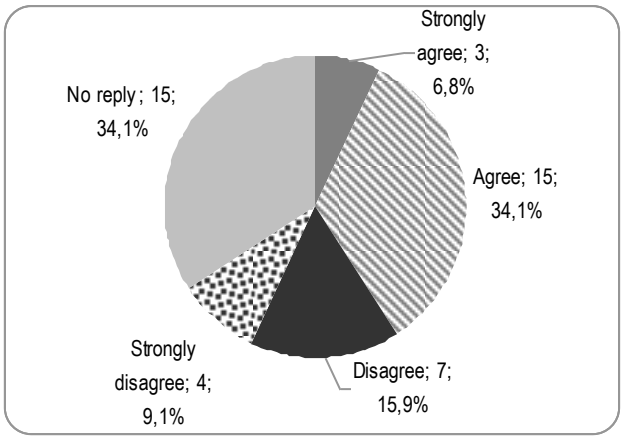


Diagram 4.61.b – Higher education

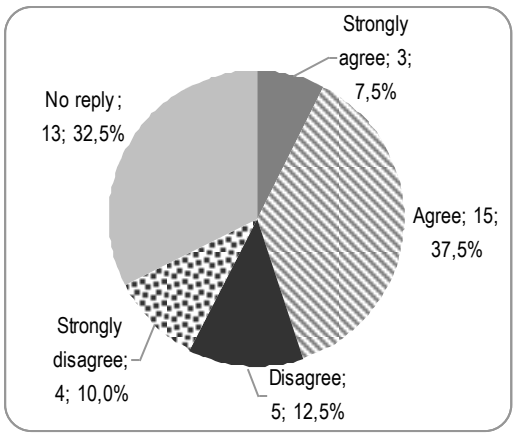
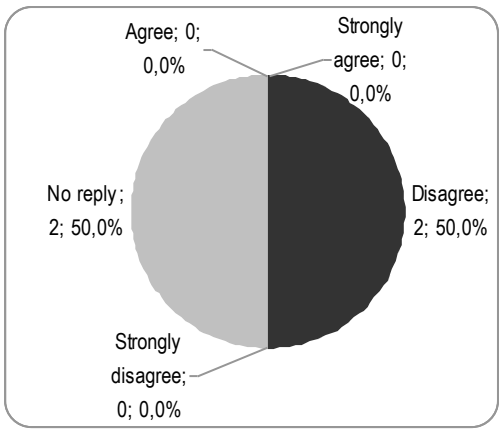


Diagram 4.61.c – Adult learning



By way of conclusion, there is a clear positive opinion in all education roles and across the two sectors surveyed that the use of OER and the implementation of OEP lead to innovations in pedagogical terms, in learning strategies and at institutional level. It should be stressed also that there is a recognition that such innovation poses challenges to organisations, and institutional leaders seem to be quite aware of this. Notwithstanding this good will there are still very serious barriers to overcome to enable a scenario of generalised uptake of OER and related practices.

B. Institutional Policies

2.1. The views of educational policy makers were sought regarding the value of institutional support to OER. We analysed this sub-question earlier (chapter IV.I, section A, 2.2) and observed that the replies indicate an overall positive rating.

2.2. Respondents were queried on the existence of a number of supporting factors to using OER in their educational institutions:

Institutional policy makers/managers; educational professionals: Q4.3. In your higher education institution, how would you rate the following factors in support of the use of OER?
1. An explicit institutional policy.
2. A partnership with other organisations.
3. Specific quality assurance processes for OER.
5. Specific pedagogical scenarios and models for open educational practices.

2.2.1. Existence of an explicit institutional policy

Overall, the existence of individual efforts in the institutions received the highest score, at 27.4%, followed closely by the inexistence of any explicit institutional policy, at 22,7%. The lowest figure was recorded for institutional policies implemented through the whole organisation, at 12.7%. A similar pattern was registered at sector level, as was the fairly high level of no replies recorded.

Diagram 4.62.a – An explicit institutional policy

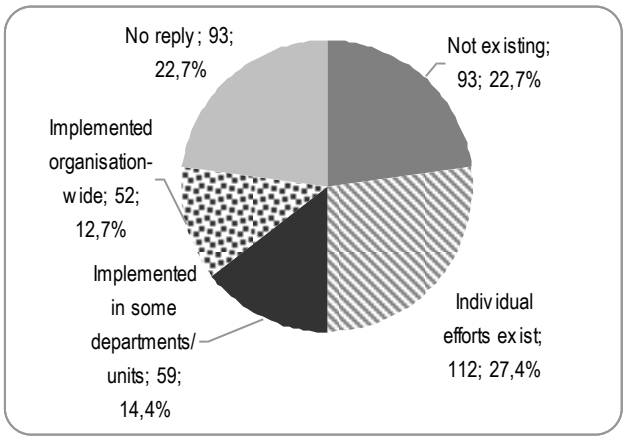


Diagram 4.62.b – Higher education

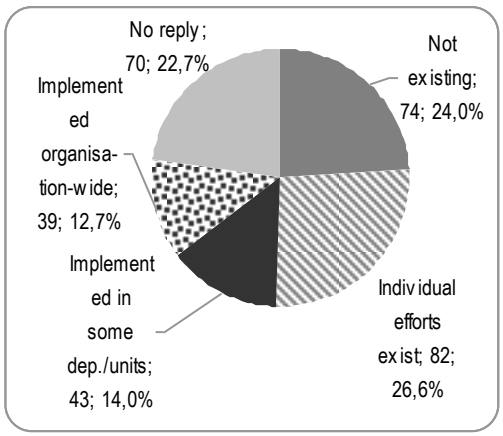
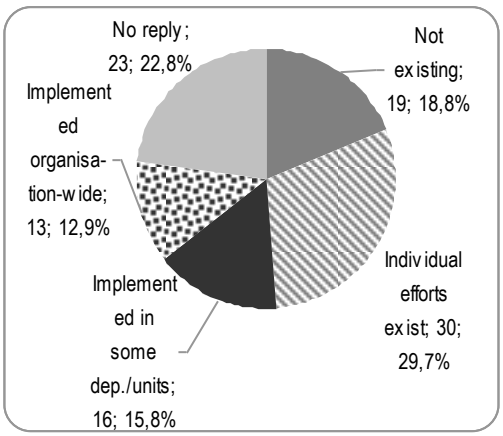


Diagram 4.62.c – Adult learning



The analysis by educational sector shows a similar trend in the responses of institutional policy makers/managers, who register higher figures for policies implemented organisation-wide than their counterparts.

Diagram 4.63.a – An explicit institutional policy
Higher education – Breakdown per educational role

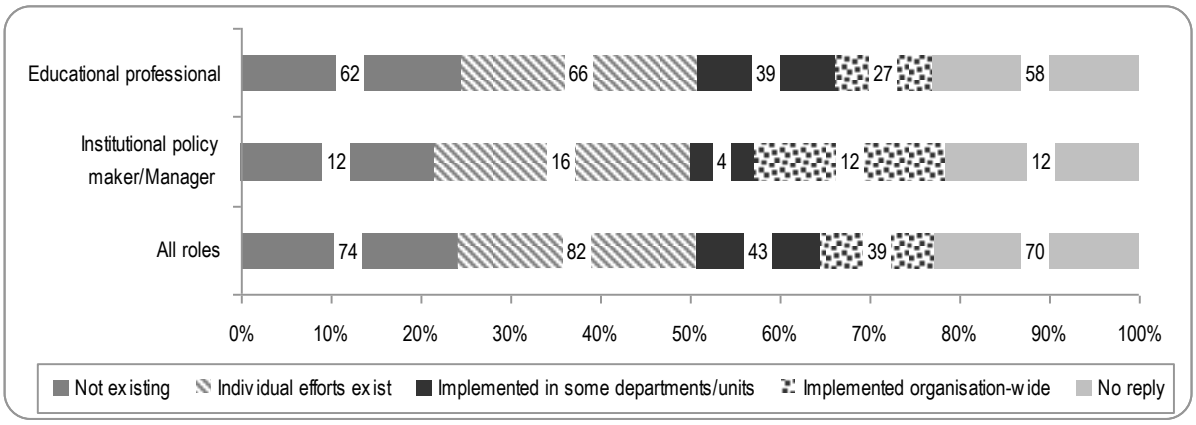
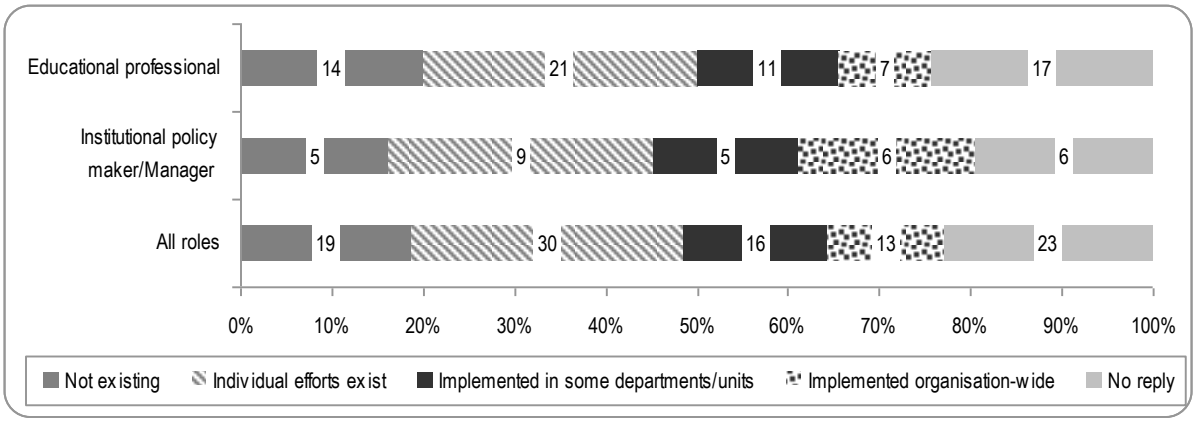


Diagram 4.63.b – Adult learning – Breakdown per educational role



The clear picture that emerges here is that organisation-wide explicit policies in support of the use of OER are the least prevalent, a clear indication as to the need for vigorous action to be taken by institutional decision makers.

2.2.2. A partnership with other organisations

This sub-question was analysed earlier from the perspective of networks of innovation (chapter IV.I, section B), where we noted response patterns where the prevalence of partnerships augments from the lowest values registered for organisation-wide implementation to the highest values recorded for the existence of individual efforts (with the exception of adult learning, where the implementation category in some departments/units supersedes the individual efforts).

2.2.3. Specific quality assurance processes for OER

This sub-question was analysed earlier from the perspective of OER supply (chapter IV.I, section C, 2.1). For higher education and adult learning, there is a prevalent notion that there are no specific quality assurance processes in place for OER, followed by the item indicating individual efforts. The

least represented item regards the implementation of OER quality assurance processes across the organisation.

2.2.4. Specific pedagogical scenarios and models for open educational practices.

The status of pedagogical scenarios and models that are specific to open educational practices in organisations follows an identical trend to other aspects of institutional policies. In this case, the existence of individual efforts takes the lead overall, at 33.3%, followed by inexistence, at 21.3%. Again, we note that organisation-wide implementation gathers the least opinions overall, at 6.8%.

Diagram 4.64.a – Specific pedagogical scenarios and models for open educational practices

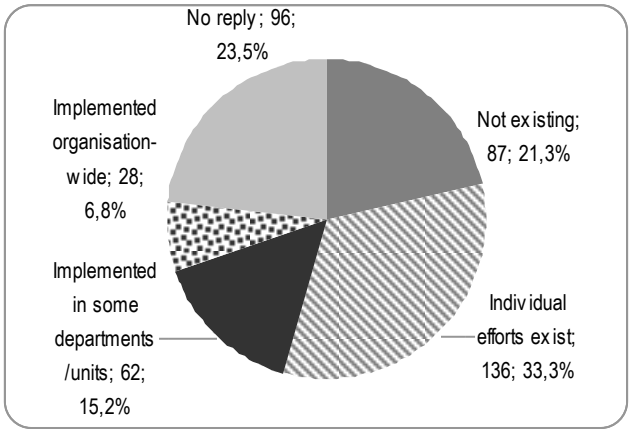


Diagram 4.64.b – Higher education

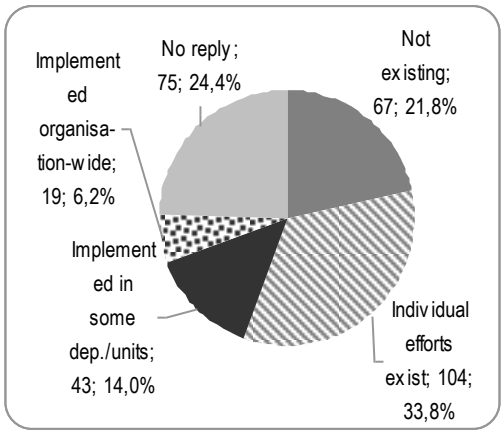
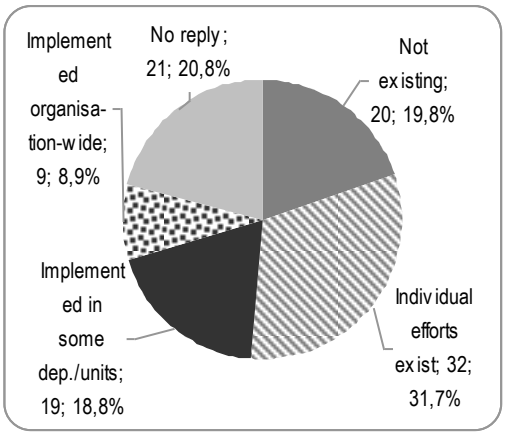


Diagram 4.64.c – Adult learning



The breakdown by educational role shows that institutional policy makers register higher than their counterparts regarding the existence of organisation-wide implementations in the two sectors surveyed and lower regarding the inexistence of any specific pedagogical scenarios and models for OEP.

Diagram 4.65.a – Specific pedagogical scenarios and models for open educational practices
Higher education – Breakdown per educational role

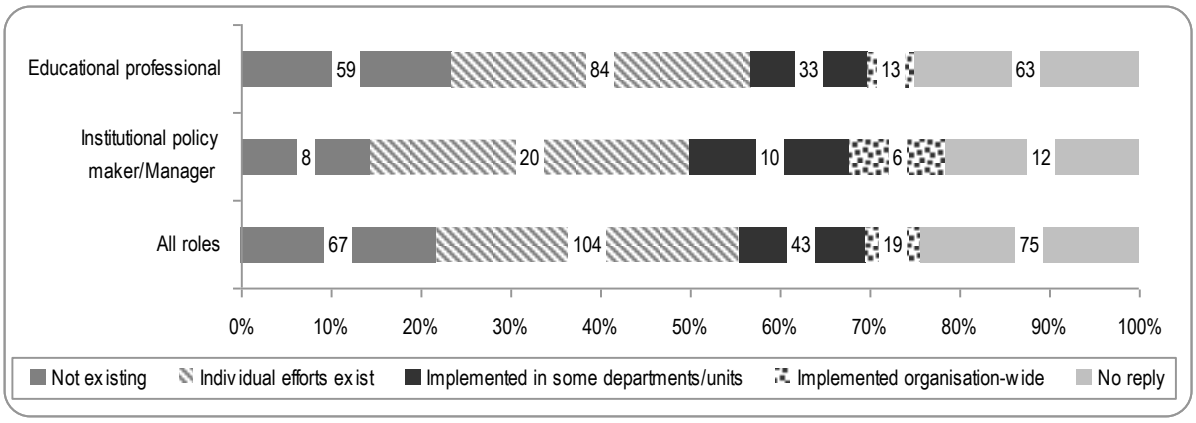
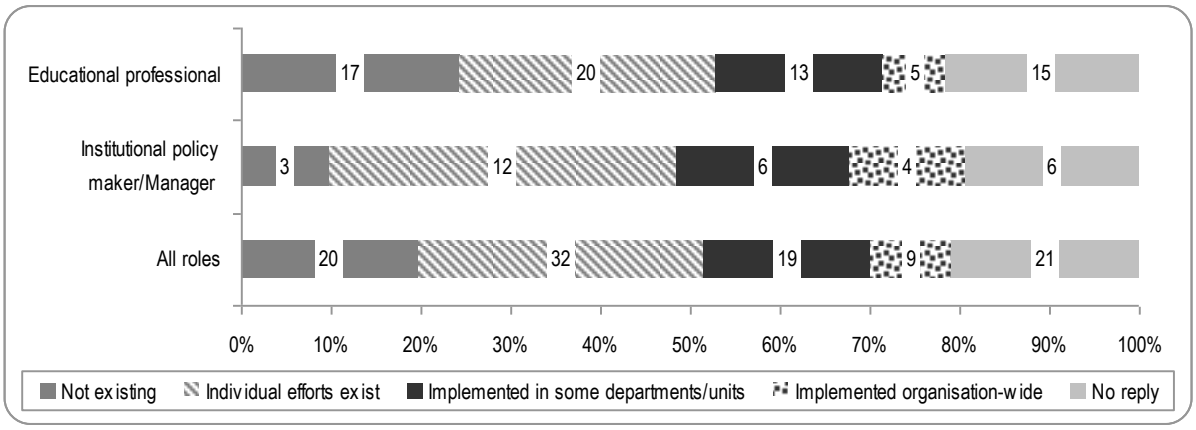


Diagram 4.65.b – Adult learning – Breakdown per educational role



2.3. OER leading to institutional innovations and the need for skill support were targeted in two sub-questions:

Institutional policy makers/managers: Q4.4. How would you rate the following statements? (and educational professionals): 2. (5.) Using OER leads to institutional innovations.
5. In order to stimulate the use of OER, specific skill support at institutional level is needed.

2.3.1. Using OER leads to institutional innovations

This sub-question was analysed earlier from the perspective of cultures of innovation (chapter IV.II, section A1, 1.2.2), where we saw that the majority of both targets – institutional policy makers/managers and educational professionals – gave a positive and very positive rating to this assertion, overall and per sector (with the highest values in adult learning, at 71.2%).

2.3.2. Specific skill support at institutional level is needed to stimulate OER use

The combination of positive responses from the institutional policy makers/managers to this sub-question reaches 73.6% overall, with a similar pattern in each sector.

Diagram 4.66.a – Specific skill support at institutional level is needed to stimulate OER use

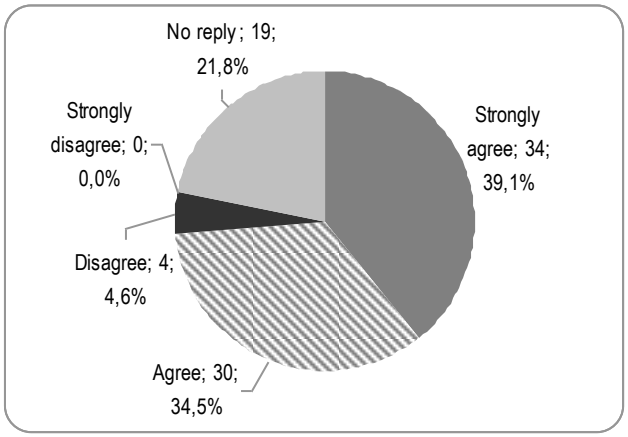


Diagram 4.66.b – Higher education

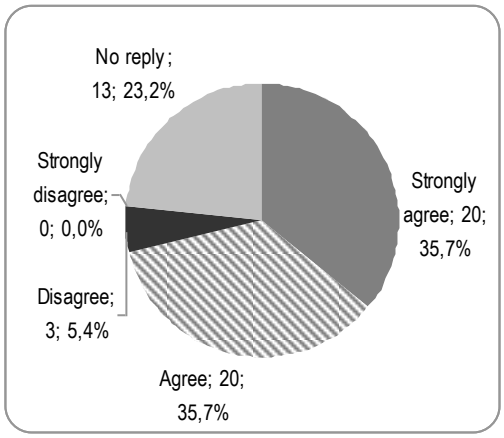
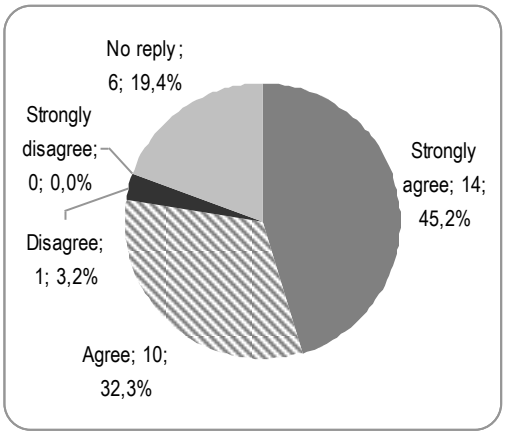


Diagram 4.66.c – Adult learning



The analysis of this sub-question should be complemented with that of a related sub-question dealt with elsewhere in this report (chapter IV.I section A, 3), which shows that the majority of educational professionals are of the opinion that in order to stimulate the use of OER, specific skill support is needed.

2.4. Open educational practices from an institutional policy perspective were the focus of two sub-questions:

Educational professionals: Q4.4. How would you rate the following statements?
2. Teaching strategies promoting the use of OER are explicitly supported in my higher education institution/adult learning organisation.
3. Adoption of open educational practices is specifically supported in my higher education institution/adult learning organisation.

2.4.1. Explicit support in the institution for teaching strategies promoting the use of OER

In this respect, the sum of the overall responses to the two positive types of rating (31.7%) is quite far from the sum for the negative ratings (46.6%), a pattern closely matched by the higher education sector.

Diagram 4.67.a – Explicit support for teaching strategies promoting the use of OER

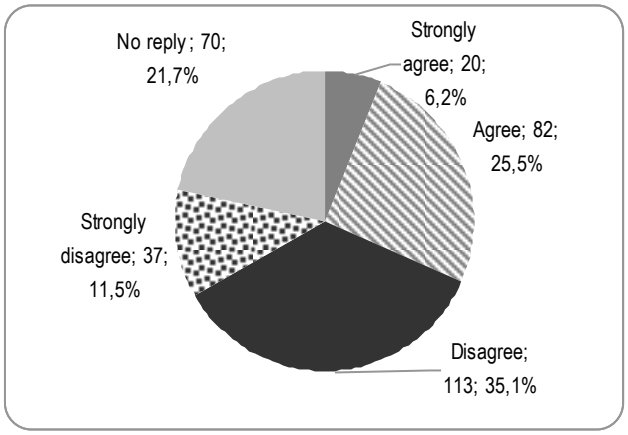


Diagram 4.67.b – Higher education

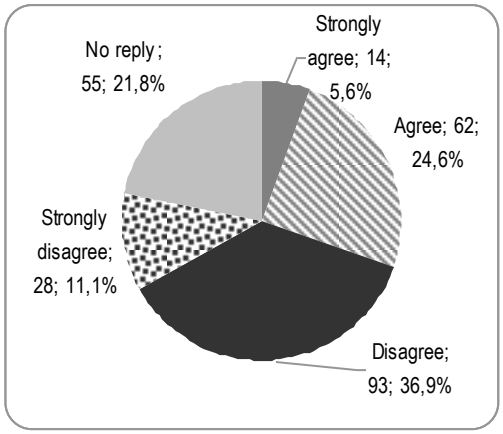
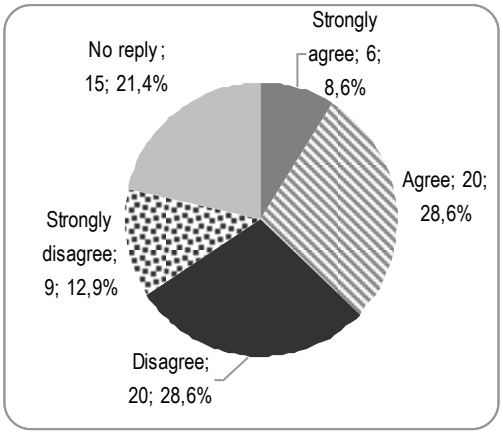


Diagram 4.67.c – Adult learning



2.4.2. Existence of specific support in the institution for the adoption of open educational practices

The negative ratings account for almost half of the overall responses (48.4%), a trend closely followed by the higher education sector.

Diagram 4.68.a – Specific support for the adoption of open educational practices

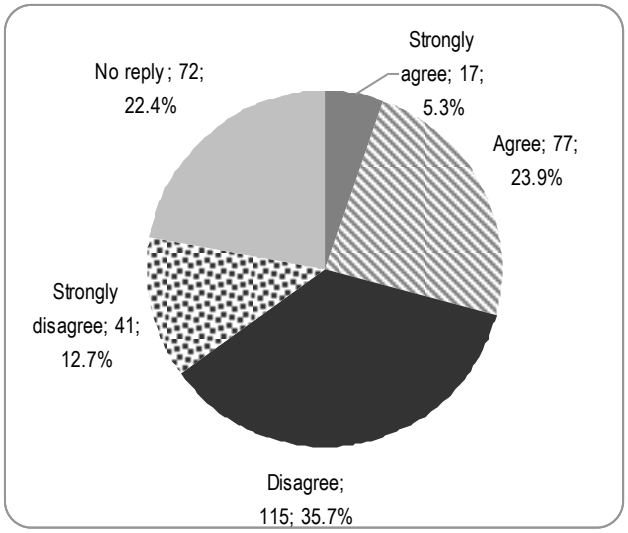


Diagram 4.68.b – Higher education

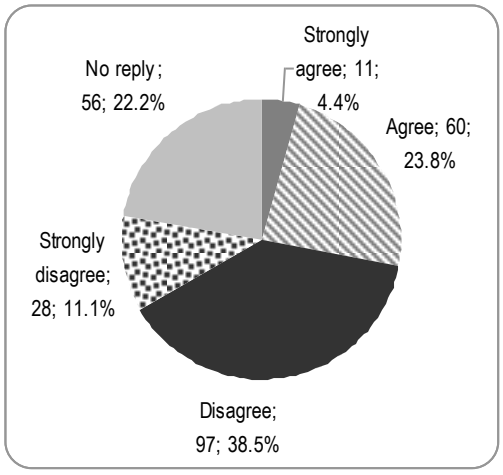
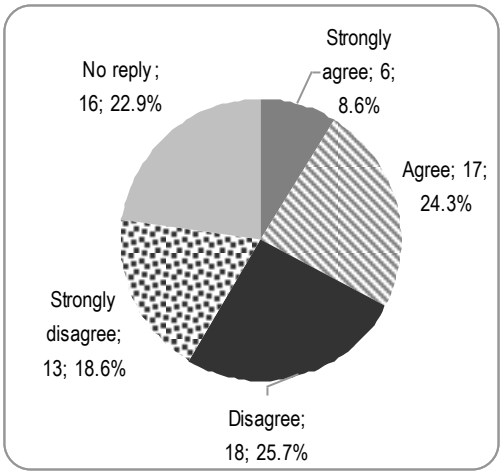


Diagram 4.68.c – Adult learning



2.5. The survey queried all respondents on their views regarding institutional polices that may constitute a barrier to the use of OER:

All respondents: Q4.4 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:
10. Insufficient reward system for educational professionals devoting time and energy to OER development.
12. Insufficient support from the management level of higher education institutions/adult learning organisations.
14. Lack of policies at institutional level to support the creation or use of OER.

2.5.1. Insufficient reward system for educational professionals

The majority of respondents concur unequivocally with this statement, with overall positive responses reaching 61.7%.

Diagram 4.69.a – Insufficient reward system for educational professionals devoting time and energy to OER development

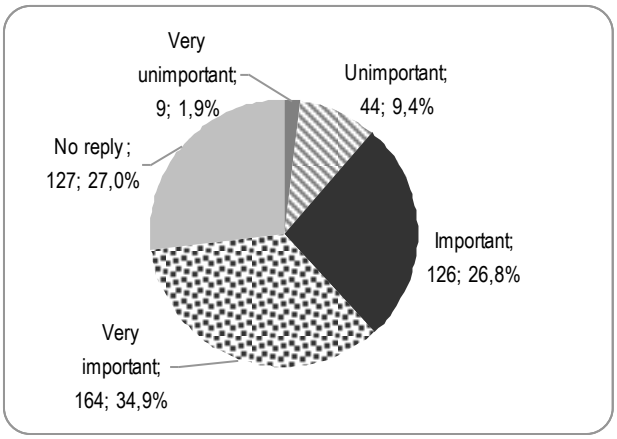


Diagram 4.69.b – Higher education

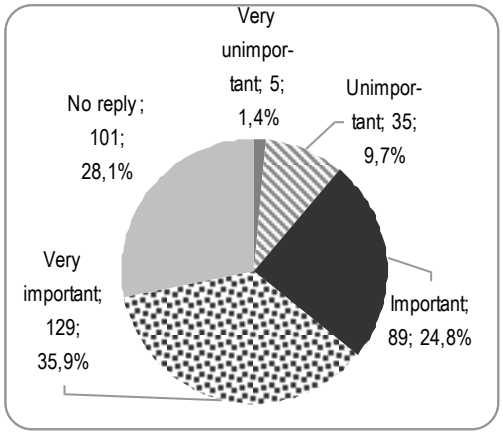
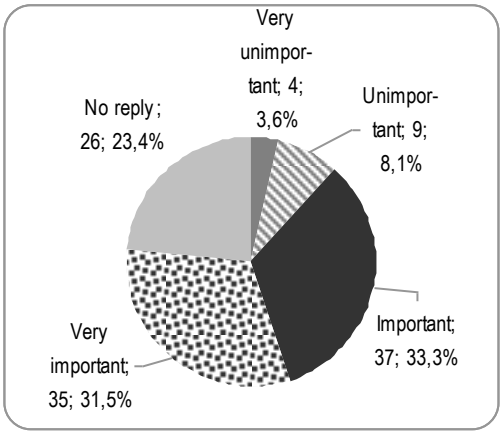


Diagram 4.69.c – Adult learning



The breakdown per educational role shows dissimilarity in the adult learning sector, in particular as regards the learners' views.

Diagram 4.70.a – Insufficient reward system for educational professionals devoting time and energy to OER development
Higher education – Breakdown per educational role

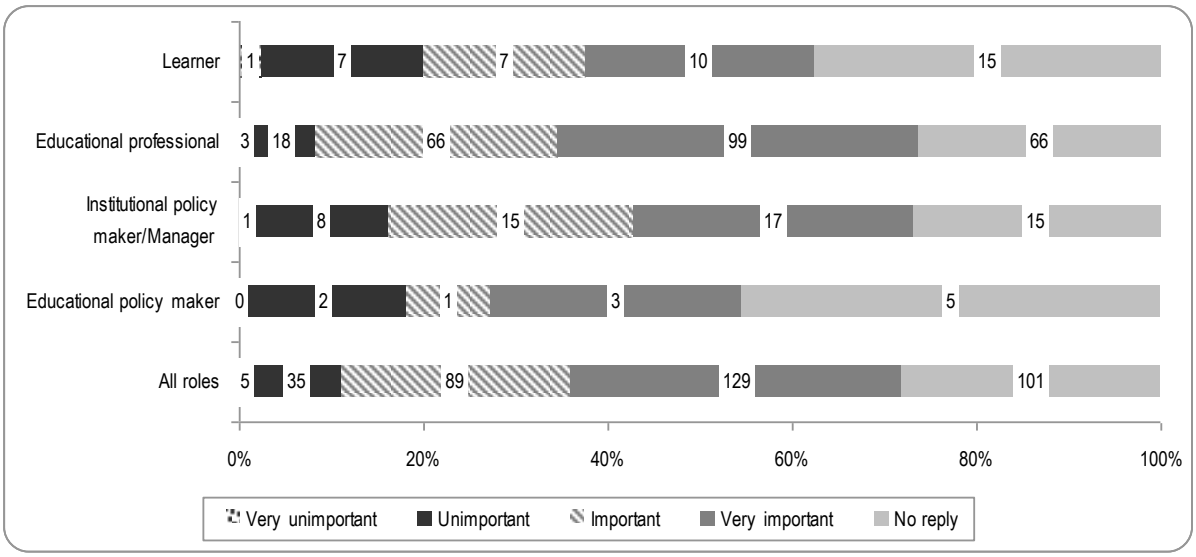
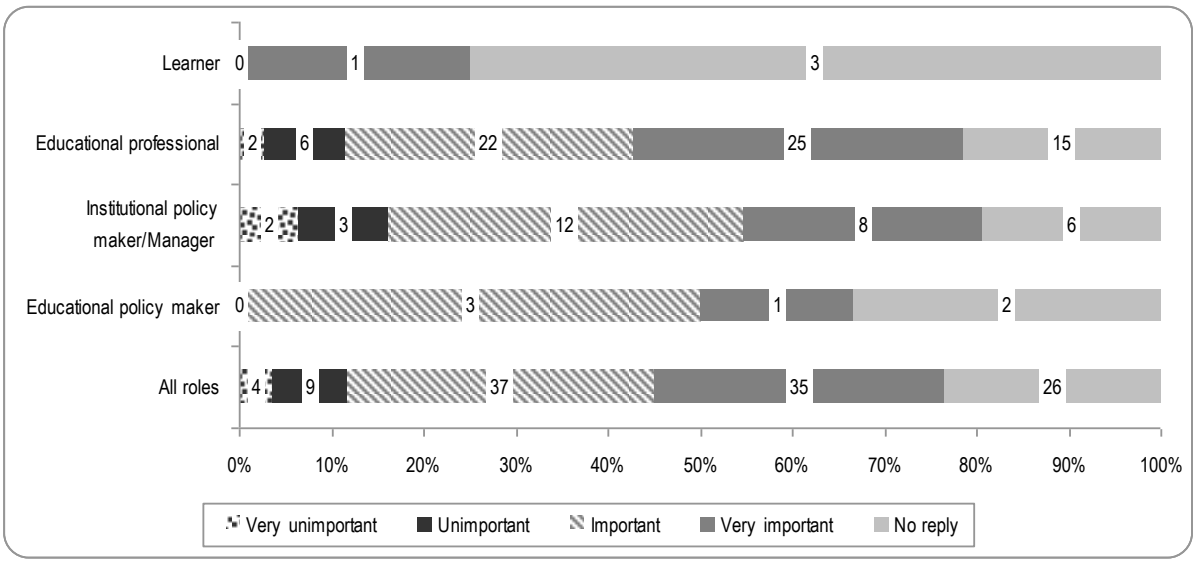


Diagram 4.70.b – Adult learning – Breakdown per educational role



2.5.2. Insufficient support from the management level

Overall, respondents place a great deal of importance to the need for more support from the management level, with positive responses totalling 61.7%. It should be noted that this sub-question received a high percentage of no replies (27.9% overall).

Diagram 4.71.a – Insufficient support from the management level

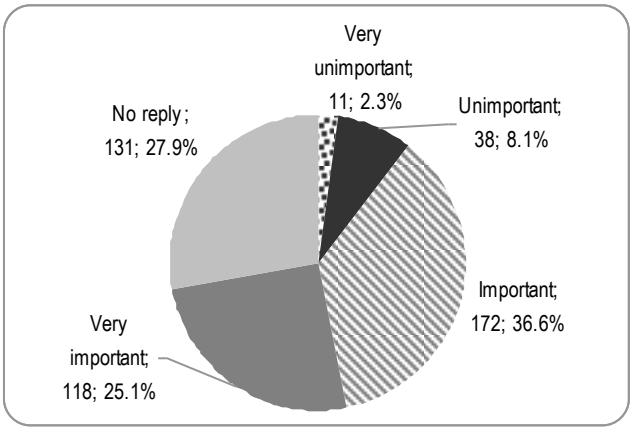


Diagram 4.71.b – Higher education

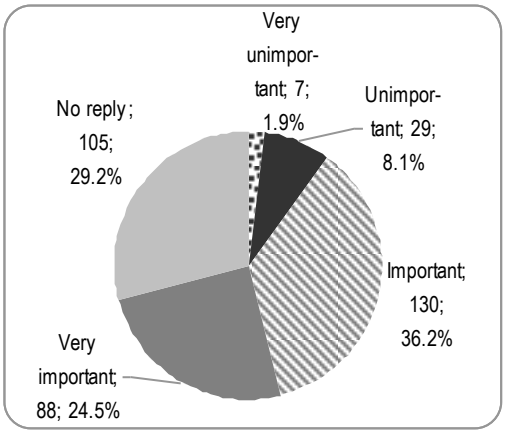
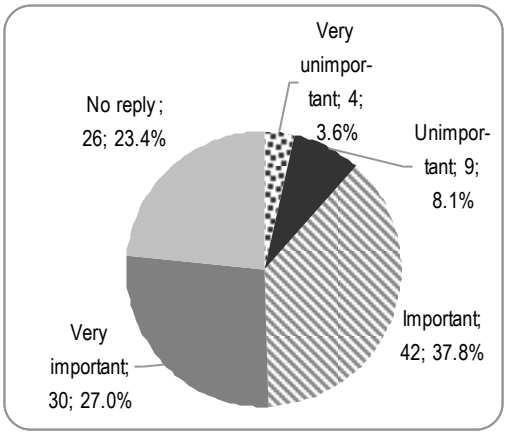


Diagram 4.71.c – Adult learning



Both educational professionals and institutional policy makers/managers offer positive assessments to this sub-question: the former at 65.5% in higher education and 67.1% in adult learning; the latter at 50% in higher education and 64.5% in adult learning.

Diagram 4.72.a – Insufficient support from the management level
Higher education – Breakdown per educational role

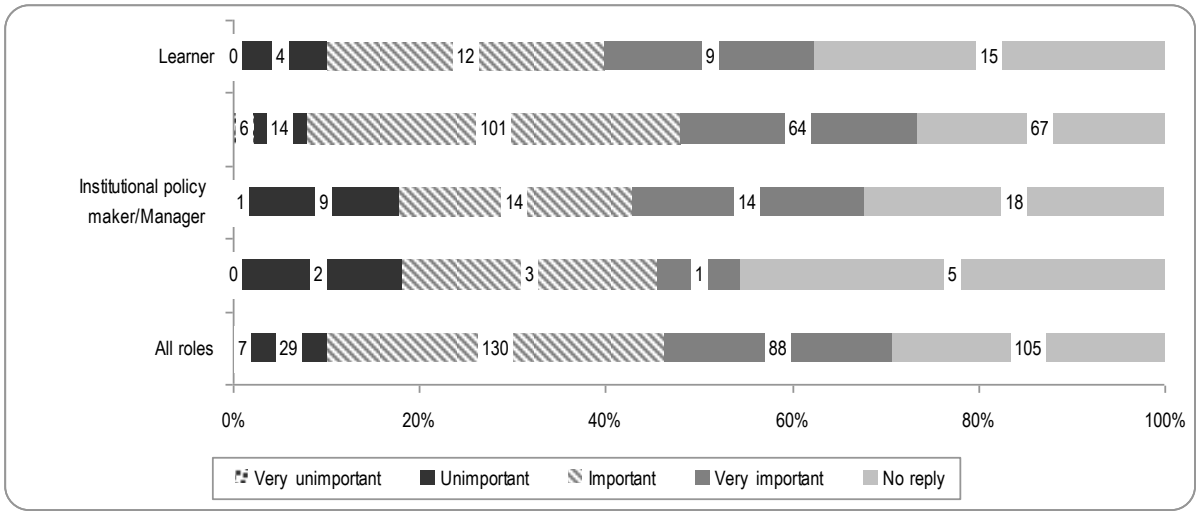
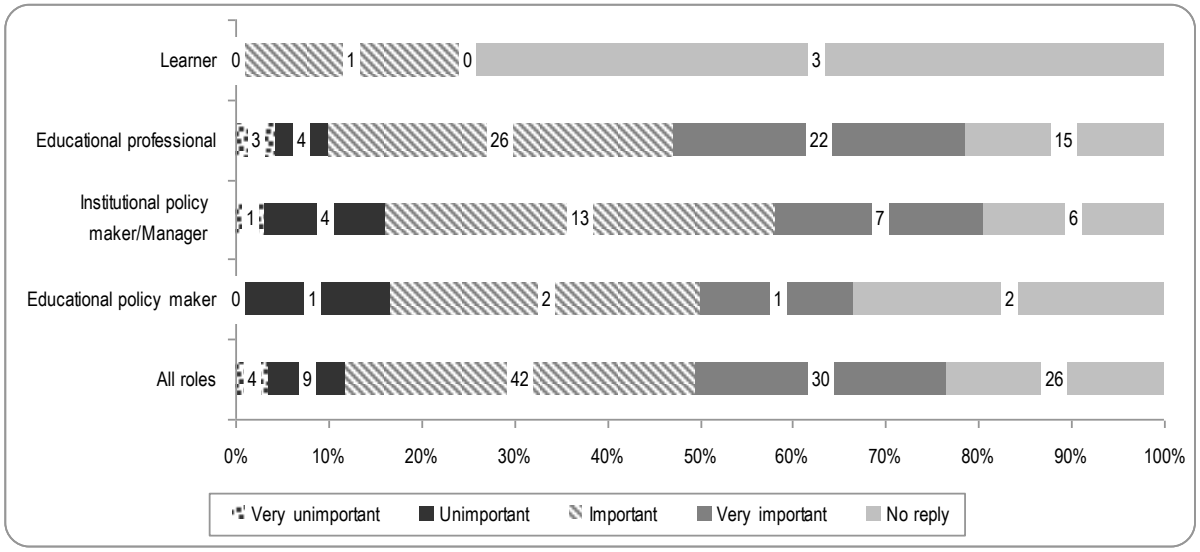


Diagram 4.72.b – Adult learning – Breakdown per educational role



2.5.3. Lack of policies at institutional level to support the creation or use of OER

The majority of the respondents rated this barrier as an important or very important one, totalling 63.4%, with similar values by sector.

Diagram 4.73.a – Lack of policies at institutional level to support the creation or use of OER

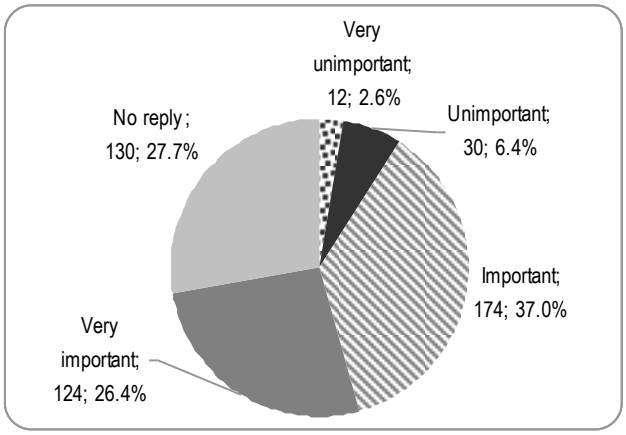


Diagram 4.73.b – Higher education

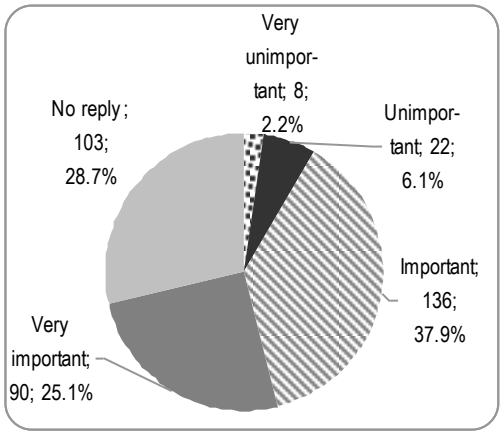
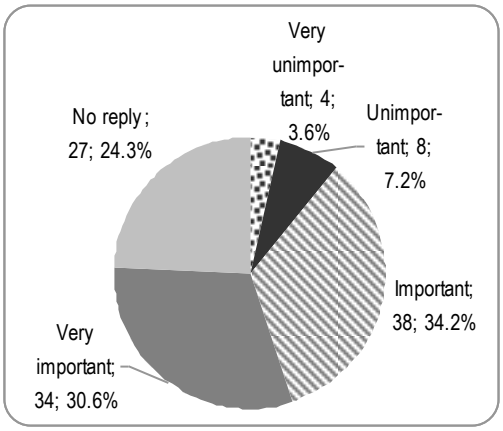


Diagram 4.73.c – Adult learning



The distribution of responses per educational role is more consistent with the general trend within the educational roles of the higher education sector.

Diagram 4.74.a – Lack of policies at institutional level to support the creation or use of OER
Higher education – Breakdown per educational role

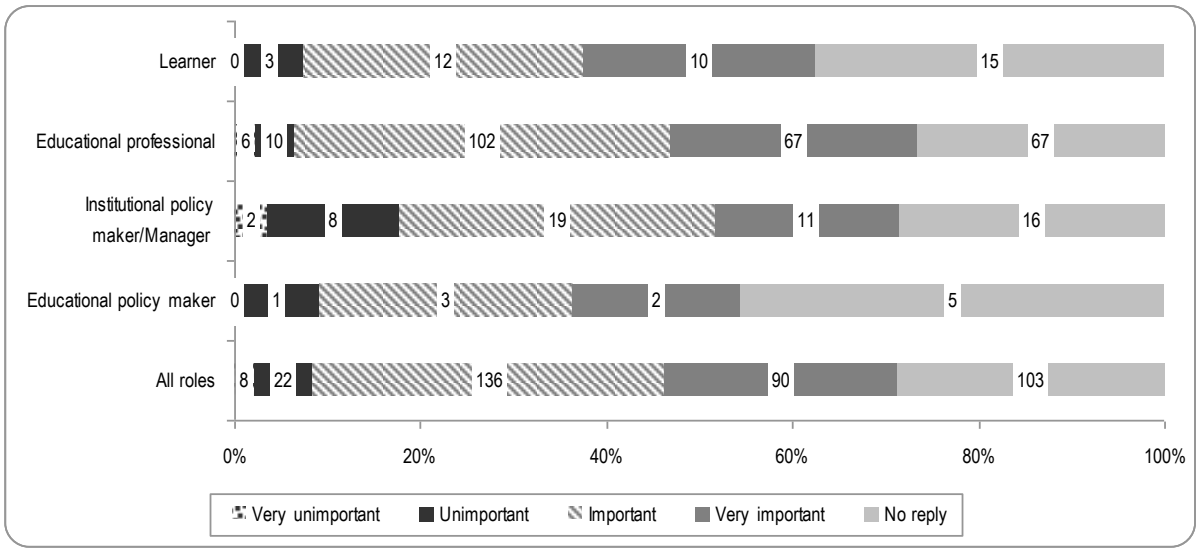
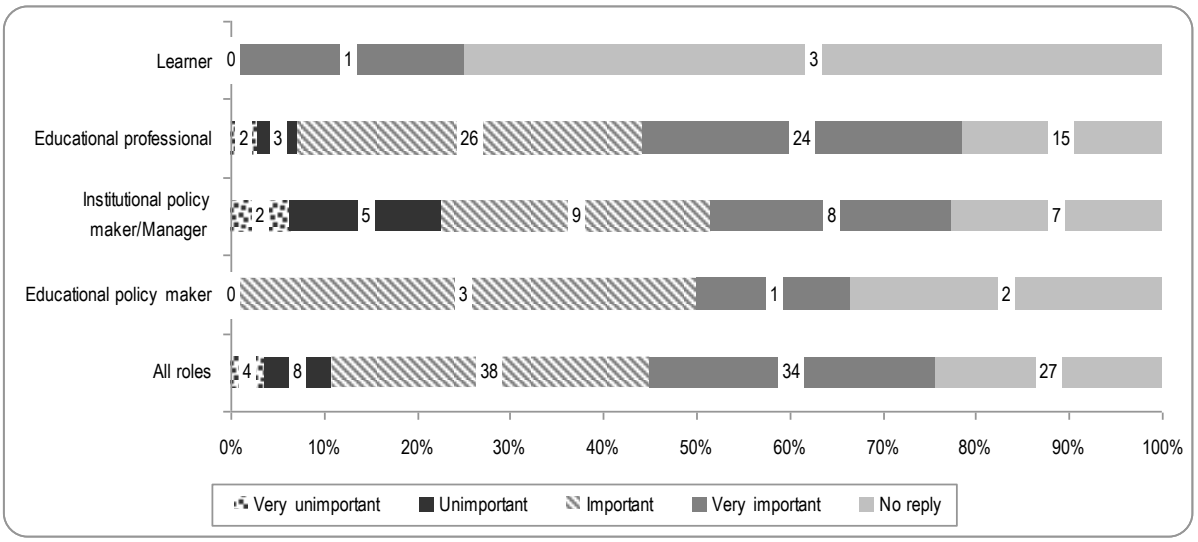


Diagram 4.74.b – Adult learning – Breakdown per educational role



When considering the various strands of institutional policies around OER, it becomes obvious that they are still quite far from impacting on the educational institutions as a whole. The perception by respondents that using OER can lead to institutional innovations does not seem to translate, to the same extent, into the existence of organisation-wide implementations, which points to the need for considerable efforts to be made in this regard. This is further compounded, on the one hand, by the modest levels of types of support to factors that induce or enable open educational practices to be firmly established in educational institutions, and on the other hand by the level of importance attached by respondents to institutional policy barriers to the use of OER.

C. Infrastructures for Creation and Use of OER

Infrastructures are a micro level category of analysis corresponding to an enabling factor for the creation and use of OER, as well as for the implementation of OEP.

3.1. This factor may be viewed from a policy perspective; this analysis was made earlier in this report (chapter IV, section A, points 2.6 and 2.7).

3.2. Respondents were queried on a series of potential barriers to the use of OER, three of which are directly connected to the availability of infrastructures:

> *All educational roles: Please evaluate the relevance of the following barriers to the use of OER from your personal experience:*
> *3. Lack of Internet connectivity.*
> *4. Lack of software to adapt the resources to the user's purposes.*
> *5. Lack of access to computers.*

3.2.1. Lack of Internet connectivity

42.5% of all respondents feel this barrier is very unimportant or unimportant while 30.6% rate it as very important or important. The breakdown per sector leads to a larger figure of unimportance for higher education, at 45.1%, than that for adult learning, at 34.2%.

Diagram 4.75.a – Lack of Internet connectivity

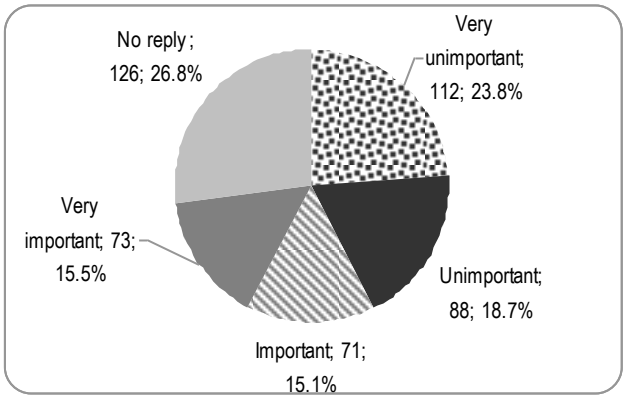


Diagram 4.75.b – Higher education

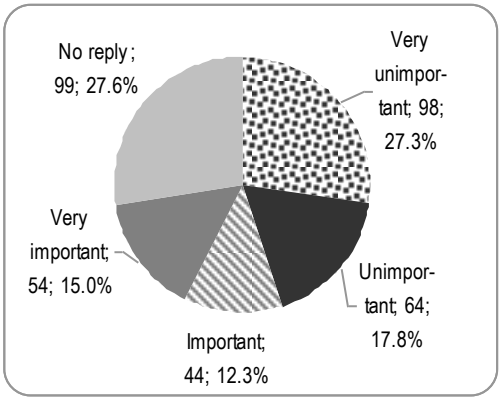
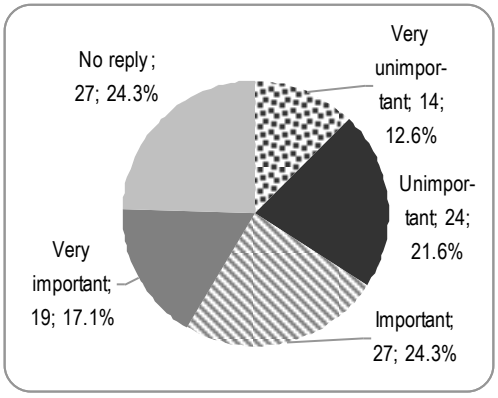


Diagram 4.75.c – Adult learning



As regards the breakdown per educational role within each sector, higher education professionals show an uneven distribution of responses across the options provided; adult learning professionals, to the contrary, present a very even distribution of opinion. Also, while 46.8% of higher education professionals think Internet connectivity is very unimportant and unimportant for OER use (against 41.6% who think the opposite), only 31.4% of adult learning professionals share that view (against 45.7% who think it is important or very important).

Diagram 4.76.a – Lack of Internet connectivity
Higher education – breakdown per educational role

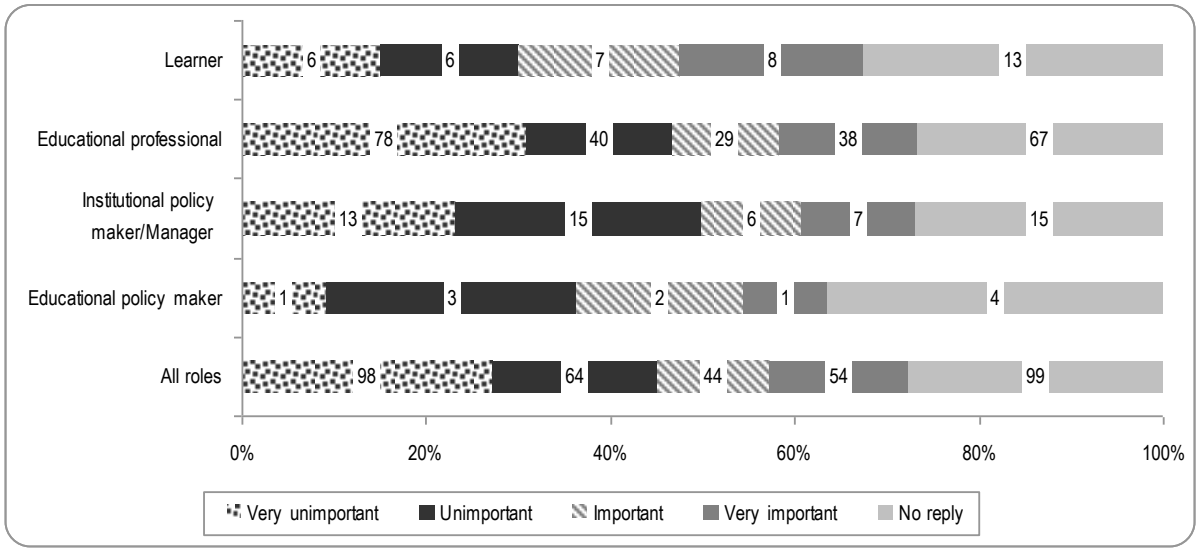
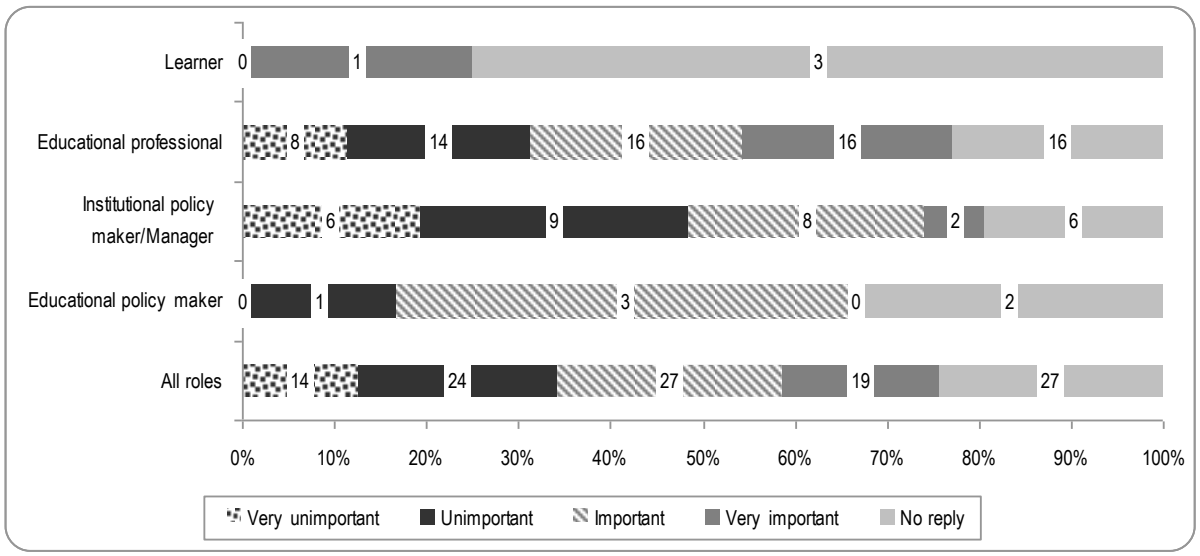


Diagram 4.76.b – Adult learning – breakdown per educational role



The above responses show that there is still a relevant barrier posed by the insufficient coverage of Internet access for OER users.

3.2.2. Lack of software to adapt the resources to the user's purposes

Overall, the majority of respondents considers this barrier very important or important, but the adult learning respondents more so than their counterparts.

Diagram 4.77.a – Lack of software to adapt the resources to the user's purposes

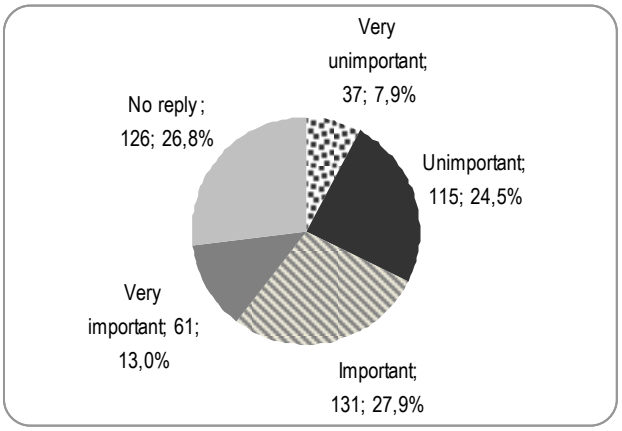


Diagram 4.77.b – Higher education

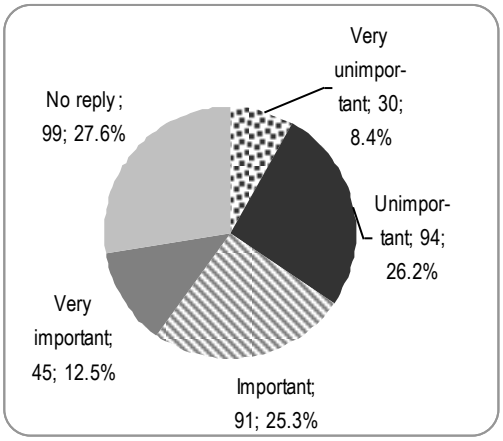
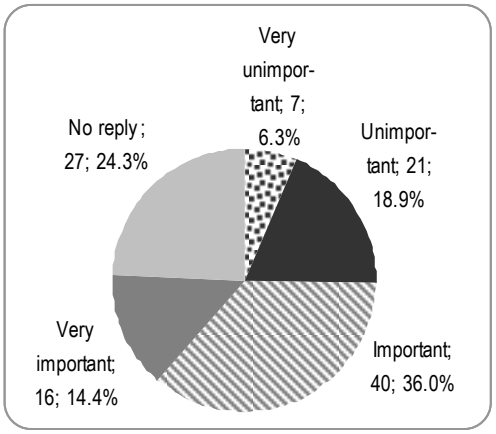


Diagram 4.77.c – Adult learning



Given the sector breakdown per educational role, one observes that higher education professionals rate in a fairly similar way the positive assessments (at 37.9%) and the negative ones (at 35.2%). A dissimilar pattern can be observed in the adult learning professional, 52.9% of whom rate positively, against 24.3% who rate negatively.

Diagram 4.78.a – Lack of software to adapt the resources to the user's purposes
Higher education – breakdown per educational role

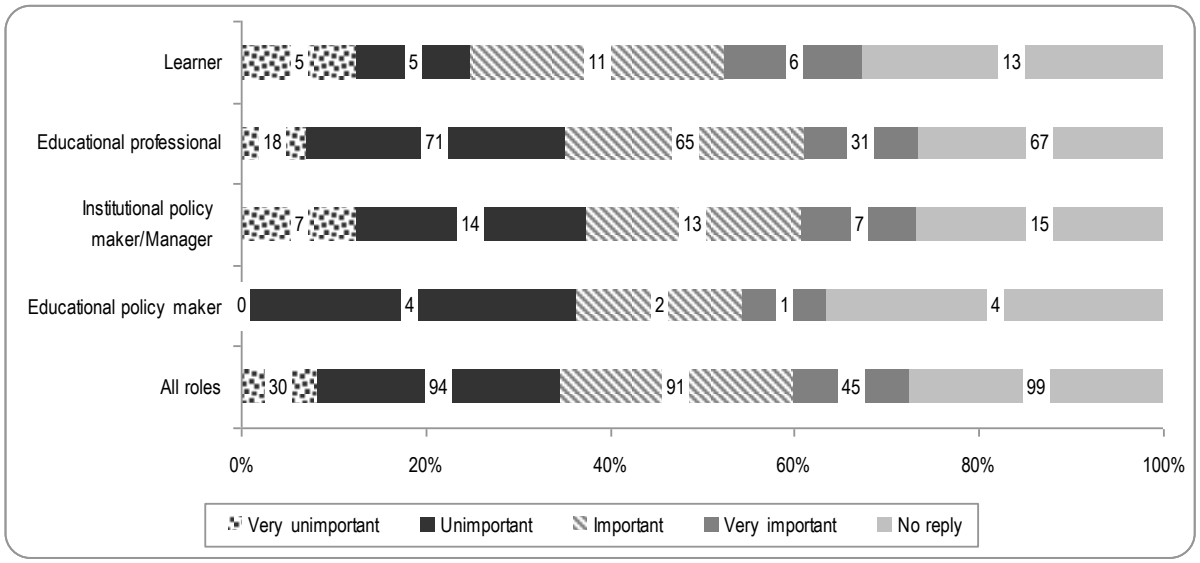
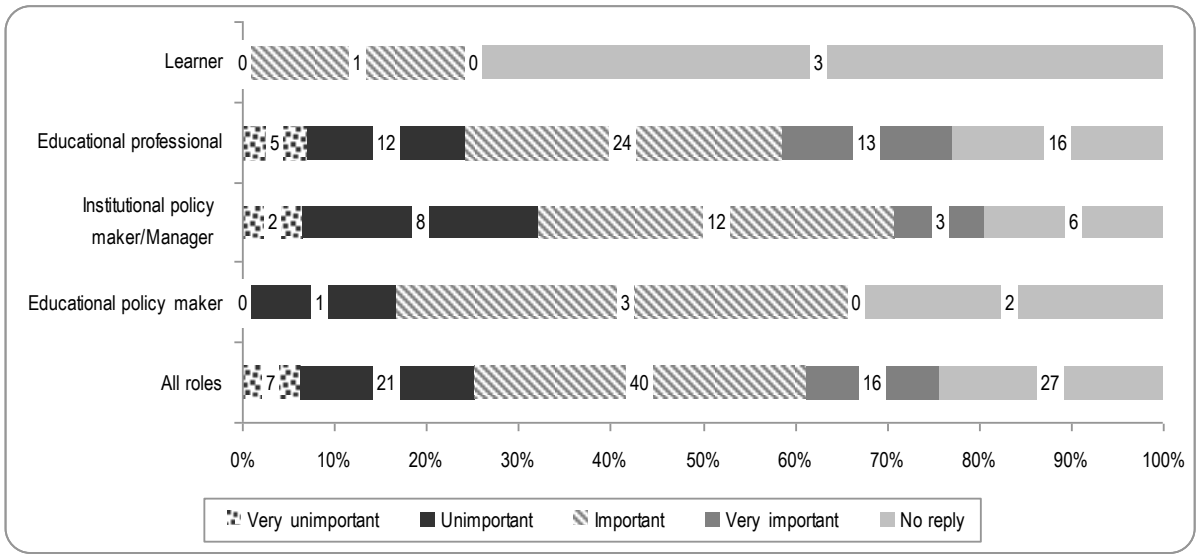


Diagram 4.78.b – Adult learning – breakdown per educational role



These results indicate that actions are needed to make available appropriate software, in particular when considering the repurposing of existing OER to better suit the users' educational needs.

3.2.3. Lack of access to computers

Almost half of all respondents (45.5%) felt this was very unimportant or unimportant, with only 28% considering it to be important or very important. However, in the breakdown by sector while higher education respondents strongly favour the negative options, adult learning respondents provide more balanced views as seen from the values given for positive and negative options.

Diagram 4.79.a – Lack of access to computers

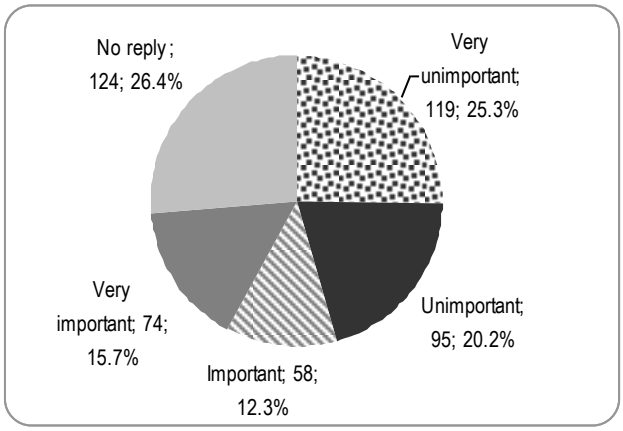


Diagram 4.79.b – Higher education

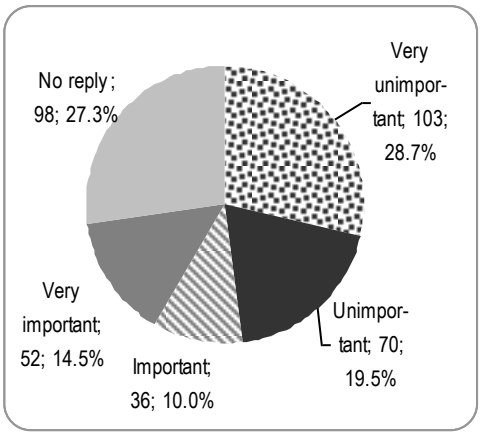
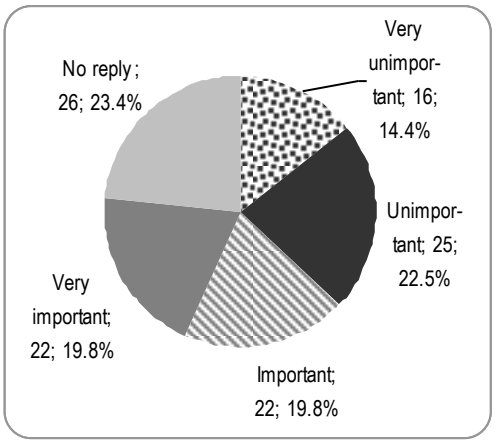


Diagram 4.79.c – Adult learning



When analysing the breakdown per educational role in the two sectors, the replies from higher education professionals for the positive attributes total 23.0%, against 50.8% for the negative ones. The opposite is observed in the replies from the adult learning professionals, with 44.3% for the positive attributes against 34.3% for the negative ones.

Diagram 4.80.a – Lack of access to computers
Higher education – breakdown per educational role

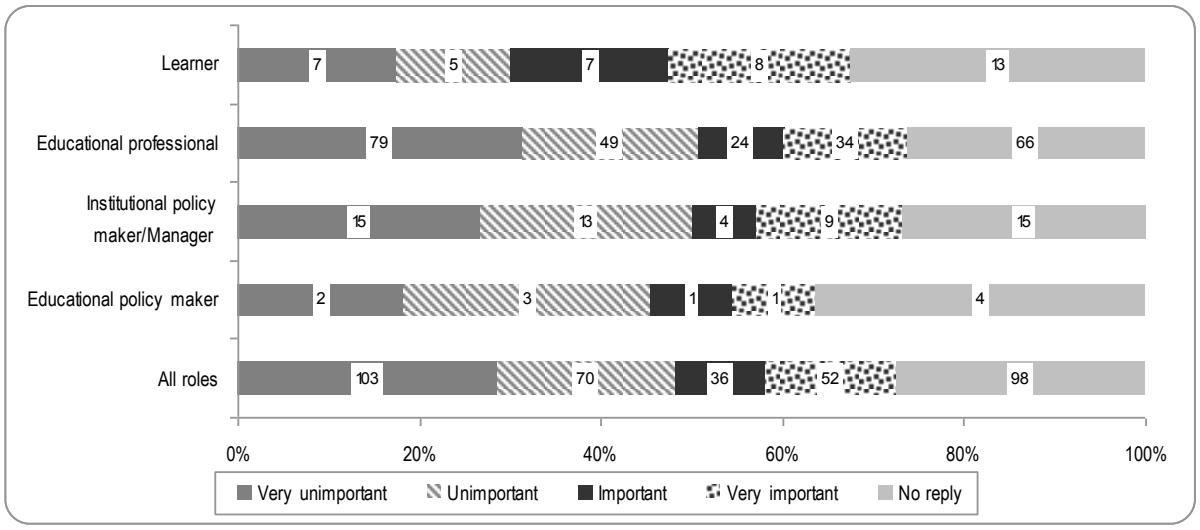
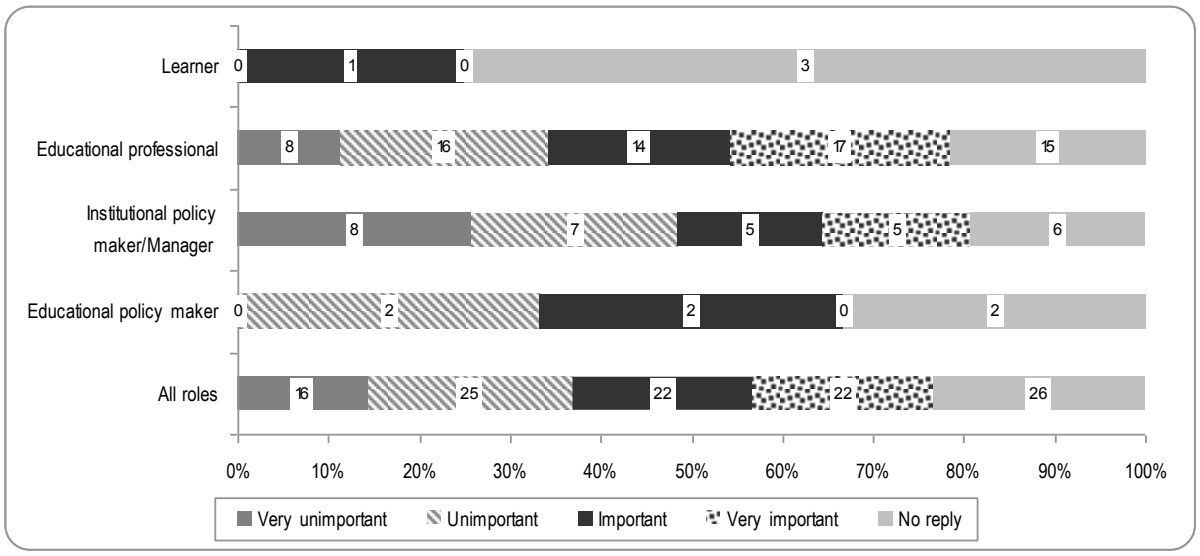


Diagram 4.80.b – Adult learning – breakdown per educational role



The survey sought the opinion of the respondents regarding several factors in support of the use of OER, among which the existence of specific technological infrastructures. The responses to this sub-question were already analysed from an OER supply perspective (chapter IV.I, section A, point 2.2), where we saw a pattern emerging namely that the sum of replies on non existence of technological infrastructures and the existence of individual efforts outweighs the two replies geared towards institutionalised practices, and we concluded that data analysis would suggest that there is room for active policies encouraging the implementation of technological infrastructures for OER where they lack.

On the whole, the opinions of respondents on infrastructure-related questions point to a lower level of perceived importance as regards generic-purpose infrastructures (Internet connectivity, access to computers), which can be explained by their pervasiveness and wide availability. This is counterbalanced by a lower degree of perceived relevance regarding technological infrastructures that are specific to supporting OER, where data suggest there is much room for improvement. In fact, where they exist, such infrastructures stem predominantly from the initiative of individuals or units within organisations. This points to the strategic aim of getting the entire educational organisation behind OER and OEP and backing that support through earmarked resources. As we already remarked, appropriate institutional policies in this regard are both timely and required.

2. Perceptions and Opinions towards OER

A few attributes can be used to characterise the representations of respondents regarding OER, as presented in the following sub-sections.

A. Attitudes towards the Use of OER

The survey was addressing different realities of using OER.

Educational policy maker; institutional policy maker/manager; educational professional: Q4.1. What is your view on open educational practices in higher education institutions/adult learning organisations today? Do you think that…
… they are sufficiently developed?
… they are moderately developed?

... they are underdeveloped?
... they are not developed at all?

Overall, roughly half of the respondents (50.9%) consider that open educational practices are currently undeveloped in educational institutions, and only a small minority is satisfied with the state of development of OEP (3.1%). Both sectors follow this trend closely.

Diagram 4.81.a – Views on state of development of OEP in education/training institutions

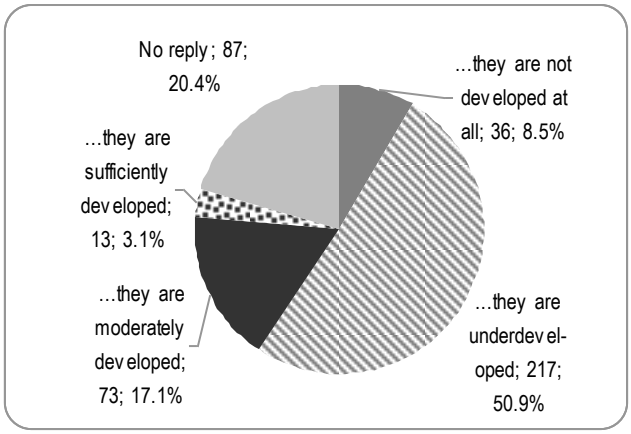


Diagram 4.81.b – Higher education

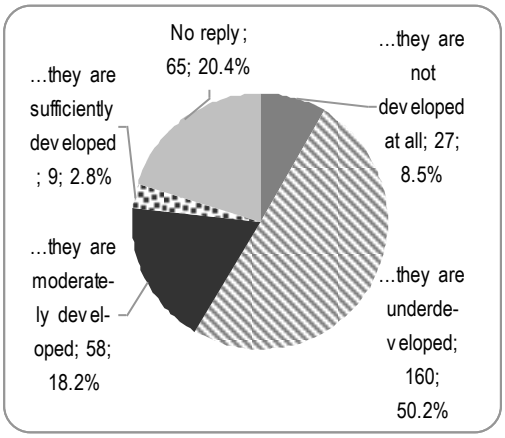
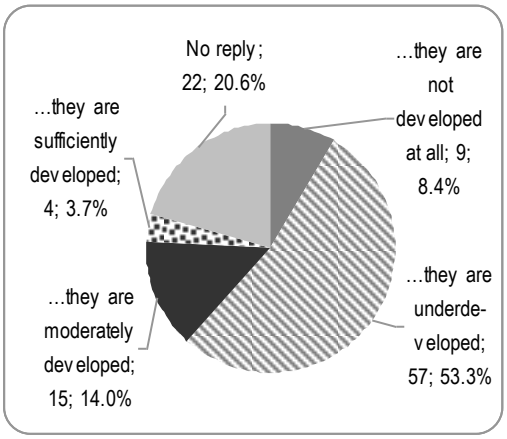


Diagram 4.81.c – Adult learning



The breakdown of responses per educational role shows the same trend described above and also that institutional policy makers/managers in higher education and educational professionals in adult learning score the highest (both at 57.1%) in considering that OEP are underdeveloped in educational institutions.

Diagram 4.82.a – Views on state of development of OEP in education/training institutions
Higher education – Breakdown per educational role

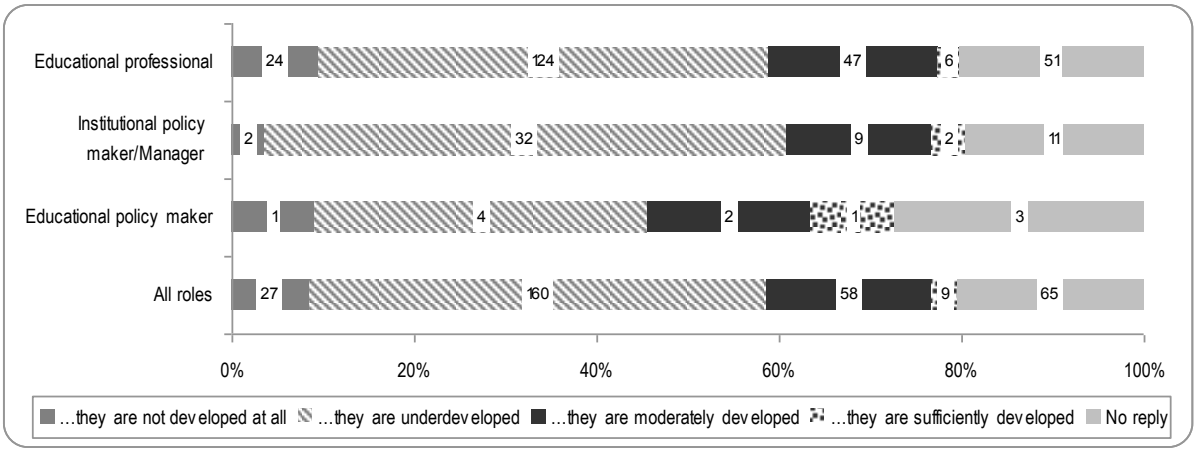
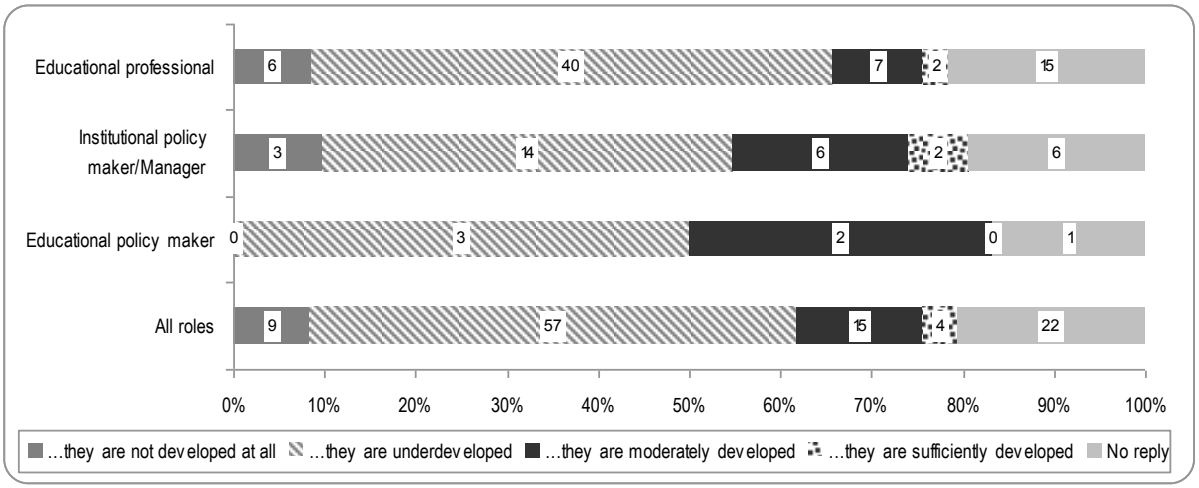


Diagram 4.82.b – Adult learning – Breakdown per educational role



The unequivocal nature of the opinions expressed seems to confirm that for respondents the use of OER does not equal the prevalence of open educational practices in institutions; this suggests the need for further efforts to be made within educational institutions in promoting open educational practices and adopting a supporting internal framework and appropriate measures to favour both the emergence, the sustainability and the recognition of OEP.

B. Perceived Usefulness of OER

Educational policy makers; institutional policy makers /managers; learners: Q3.3 Please tell us what in your experience is the value of OER for education/training (formal, non formal, informal), by rating the following statements:
1. OER raise efficiency because materials can be re-used.

1.1. OER raise efficiency because materials can be re-used

The vast majority of respondents concur with one important characteristics of OER, i.e., its ability to be re-used, and acknowledge the consequent link with efficiency (81.8%).

Diagram 4.83.a – OER raise efficiency because materials can be re-used

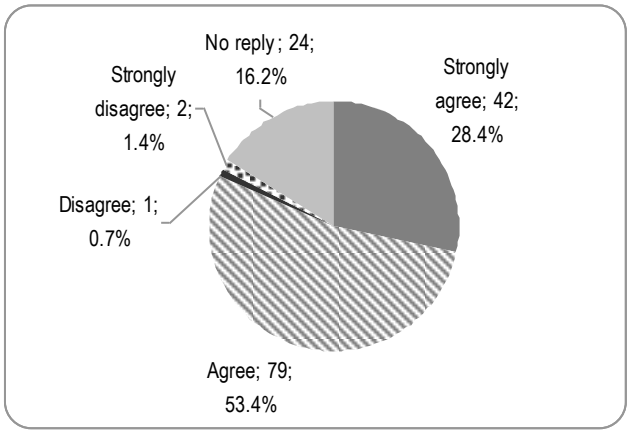


Diagram 4.83.b – Higher education

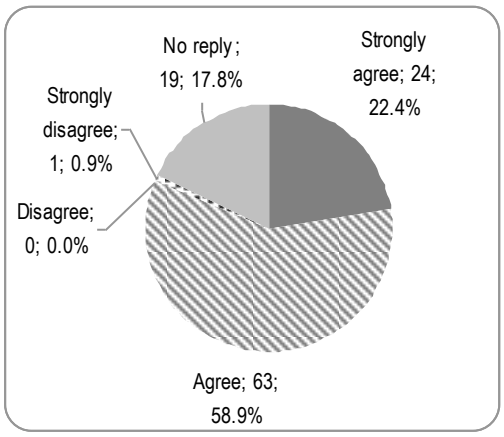
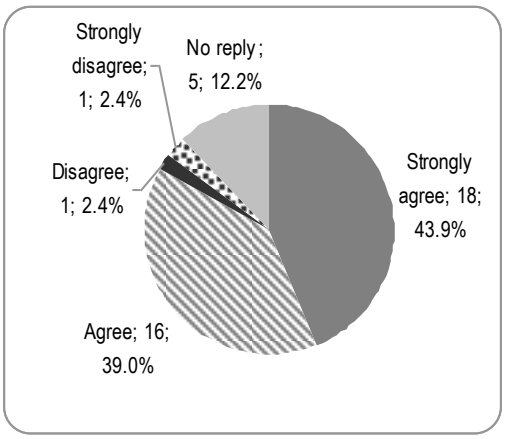


Diagram 4.83.c – Adult learning



The positive pattern is particularly consistent across educational roles in the higher education sector.

Diagram 4.84.a – OER raise efficiency because materials can be re-used
Higher education – Breakdown per educational role

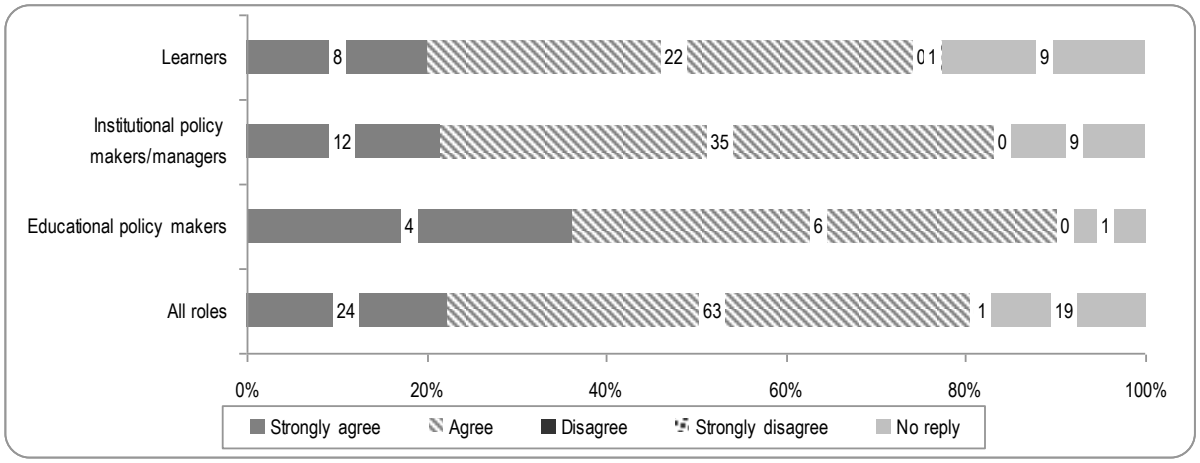
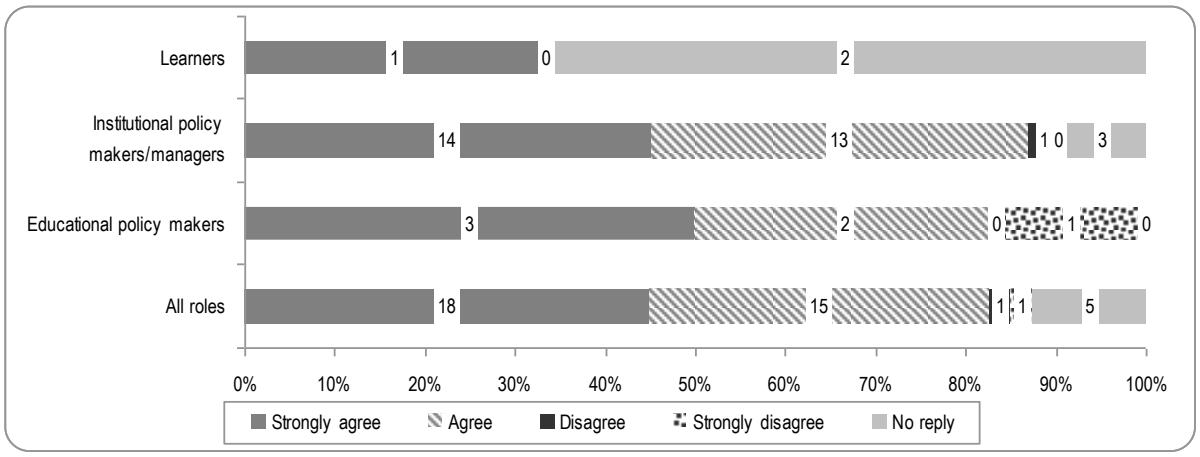


Diagram 4.84.b – Adult learning – Breakdown per educational role



C. Perceived Quality of OER

Respondents were asked about their opinion on the value and quality of OER.

Educational policy makers; institutional policy makers /managers; learners: Q3.3 Please tell us what in your experience is the value of OER for education/training (formal, non formal, informal), by rating the following statements:
2. The quality of OER can be a problem.

Based on their experiences, the majority of respondents (68.9% overall) agree that the quality of OER can be a problem; respondents from the adult learning sector feel even stronger about this issue, at 78% of their responses.

Diagram 4.85.a – The quality of OER can be a problem.

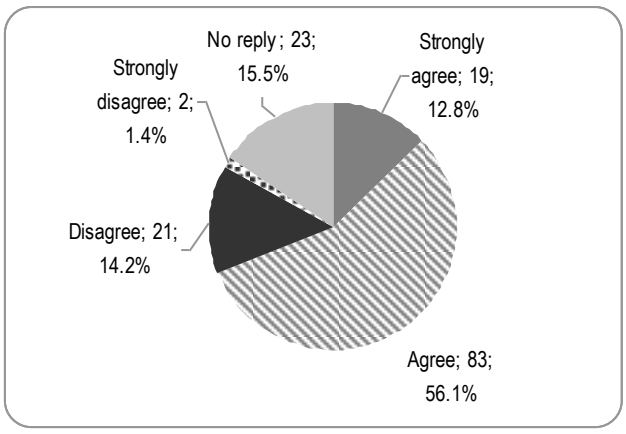


Diagram 4.85.b – Higher education

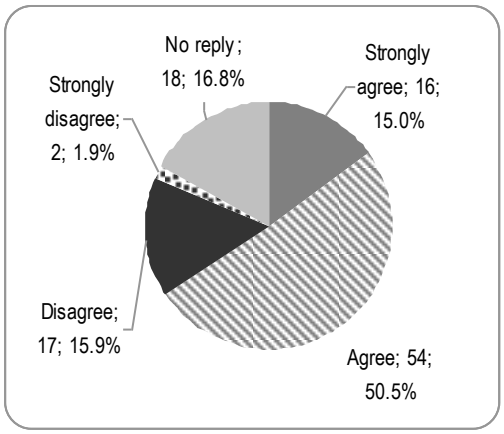
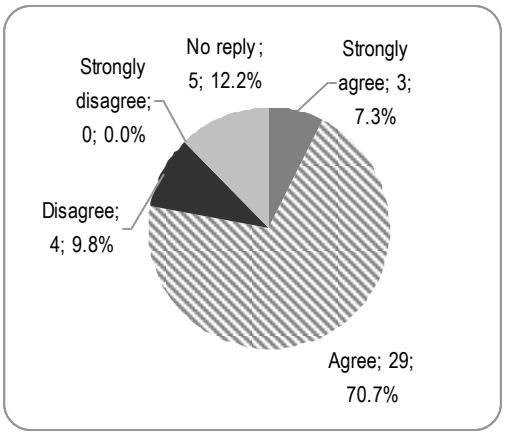


Diagram 4.85.c – Adult learning



The comparison of the opinions expressed by educational role shows that the educational policy makers in both sectors are the ones who evidence a higher agreement with the statement.

Diagram 4.86.a – The quality of OER can be a problem. Higher education – Breakdown per educational role

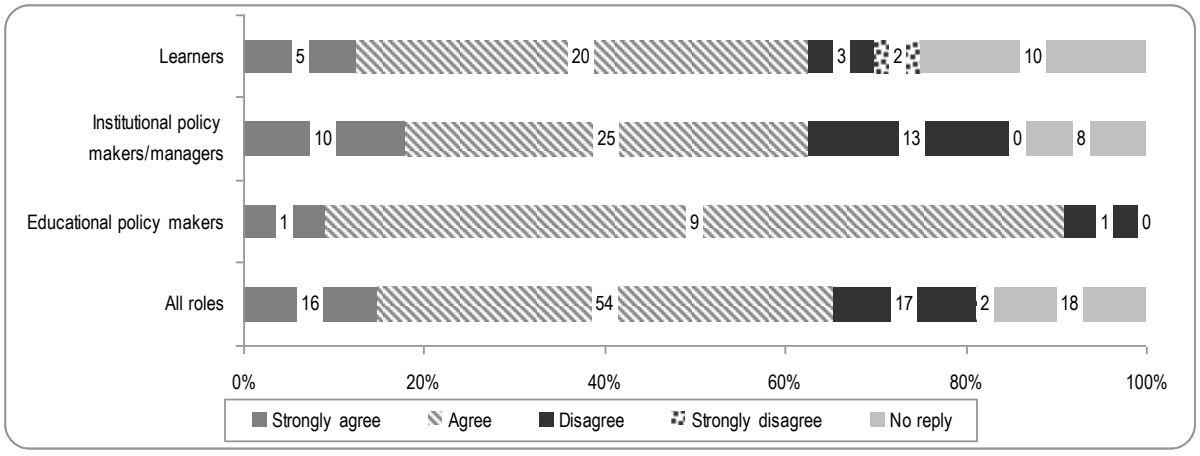
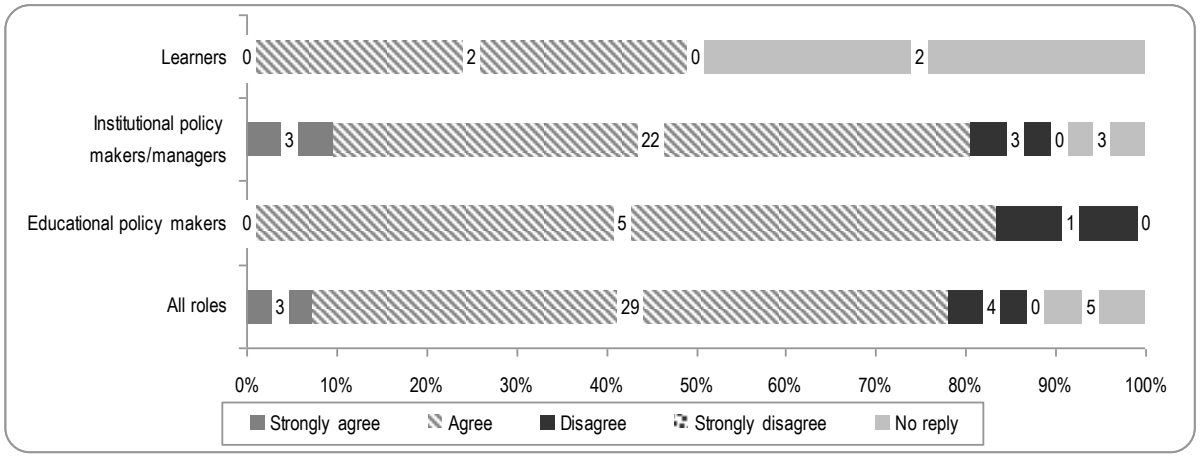


Diagram 4.86.b – Adult learning – Breakdown per educational role



The very clear opinions shown in this sub-question point to the need for actions to promote the quality of OER, which should lead to a boost in usage and support also open educational practices.

D. Barriers to Use OER

A list of 19 potential barriers to use were proposed to all respondents as the last question in chapter IV of the survey. Some of the sub-questions were already dealt with under previous categories of our analysis, but we review them all here to provide a complete picture of respondents views on these barriers.

All respondents: Please evaluate the relevance of the following barriers to the use of OER from your personal experience:
1. Not invented here syndrome: no trust in others' resources.
2. Lack of time to find suitable materials.
3. Lack of Internet connectivity.
4. Lack of software to adapt the resources to the user's purposes.
5. Lack of access to computers.
6. Lack of quality of the OER.
7. Lack of OER that are culturally relevant to the user.
8. Lack of OER in the user's native language.
9. OER are not embedded into the learning scenarios.
10. Insufficient reward system for educational professionals devoting time and energy to OER development.
11. Lack of interest in pedagogical innovation among educational professionals.
12. Insufficient support from the management level of higher education institutions.
13. Lack of policies at national/regional level to support the creation or use of OER.
14. Lack of policies at institutional level to support the creation or use of OER.
15. Lack of interest in creating or using OER.
16. Educational professionals lack the skills to create or use OER.
17. Learners lack the skills to create or use OER.
18. Educational professionals lack the time to create or use OER.
19. Learners lack the time to create or use OER.

1. Not invented here syndrome: no trust in others' resources.

Trust in the OER available from others is a barrier perceived by almost half of all respondents (44.2% of "important" and "very important" replies), with emphasis on respondents from the higher education, 10.6% of whom felt this was a "very important" barrier.

Diagram 4.87.a – No trust in others' resources

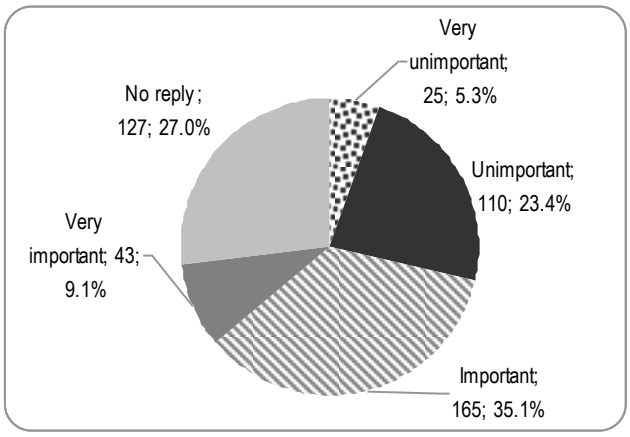


Diagram 4.87.b – Higher education

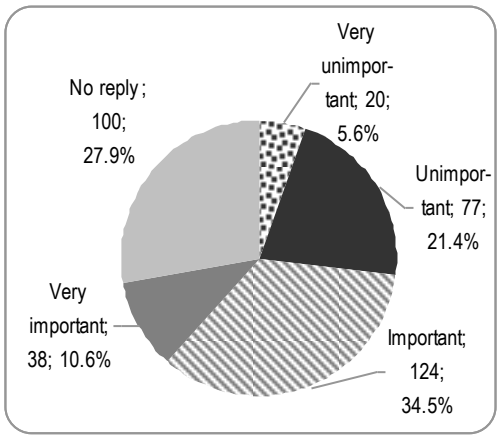
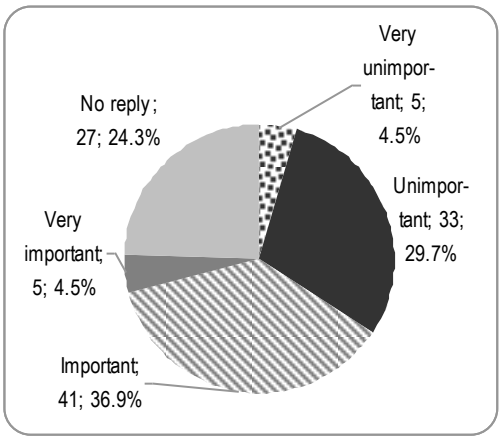


Diagram 4.87.c – Adult learning



In the breakdown per educational role, educational policy makers from both sectors and learners in adult learning were the only ones who did not to rate this barrier as "very important".

Diagram 4.88.a – No trust in others' resources
Higher education – Breakdown per educational role

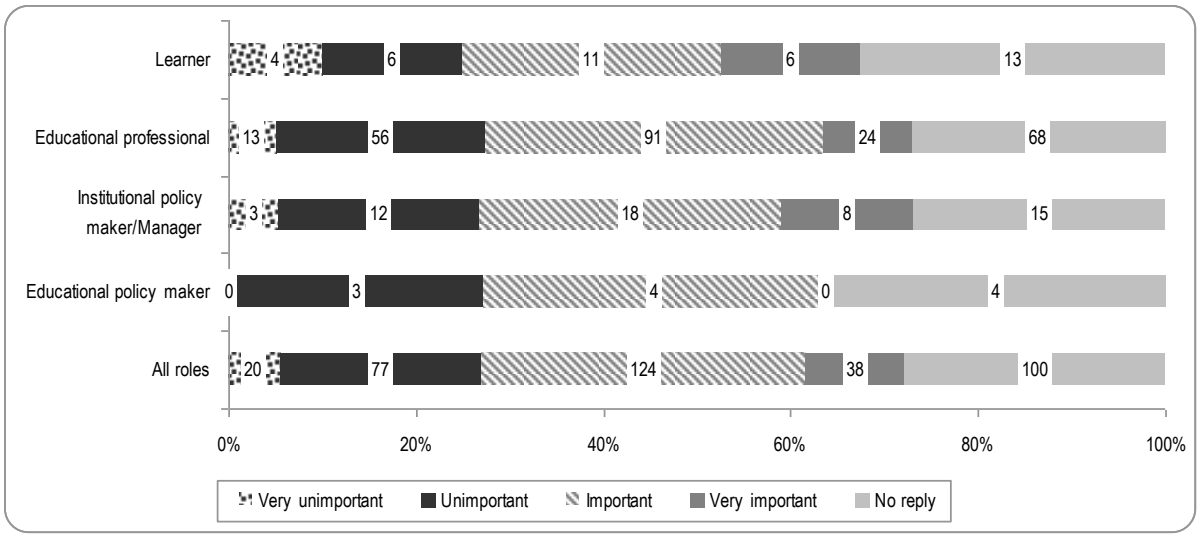
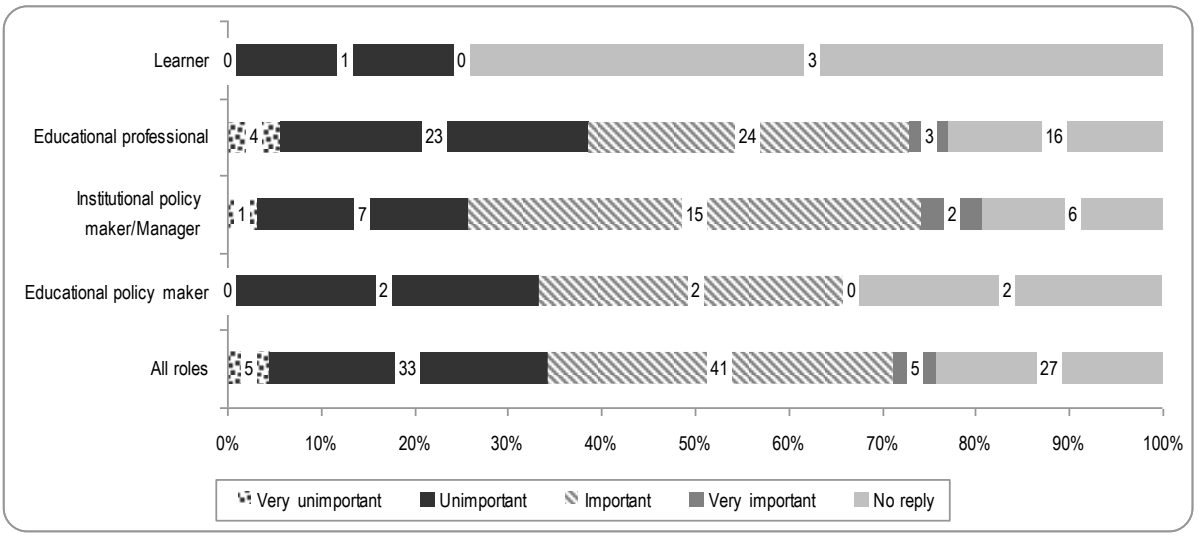


Diagram 4.88.b – Adult learning – Breakdown per educational role



These results might direct the attention of policy makers and managers towards addressing issues of trust in OER through actions in the fields of quality and promotion.

2. Lack of time to find suitable materials

Devoting time to search for suitable materials is regarded as a relevant barrier by 56.8% of all respondents.

Diagram 4.89.a – Lack of time to find suitable materials

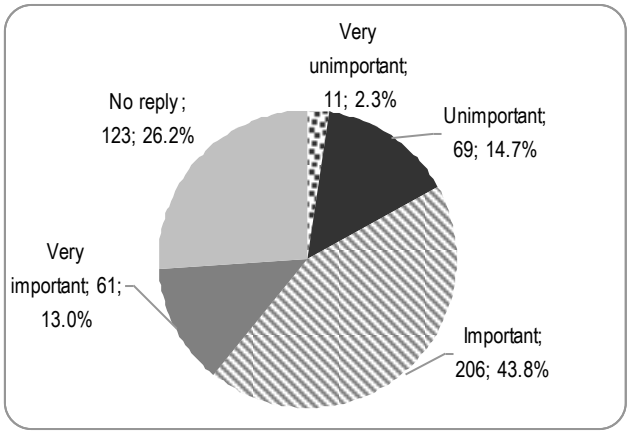


Diagram 4.89.b – Higher education

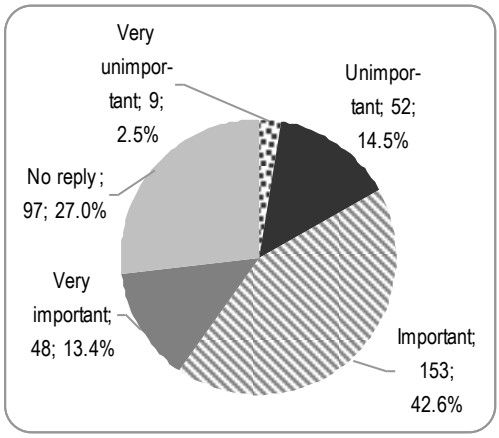
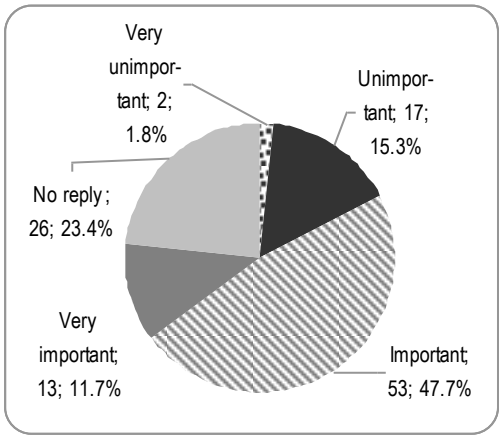


Diagram 4.89.c – Adult learning



This barrier is felt in a fairly consistent way across educational roles in higher education, with some divergence in pattern as regards the responses by educational policy makers and learners in the adult learning sector.

Diagram 4.90.a – Lack of time to find suitable materials
Higher education – Breakdown per educational role

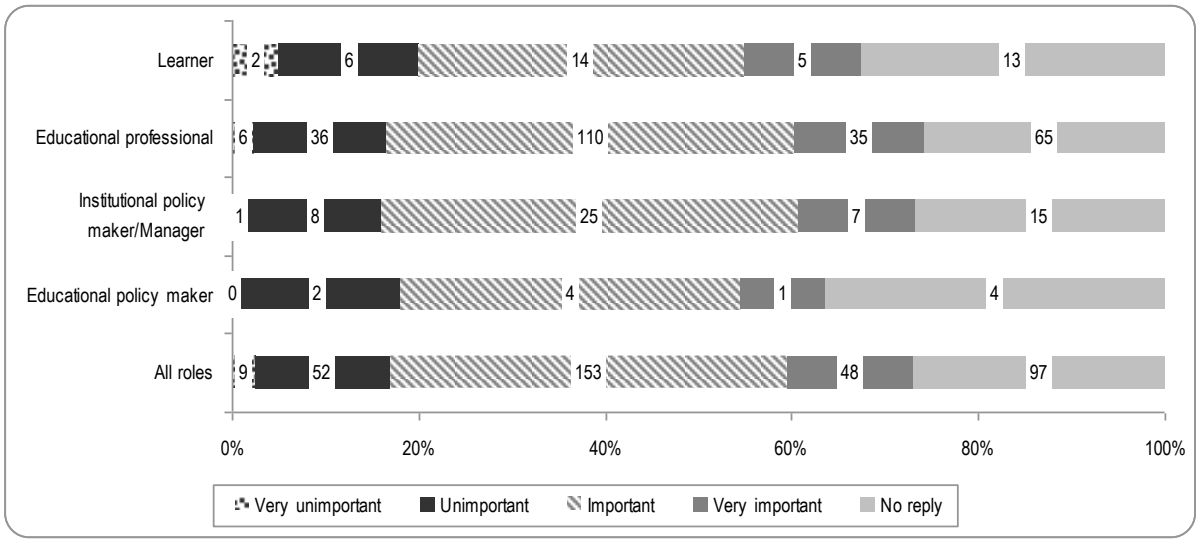
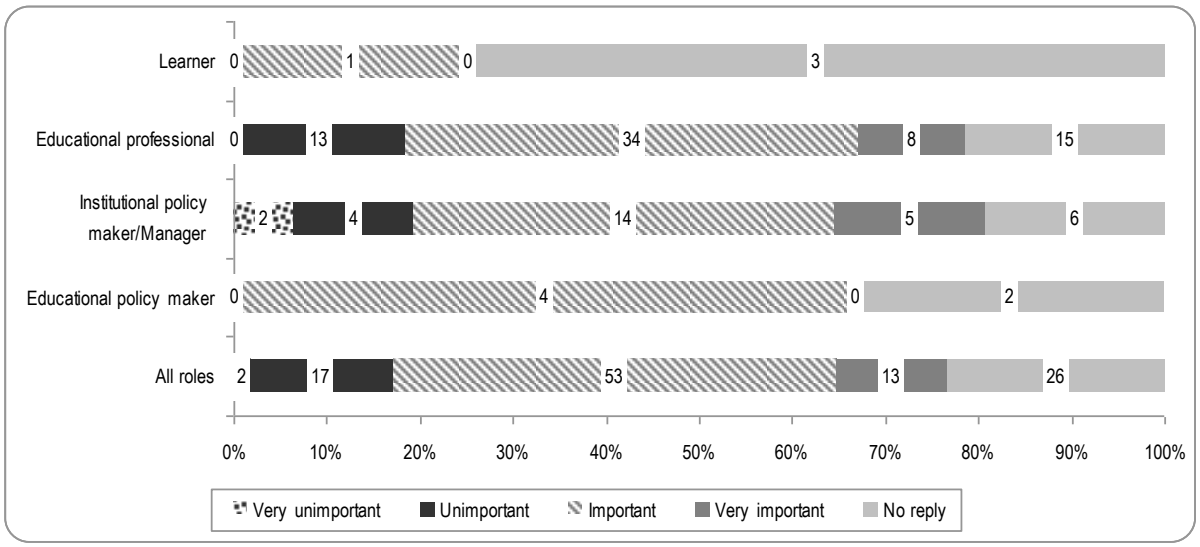


Diagram 4.90.b – Adult learning – Breakdown per educational role



These results seem to indicate that respondents could benefit from the availability of information tools on OER that might curtail the time spent on locating the OER they need.

3. Lack of Internet connectivity

42.5% of all respondents feel this barrier is very unimportant or unimportant while 30.6% rate it as very important or important. The breakdown per sector leads to a larger figure of unimportance for higher education, at 45.1%, than that for adult learning, at 34.2%.

Diagram 4.91.a – Lack of Internet connectivity

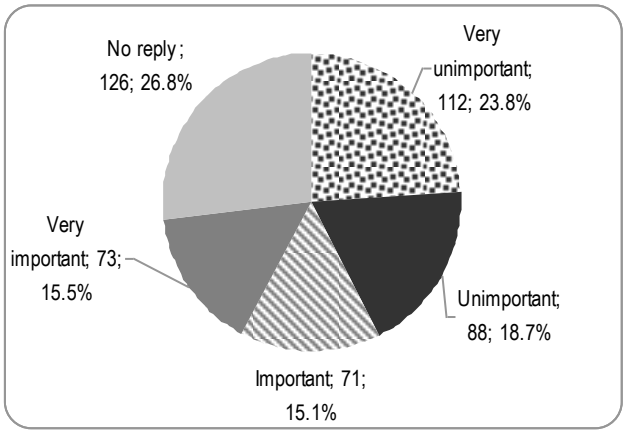


Diagram 4.91.b – Higher education

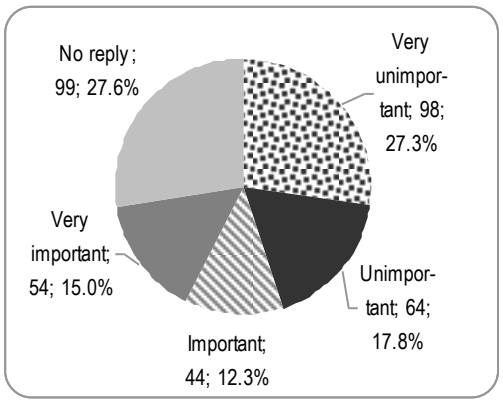
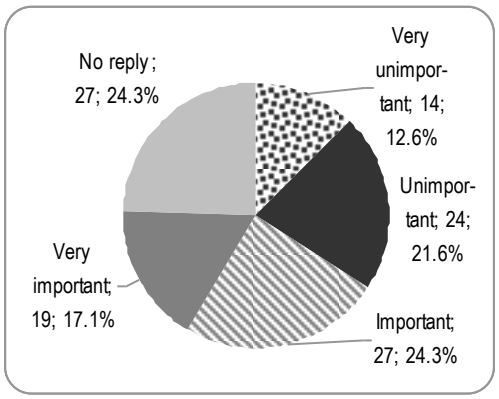


Diagram 4.91.c – Adult learning



As regards the breakdown per educational role within each sector, higher education professionals show an uneven distribution of responses across the options provided; adult learning professionals, to the contrary, present a very even distribution of opinion. Also, while 46.8% of higher education professionals think Internet connectivity is very unimportant and unimportant for OER use (against 41.6% who think the opposite), only 31.4% of adult learning professionals share that view (against 45.7% who think it is important or very important).

Diagram 4.92.a – Lack of Internet connectivity
Higher education – Breakdown per educational role

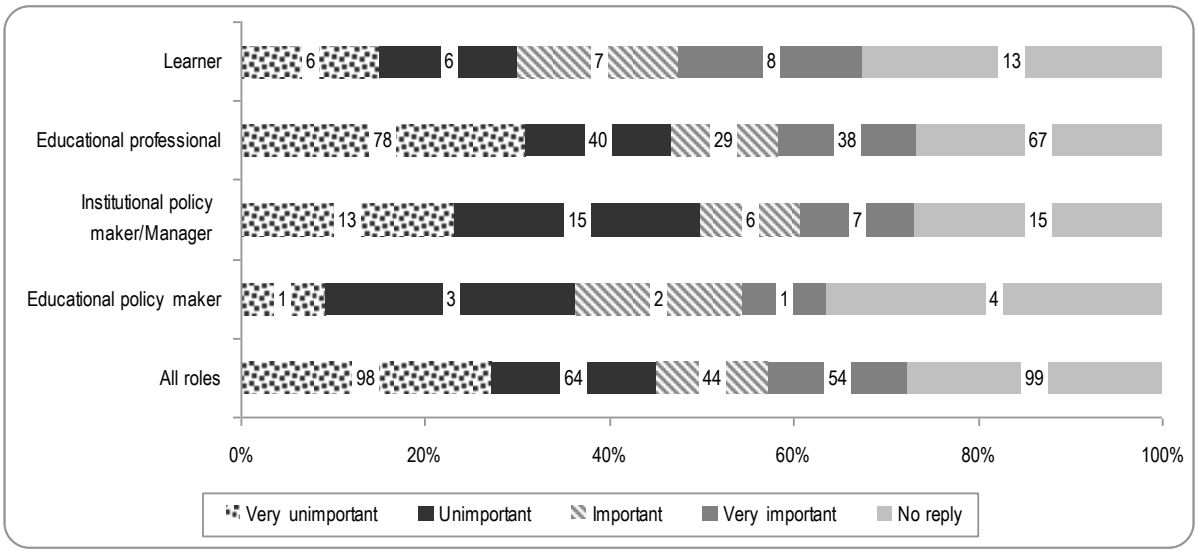
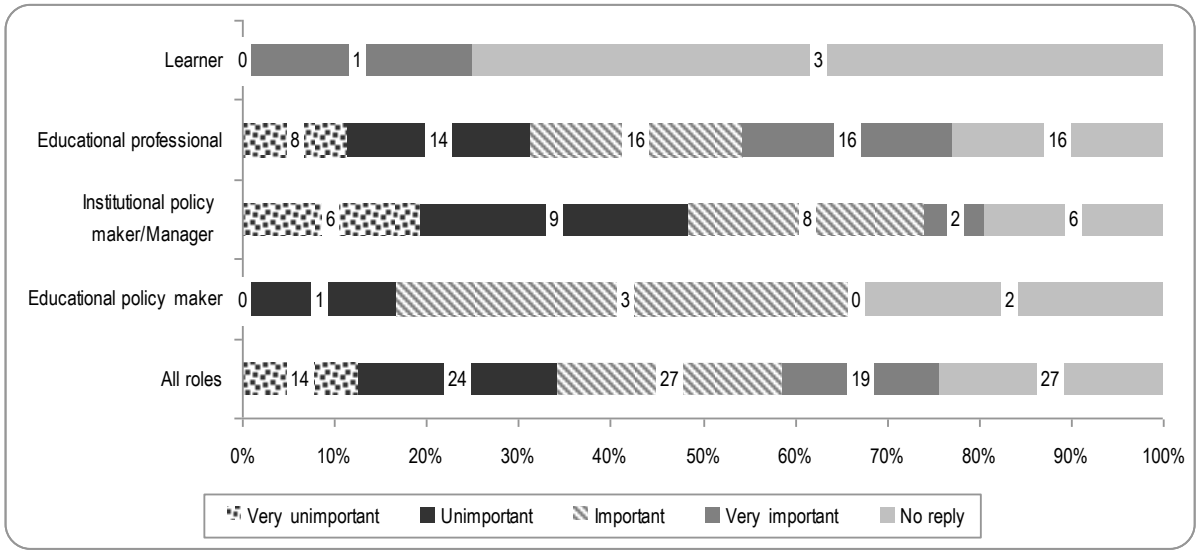


Diagram 4.92.b – Adult learning – Breakdown per educational role



The above responses show that there is still a relevant barrier posed by the insufficient coverage of Internet access for OER users.

4. Lack of software to adapt the resources to the user's purposes

Overall, the majority of respondents considers this barrier very important or important, but the adult learning respondents more so than their counterparts.

Diagram 4.93.a – Lack of software to adapt the resources to the user's purposes

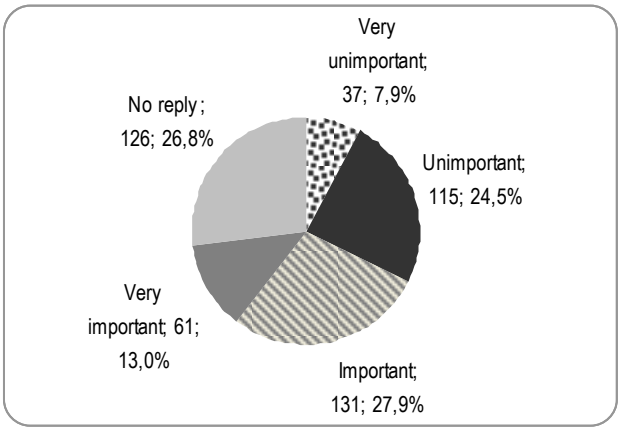


Diagram 4.93.b – Higher education

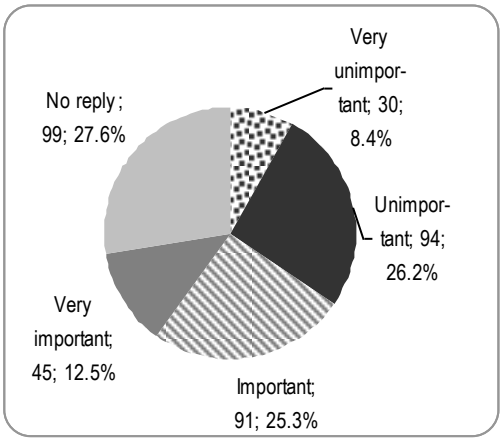
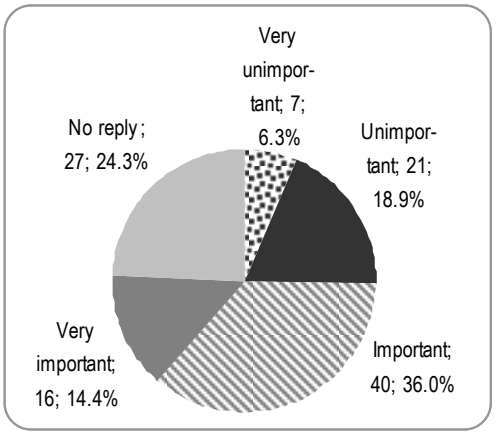


Diagram 4.93.c – Adult learning



Given the sector breakdown per educational role, one observes that higher education professionals rate in a fairly similar way the positive assessments (at 37.9%) and the negative ones (at 35.2%). A dissimilar pattern can be observed in the adult learning professional, 52.9% of whom rate positively, against 24.3% who rate negatively.

Diagram 4.94.a – Lack of software to adapt the resources to the user's purposes
Higher education – breakdown per educational role

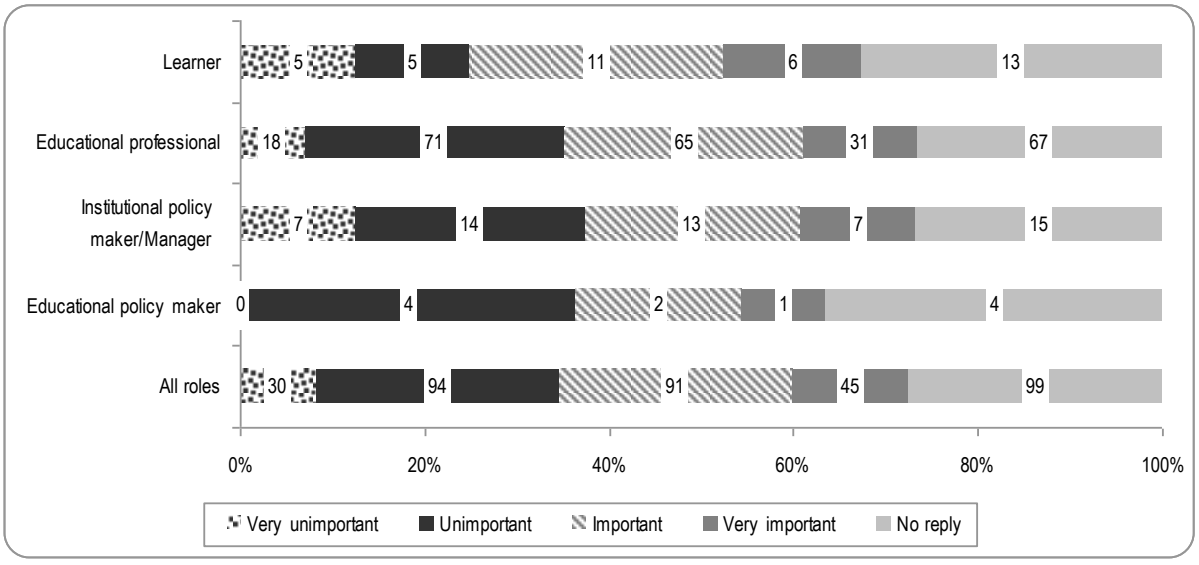
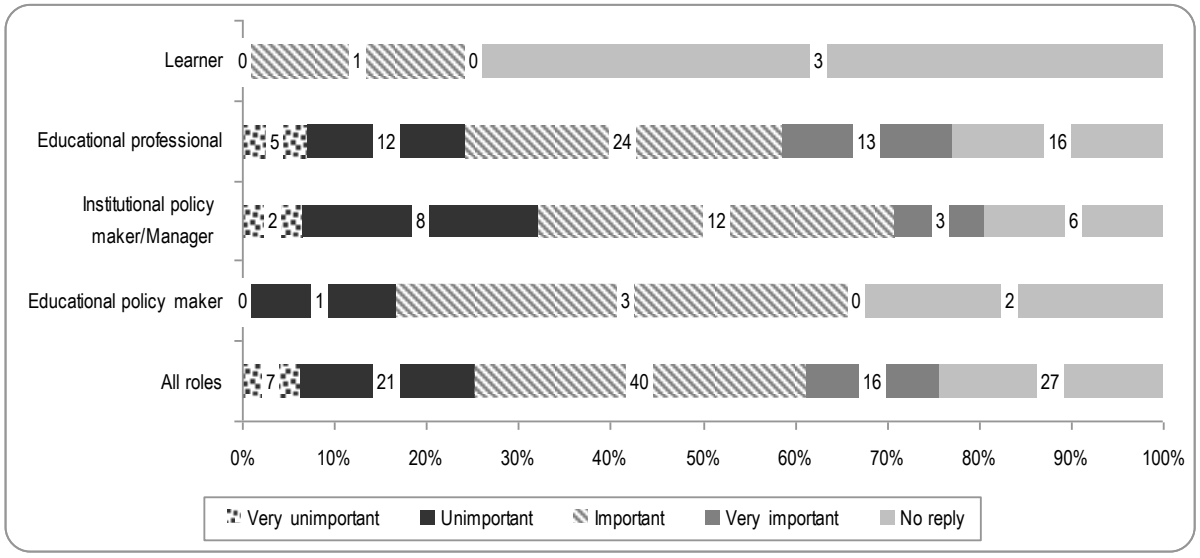


Diagram 4.94.b – Adult learning – breakdown per educational role



These results indicate that actions are needed to make available appropriate software, in particular when considering the repurposing of existing OER to better suit the users' educational needs.

5. Lack of access to computers

Almost half of all respondents (45.5%) felt this was very unimportant or unimportant, with only 28% considering it to be important or very important. However, in the breakdown by sector while higher education respondents strongly favour the negative options, adult learning respondents provide more balanced views as seen from the values given for positive and negative options.

Diagram 4.95.a – Lack of access to computers

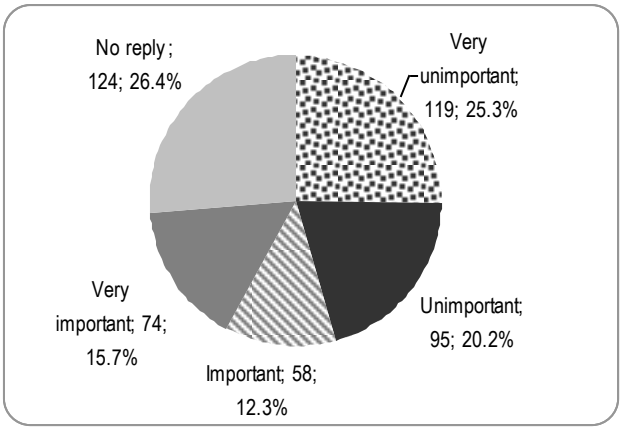


Diagram 4.95.b – Higher education

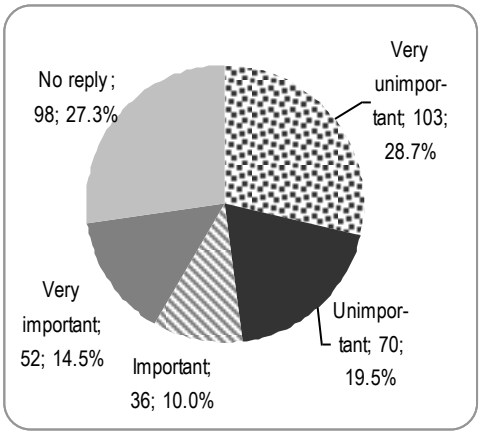
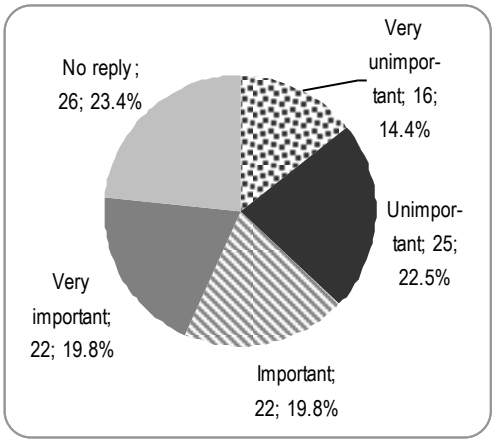


Diagram 4.95.c – Adult learning



When analysing the breakdown per educational role in the two sectors, the replies from higher education professionals for the positive attributes total 23.0%, against 50.8% for the negative ones. The opposite is observed in the replies from the adult learning professionals, with 44.3% for the positive attributes against 34.3% for the negative ones.

Diagram 4.96.a – Lack of access to computers
Higher education – breakdown per educational role

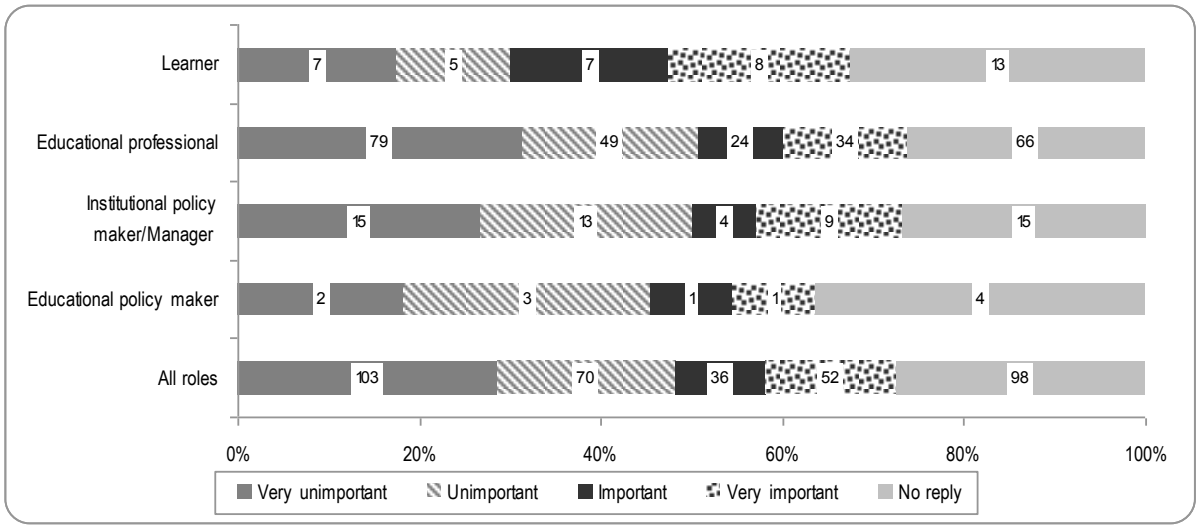
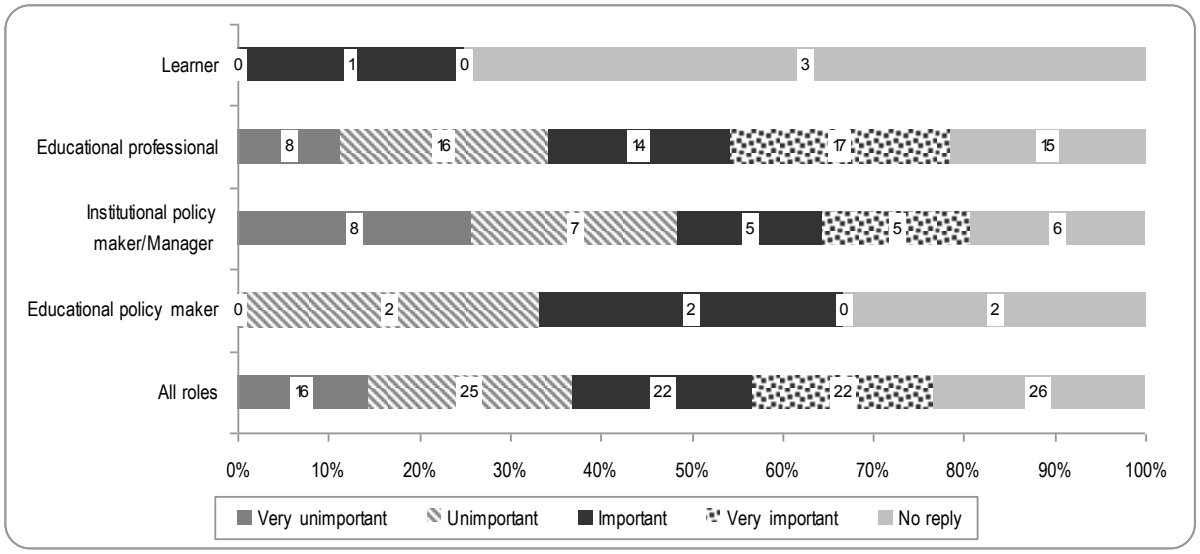


Diagram 4.96.b – Adult learning – breakdown per educational role



6. Lack of quality of the OER

The issue of quality as a barrier to OER use (see also the related chapter IV.II, section B.4. Representations of Quality and chapter IV.I, section C, 1.1) is positively assessed by nearly half of all respondents (47.4%, against 24.2% who stated it was unimportant or very unimportant), similarly distributed by sector.

Diagram 4.97.a – Lack of quality of the OER

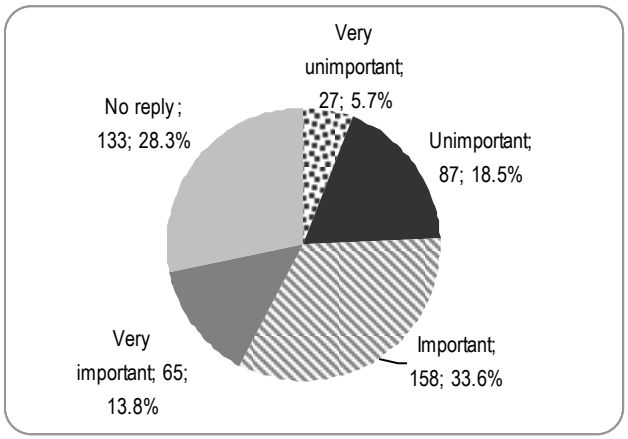


Diagram 4.97.b – Higher education

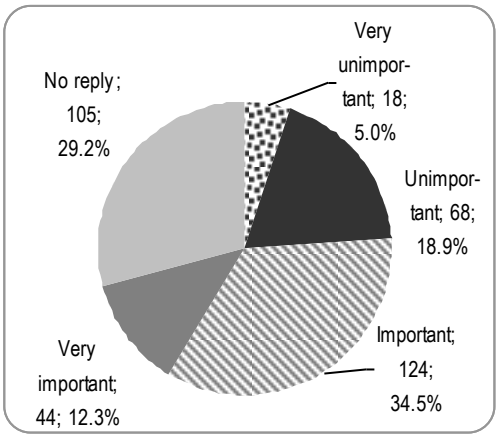
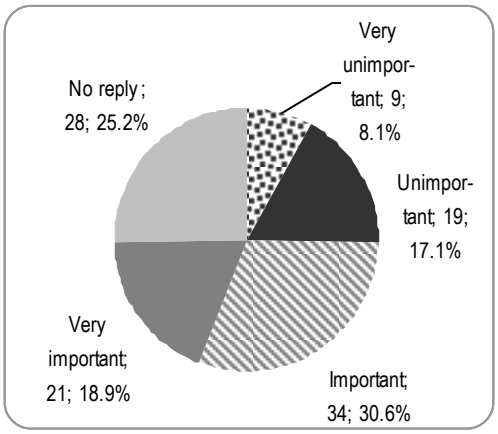


Diagram 4.97.c – Adult learning



The general pattern observed is also followed in higher education by the institutional policy makers/managers and the educational professionals. In the adult learning sector, 62.3% of institutional policy makers/managers rate this factor positively, against 16.1% who rate it negatively, while opinions are more balanced in the educational professionals of this sector, with 45.7% positive replies, against 32.9% of negative ones. The distribution of responses shows an uneven pattern in educational policy makers and adult learners, affected by the rate of no replies.

Diagram 4.98.a – Lack of quality of the OER
Higher education – breakdown per educational role

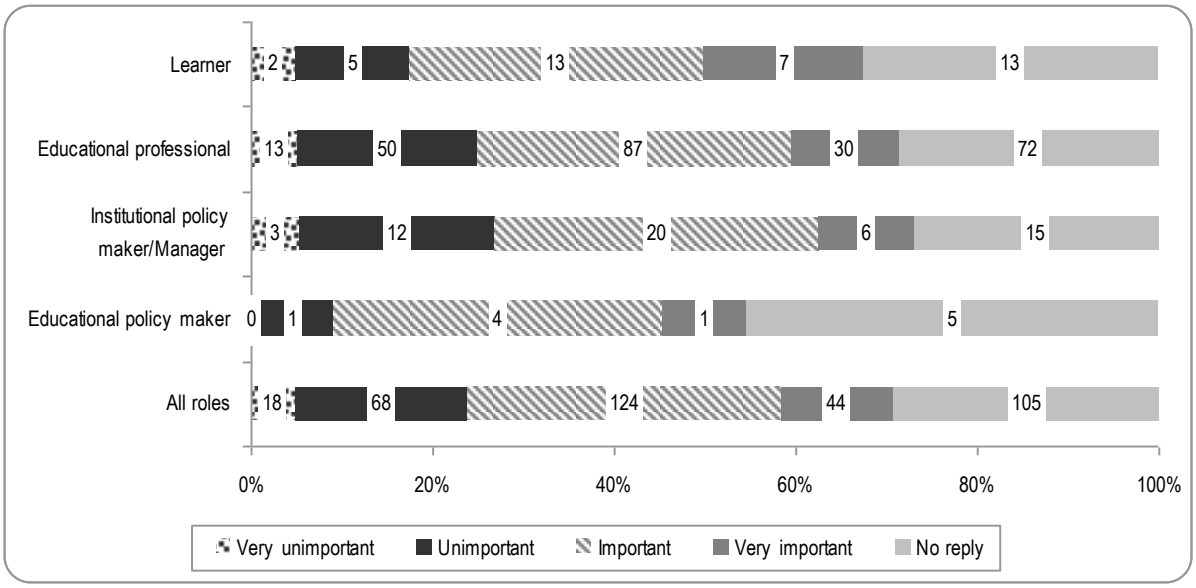
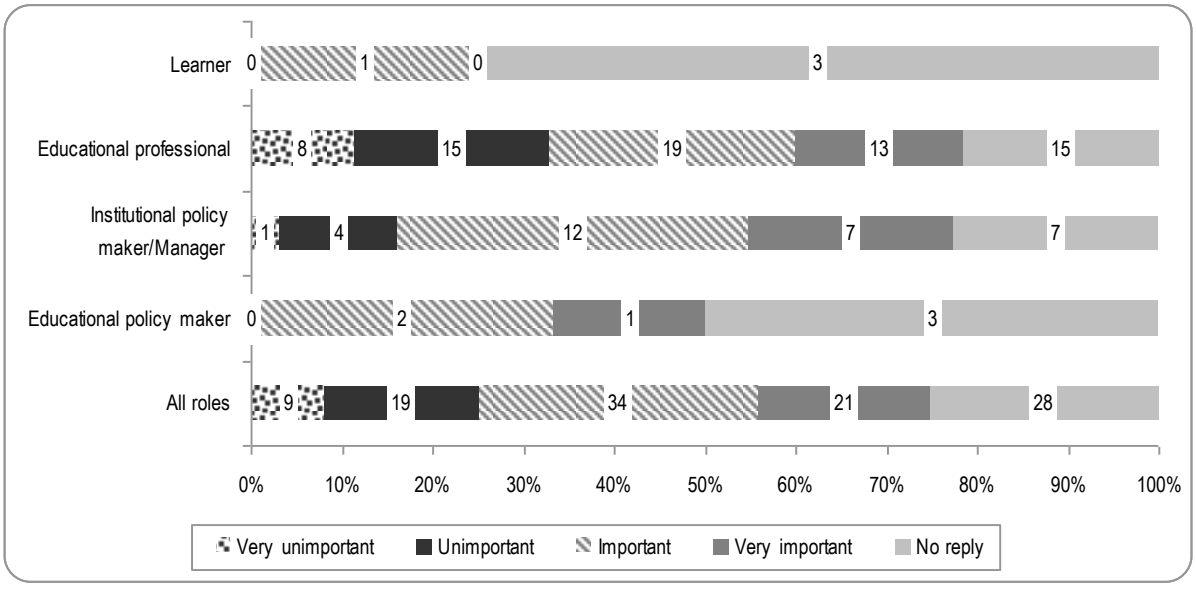


Diagram 4.98.b – Adult learning – breakdown per educational role



As suggested before, it seems clear that quality is an issue that concerns the respondents and therefore would deserve specific attention, at public and institutional policy level alike.

7. Lack of OER that are culturally relevant to the user

Half of all respondents felt that this barrier is very important or important, with a higher contribution from the adult learning sector, in relative terms. The rating of very unimportant was notably low, and similarly so in both sectors under scrutiny.

Diagram 4.99.a – Lack of OER that are culturally relevant to the user

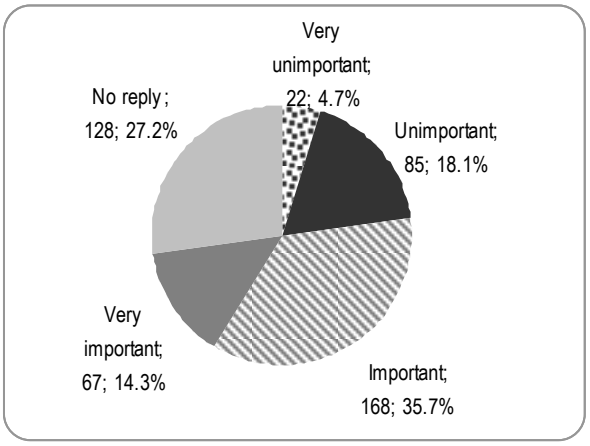


Diagram 4.99.b – Higher education

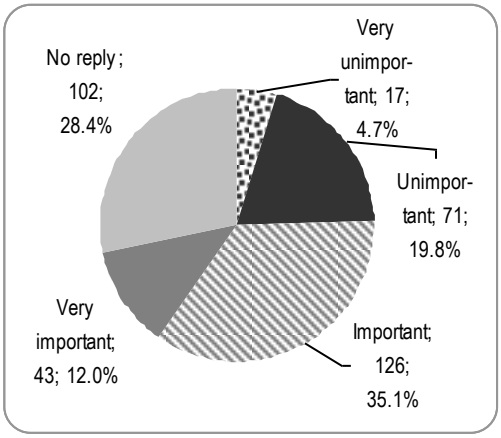
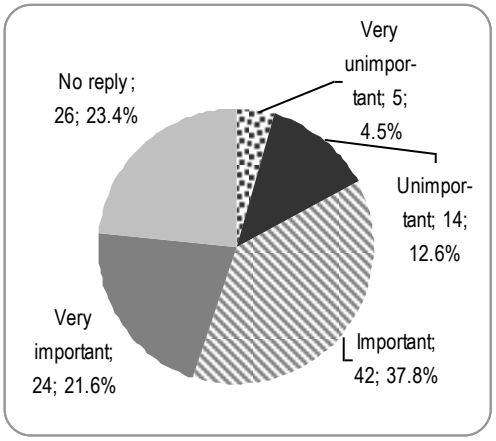


Diagram 4.99.c – Adult learning questionnaire



Considering the breakdown by educational role in the two sectors surveyed, both institutional policy makers/managers and educational professionals share a pattern of *circa* half of the responses with a preference for positive attributes and *circa* a quarter for the negative ones.

Diagram 4.100.a –Lack of OER that are culturally relevant to the user
Higher education – breakdown per educational role

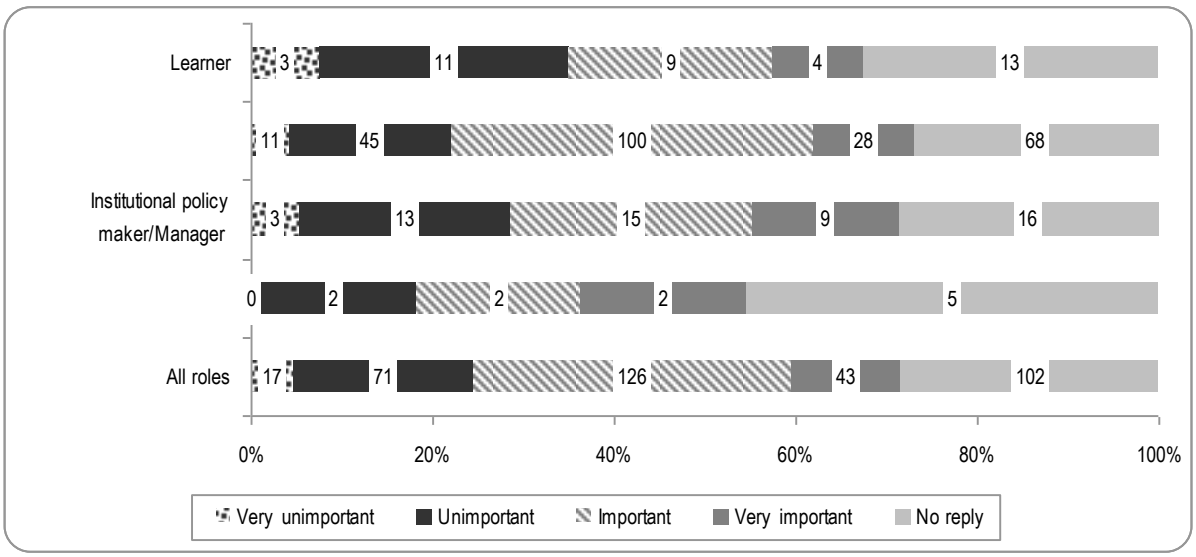
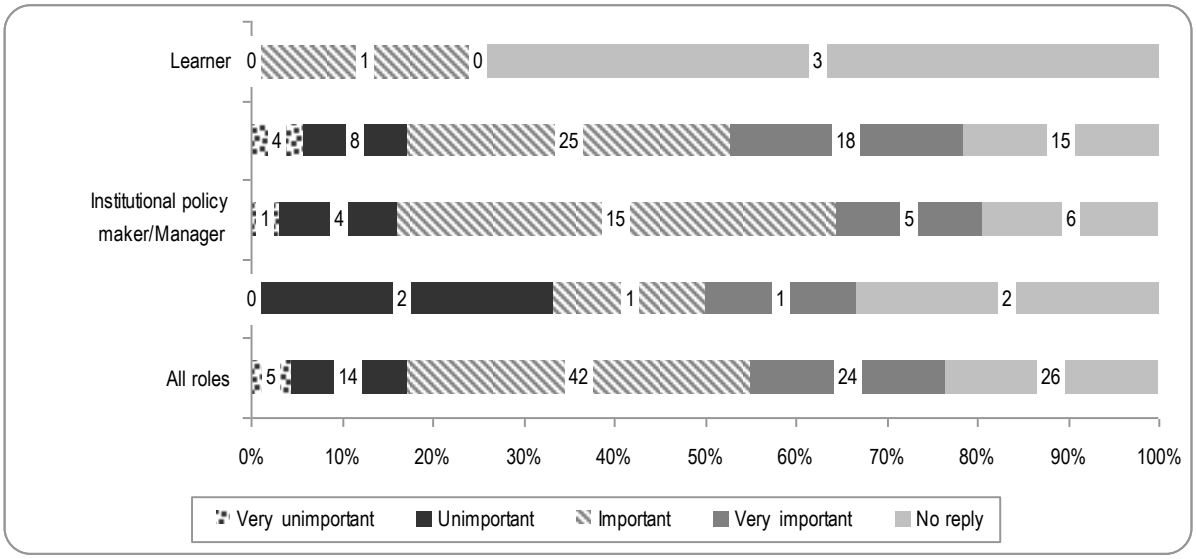


Diagram 4.100.b – Adult learning – breakdown per educational role



In light of these results, the appropriateness of OER to the cultural contexts of use is an issue that would deserve specific measures at various levels, so that the impact of this barrier may be softened in time.

8. Lack of OER in the user's native language

Near half of all respondents rated this barrier as very important or important; the corresponding score for adult learning respondents was 56.7%.

Diagram 4.101.a – Lack of OER in the user's native language

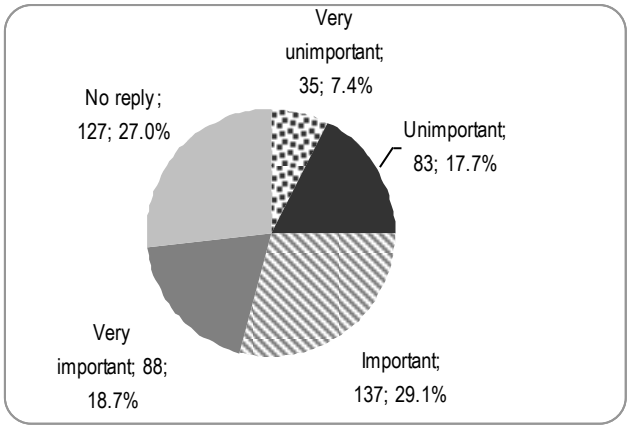


Diagram 4.101.b –Higher education

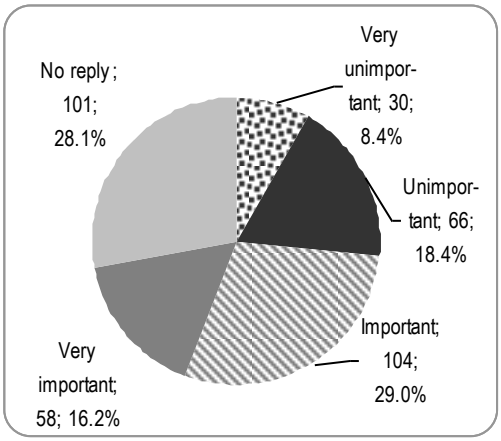
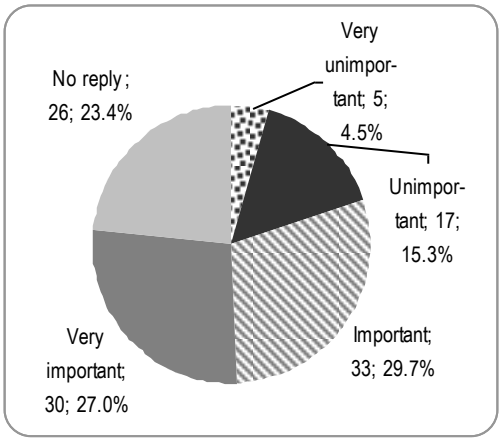


Diagram 4.101.c – Adult learning



The above trend can also be observed in both institutional policy makers/managers and educational professionals of the two sectors surveyed.

Diagram 4.102.a – Lack of OER in the user's native language
Higher education – breakdown per educational role

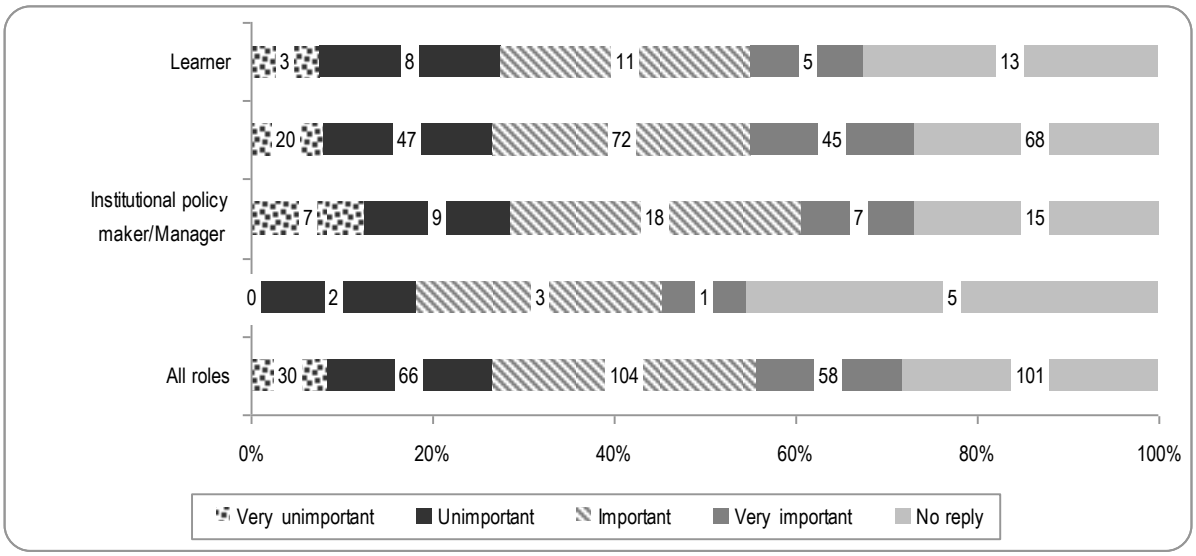
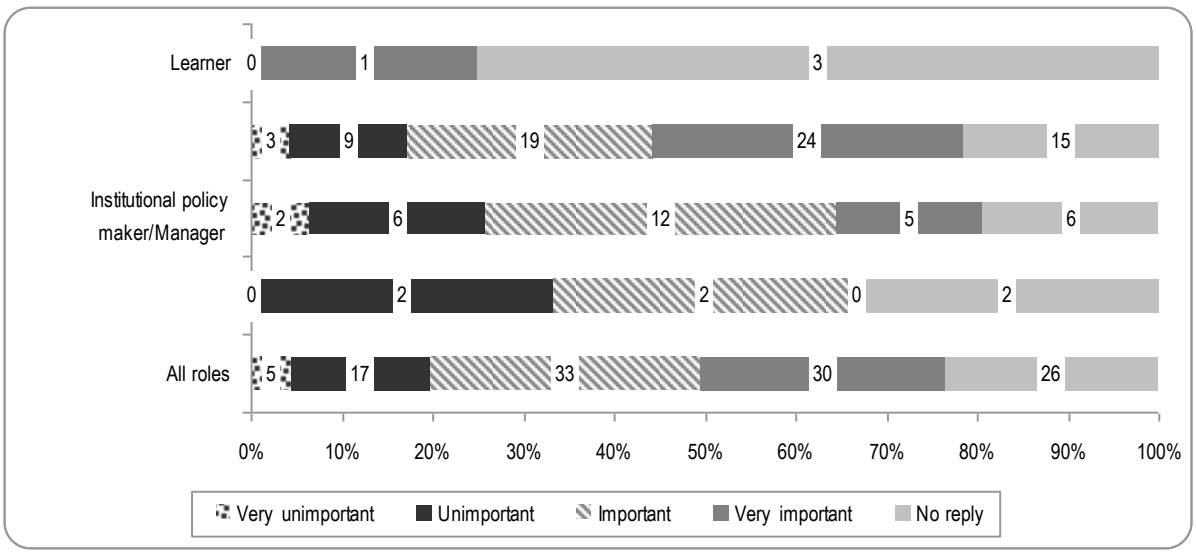


Diagram 4.102.b –Adult learning – breakdown per educational role



The availability of OER in the user's language constitutes, according to the results of the survey, a barrier which would point to public policy and institutional policy intervention to support OER supply from a multi-linguistic perspective.

9. OER are not embedded into the learning scenarios

More than half of all respondents rate this sub-question positively (52.8% of important and very important ratings), with slightly higher results from the adult learning sector. The negative assessments are fairly balanced between the two sectors.

Diagram 4.103.a – OER are not embedded into the learning scenarios

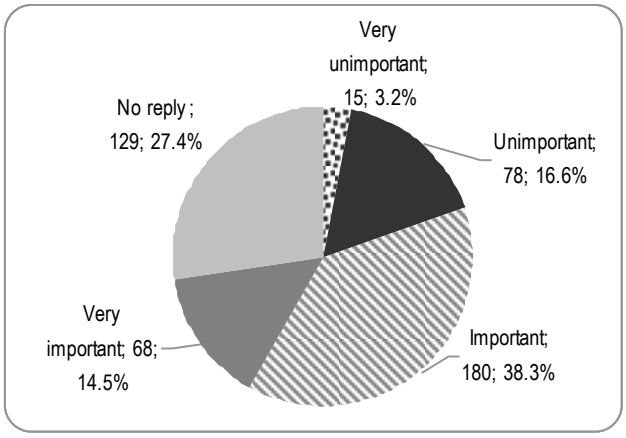


Diagram 4.103.b – Higher education

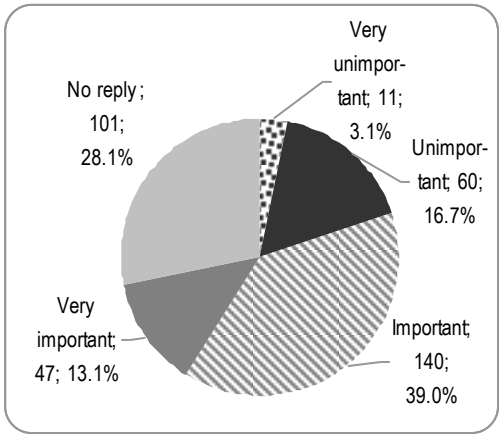
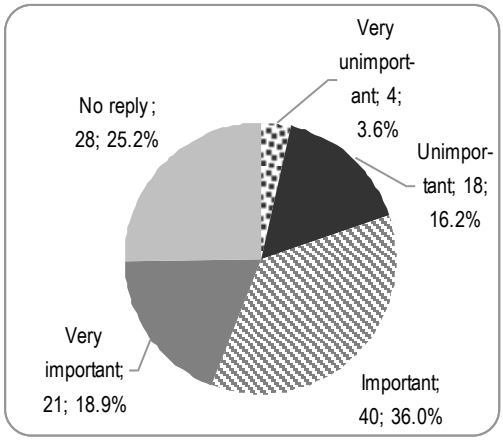


Diagram 4.103.c – Adult learning



When comparing the results of institutional policy makers/managers and educational professionals, we see that the former provided the higher positive assessments (64.5% in higher education and 61.3% in adult learning, against the latter, at 50% in higher education and 54.3% in adult learning).

Not surprisingly, educational policy makers and learners are the educational roles that provided higher results of no replies to this sub-question.

Diagram 4.104.a – OER are not embedded into the learning scenarios
Higher education – Breakdown per educational role

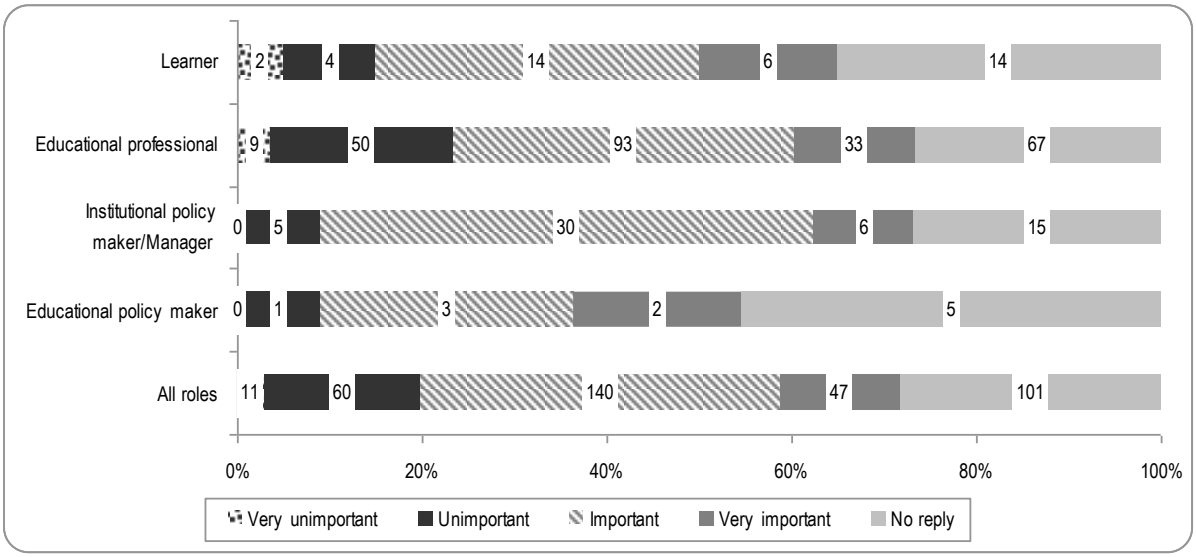
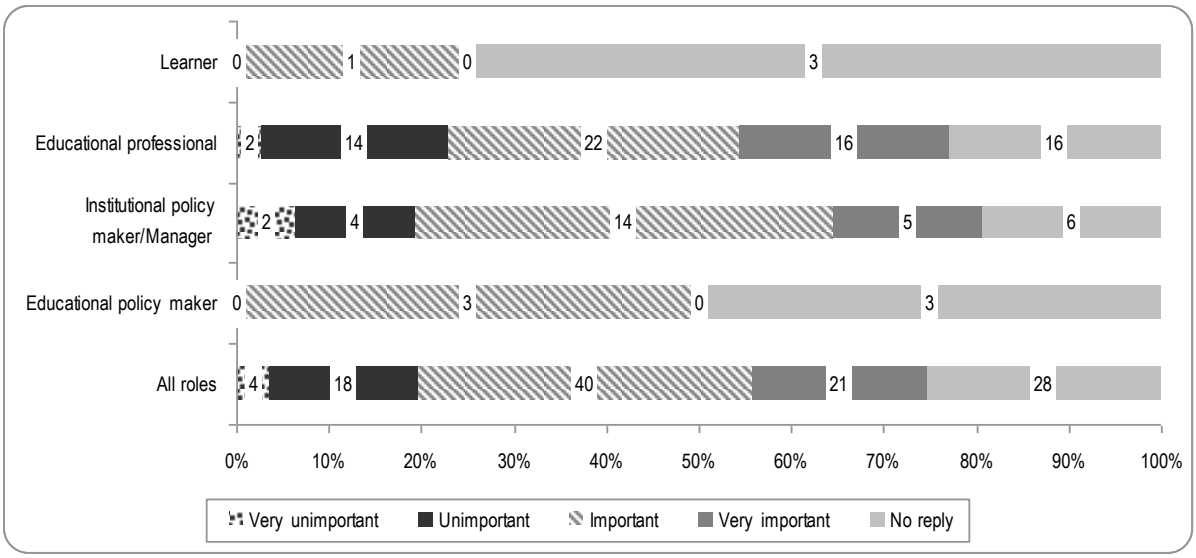


Diagram 4.104.b – Adult learning – Breakdown per educational role



This barrier – which can also be considered as a factor of innovation in educational institutions – is perceived by respondents as an important one, and the results show an awareness across sectors and most educational roles regarding issues of pedagogical innovation and practice surrounding OER.

10. Insufficient reward system for educational professionals devoting time and energy to OER development

The majority of respondents concur unequivocally with this statement, with overall positive responses reaching 61.7%.

Diagram 4.105.a – Insufficient reward system for educational professionals devoting time and energy to OER development

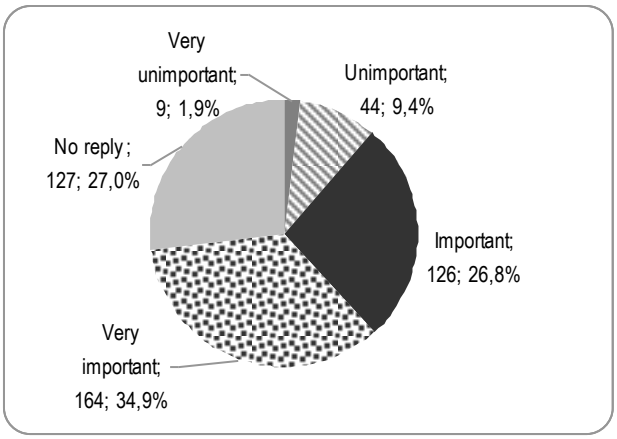


Diagram 4.105.b – Higher education

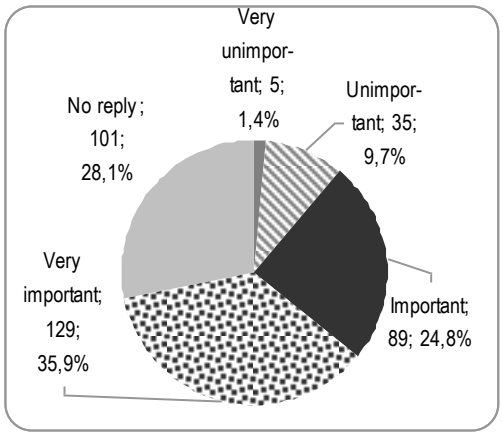
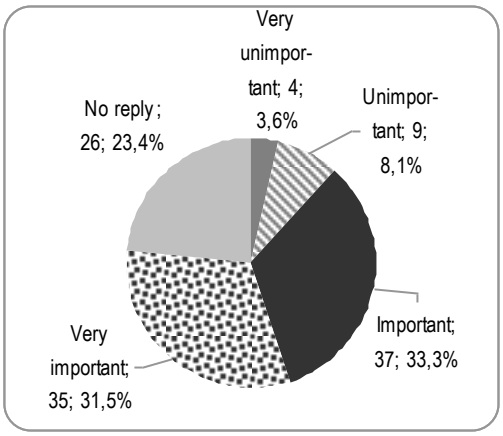


Diagram 4.105.c – Adult learning



The breakdown per educational role shows dissimilarity in the adult learning sector, in particular as regards the learners' views.

Diagram 4.106.a – Insufficient reward system for educational professionals devoting time and energy to OER development
Higher education – Breakdown per educational role

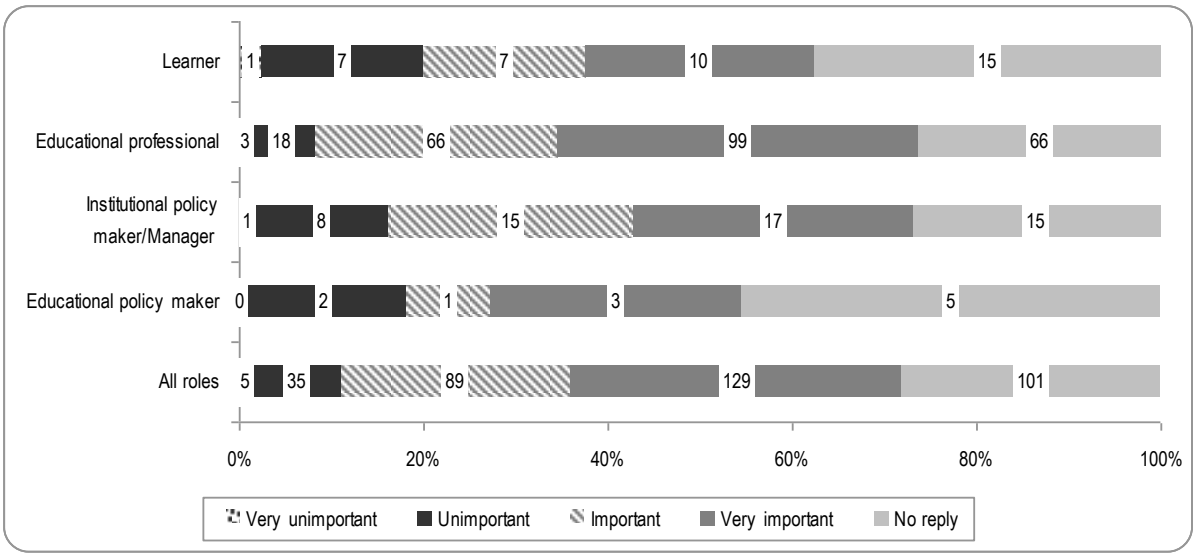
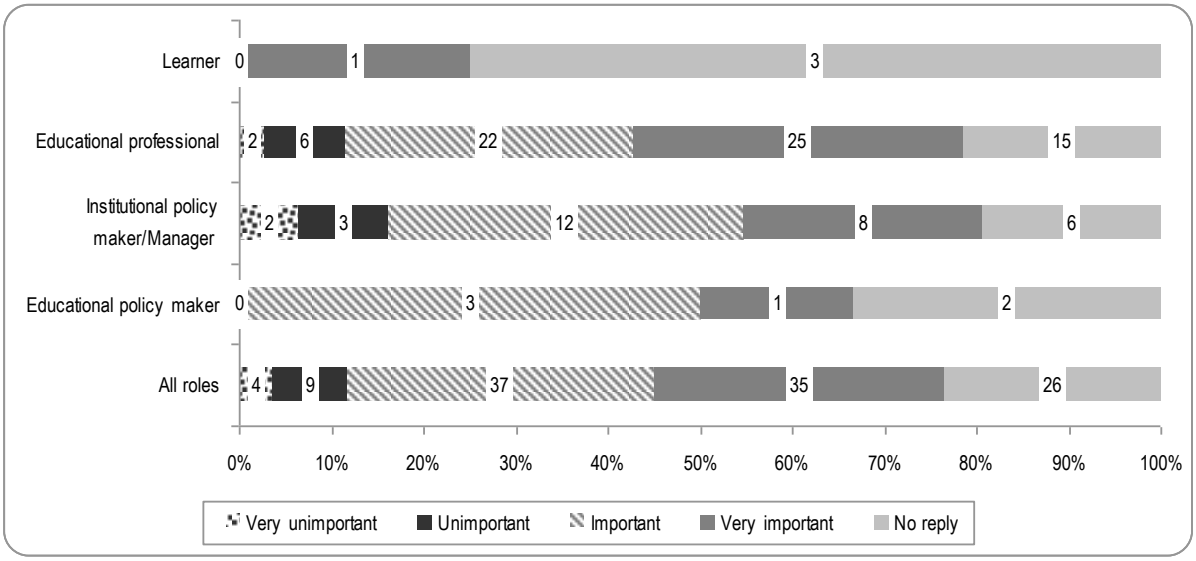


Diagram 4.106.b – Adult learning – Breakdown per educational role



The respondents' opinions point to the need for appropriate reward systems to be established at institutional level, which would not only help expand OER use but also ensure the sustainability of existing initiatives and programmes.

11. Lack of interest in pedagogical innovation among educational professionals

More than half of all respondents felt that lack of interest in pedagogical innovation among educational professionals was an important and very important barrier to OER use, and over one quarter did not register a reply. The pattern is similar in each sector surveyed.

Diagram 4.107.a – Lack of interest in pedagogical innovation among educational professionals

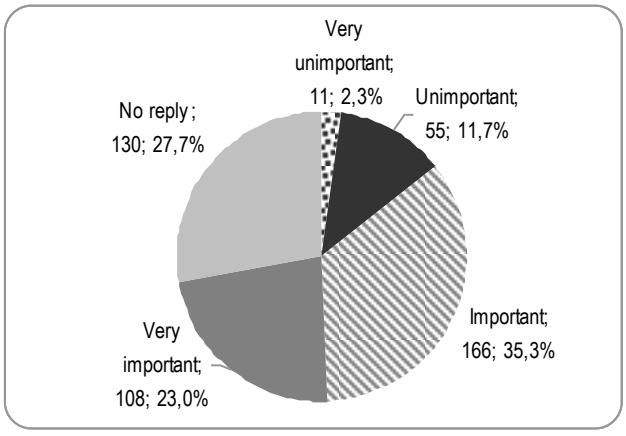


Diagram 4.107.b – Higher education

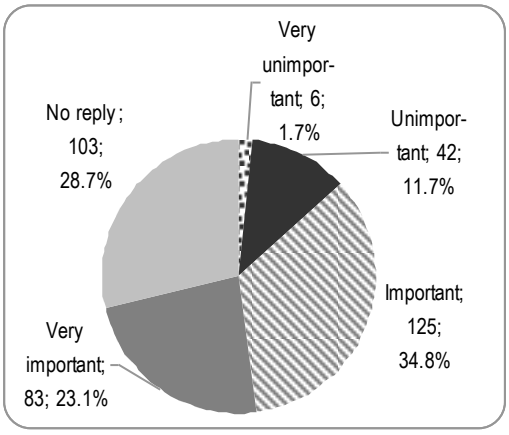
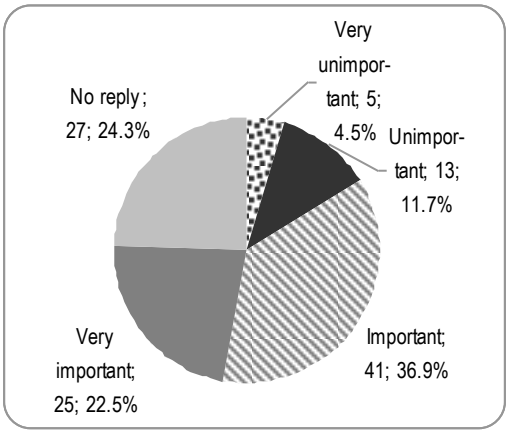


Diagram 4.107.c – Adult education



The breakdown analysis per educational role does not show remarkable deviations from the pattern described above.

Diagram 4.108.a – Lack of interest in pedagogical innovation among educational professionals
Higher education – Breakdown per educational role

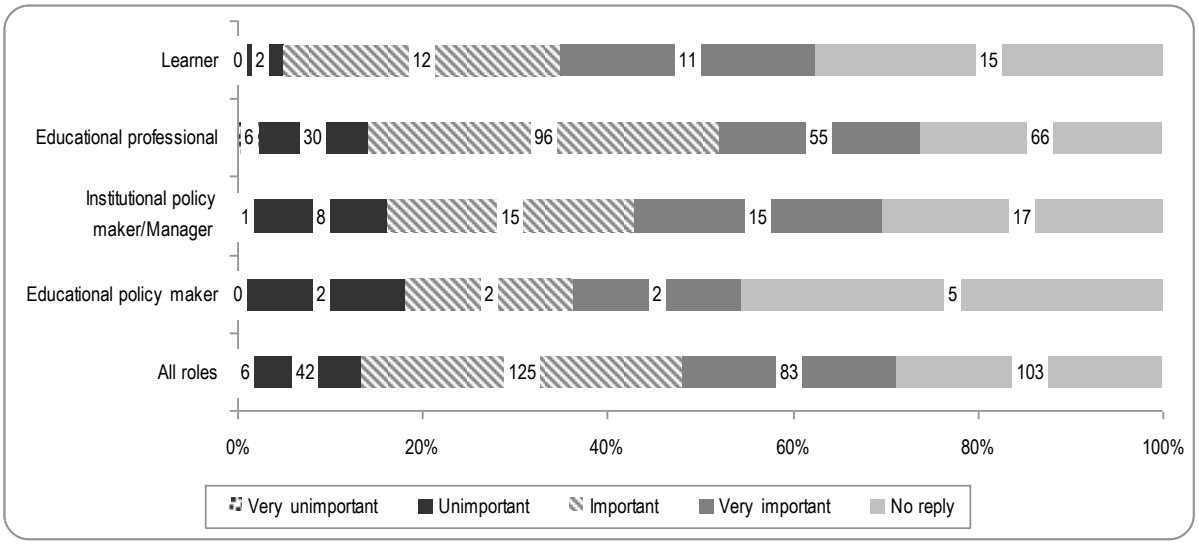
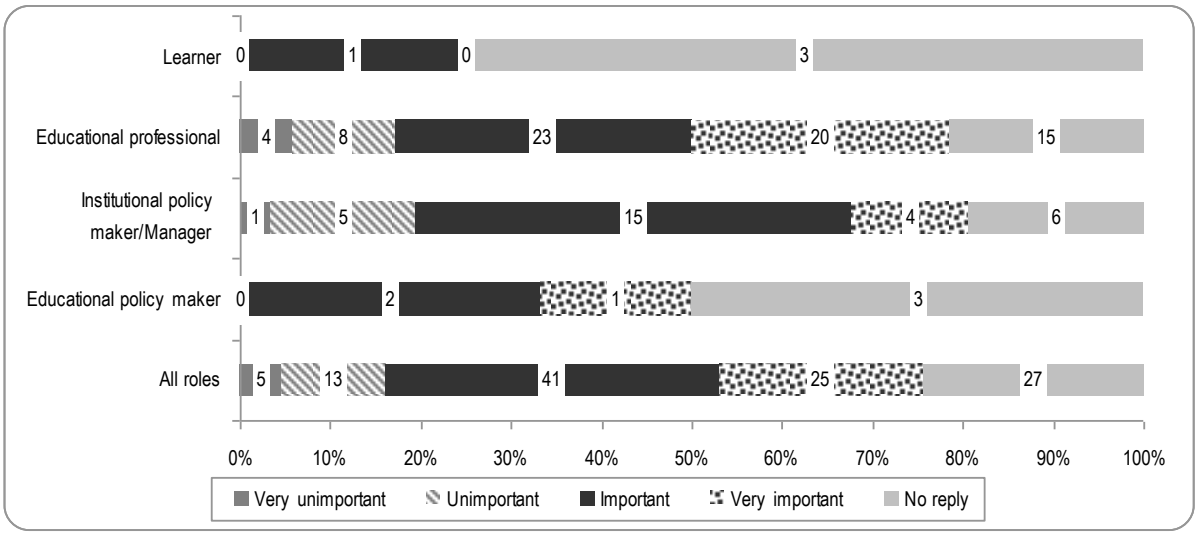


Diagram 4.108.b – Adult learning – Breakdown per educational role



The results support the close link between OER and pedagogical innovation and would seem to endorse the views we expressed earlier (chapter IV.II.A.1.5) and the need for measures to promote cultures of innovation in educational institutions.

12. Insufficient support from the management level of higher education institutions/adult learning organisations

Overall, respondents place a great deal of importance on this barrier, with positive responses totalling 61.7%. It should be noted that this sub-question received a high percentage of no replies (27.9% overall).

Diagram 4.109.a – Insufficient support from the management level

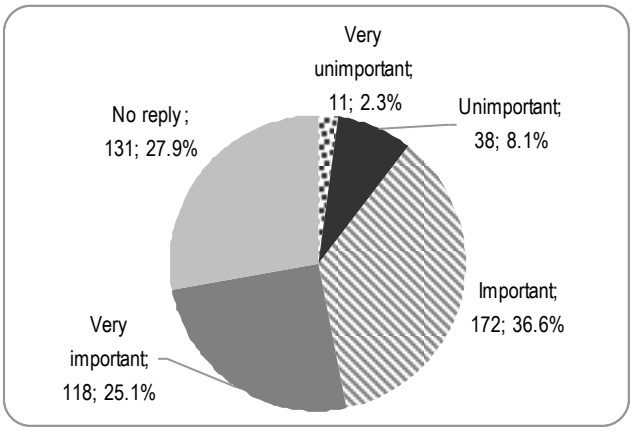


Diagram 4.109.b – Higher education

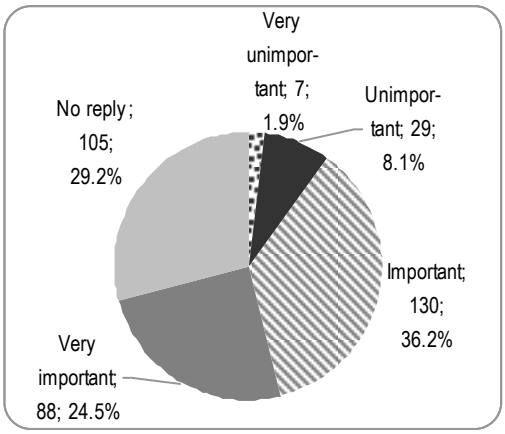
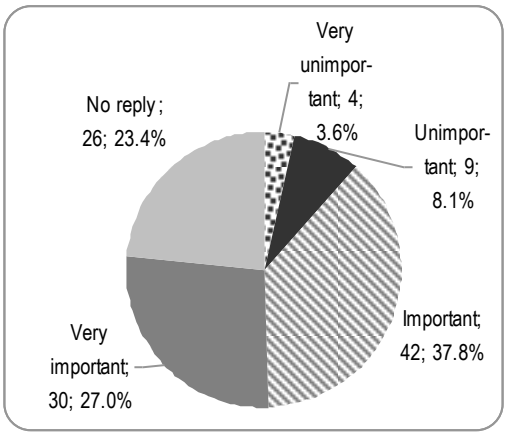


Diagram 4.109.c – Adult learning



Both educational professionals and institutional policy makers/managers offer positive assessments to this sub-question: the former at 65.5% in higher education and 67.1% in adult learning; the latter at 50% in higher education and 64.5% in adult learning.

Diagram 4.110.a – Insufficient support from the management level
Higher education – Breakdown per educational role

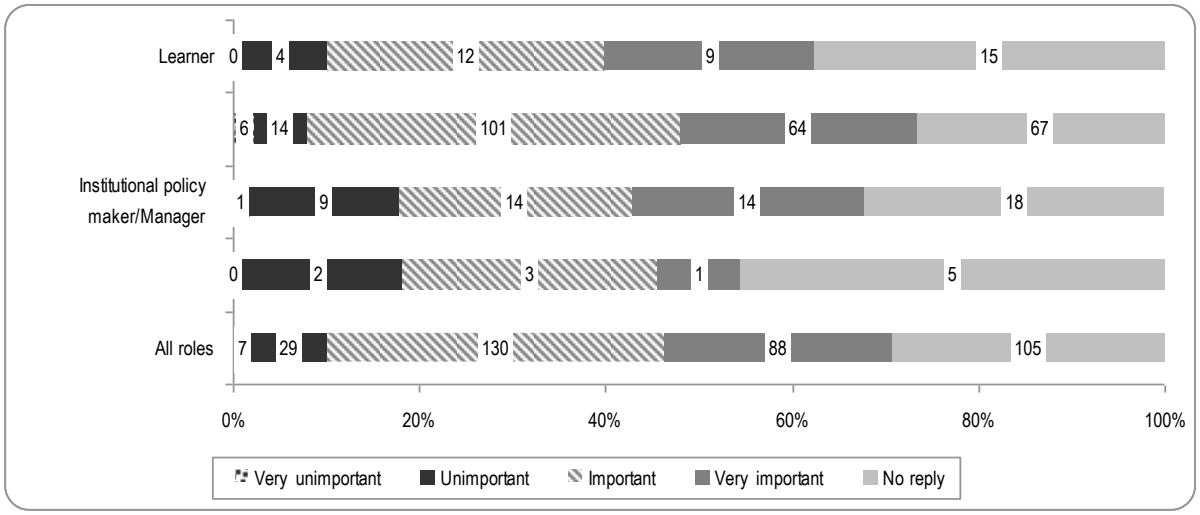
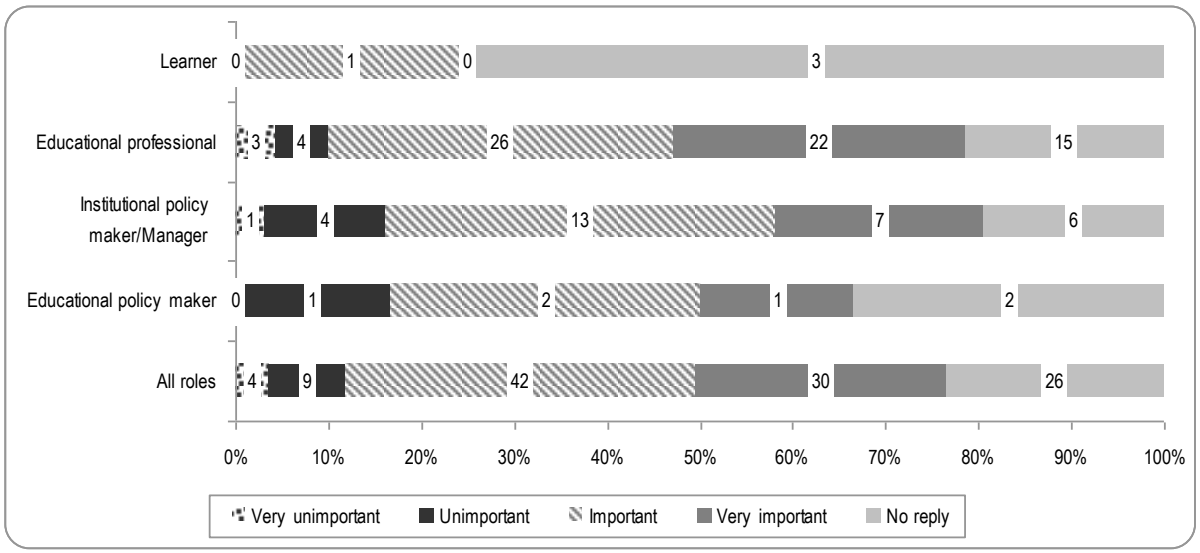


Diagram 4.110.b – Adult learning – Breakdown per educational role



Thus, the results clearly point to the perception that there is ample ground for improvement as regards the concrete support that the management of educational institutions should be providing to OER developments.

13. Lack of policies at national/regional level to support the creation or use of OER

The majority of respondents (60%) leaned toward the idea that a lack of national/regional policies is an important and very important barrier, with higher distributions in the adult learning sector. The level of no replies is fairly high, at 27.4% overall.

Diagram 4.111.a – Lack of policies at national/regional level to support the creation or use of OER

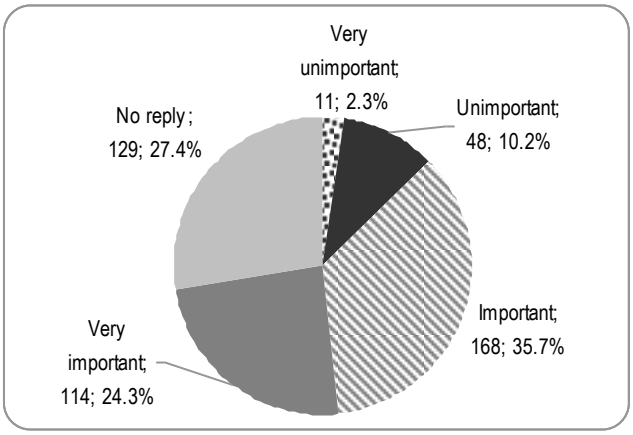


Diagram 4.111.b – Higher education

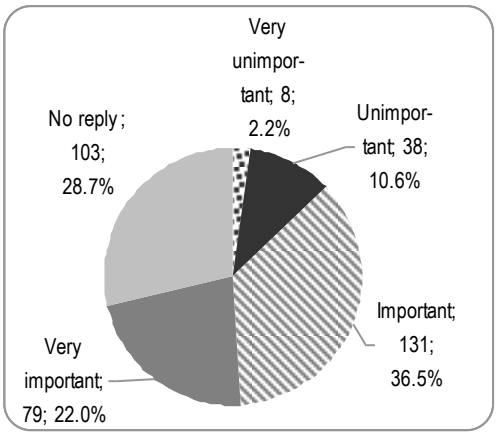
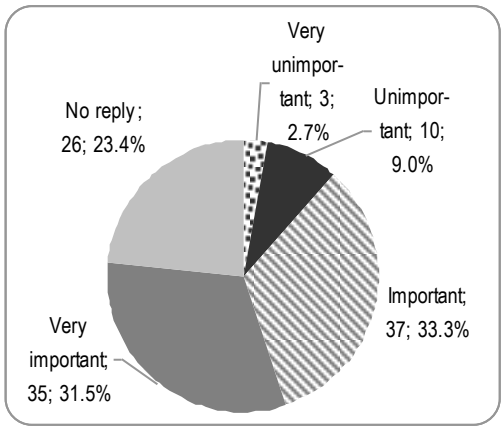


Diagram 4.111.c – Adult learning



The defined trend holds across most categories elicited in the survey within each sector. This consistency reveals a high degree of consensus reached in the entire educational segment surveyed regardless of the levels of responsibility or activity.

Diagram 4.112.a – Lack of policies at national/regional level to support the creation or use of OER
Higher education – breakdown per educational role

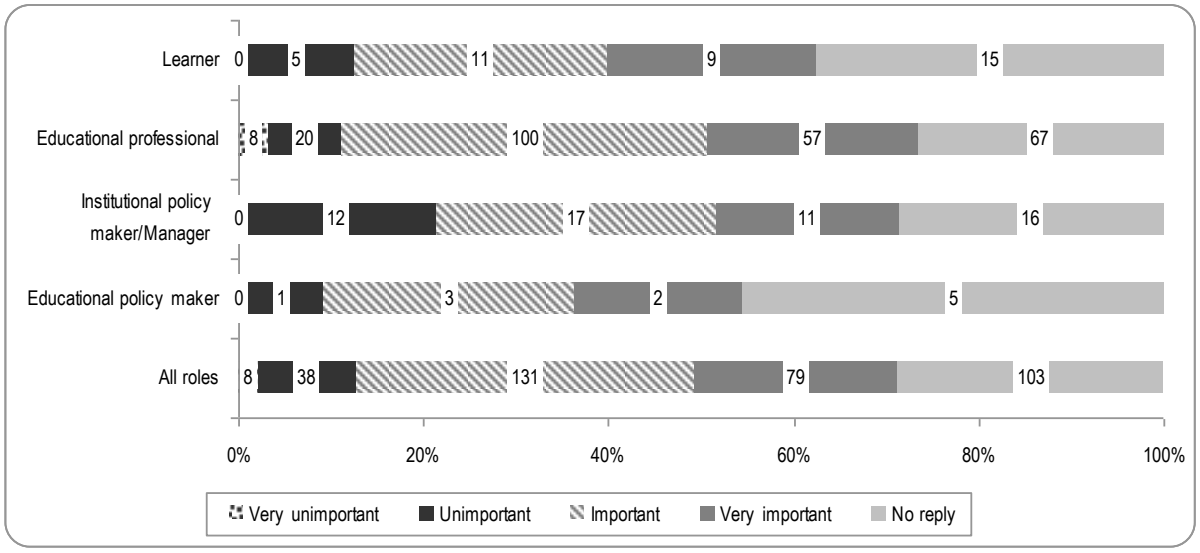
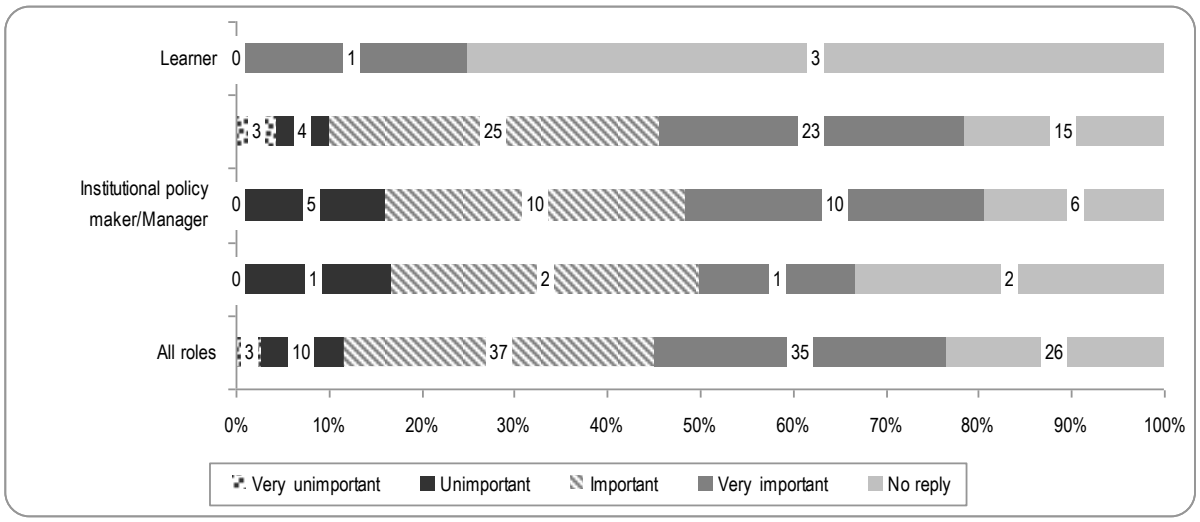


Diagram 4.112.b – Adult learning – breakdown per educational role



The results evidence a rather advanced awareness of the importance of public policies to further OER developments. This awareness is a notorious fact not only among educational policy makers but equally across the four educational roles targeted by the OPAL survey.

14. Lack of policies at institutional level to support the creation or use of OER

The majority of the respondents rated this barrier as an important or very important one, totalling 63.4%, with similar values by sector.

Diagram 4.113.a – Lack of policies at institutional level to support the creation or use of OER

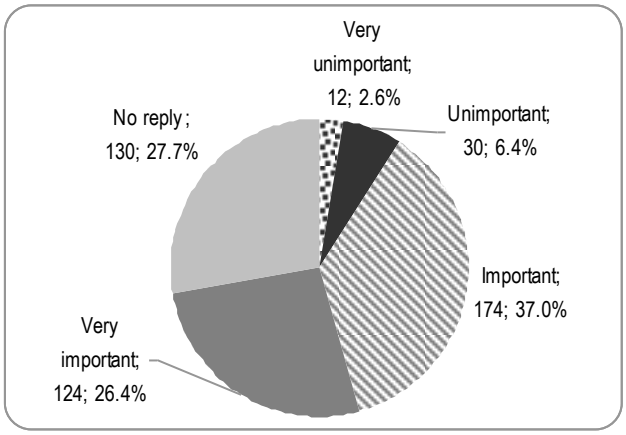


Diagram 4.113.b – Higher education

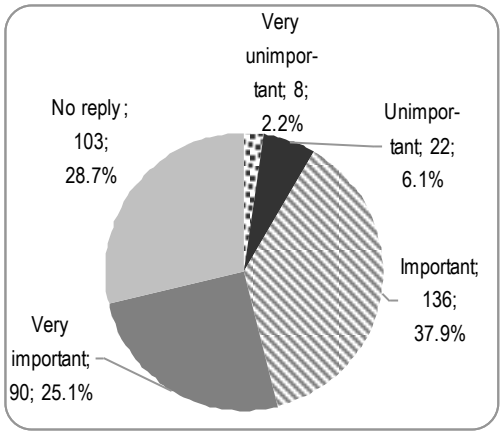
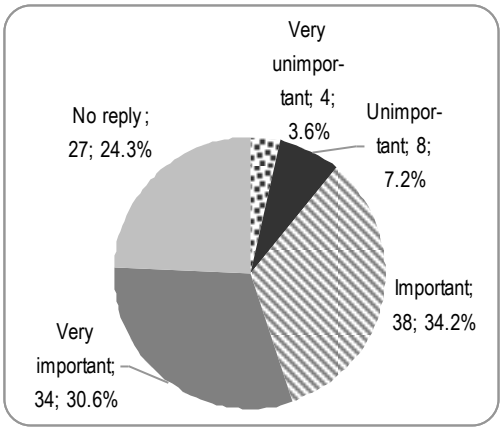


Diagram 4.113.c – Adult learning



The distribution of responses per educational role in more consistent with the general trend within the educational roles of the higher education sector.

Diagram 4.114.a – Lack of policies at institutional level to support the creation or use of OER
Higher education – Breakdown per educational role

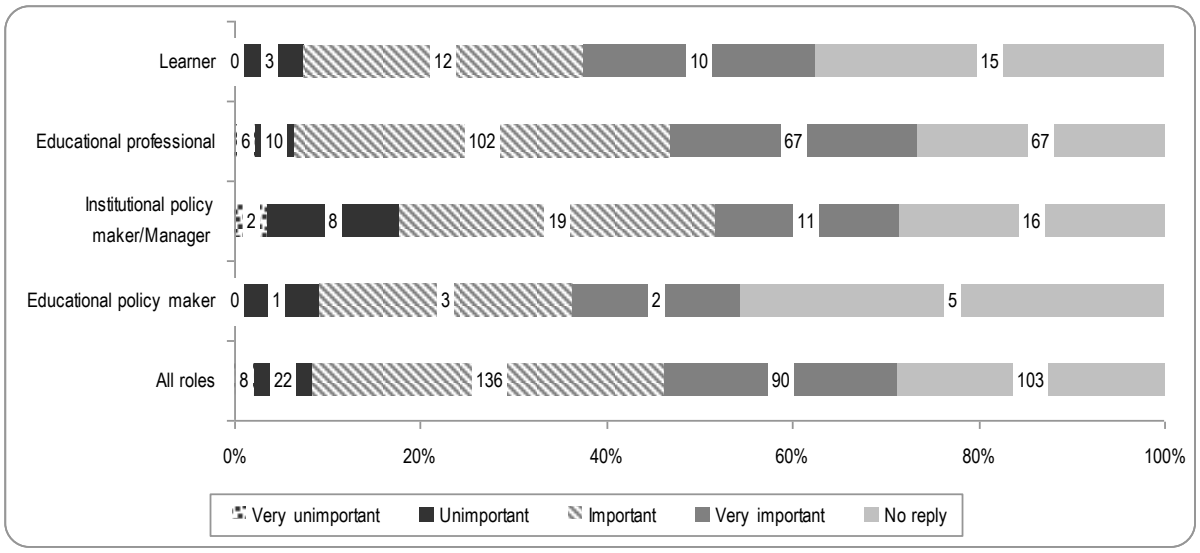
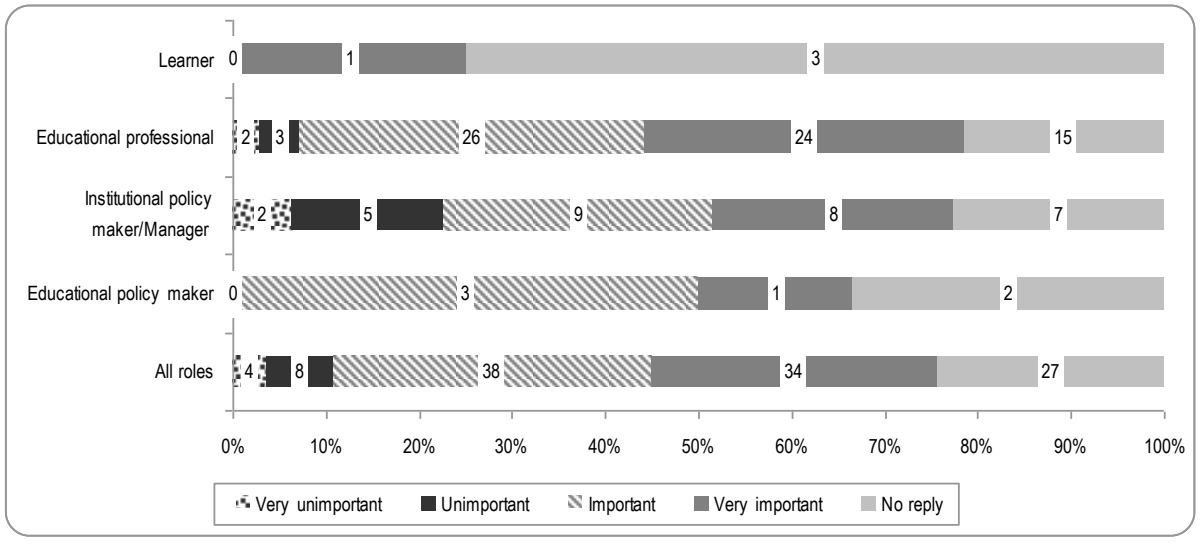


Diagram 4.114.b – Adult learning – Breakdown per educational role



Again here, as with the previous sub-question, there is evidence of a high degree of awareness of the importance of institutional policies for the uptake of OER.

15. Lack of interest in creating or using OER

A clear majority of respondents (58.5%) feels that this barrier is very important and important. Likewise, the breakdown into sectors provides a similar pattern.

Diagram 4.115.a – Lack of interest in creating or using OER

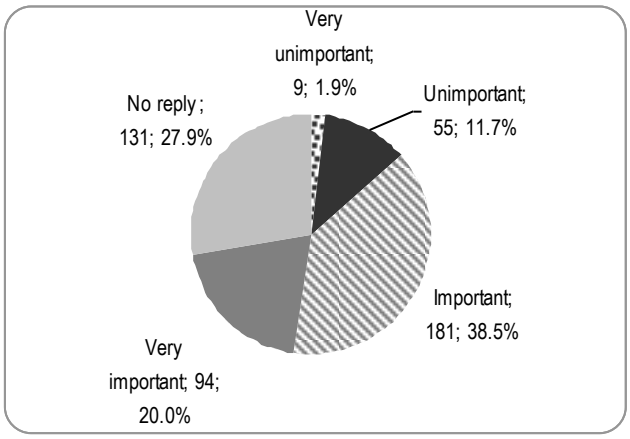


Diagram 4.115.b – Higher education

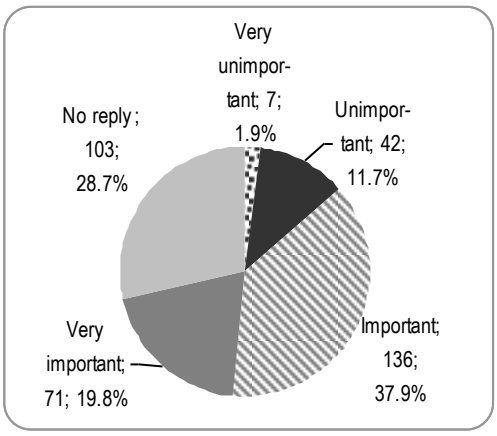
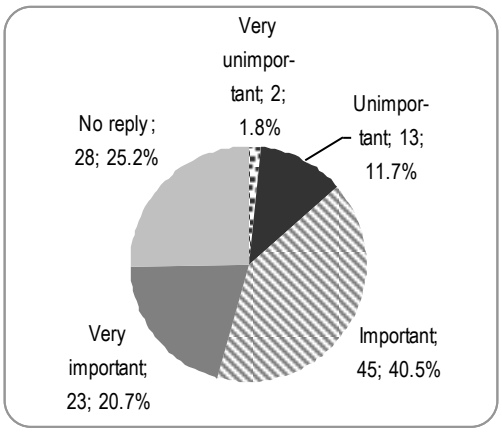


Diagram 4.115.c – Adult learning



In analysing the breakdown per educational role in each sector, one observes that in higher education 50.0% of institutional policy makers/managers rate this sub-question positively, while as much as 61.5% of educational professionals do so; in adult learning, the lead is taken by institutional policy makers/managers, at 67.7% of positive replies, and the educational professionals follow suit, at 61.4%.

Diagram 4.116.a – Lack of interest in creating or using OER
Higher education – breakdown per educational role

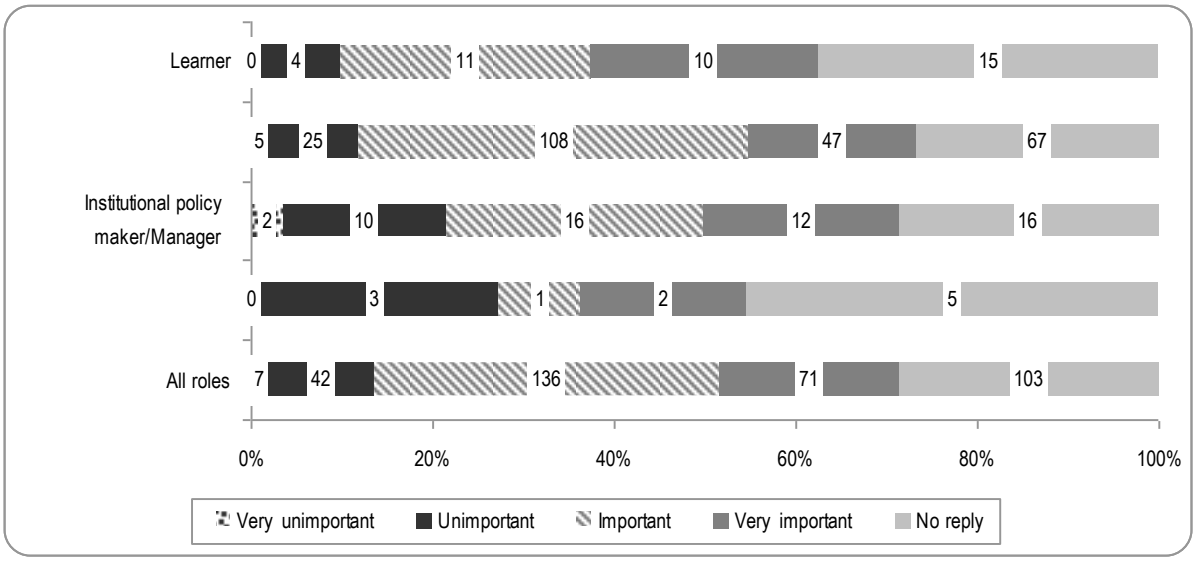
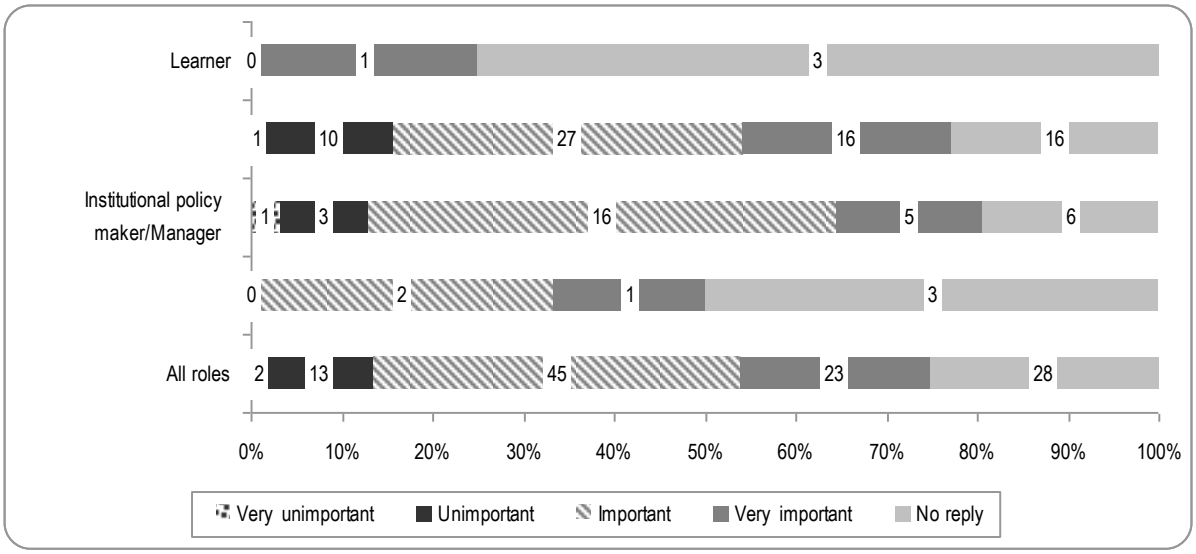


Diagram 4.116.b – Adult learning – breakdown per educational role



The opinions expressed by the respondents seem to point, as we mentioned earlier, to the relevance of the existence of cultures of innovation in educational institutions for OER to succeed.

16. Educational professionals lack the skills to create or use OER

More than half of all respondents express agreement with this statement as a barrier to OER use (56.8%), with especial relevance in the adult learning sector (65.9%).

Diagram 4.117.a – Educational professionals lack the skills to create or use OER

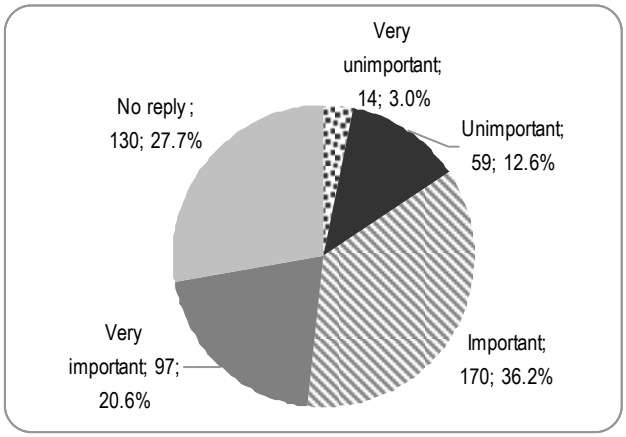


Diagram 4.117.b – Higher education

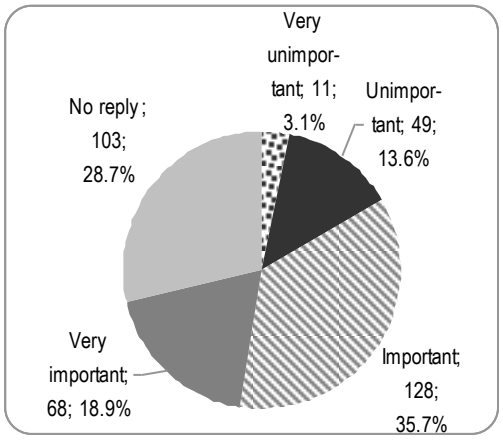
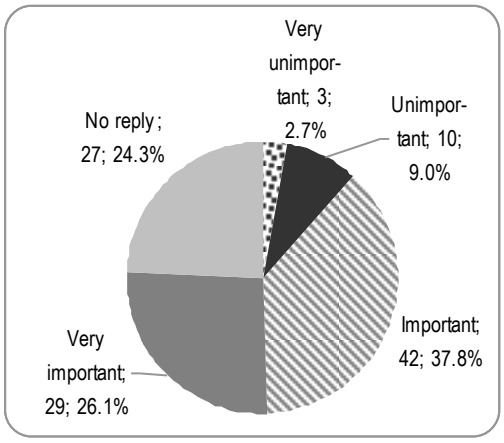


Diagram 4.117.c – Adult learning



Considering the distribution by educational role, the higher positive values are shown by institutional policy makers/managers and educational professionals in both sectors.

Diagram 4.118.a – Educational professionals lack the skills to create or use OER
Higher education – Breakdown per educational role

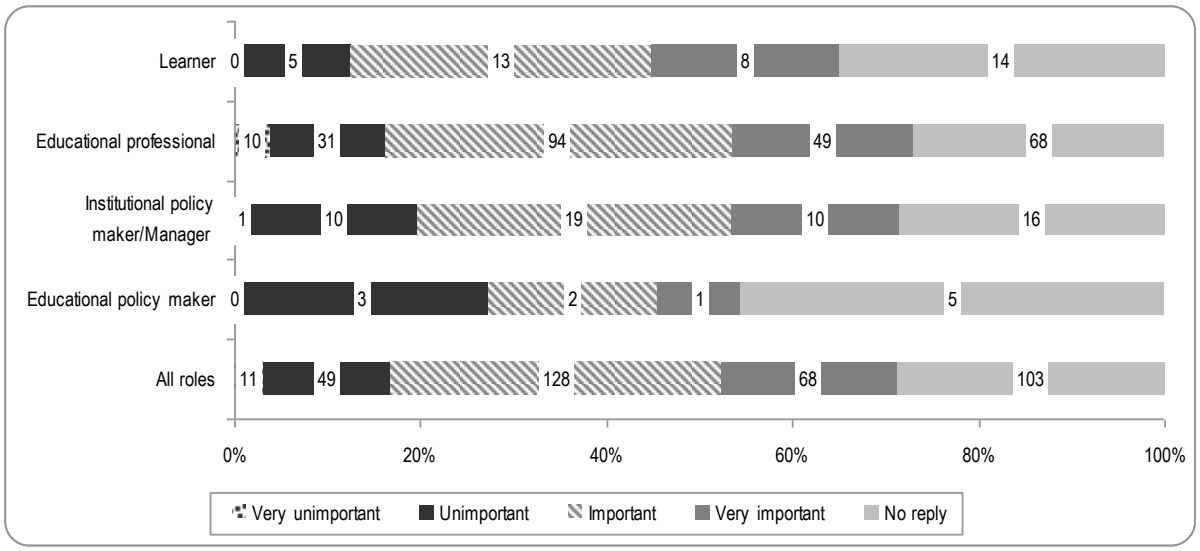
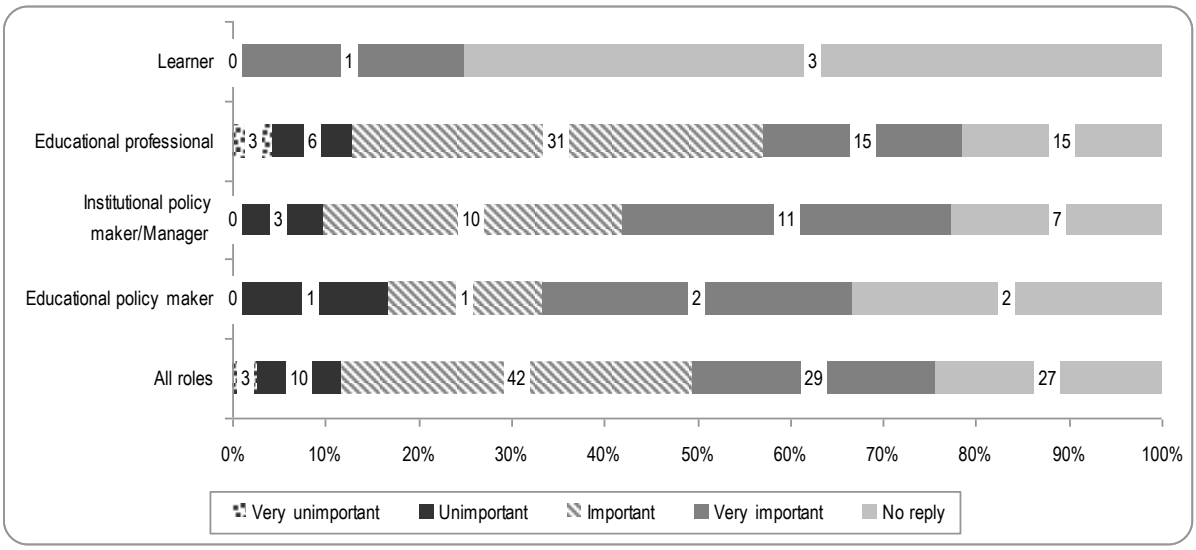


Diagram 4.118.b – Adult learning – Breakdown per educational role



These results suggest that measures should be implemented to support skills development by educational professionals in areas of relevance to OER.

17. Students/Learners lack the skills to create or use OER

In contrast with the previous barrier, only 42.1% of all respondents assessed this barrier positively. It should be noted that the breakdown of the positive ratings per sector offers differing results: only 39.0% in higher education against 52.2% in adult learning.

Diagram 4.119.a – Students/Learners lack the skills to create or use OER

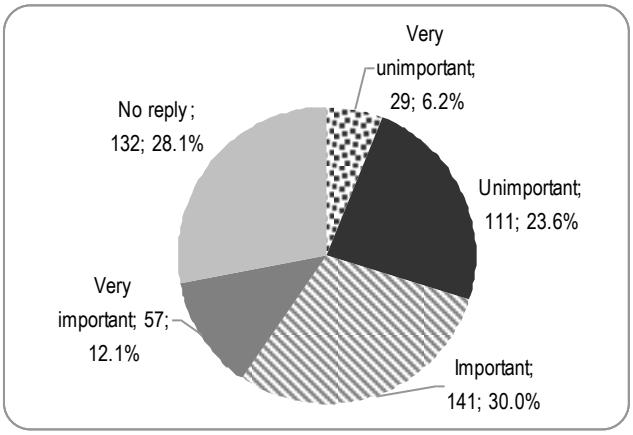


Diagram 4.119.b – Higher education

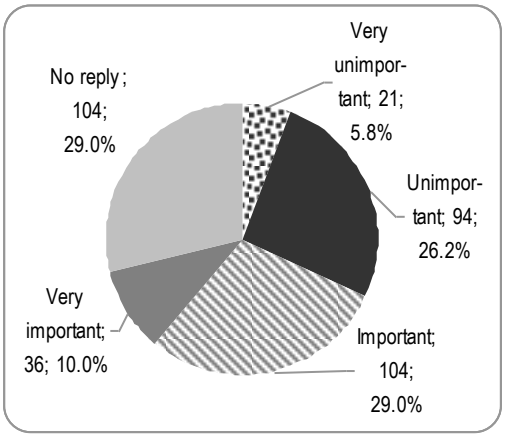
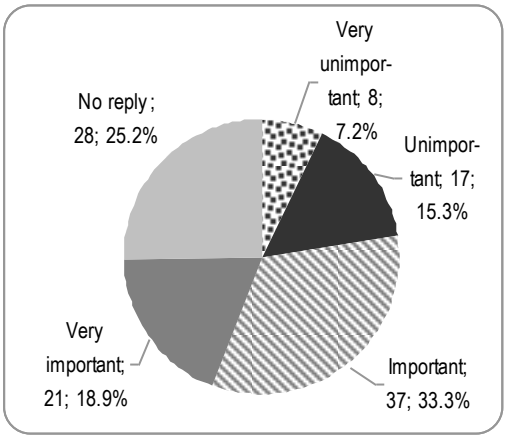


Diagram 4.119.c – Adult learning



The distribution of ratings by educational role follows a fairly similar pattern within the two sectors surveyed, with the exception of the adult learners.

Diagram 4.120.a – Students/Learners lack the skills to create or use OER
Higher education – Breakdown per educational role

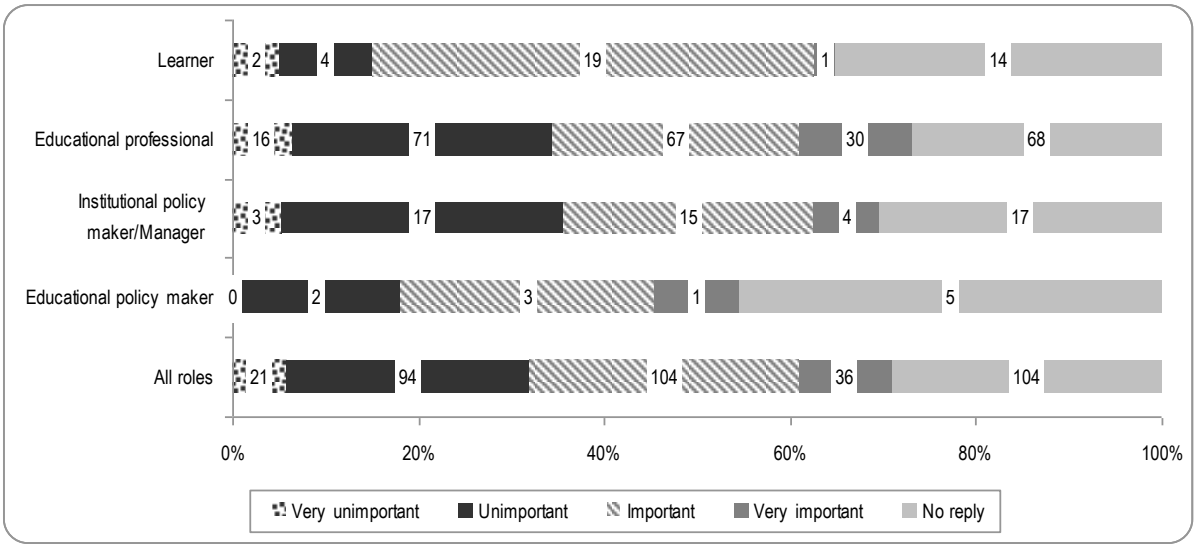
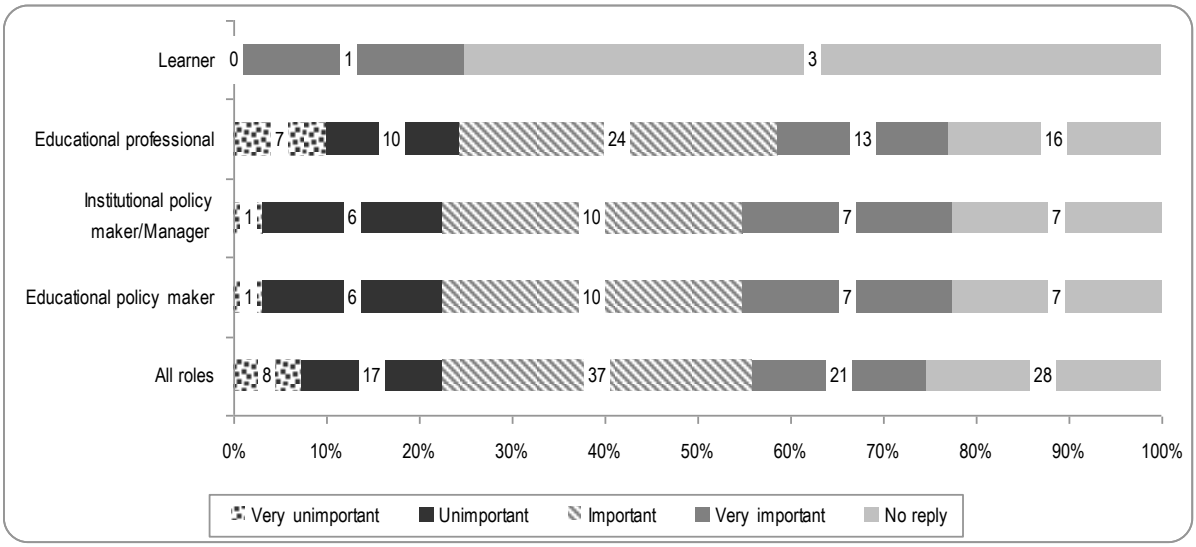


Diagram 4.120.b – Adult learning – Breakdown per educational role



The results would seem to unveil to two different situations, with a potential for intervention in skills development for adult learners.

18. Educational professionals lack the time to create or use OER

The requirements of time to devote to the creation or use of OER are considered as a relevant barrier by more than half of all respondents (58.1%), a trend mirrored by each sector.

Diagram 4.121.a – Educational professionals lack the time to create or use OER

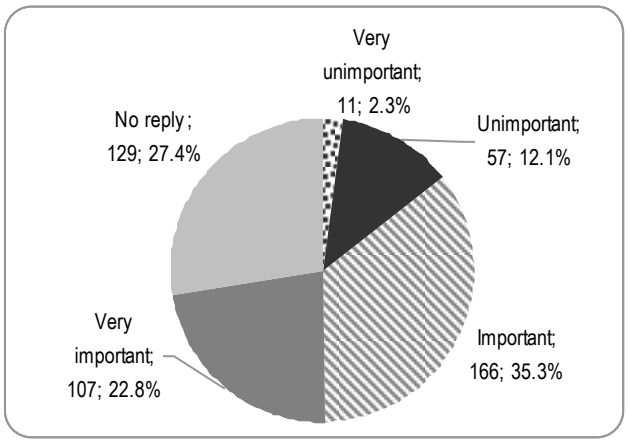


Diagram 4.121.b – Higher education

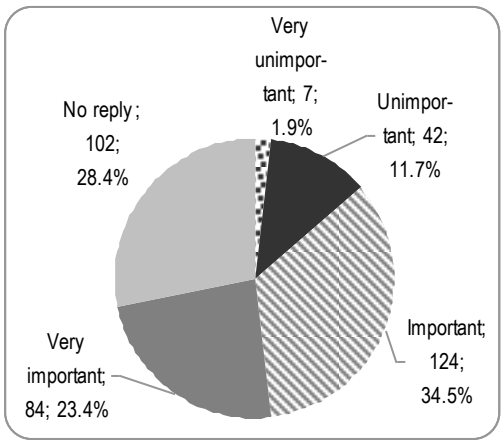
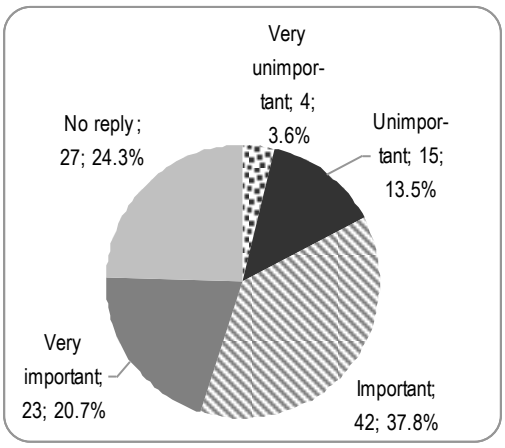


Diagram 4.121.c – Adult learning



The distribution by educational role shows that higher educational learners and educational professional share similar levels of positive ratings; in adult learning, institutional policy makers/managers, followed by educational professionals, share the concern for this barrier.

Diagram 4.122.a – Educational professionals lack the time to create or use OER
Higher education – Breakdown per educational role

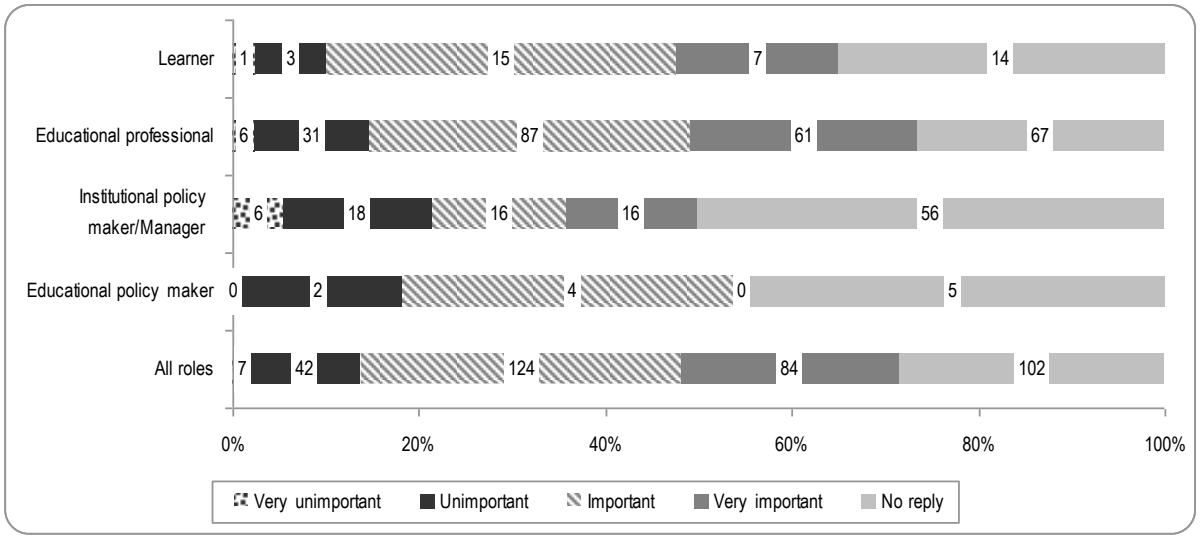
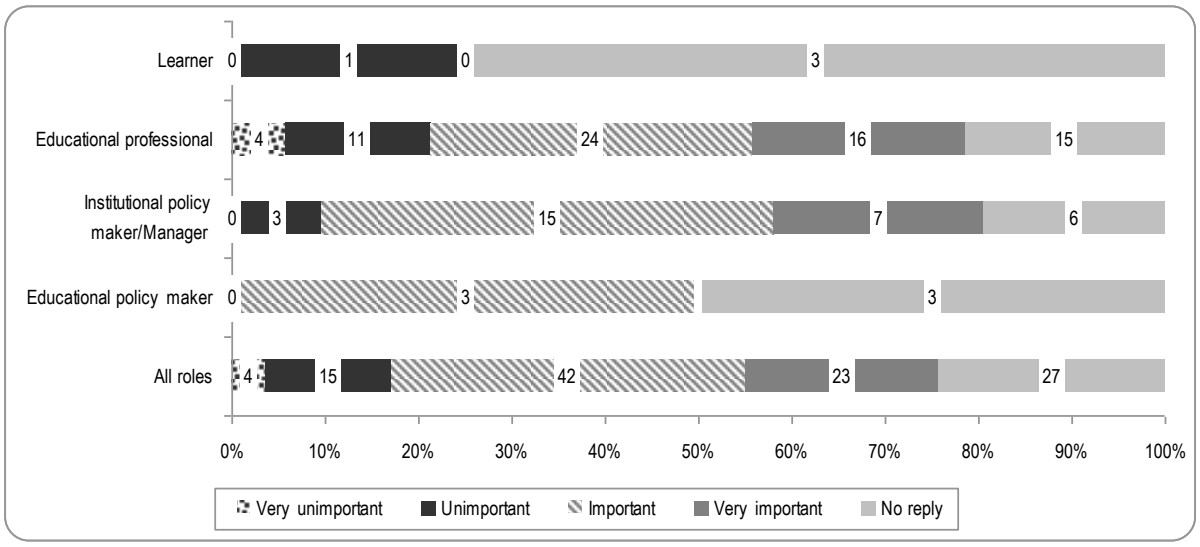


Diagram 4.122.b – Adult learning – Breakdown per educational role



These results are an indication that institutional measures may need to be put into place to address this difficulty.

19. Students/Learners lack the time to create or use OER

The trend observed with the previous barrier is not followed when considering this factor for students/learners, since less than half of all respondents rated it positively (41.0%). Adult learning respondents, however, replied more positively (47.7%, against 39.0% in higher education). It should also be noted that there is a high level of no replies in both sectors.

Diagram 4.123.a – Students/Learners lack the time to create or use OER

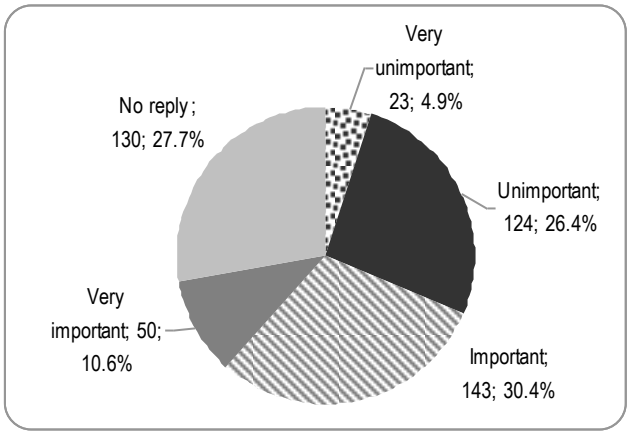


Diagram 4.123.b – Higher education

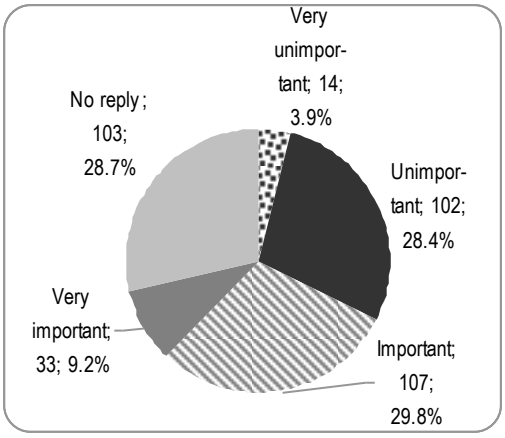
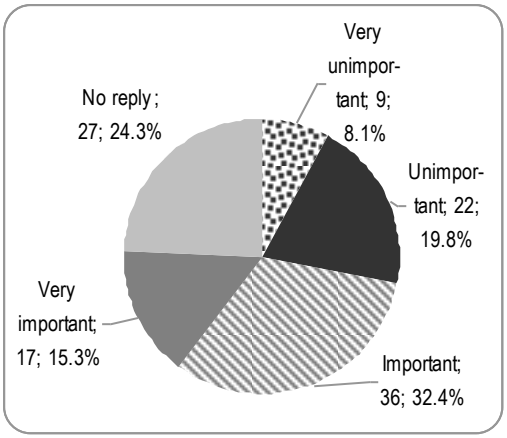


Diagram 4.123.c – Adult learning



The distribution of replies by education role within each sector is fairly similar, with the exception of adult learners.

Diagram 4.124.a – Students/Learners lack the time to create or use OER
Higher education – Breakdown per educational role

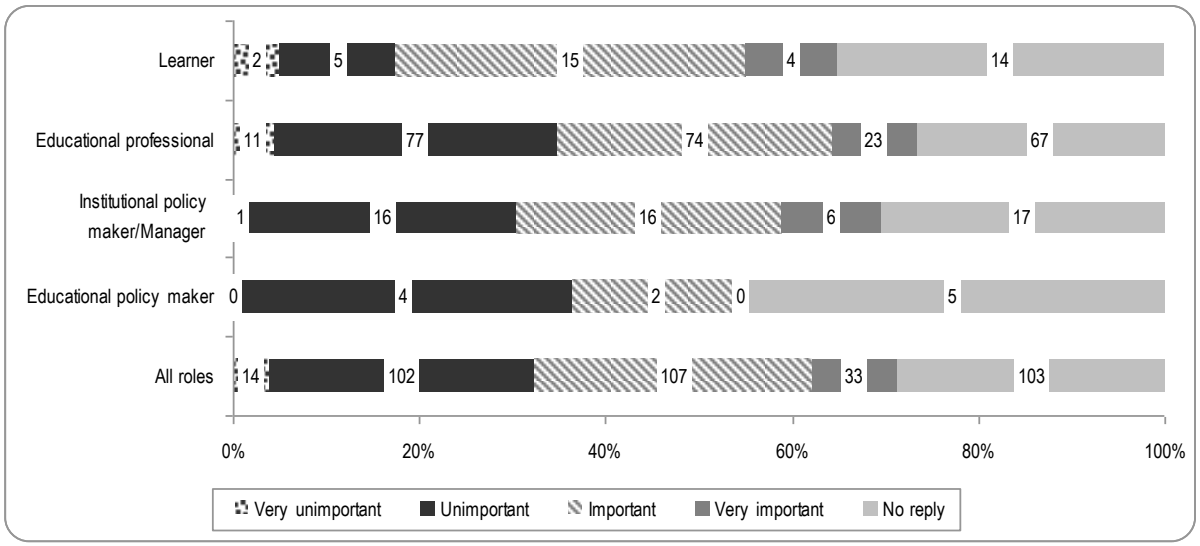
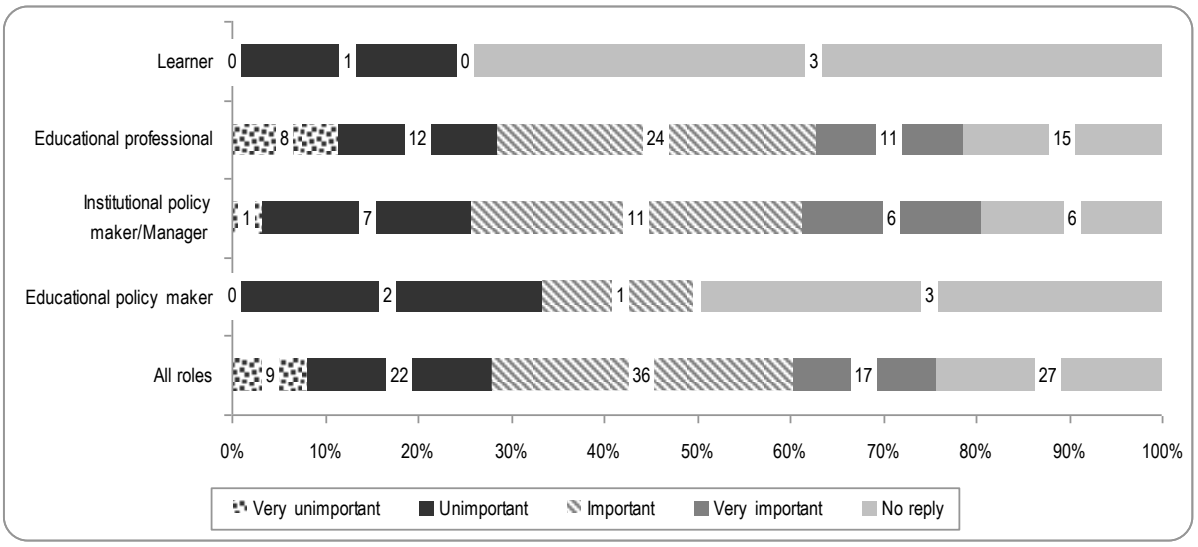


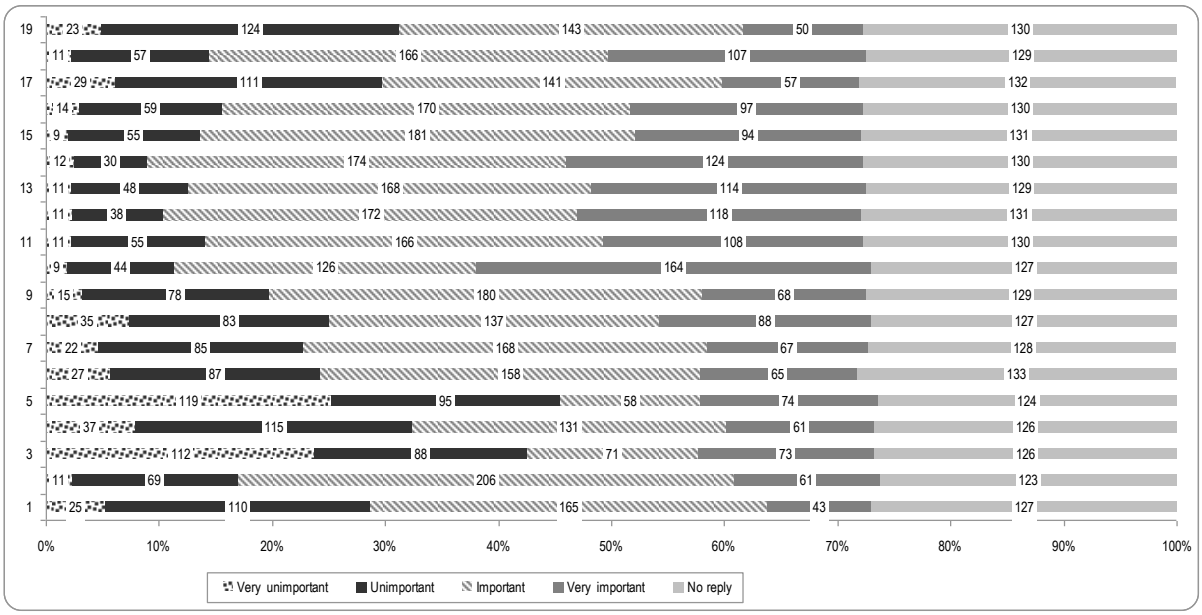
Diagram 4.124.b – Adult learning – Breakdown per educational role



The results for this barrier seem to indicate a lower need for intervention, particularly when comparing with the previous barrier.

20. When considering the overall replies to the list of barriers proposed to the respondents in the survey, there appears a striking even distribution of the no replies. Also, in general, we can say that respondents would appear to be in broad agreement with the list proposed, and would seem to consider them relevant, given the positive ratings shown.

Diagram 4.125 – Barriers to the use of OER
Breakdown per barrier



A more in-depth view of the eight top barriers according to each possible rating is offered in the following tables.

Table 4.2.a – Barriers to the use of OER
8 highest scoring barriers rated "Very important"

Barrier	"Very important" ratings	Total responses	%
10. Insufficient reward system for educational professionals devoting time and energy to OER development	164	470	34.9%
14. Lack of policies at institutional level to support the creation or use of OER	124	470	26.4%
12. Insufficient support from the management level of higher education institutions	118	470	25.1%
13. Lack of policies at national/regional level to support the creation or use of OER	114	470	24.3%
11. Lack of interest in pedagogical innovation among educational professionals	108	470	23.0%
18. Educational professionals lack the time to create or use OER	107	470	22.8%
16. Educational professionals lack the skills to create or use OER	97	470	20.6%
15. Lack of interest in creating or using OER	94	470	20.0%

Table 4.2.b – Barriers to the use of OER
8 highest scoring barriers rated "Important"

Barrier	"Important" ratings	Total responses	%
2. Lack of time to find suitable materials	206	470	43.8%
15. Lack of interest in creating or using OER	181	470	38.5%
9. OER are not embedded into the learning scenarios	180	470	38.3%
14. Lack of policies at institutional level to support the creation or use of OER	174	470	37.0%
12. Insufficient support from the management level of higher education institutions	172	470	36.6%
16. Educational professionals lack the skills to create or use OER	170	470	36.2%
7. Lack of OER that are culturally relevant to the user	168	470	35.7%
13. Lack of policies at national/regional level to support the creation or use of OER	168	470	35.7%

Table 4.2.c – Barriers to the use of OER
8 highest scoring barriers rated "Unimportant"

Barrier	"Unimportant" ratings	Total responses	%
19. Learners lack the time to create or use OER	124	470	26.4%
4. Lack of software to adapt the resources to the user's purposes	115	470	24.5%
17. Learners lack the skills to create or use OER	111	470	23.6%
1. Not invented here syndrome: no trust in others' resources	110	470	23.4%
5. Lack of access to computers	95	470	20.2%
3. Lack of Internet connectivity	88	470	18.7%
6. Lack of quality of the OER	87	470	18.5%
7. Lack of OER that are culturally relevant to the user	85	470	18.1%

Table 4.2.d – Barriers to the use of OER
8 highest scoring barriers rated "Very unimportant"

Barrier	"Very unimportant" ratings	Total responses	%
5. Lack of access to computers	119	470	25.3%
3. Lack of Internet connectivity	112	470	23.8%
4. Lack of software to adapt the resources to the user's purposes	37	470	7.9%
8. Lack of OER in the user's native language	35	470	7.5%
17. Learners lack the skills to create or use OER	29	470	6.2%
6. Lack of quality of the OER	27	470	5.7%
1. Not invented here syndrome: no trust in others' resources	25	470	5.3%
19. Learners lack the time to create or use OER	23	470	4.9%

3. Attitudes

The attitudes of respondents vis-a-vis the use of OER were addressed in two questions of the survey.

1. Experience

The first one inquired about the experiences of respondents in using OER and was aimed at educational professionals:

Educational professionals: Q3.2 How do you feel about using OER in your educational practice?
1. I am relieved, because I do not need to create my own materials.
2. I am uneasy, because I do not know how to assess the quality of the OER.
3. I feel uncomfortable, because as an educational professional, I feel that I am obliged to create the learning materials.
4. I feel uncertain, because I do not know what learners might think of me, if I use another person's educational resources instead of creating my own.
5. I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes.
6. I feel uneasy about openly sharing the learning resources that took me a lot of time and effort to produce.
7. I have no interest in using OER.

1.1. Attitudes of educational professionals towards creating their own materials

Disagreement and strong disagreement with a sense of relief for not having to produce one's teaching/training materials ranked highest in the overall replies to this sub-question, at 48.4% in aggregate, a pattern replicated in a similar fashion by the educational professionals of the two sectors surveyed.

Diagram 4.126.a – Attitudes towards creating one's own materials

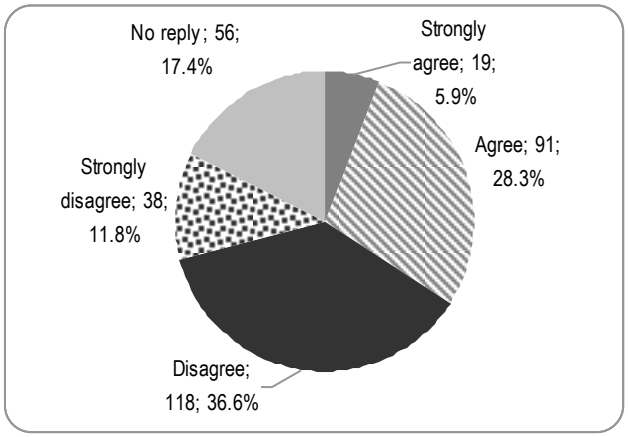


Diagram 4.126.b – Higher education

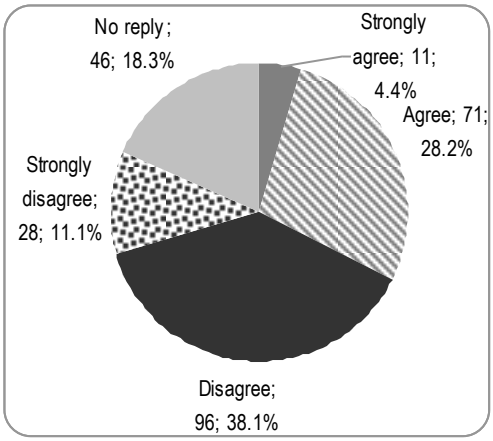
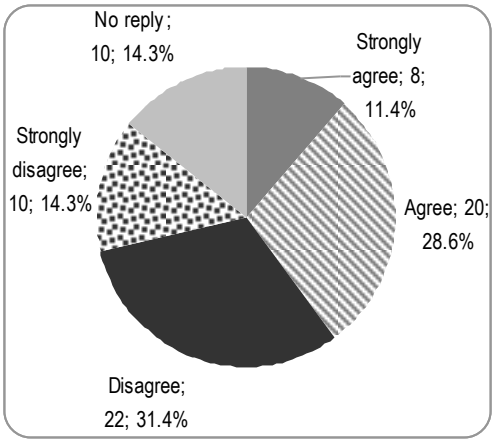


Diagram 4.126.c – Adult learning



1.2. Attitudes of educational professionals towards assessing the quality of the OER

Concerns over using OER whose quality one has difficulty in assessing rank low in the opinions of the educational professionals overall, in that 64.6% were in disagreement and strong disagreement. Again, this attitude is replicated at sector level.

Diagram 4.127.a – Attitudes towards assessing the quality of the OER

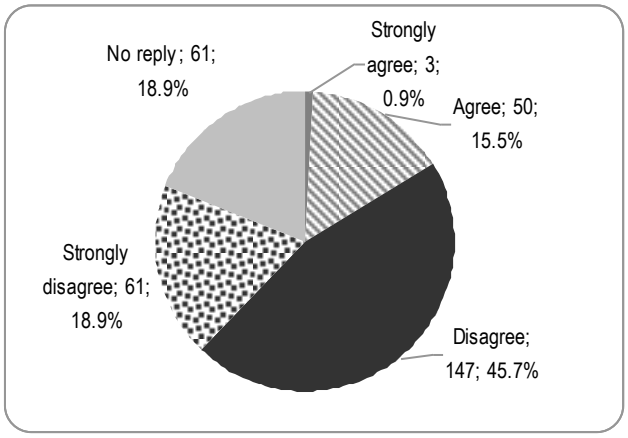
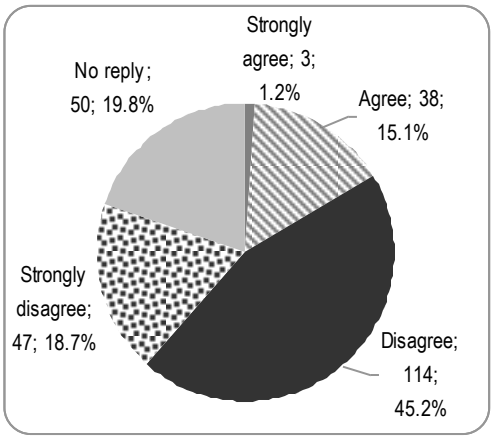
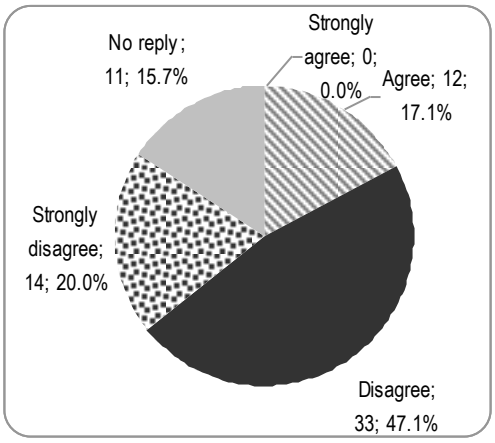


Diagram 4.127.b – Higher education

Diagram 4.127.c – Adult learning





1.3. *Attitudes of educational professionals towards feeling obliged to create learning materials*

The third statement also gathered a very high percentage of the combined negative replies, totalling 67.1 overall. The strongest negative responses came from the adult learning sector, at 72.8%.

Diagram 4128.a – Attitudes towards feeling obliged to create learning materials

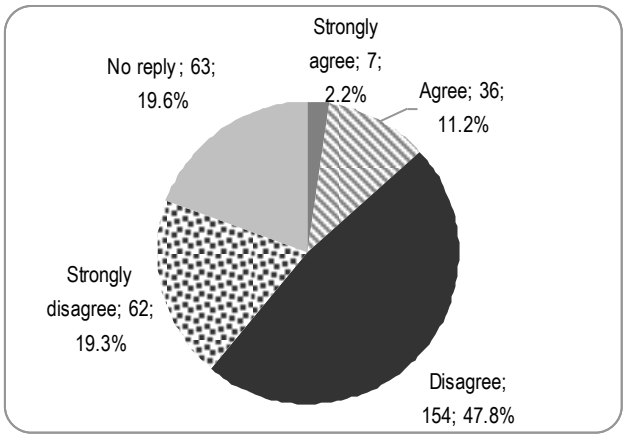


Diagram 4.128.b – Higher education

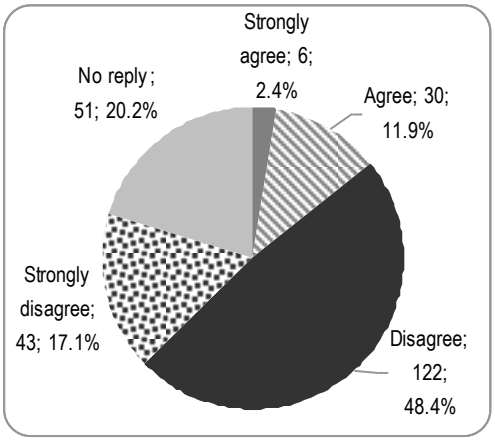
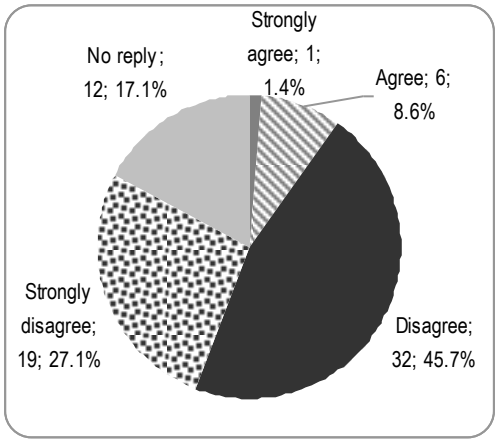


Diagram 4.128.c – Adult learning



1.4. Attitudes of educational professionals towards learners' opinion of them using another person's educational resources

The majority of respondents do not comply with a sense that it is expected from them, as educational professional, to produce learning materials themselves. The combined negative responses total 72.7%, a pattern that is shared by higher education and adult learning.

Diagram 4.129.a – Attitudes towards learners' opinion of them using another person's educational resources

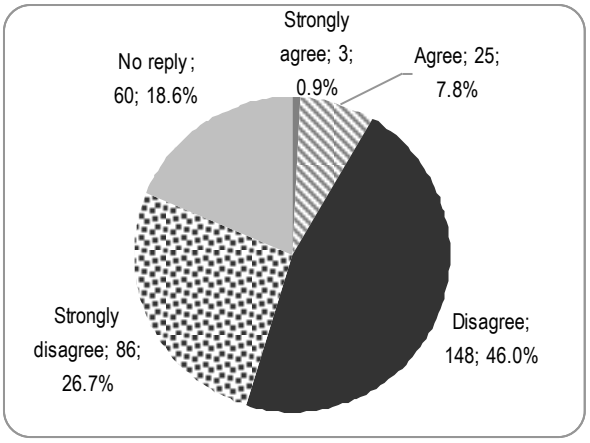


Diagram 4.129.b – Higher education

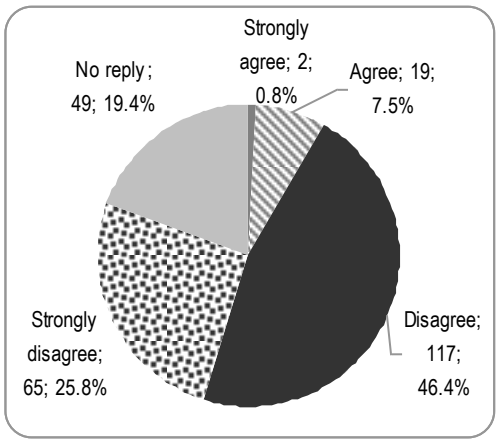
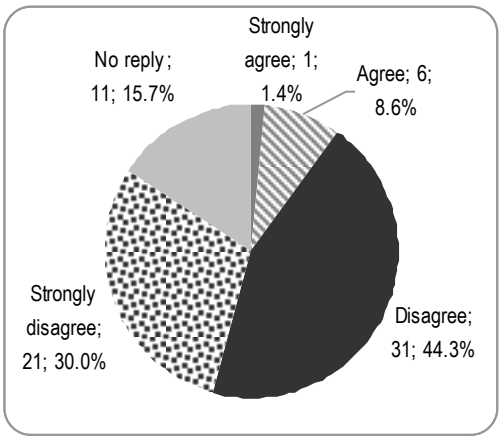


Diagram 4.129.c – Adult learning



1.5. Attitudes of educational professionals towards understanding how OER fit into their course programmes

Deciding the most appropriate way to fit OER into one's course programmes is felt as a challenge by almost half of all educational professionals (47.2%). In adult learning, as much as 54.3% replies were in agreement and strong agreement.

Diagram 4.130.a – Attitudes towards understanding how OER fit into their course programmes

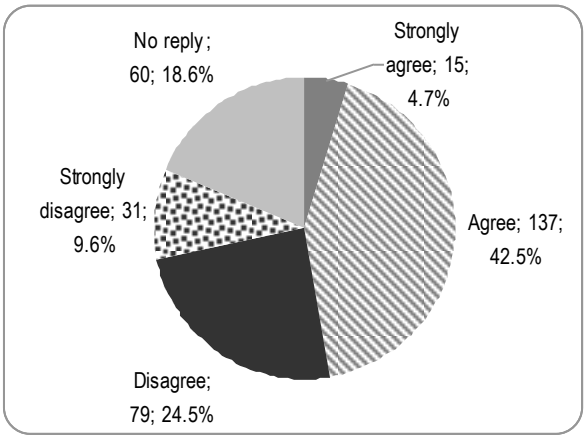


Diagram 4.130.b – Higher education

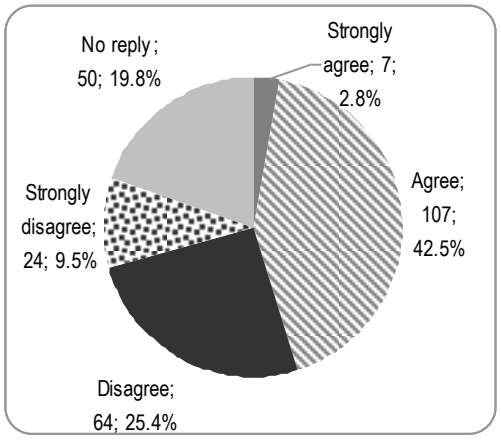
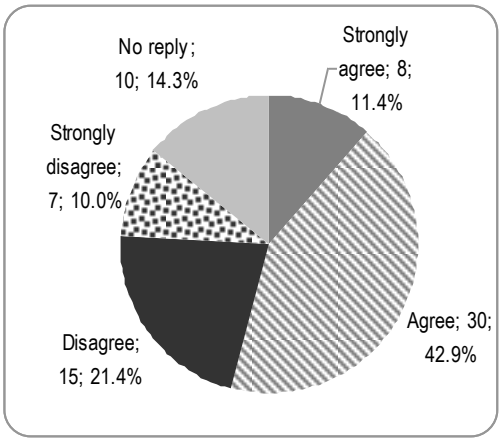


Diagram 4.130.c – Adult learning



1.6. *Attitudes of educational professionals towards sharing OER*

Investing time and effort in creating learning resources that others may use openly is an attitude denied by 58.3% of all respondents; this figure is even higher in adult education, at 62.9%.

Diagram 4.131.a – Attitudes towards sharing OER

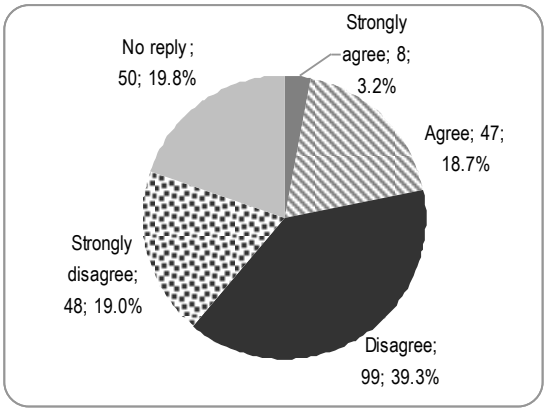


Diagram 4.131.b – Higher education

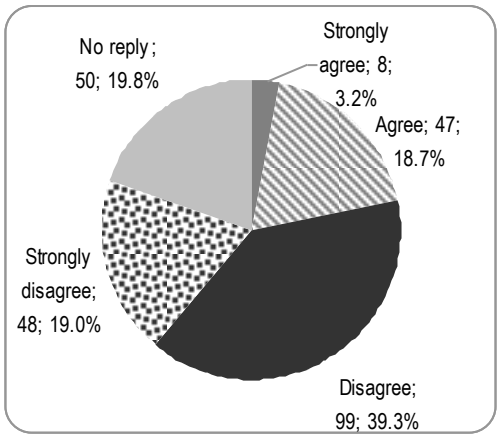
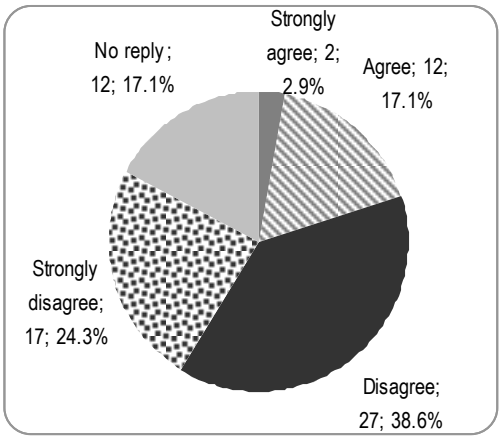


Diagram 4.131.c – Adult learning



1.7. Attitude of disinterest in using OER

A meagre 3.1% of all respondents claimed to have no interest in using OER (agreement and strong agreement combined). Adult education respondents scored slightly higher in the sum of positive responses, at 8.5%, whilst higher education respondents barely scored 1.6%.

Diagram 4.132.a – Attitude of disinterest in using OER

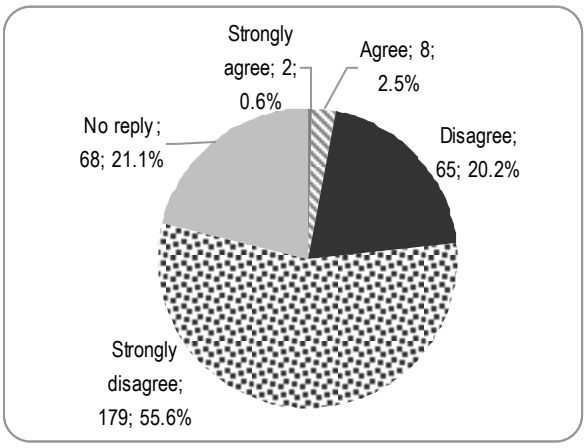


Diagram 4.132.b – Higher education

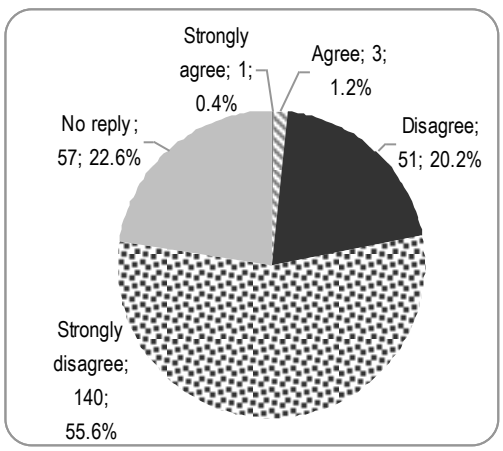
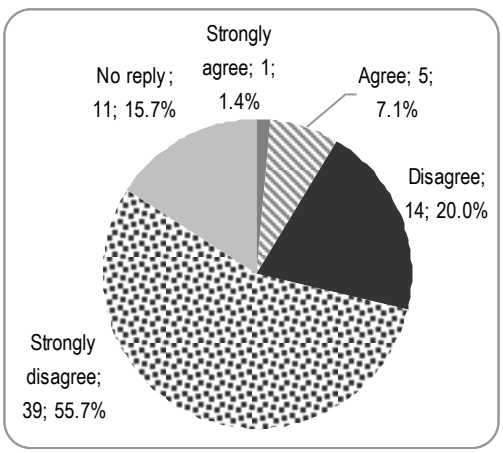


Diagram 4.132.c – Adult learning



2. Another question can be analysed as conveying information about attitudes vis-a-vis OER, namely:

Educational policy makers, institutional policy makers/managers; learners: Q3.3 Please tell us what in your experience is the value of OER for education/training (formal, non formal, informal), by rating the following statements:
3. OER are not so relevant for me, because educational institutions usually have fixed curricula in which OER often do not fit.
4. Using OER often is not accepted, because they are considered as not being one's own achievement.

2.1. Lack of relevance of OER because they do not fit into fixed curricula

Overall, the attitude of respondents is one of refusal of the statement proposed, to the mark of 64.8% overall, and very similar figures per sector.

Diagram 4.133.a – Lack of relevance of OER because they do not fit into fixed curricula

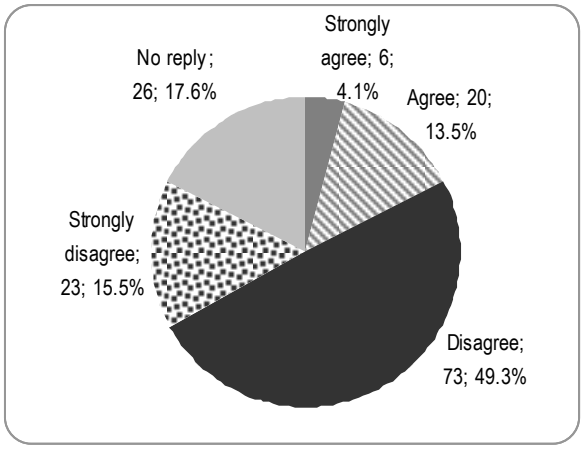


Diagram 4.133.b – Higher education

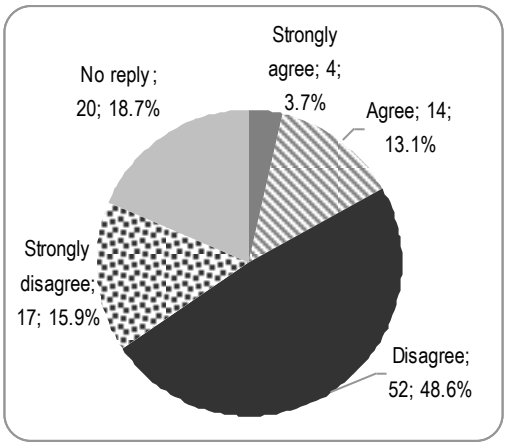
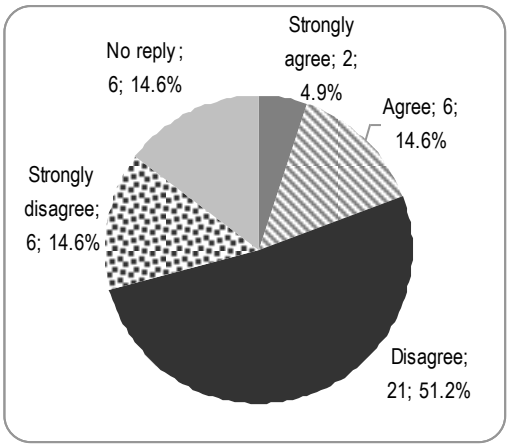


Diagram 4.133.c – Adult learning



When analysing the breakdown of responses by education role, in relative terms, educational policy makers from higher education stand out.

Diagram 4.134.a – Lack of relevance of OER because they do not fit into fixed curricula
Higher education – Breakdown per educational role

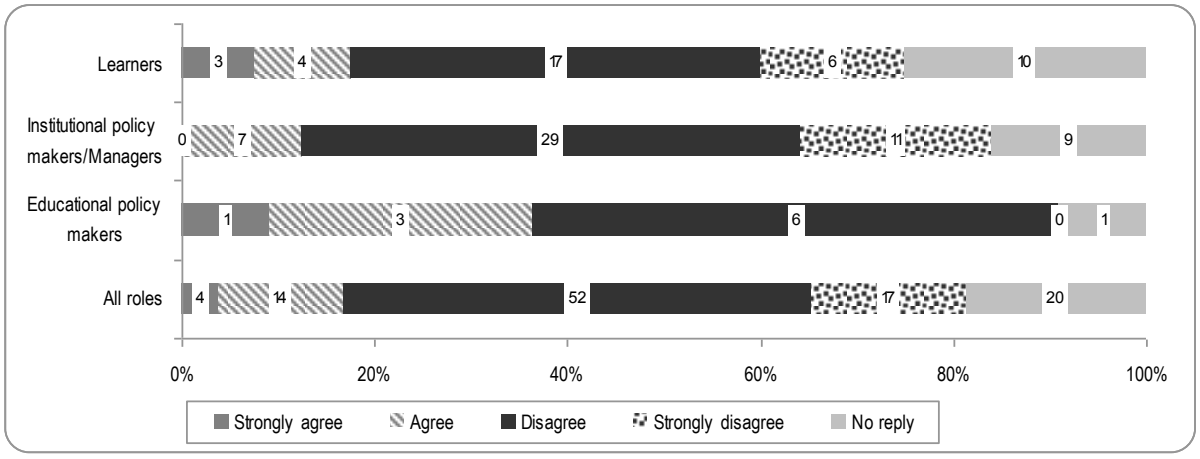
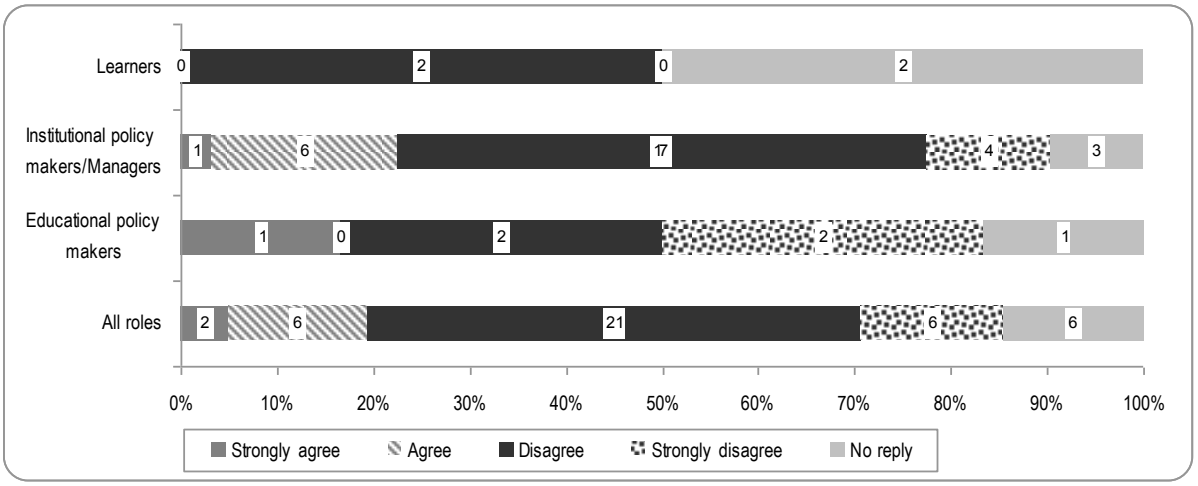


Diagram 4.134.b – Adult learning – Breakdown per educational role



2.2. Non-Acceptance of OER, because they are considered as not being one's own achievement

The perception of the professional unworthiness of using the result of other people's achievements was denied by 49.4% of all respondents (for this question, the focus was seeking the opinion of other than educational professionals roles), with a stronger emphasis on respondents from the adult learning sector.

Diagram 4.135.a – Non-Acceptance of OER, because they are considered as not being one's own achievement

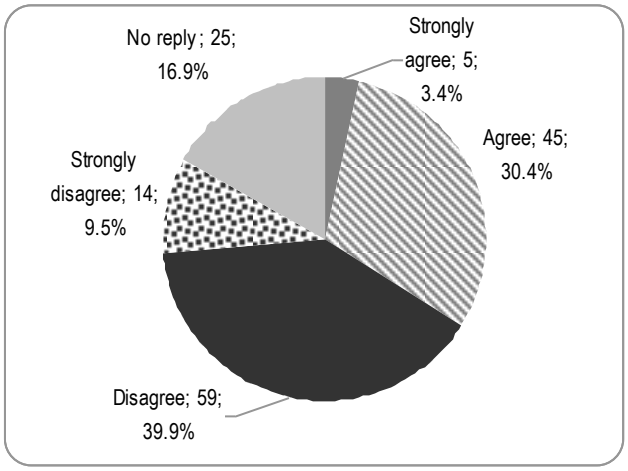


Diagram 4.135.b – Higher education

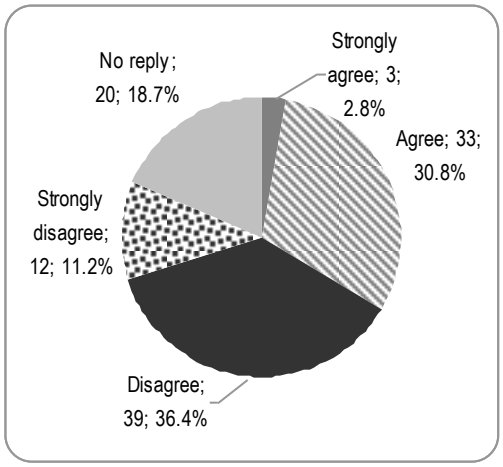
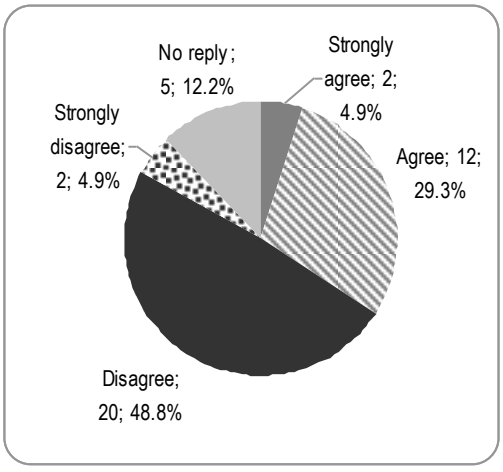


Diagram 4.135.c – Adult learning



In higher education, the educational policy makers present a response pattern that diverges from the other two educational roles, in agreement with the proposed statement; it also diverges strikingly when comparing with their counterparts in adult learning, who follow the trend of disagreement with the statement.

Diagram 4.136.a – Non-Acceptance of OER, because they are considered as not being one's own achievement
Higher education – Breakdown per educational role

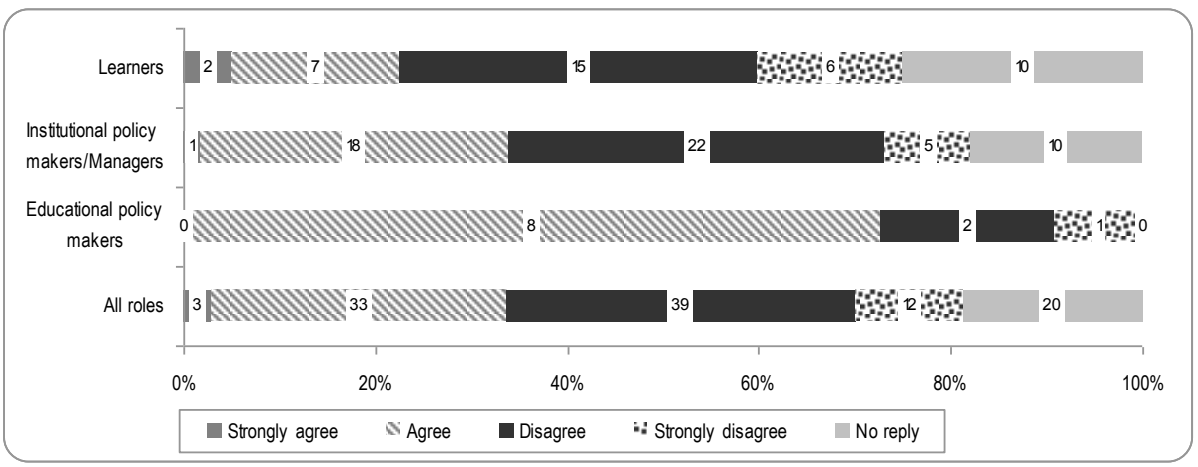
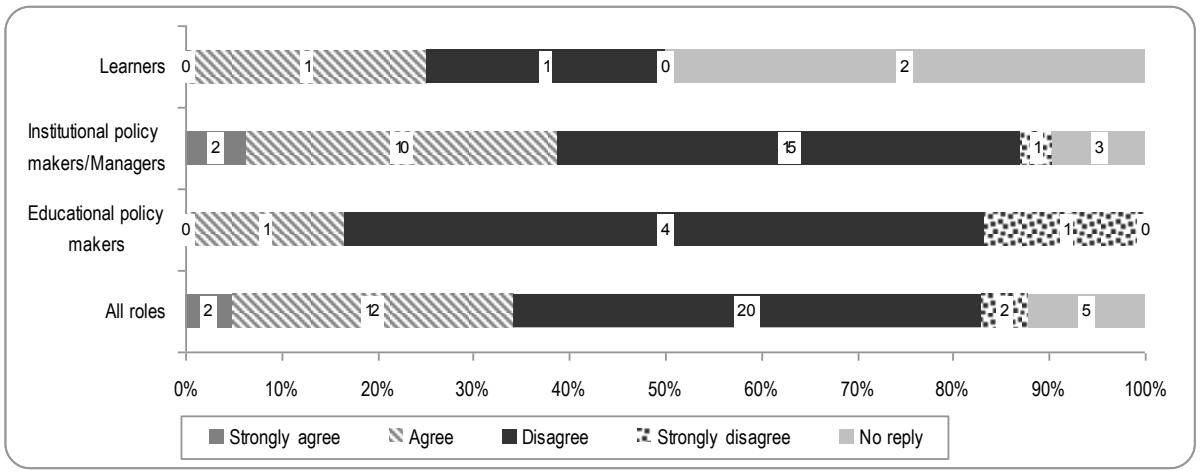


Diagram 4.136.b – Adult learning – Breakdown per educational role



3. Attitudes reported by respondents toward OER follow a very similar pattern to that already captured in previous sections of the survey analysis. They evidence a clear understanding of the purpose of OER and suggest easiness about using, creating and integrating OER into their educational practices.

Findings under this heading are very robust as the overall trends rate extremely and consistently high, suggesting an area of broad consensus that is not easily found in other questionnaires probing attitudes and perceptions.

C. PRACTICES

Evidence of the actual use practices or experiences of OER, as reported by respondents is a key objective OPAL survey. Therefore, a specific section was devoted to this issue, section II, "Your experiences with the use of open educational resources" to ascertain to what extent and in what form are OER being used.

1. Question 2.1 intended to gather information on whether the respondents used OER and in which of three broad categories:

> *All educational roles: Q2.1 Open educational resources are resources which are freely available and can be used, shared or adapted. Please tell us if you have ever used or produced/provided such materials for teaching or learning.*
> *1. Using existing OER for teaching/training/learning.*
> *2. Creating OER myself and publishing them.*
> *3. Adapting existing OER to fit my needs for teaching/ training/learning.*

1.1. Use of existing OER for teaching/training/learning

Almost half of all respondents report an occasional use, followed by a frequent use and no use at all. In the adult education sector, the percentage of frequent use is higher than in the higher education sector and the percentage of no use is half of that reported by higher education respondents.

Diagram 4.137.a – Use of existing OER for teaching/training/learning

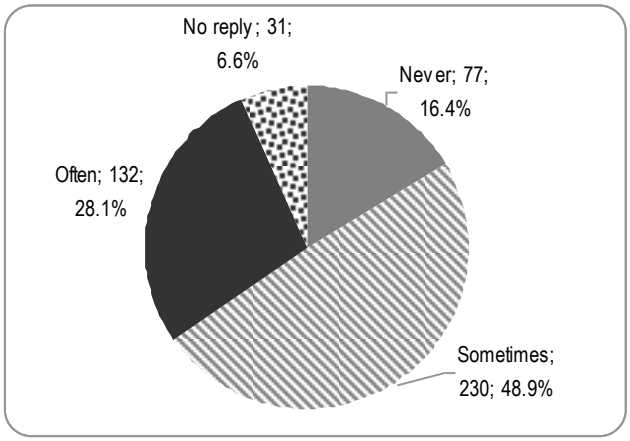


Diagram 4.137.b – Higher education

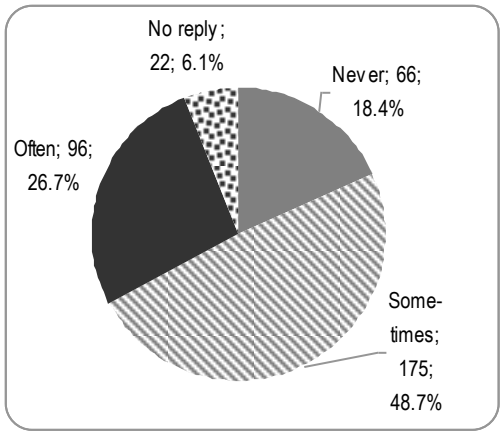
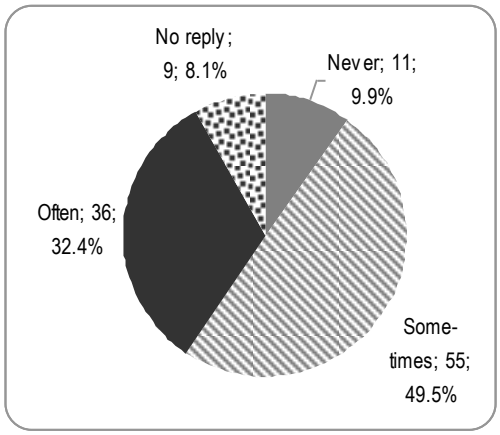


Diagram 4.137.c – Adult education



The analysis of the distribution of responses according to the educational roles evidences distinct patterns for the sectors surveyed, notably for learners and educational policy makers, as shown in the two following diagrams. This should, however, be considered with caution, since these are precisely the educational roles with the lower number of respondents to the survey.

Diagram 4.138.a – Use of existing OER for teaching/training/learning
Higher education – Breakdown per educational role

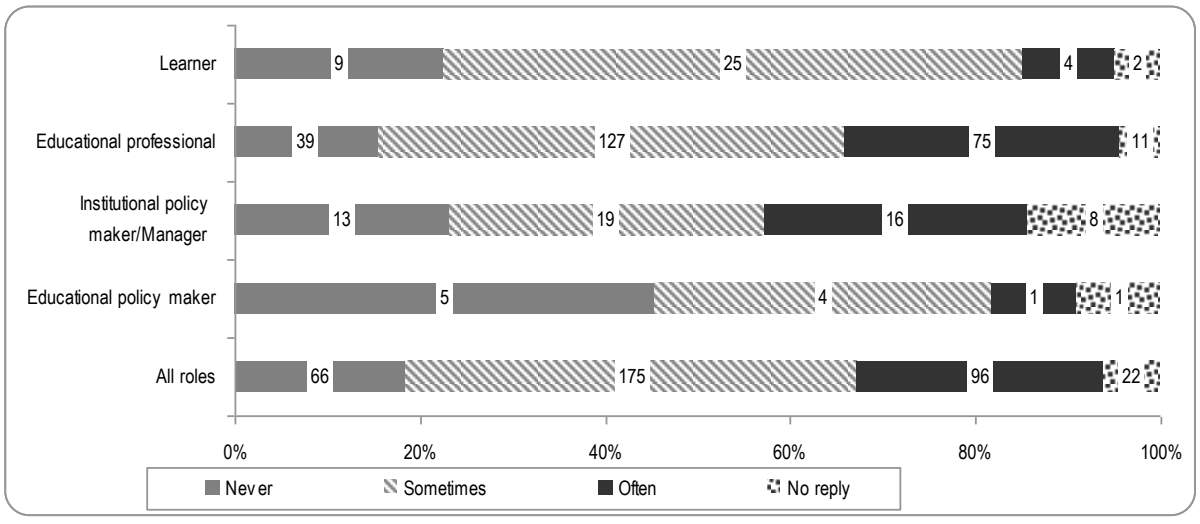
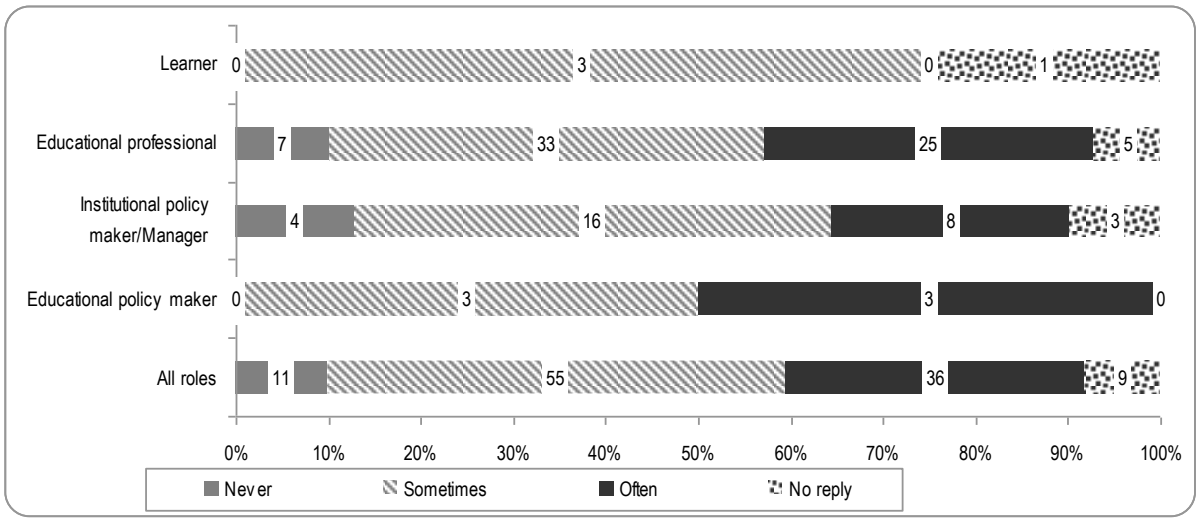


Diagram 4.138.b – Adult learning – Breakdown per educational role



1.2. Creation and publication of OER

Overall, there is a significant proportion of respondents who replied "never", more so if we consider only the valid responses. This occurs to a greater extension in the higher education sector, when analysing both sectors. Mirroring the situation portrayed by the previous sub-question, here too the prevalence goes to the sporadic practice, again in both sectors.

Diagram 4.139.a – Creation and publishing of OER

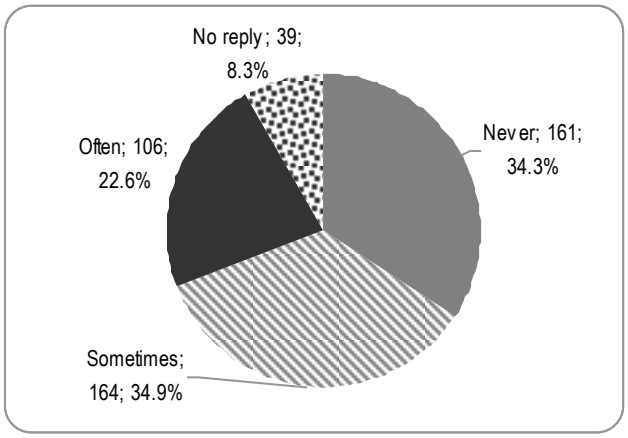


Diagram 4.139.b – Higher education

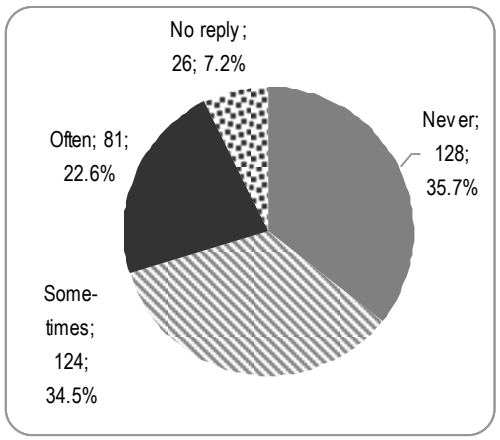
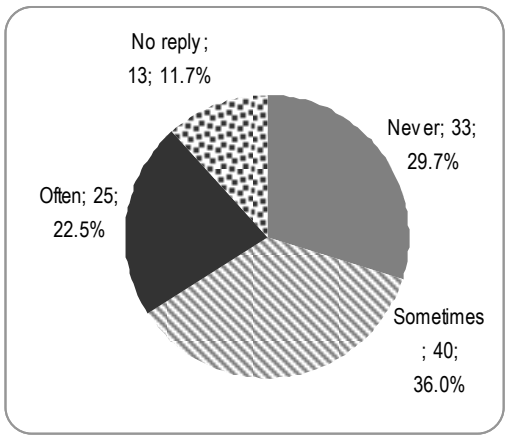


Diagram 4.139.c – Adult education



The distribution across educational roles, comparing sectors, shows a divergent pattern in the learner and the institutional policy maker groups, as shown below, although the small numbers f respondents must be taken into account in this regard.

Diagram 4.140.a – Creation and publishing of OER
Higher education – Breakdown per educational role

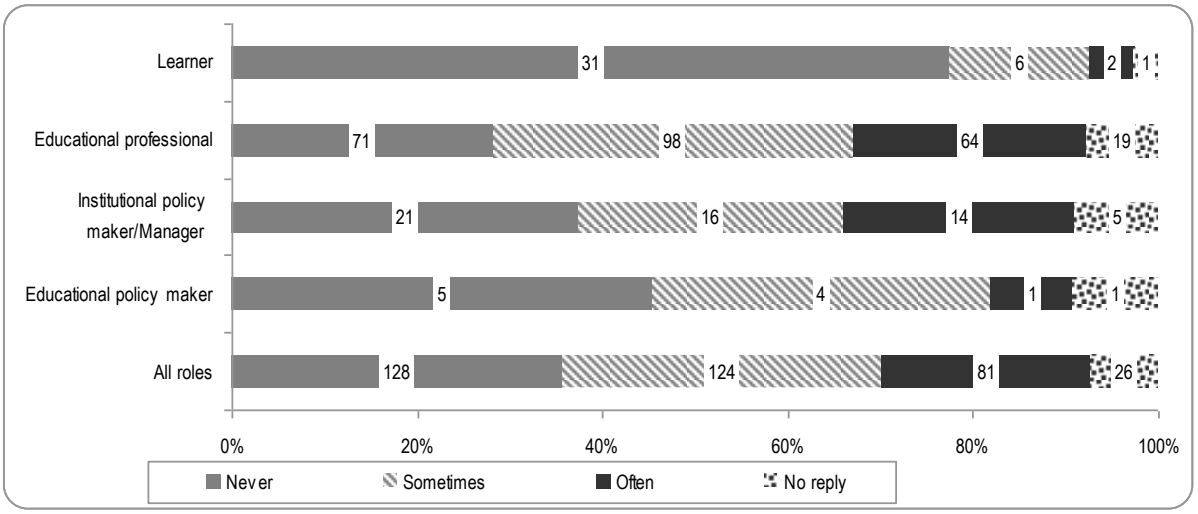
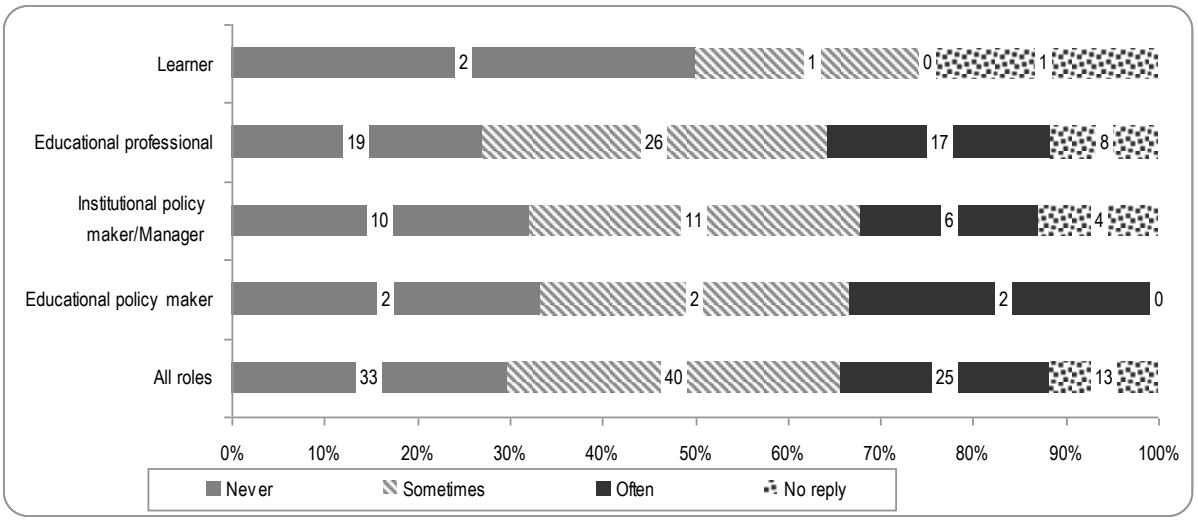


Diagram 4.140.b – Adult learning – Breakdown per educational role



1.3. Adaptation of existing OER to fit tone's needs for teaching/training/learning

The same trend observed in the two previous sub-questions is evident here, with almost half of the responses, overall and per sector, favouring the occasional use. To be noted also the fairly substantial percentages of inexistence of this type of OER practice, which surpass the frequent use overall and in the higher education sector.

Diagram 4.141.a – Adaptation of existing OER to fit one's needs for teaching/ training/learning

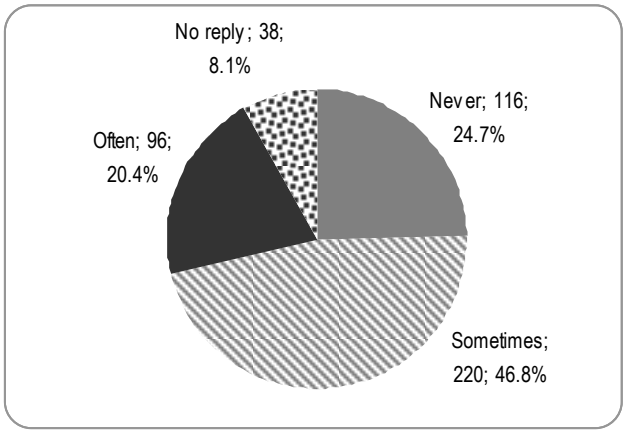


Diagram 4.141.b – Higher education

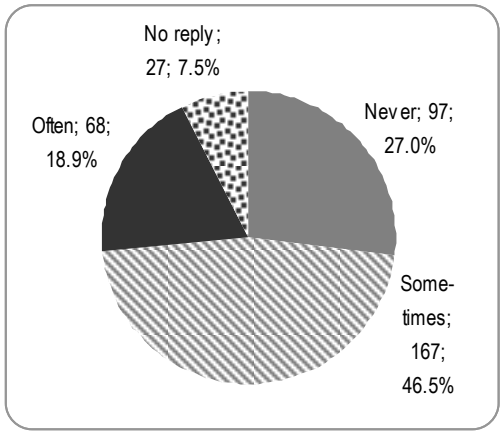
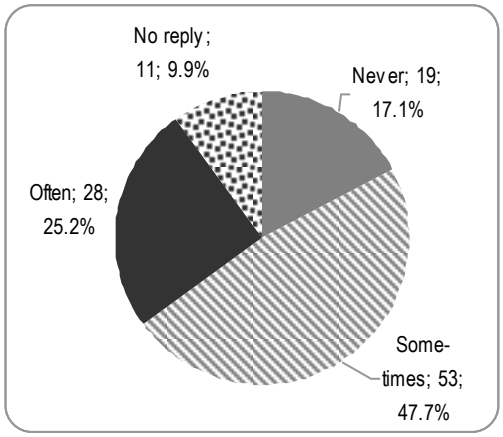


Diagram 4.141.c – Adult education



In analysing the distribution per educational role and comparing the two sectors surveyed, the higher education sector shows higher percentages of no use across educational roles. Institutional policy makers in adult learning claim a far greater frequent use in this category than their counterparts in higher education, as can be seen in the two diagrams below.

Diagram 4.142.a – Adaptation of existing OER to fit one's needs for teaching/ training/learning
Higher education – Breakdown per educational role

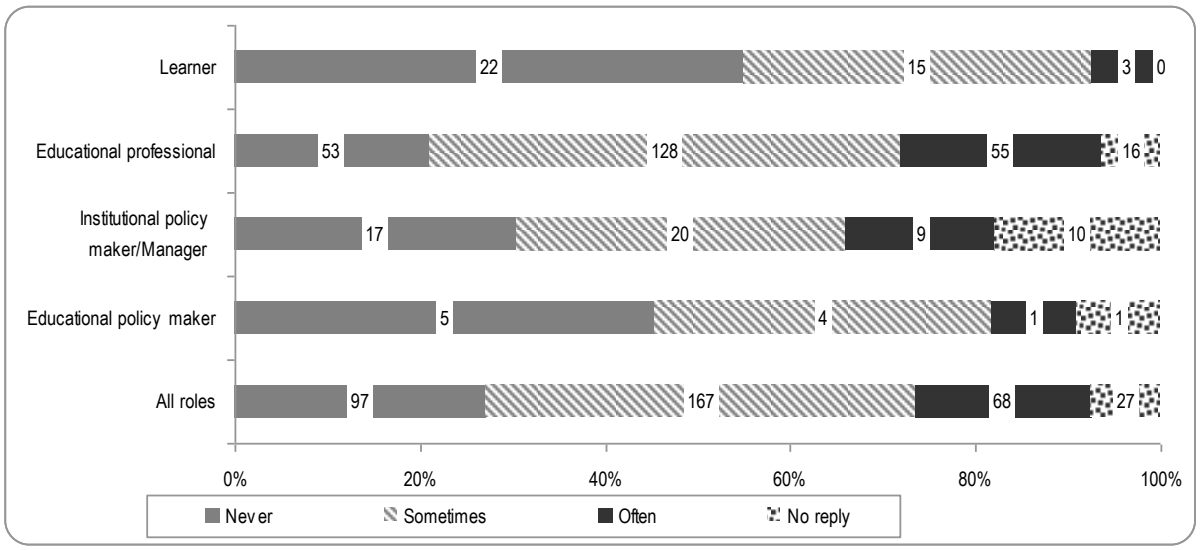
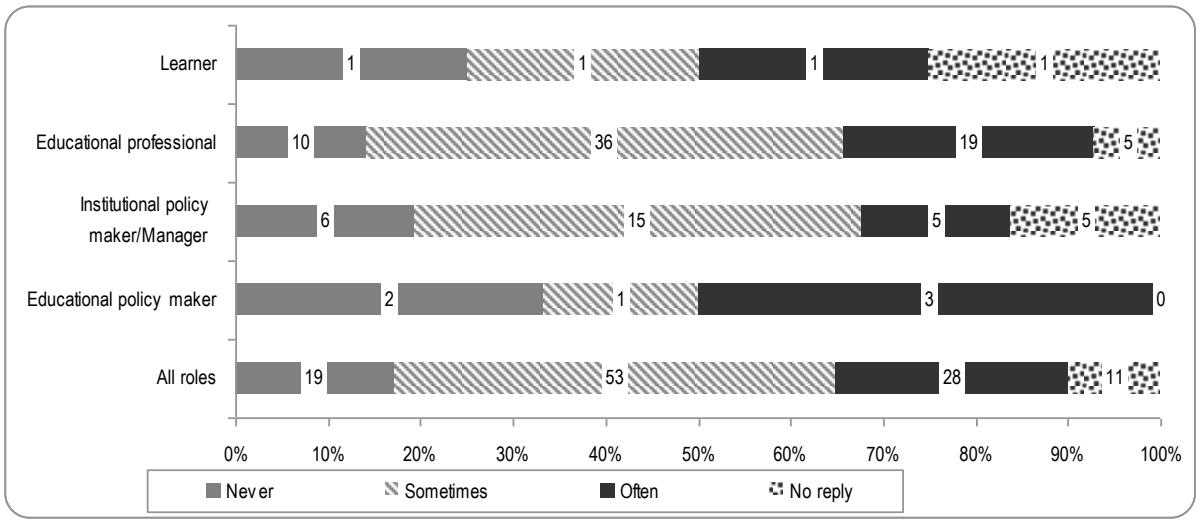


Diagram 4.142.b – Adult learning – Breakdown per educational role

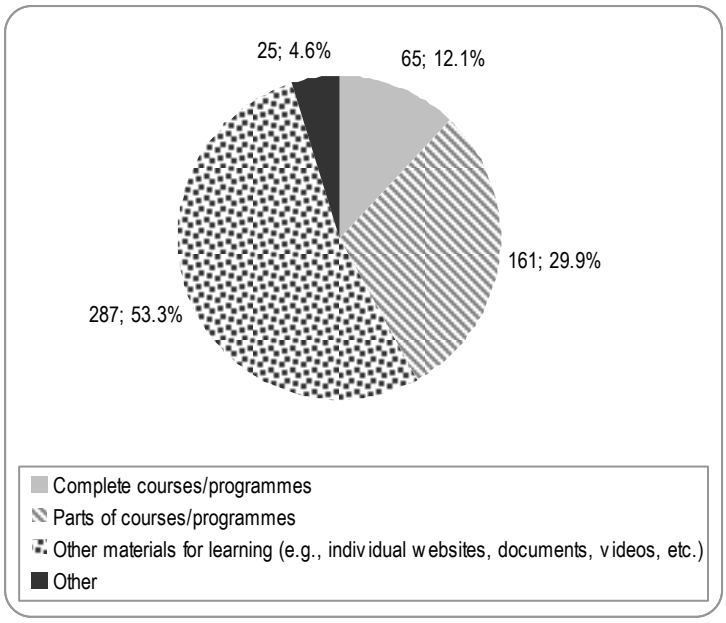


2. Question 2.2 asked respondents to categorize the OER used for teaching or learning:

Educational professionals; learners: Q2.2 How would you describe the kind of OER that you use for teaching/ learning?
1. Complete courses/programmes.
2. Parts of courses/programmes.
3. Other materials for learning (e.g., individual websites, documents, videos, etc.).
4. Other. Please specify.

The emerging trend – overall and per sector - favours clearly what could be called an "atomised" use of OER, that is to say, there appears a clear preference for using individual resources for teaching and learning, rather than more structured programmes or courses.

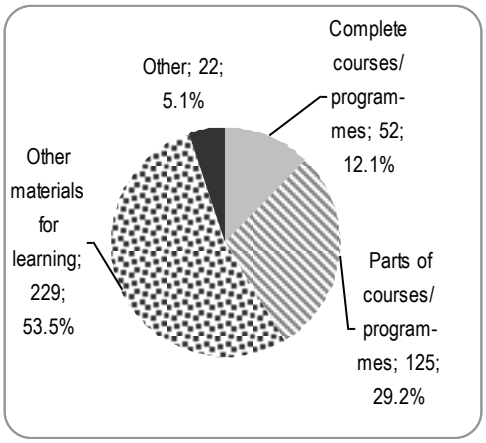
Diagram 4.143.a – Kind of OER used for teaching/learning



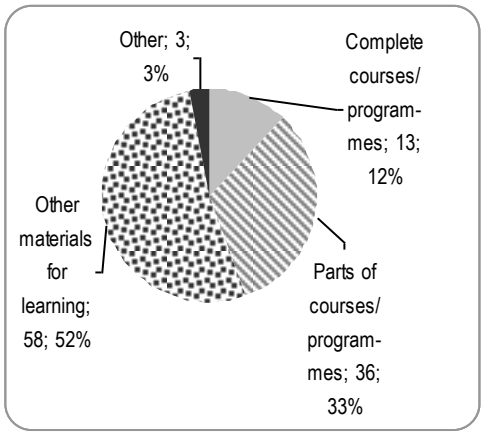
Valid cases: 336 Missing cases: 134

Diagram 4.143.b – Higher education

Diagram 4.143.c – Adult education



Valid cases: 269 Missing cases: 90



Valid cases: 67 Missing cases: 44

The distribution of respondent's opinions per educational role is very similar, as shown in the following diagram.

Diagram 4.144.a – Kind of OER used for teaching/learning
Higher education – Breakdown per educational role

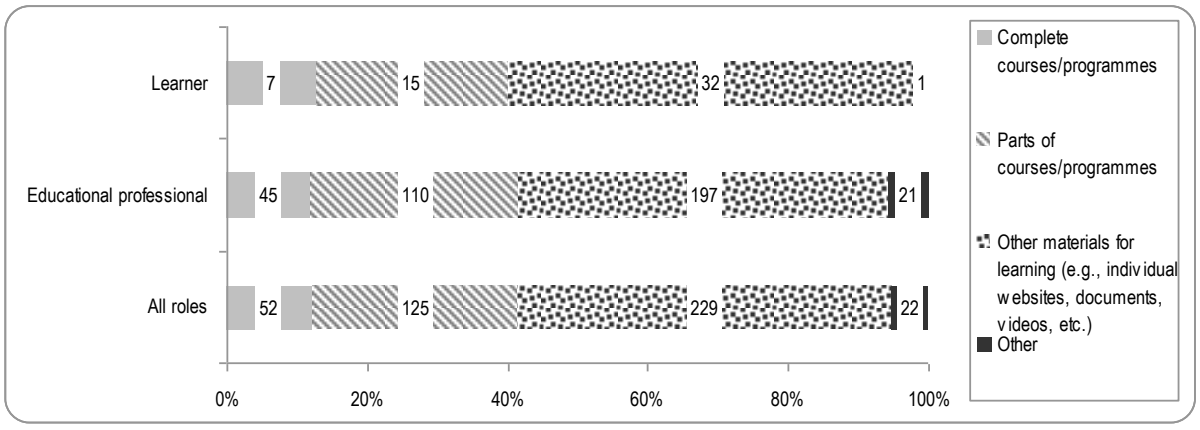
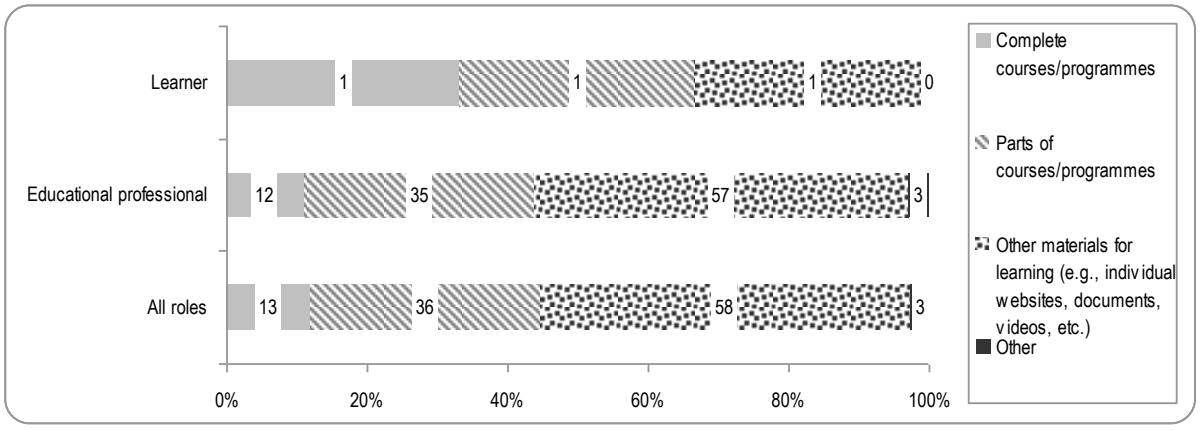


Diagram 4.144.b – Adult learning – Breakdown per educational role



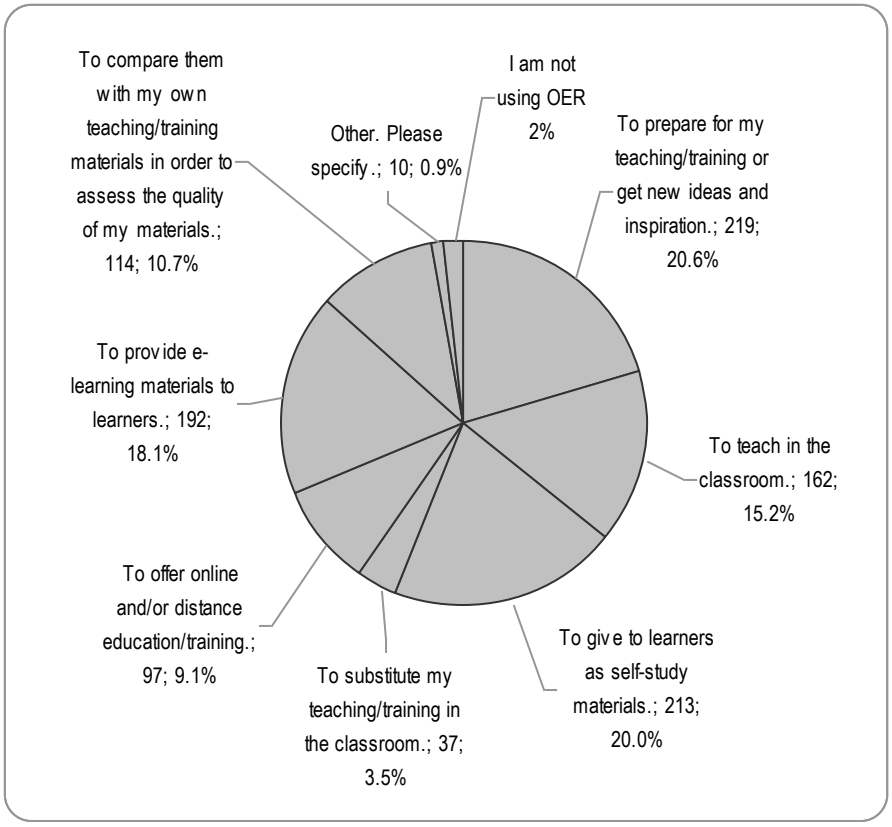
Sub-question 4 gave respondents the opportunity to indicate any other categories of kinds of OER used. Overall, 17 responses were received, ranging from technological infrastructures (repositories of videos, images, dissertations, articles and other resources, databases, open source code, open platforms) to individual resources (simulations, presentations, exercises, videos, online books, educational software).

3. Question 2.3 aimed at the purpose of OER use:

Educational professionals: Q2.3 For what purpose do you use OER? (You may choose all the options that fit your personal case)
I am using OER:
1. To prepare for my teaching/training or get new ideas and inspiration.
2. To teach in the classroom.
3. To give to learners as self-study materials.
4. To substitute my teaching/training in the classroom.
5. To offer online and/or distance education/training.
6. To provide e-learning materials to learners.
7. To compare them with my own teaching/training materials in order to assess the quality of my materials.
8. Other. Please specify.
9. I am not using OER.

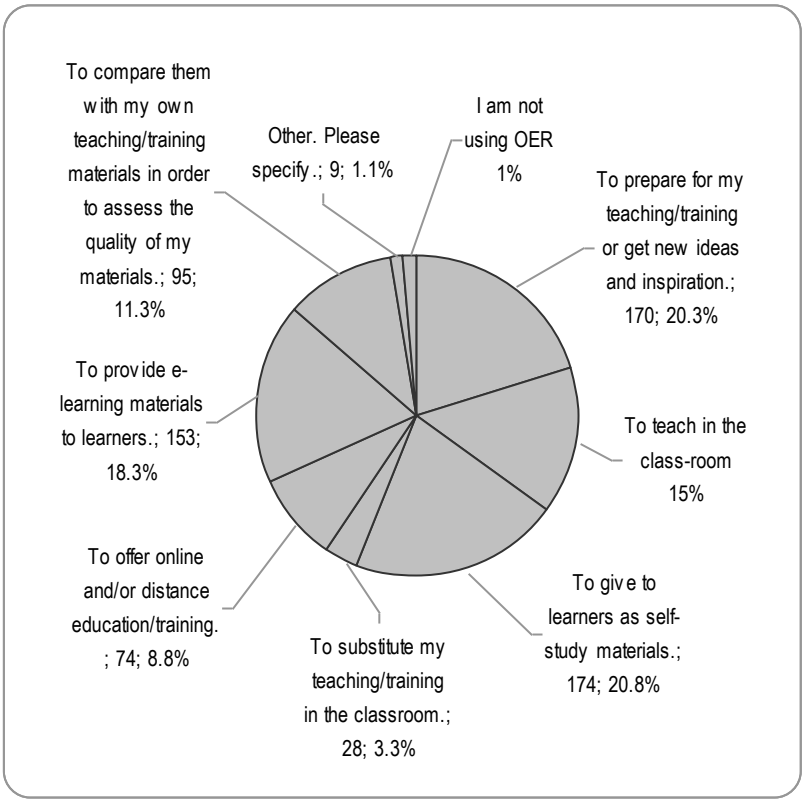
The three categories that received the highest number of responses overall were "1. To prepare for my teaching/training or get new ideas and inspiration" (21%), "3. To give to learners as self-study materials" (20%) and "6. To provide e-learning materials to learners".

Diagram 4.145.a – Purpose of OER use



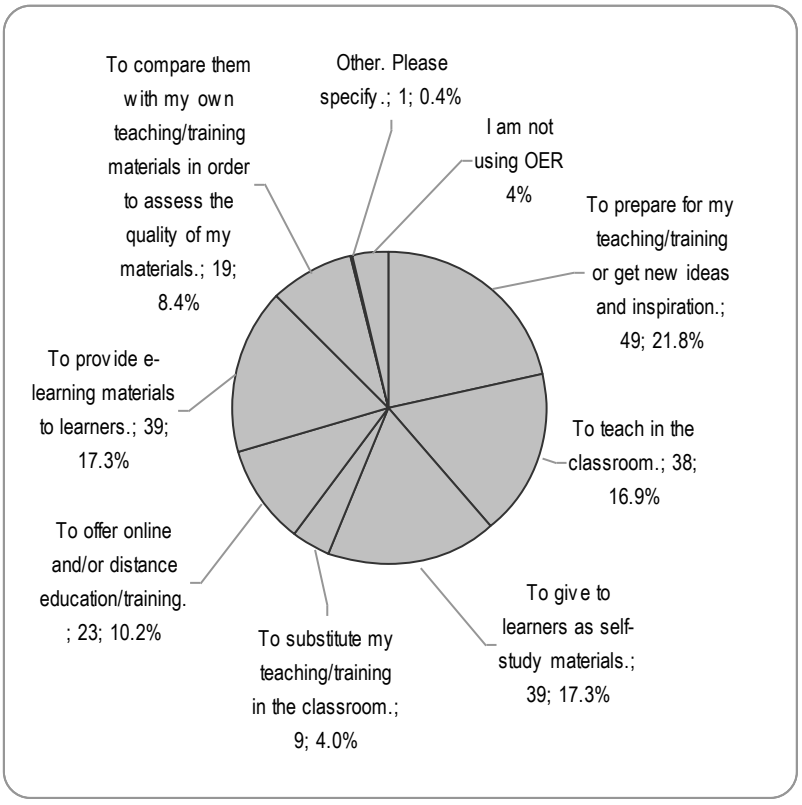
This trend is followed in a fairly similar way by each sector surveyed.

Diagram 4.145.b – Higher education



838 responses (229 valid cases; 130 missing cases).

Diagram 4.145.c – Adult learning



225 responses (63 valid cases; 48 missing cases).

Again, respondents were given the opportunity to indicate other types of use of OER. 9 responses were received, referring: research, student assessment, co-development of OER for staff

development, personal learning, encouraging students to develop their creativity and research by developing OER, digital inclusion initiatives for persons with disabilities and learning impaired children,

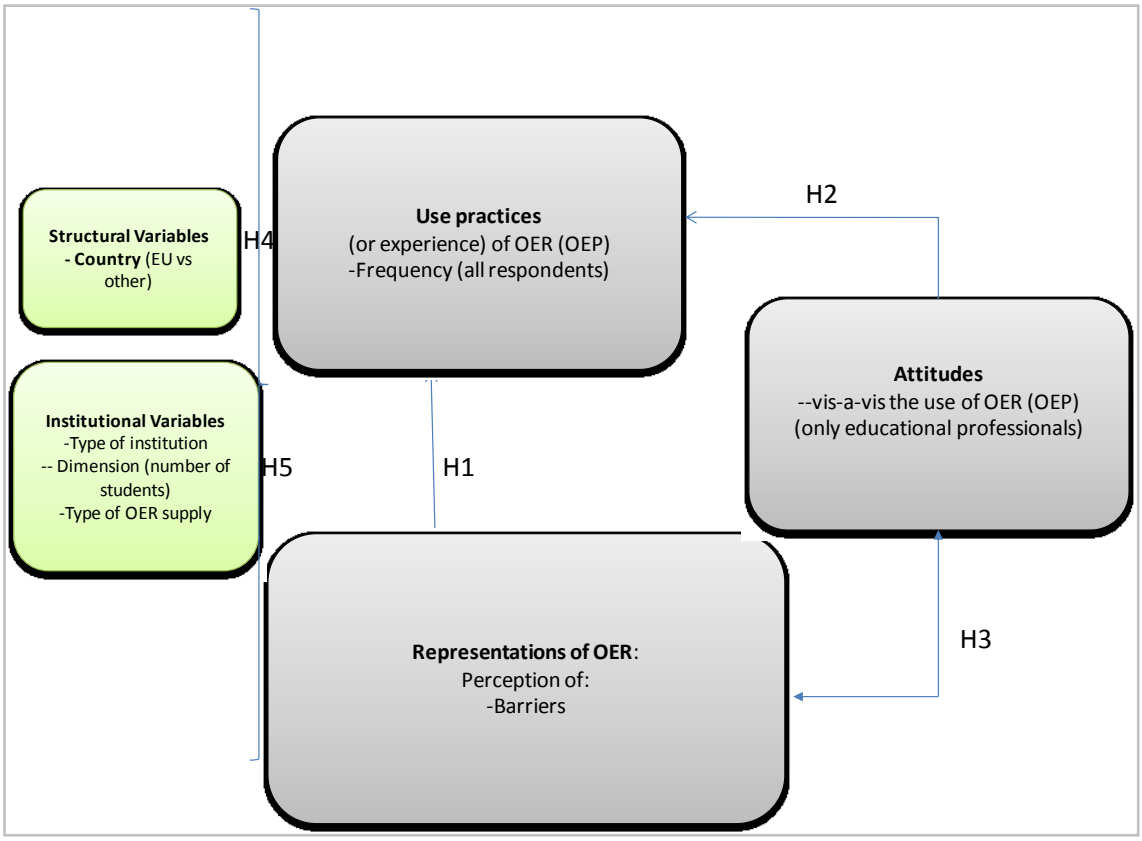
4. The information provided by respondents on their actual use of OER shows that there is a substantial share of infrequent, atomistic use of OER, albeit for a wide range of purposes. The adaptation of OER for one's needs and, even more so, the creation of OER, seem not to be prevalent. This would suggest that there is ample ground for action at the macro level conditions explored earlier in this report to entice the different stakeholders to feel that they can – should – take a significant stake in the current processes of OEP, understood as knowledge co-creation and re-validation.

Chapter V – In-Depth Analysis of Key Issues: Attitudes, Perceptions and Usage of OER

A. Purpose

In this part of the report our purpose is to explore possible relations between uses of OER (OEP) and representations and attitudes towards them. As proposed in Chapter 2 a first model of analysis, exploratory and setting the ground for discussion, in which representations and attitudes appear as principal variables for explaining the use of OER (OEP). There are also a set of potentially explanatory variables, namely of a structural nature (such as country of origin of the respondent's institution of work or study) and of an institutional nature (such as the type of institution, its dimension in terms of learners, type of supply of OER). This model of analysis is represented as follows.

Diagram 5.1 – Model of Analysis: Use of Open Educational Resources



Our main work hypotheses are thus the following:

- H1: Representations of OER (Open Educational Resources) influence their use.
  - H1.1. The more the users represent OER as pertinent, useful, of quality and having a relevant pedagogical function, the higher the tendency to use them (the present analysis deals mainly with the perception of barriers).
- H2: Attitudes vis-a-vis OER influence their use.
  - H2.1. The more open and confident the attitudes, the higher the use of OER.

- H3: Representations and attitudes vis-a-vis OER are very much correlated: more open attitudes correlate positively with representations of OER as a perception of barriers (the present analysis deals mainly with the perception of barriers).
- H4: The country of origin of the respondent influences his/her position vis-a-vis OER, v.g., as regards:
    - Representations
    - Attitudes
    - Practices
- H5: The type, size and characteristics of the education institution in terms of OER influence the positioning vis-a-vis OER, as regards:
    - Representations
    - Attitudes
    - Practices

B. Dependent Variable: Frequency of OER use

At an initial stage, we will only work with one dependent variable which is common to all respondents: the frequency of OER use (in the survey, Q2.1.). This way, all analyses will consider the total number of respondents regardless of their status (educational policy makers, institutional policy makers/managers, educational professionals or learners). In addition to relating to the exploratory nature of these first analyses, this choice has to do with the reduced number of answers obtained among some of these target-populations. We have assumed the total number of respondents, regardless of their sector (higher education, adult learning), to the extent that this question incorporates an interrogation which is fundamental to the research: what are the actual practices based on (OEP)? The teleological or finalistic relevance of this question, which is common to the entire research, justifies it being cumulatively and transversely considered in relation to the total universe of respondents.

The use of OER (OEP) presents the following distribution.

Table 5.1 – Use of OER (total of respondents)

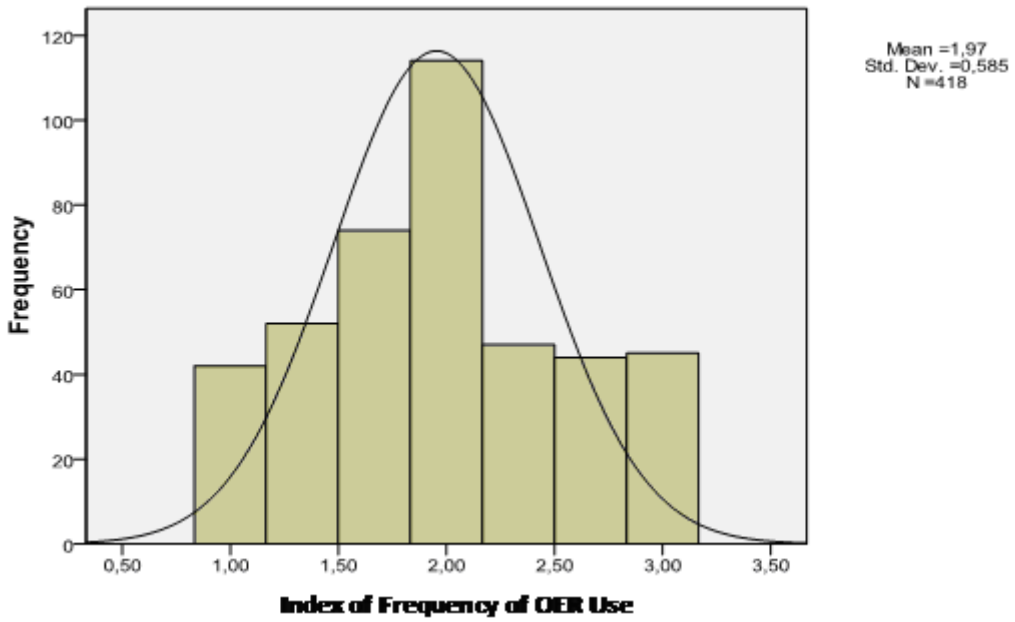
		Count	Column N %
Using existing OER from the web for teaching/ learning	Don't know/Refuse	31	6.6%
	Never	77	16.4%
	Sometimes	230	48.9%
	Often	132	28.1%
	Total	470	100.0%
Creating OER myself and publishing them on the web	Don't know/Refuse	39	8.3%
	Never	161	34.3%
	Sometimes	164	34.9%
	Often	106	22.6%
	Total	470	100.0%
Changing existing OER to fit my needs for teaching/ learning	Don't know/Refuse	38	8.1%
	Never	116	24.7%
	Sometimes	220	46.8%
	Often	96	20.4%
	Total	470	100.0%

The statistical exploration of these variables' distribution (excluding those who did not answer, i.e., working only with the valid answers; see Annex 1 for the variables' distribution) allows us to consider their aggregation through an utilisation index, reflecting the summation of the mean of the responses to these variables. The distribution of the respective index is represented in the below table and chart. This new variable can thus be considered as the principal dependent variable of our model, at this initial stage. As shown, only 10% of the total sample does not make any use of OER (point 1 of the index), whereas *circa* 11% frequently uses OER (point 3 of the scale). The majority of respondents make an average use (sometimes irregular) of OER.

Table 5.2 – Index of Frequency of OER Use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	42	8.9	10.0	10.0
	1.33	52	11.1	12.4	22.5
	1.67	74	15.7	17.7	40.2
	2.00	114	24.3	27.3	67.5
	2.33	47	10.0	11.2	78.7
	2.67	44	9.4	10.5	89.2
	3.00	45	9.6	10.8	100.0
	Total	418	88.9	100.0	
Missing	System	52	11.1		
Total		470	100.0		

Diagram 5.2 – Histogram: Index of frequency of OER use



Despite the slight left skewing, we may consider that this new variable is qualifiedly as possible dependent variable, at this stage of data exploration.

C. Independent variables: representations and attitudes vis-a-vis OER-OEP

Before exploring possible explanatory relations or correlations between uses of OER and respective variables which are regarded as independent in this model, it is necessary to explore the structure of representations and social attitudes vis-a-vis OER and to identify possible dimensions therein.

1. Representations of OER: Obstacles or Barriers to Use

We will start by highlighting dimensions of barriers to use, as this question has been posed to all respondents (regardless of their sector and educational role), with the necessary adjustments in language and context (Annex 2). The distribution of the original variables is as follows.

Table 5.3 – Barriers to the use of OER (educational policy makers, institutional policy makers/managers, educational professionals and learners)

		Count	Column N %
Not invented here syndrome: no trust in others' resources.	Don't know/Refuse	127	27.0%
	Very unimportant	25	5.3%
	Unimportant	110	23.4%
	Important	165	35.1%
	Very important	43	9.1%
	Total	470	100.0%
Lack of time to find suitable materials	Don't know/Refuse	123	26.2%
	Very unimportant	11	2.3%
	Unimportant	69	14.7%
	Important	206	43.8%
	Very important	61	13.0%
	Total	470	100.0%
Lack of Internet connectivity	Don't know/Refuse	126	26.8%

	Very unimportant	112	23.8%
	Unimportant	88	18.7%
	Important	71	15.1%
	Very important	73	15.5%
	Total	470	100.0%
Lack of software to adapt the resources to the user's purposes	Don't know/Refuse	126	26.8%
	Very unimportant	37	7.9%
	Unimportant	115	24.5%
	Important	131	27.9%
	Very important	61	13.0%
	Total	470	100.0%
Lack of access to computers	Don't know/Refuse	124	26.4%
	Very unimportant	119	25.3%
	Unimportant	95	20.2%
	Important	58	12.3%
	Very important	74	15.7%
	Total	470	100.0%
Lack of quality of the OER	Don't know/Refuse	133	28.3%
	Very unimportant	27	5.7%
	Unimportant	87	18.5%
	Important	158	33.6%
	Very important	65	13.8%
	Total	470	100.0%
Lack of OER that are culturally relevant to the user	Don't know/Refuse	128	27.2%
	Very unimportant	22	4.7%
	Unimportant	85	18.1%
	Important	168	35.7%
	Very important	67	14.3%
	Total	470	100.0%

		Count	Column N %
Lack of OER in the user's native language	Don't know/Refuse	127	27.0%
	Very unimportant	35	7.4%
	Unimportant	83	17.7%
	Important	137	29.1%
	Very important	88	18.7%
	Total	470	100.0%
OER are not embedded into the learning scenarios	Don't know/Refuse	129	27.4%
	Very unimportant	15	3.2%
	Unimportant	78	16.6%
	Important	180	38.3%
	Very important	68	14.5%
	Total	470	100.0%
Insufficient reward system for educational professionals devoting time and energy to OER development	Don't know/Refuse	127	27.0%
	Very unimportant	9	1.9%
	Unimportant	44	9.4%
	Important	126	26.8%

	Very important	164	34.9%
	Total	470	100.0%
Lack of interest in pedagogical innovation among educational professionals	Don't know/Refuse	130	27.7%
	Very unimportant	11	2.3%
	Unimportant	55	11.7%
	Important	166	35.3%
	Very important	108	23.0%
	Total	470	100.0%
Insufficient support from the management level of higher education institutions/adult learning organisations.	Don't know/Refuse	131	27.9%
	Very unimportant	11	2.3%
	Unimportant	38	8.1%
	Important	172	36.6%
	Very important	118	25.1%
	Total	470	100.0%
Lack of policies at national/regional level to support the creation or use of OER	Don't know/Refuse	129	27.4%
	Very unimportant	11	2.3%
	Unimportant	48	10.2%
	Important	168	35.7%
	Very important	114	24.3%
	Total	470	100.0%
Lack of policies at institutional level to support the creation or use of OER	Don't know/Refuse	130	27.7%
	Very unimportant	12	2.6%
	Unimportant	30	6.4%
	Important	174	37.0%
	Very important	124	26.4%
	Total	470	100.0%

		Count	Column N %
Lack of interest in the creation or use of OER.	Don't know/Refuse	131	27.9%
	Very unimportant	9	1.9%
	Unimportant	55	11.7%
	Important	181	38.5%
	Very important	94	20.0%
	Total	470	100.0%
Educational professionals lack the skills to create or use OER.	Don't know/Refuse	130	27.7%
	Very unimportant	14	3.0%
	Unimportant	59	12.6%
	Important	170	36.2%
	Very important	97	20.6%
	Total	470	100.0%
Learners lack the skills to create or use OER.	Don't know/Refuse	132	28.1%
	Very unimportant	29	6.2%
	Unimportant	111	23.6%
	Important	141	30.0%
	Very important	57	12.1%
	Total	470	100.0%
Educational professionals lack	Don't know/Refuse	129	27.4%

the time to create or use OER.	Very unimportant	11	2.3%
	Unimportant	57	12.1%
	Important	166	35.3%
	Very important	107	22.8%
	Total	470	100.0%
Learners lack the time to create or use OER.	Don't know/Refuse	130	27.7%
	Very unimportant	23	4.9%
	Unimportant	124	26.4%
	Important	143	30.4%
	Very important	50	10.6%
	Total	470	100.0%

The exploratory principal components analysis enabled the identification of five relevant dimensions in representations of barriers with which individuals are faced when they want to use OER. The following table shows the result of this analysis and respective identified dimensions, which we sought to name according to the content of their main indicators: 1) Lack of institutional support; 2) Lack of technological tools; 3) Lack of skills and time of users; 4) Lack of quality or fitness of OER; 5) Personal issues (lack of trust and time).

Table 5.4 – Dimensions of representations by educational role of barriers to the use of OER
Matrix of principal components

	Components				
	1 Lack of institutional support	2 Lack of technological tools	3 Lack of skills and time of users	4 Lack of quality or fitness of OER	5 Personal issues (lack of trust and time)
Insufficient support from the management level of higher education institutions/adult learning organisations.	.814	.089	.028	,065	.062
Lack of policies at institutional level to support the creation or use of OER	.795	.102	.035	.210	-.057
Lack of policies at national/regional level to support the creation or use of OER	.729	.060	.159	.205	-.085
Lack of interest in pedagogical innovation among educational professionals	.681	.123	.093	.082	.063
Lack of interest in the creation or use of OER.	.666	.246	.115	-.066	.071
Insufficient reward system for educational professionals devoting time and energy to OER development	.522	-.064	.157	.307	.133
Lack of access to computers	.140	.894	.052	.127	-.050
Lack of Internet connectivity	.141	.874	.092	.123	-.084
Lack of software to adapt the resources to the user's purposes	.173	.726	.116	.101	.227
Lack of quality of the OER	-.021	.428	.179	.	.361
Learners lack the time to create or use OER.	.074	.098	.812	.21.	.060
Educational professionals lack the time to create or use OER.	-060	-.132	.721	.139	.266
Learners lack the skills to create or use OER.	.150	.237	.716	.166	-.102

Educational professionals lack the skills to create or use OER.	.382	-276	.579	-.035	-.033
Lack of OER that are culturally relevant to the user	.129	-198	.264	.759	.124
Lack of OER in the user's native language	.207	.199	.163	.704	-.161
OER are not embedded into the learning scenarios	.372	-.006	.022	.533	.255
Not invented here syndrome: no trust in others resources.	.090	-.078	-.129	.090	.750
Lack of time to find suitable materials	.000	-.017	.304	.001	.627
N=302 **Total of Variance Explained:** 61.572% **KMO Test**: 0.810 | **Bartlett's Test of Sphericity**: Approx. Chi-Square: 2236.333 (171), *p<0.001* **Rotated Component Matrix** Extraction Method: Principal Component Analysis, listwise. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Recording the factors produced by the analysis in new variables (standardized), it is now possible to use these variables to establish relations with other variables of the model, namely with that which we are taking as the principal variable: the use of OER (OEP). However, a first analysis of correlations reveals that only two of the identified dimensions seem to be significantly correlated with the use of OER (OEP), and even so only slightly correlated.

Table 5.5 – Dimensions of the perceived barriers to the use of OER and frequency of use (OEP) Correlations

		Index of Frequency of OER Use
REGR factor score 1 **Lack of institutional support**	Pearson Correlation	.126*
	Sig. (2-tailed)	.034
	N	281
REGR factor score 2 **Lack of technological tools**	Pearson Correlation	.080
	Sig. (2-tailed)	.183
	N	281
REGR factor score 3 **Lack of skills and time of users**	Pearson Correlation	-.157**
	Sig. (2-tailed)	.008
	N	281
REGR factor score 4 **Lack of quality or fitness of OER**	Pearson Correlation	-.057
	Sig. (2-tailed)	.339
	N	281
REGR factor score 5 **Personal issues (lack of trust and time)**	Pearson Correlation	-.002
	Sig. (2-tailed)	.968
	N	281

The third dimension, *Lack of skills and time of users,* reveals the strongest correlation with the frequency of use: the more this is perceived as a barrier, the lesser the use of OER (OEP). The first, *Lack of institutional support,* is the second dimension which reveals some significance, but with a very low positive correlation: the higher the perception of lack of institutional support, the greater the frequency of use. This relation, which at first sight seems counter-intuitive, can be justified by the fact that those who use open educational resources are those who feel the most a lack of institutionalized support to develop that use.

2. Attitudes of Educational Professionals vis-a-vis OER

«Attitudes correspond to a mediator concept between the way of acting and the way of thinking of individuals» (Lima, 1993: 168); they are not directly observed, but inferred, assuming their link to behaviours. Considering their cognitive dimension (the way individuals perceive the world surrounding them), they also possess an orientation to action component. Attitudes are, therefore, mediator concepts between representations and uses, hence their importance in understanding the phenomenon of OER use (OEP).

The present survey only measured attitudes of the educational professionals (Q3.2) on the basis of the indicators below, in their percentage distribution. One can observe that the last indicator, pertaining to the level of lack of interest in OER, clearly gathers the respondents' disagreement: that is to say, the majority of respondents reveal an interest in this type of resources, which raises a question on how it develops and how it relates to the actual use of OER[4].

Table 5.6 – Attitudes of educational professionals vis-a-vis the use of OER (OEP)
Percentage distribution of the indicators

	Don't know/Refuse		Strongly agree		Agree		Disagree		Strongly disagree		Total
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count
I am relieved, because I do not need to create my own materials.	56	17.4%	19	5.9%	91	28.3%	118	36.6%	38	11.8%	322
I am uneasy, because I do not know how to assess the quality of the OER.	61	18.9%	3	.9%	50	15.5%	147	45.7%	61	18.9%	322
I feel uncomfortable, because as an educational professional, I feel that I am obliged to create the learning materials.	63	19.6%	7	2.2%	36	11.2%	154	47.8%	62	19.3%	322
I feel uncertain, because I do not know what learners might think of me, if I use another person's educational resources instead of creating my own.	60	18.6%	3	.9%	25	7.8%	148	46.0%	86	26.7%	322
I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes.	60	18.6%	15	4.7%	137	42.5%	79	24.5%	31	9.6%	322
I feel uneasy about openly sharing the learning resources that took me a lot of time and effort to produce.	62	19.3%	10	3.1%	59	18.3%	126	39.1%	65	20.2%	322
I have no interest in using OER.	68	21.1%	2	.6%	8	2.5%	65	20.2%	179	55.6%	322

[4] This can also be concluded from the strong negative bias of the variable (to the right), revealed in the value of skeweness (-1.738). See Annex 3.

From a conceptual viewpoint, the aggregation of the remaining items seems justified, to the extent that they are all measuring attitudes. However, a principal components analysis allows us to identify two dimensions which are latent in these answers: one which may be described as eminently oriented to the other (such as learners or resources themselves); and another which may be described as oriented to the individual – his/her personal benefits, interests or fears.

Table 5.7 – Dimensions of the attitudes of educational professionals vis-a-vis OER
Matrix of principal components

	Component	
	1 Other-Oriented attitudes	2 Self-Oriented attitudes
I am uneasy, because I do not know how to assess the quality of the OER.	.745	.177
I feel uncomfortable, because as an educational professional, I feel that I am obliged to create the learning materials.	.739	.211
I feel uncertain, because I do not know what my students might think of me, if I use another person's educational resources instead of creating my own.	.670	.460
I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes.	.595	-.136
I am relieved, because I do not need to create my own materials.	-.227	.717
I have no interest in using OER.	.277	.620
I feel uneasy about openly sharing the learning resources that took me a lot of time and effort to produce.	.368	.545
Explained Variance (%)	30.987	21.448
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations. Total Variance explained: 52.436% **KMO**: 0.751 | Bartlett's Test of Sphericity: Approx. Chi-Square: 310.948, df 21, p ≤ 0.001		

As such, we used the indicators showing the highest correlation with component 1 (Other-Oriented) so as to build an attitudinal index which reflects this external orientation, in relation to OER. However, tests revealed that scale reliability improves substantially when the item «*I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes*» is removed; this is understandable when we consider its (positive) tendency, as opposed to the remaining items[5]. We thus built an index which aims at measuring the attitudes of these individuals vis-a-vis the use of OER: fear, insecurity, discomfort and unfamiliarity with context and language. Are these elements more external-oriented or, on the opposite, elements which are more oriented to personal interests and fears? What comes between the way individuals represent OER and the use they make of them? The distribution of this new synthetic variable is as follows.

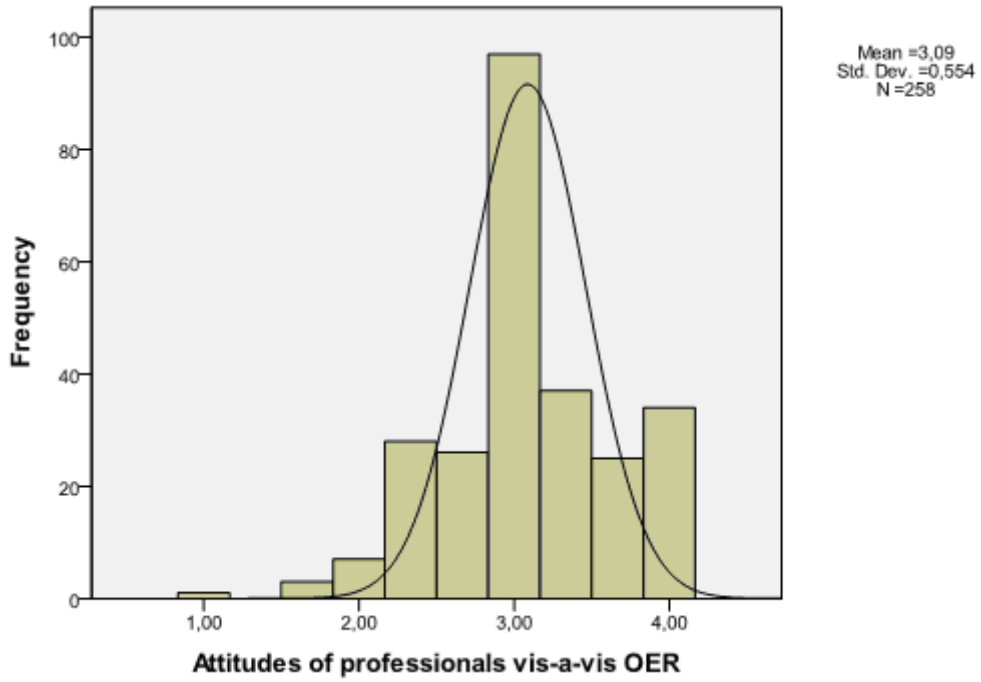
Table 5.8 – Attitudes of educational professionals vis-a-vis OER (Other-Oriented Attitudes)
Synthetic index

		Frequency	Percent	Valid Percent	Cumulative Percent
Strongly	1.00	1	.2	.4	.4

[5] For the scale with 7 items, Cronbach's Alpha is of 0.675. For the scale with 4 items identified in the ACP, it reaches 0.695. However, it rises to 0.742 if the item *«I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes»* is removed. As such, we chose to exclude this item from the newly built synthetic variable, a fact which was also validated by the correlations between the original variables (these items of answer) and the variable taken as dependent, the index of OER use, in which all indicators revealed some significant correlation, with the exception of the first and the fifth.

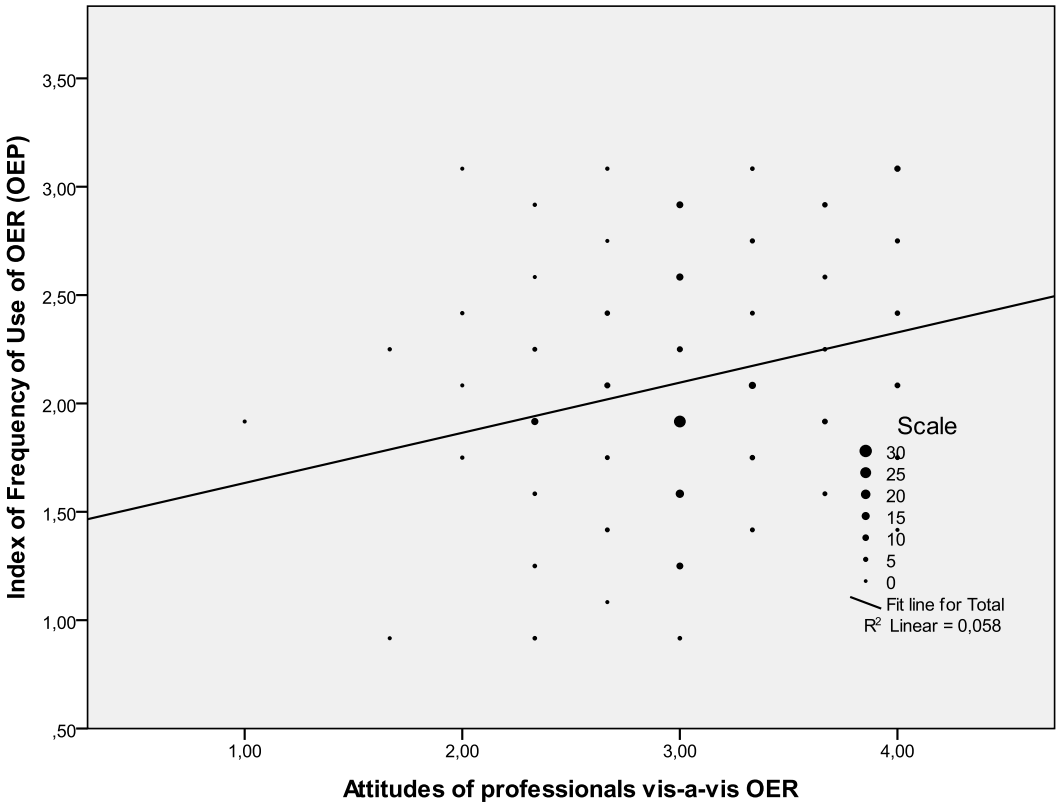
Agree	1.67	3	.6	1.2	1.6
	2.00	7	1.5	2.7	4.3
	2.33	28	6.0	10.9	15.1
	2.67	26	5.5	10.1	25.2
	3.00	97	20.6	37.6	62.8
	3.33	37	7.9	14.3	77.1
	3.67	25	5.3	9.7	86.8
Strongly disagree	4.00	34	7.2	13.2	100.0
	Total	258	54.9	100.0	
Missing	System	212	45.1		
Total		470	100.0		

Diagram 5.3 – Histogram: Attitudes of professionals vis-a-vis OER



How do these attitudes relate to the use of OER (OEP)? If the correlations with the original variables were already anticipating some significant relation, this is corroborated by the correlation between the newly built variable, which reflects the aggregation of attitudes vis-a-vis OER, and the utilisation index. The two variables – attitudinal and practices – correlate positively, even if in quite a moderate way ($r=0.241$, $p\leq0.01$). The interaction between the two variables is represented as follows.

Diagram 5.4 – Correlation between the frequency of use of OER and attitudes of professionals vis-a-vis OER



3. Relation between Representations of Barriers to OEP and Attitudes of Educational Professionals vis-à-vis OEP

The only significant relation identified, although moderate, was the relation with the second component of representations of barriers to OEP, «*Lack of technological tools*» (-0.254, $p \leq 0.01$). The correlation indicates that the more the individuals tend to identify the lack of technological tools as a barrier to the use of OER, the higher the tendency for attitudes of discomfort and uncertainty vis-a-vis the use of OER. The technological component thus assumes an important role, in that it is perceived by the individuals as a handicap which renders their use of OER more difficult, generating (or being generated by) attitudes of reluctance in relation to OER.

Relation between structural variables and uses of OER (OEP)

In this point the focus is to explain the relation between the frequency of OER use (the dependent variable that has been used) and structural variables which, in this case, will amount to only one: the respondent's country of origin (Q1.1 of the questionnaire). This variable has been re-codified into two categories – EU countries and other countries; below is the obtained distribution of frequencies.

Table 5.9 – Country of origin of the respondent (aggregated)

In which country do you work or study?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 EU countries	370	78.7	78.7	78.7
	2 Other countries	100	21.3	21.3	100.0

In which country do you work or study?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 EU countries	370	78.7	78.7	78.7
	2 Other countries	100	21.3	21.3	100.0
	Total	470	100.0	100.0	

As is clear, the great majority of respondents works or studies in EU countries.

Notwithstanding the significant difference in the two categories of this variable, it should be verified whether the respondents' country of origin links to the frequency of OER use. For this end, a T-test was applied to assess the difference in means, which did not reveal any statistical significance between these two questions (t=0.732; sig>0.05) (Annex 1). That is to say, the frequency of OER use is identical for European respondents and non European respondents (which was, in fact, foreseeable in view of the similar means of OER use frequency, obtained for the two groups).

Table 5.10 – OER Use Frequency: means of the two types of countries

Group Statistics					
	In which country do you work or study?	N	Mean	Std. Deviation	Std. Error Mean
Index of OER Use Frequency	1 EU countries	329	1.9838	.58989	.03252
	2 Other countries	89	1.9326	.56893	.06031

Relation between institutional variables and uses of OER (OEP)

It is assumed that the respondents' OER frequency of use may be related with institutional variables, i.e., with variables that characterise the institutions to which the respondents belong. In this regard, some exploratory exercises will be carried out on the basis of the variables concerning the status of the institution (Q1.5), the dimension of the institution in terms of learners/students (Q1.6), the type of education offered by the institution (Q1.8) and the existence (or inexistence) of an OER programme or initiative at the respondent's institution (Q1.9).

Frequency of OER use and Status of the Institution (Q1.5)

Table 5.11 – Frequency of OER and Status of the Institution

What is the status of the institution?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Public	334	71,1	71,1	71,1
	2 Private not-for-profit	90	19,1	19,1	90,2
	3 Private for-profit	46	9,8	9,8	100,0
	Total	470	100,0	100,0	

Circa 70% of the respondents integrate public institutions.

Cross linking this variable (Status of the Institution) with the frequency of OER use, no relation was established between the two. A One-Way Analysis of Variance (ANOVA) run was carried out for this

purpose. As demonstrated below, the significance associated with the test value is higher than 0.05 which indicates the inexistence of a relation between these two questions.

Table 5.12 – OER Use Frequency, by Status of Institution: ANOVA test

ANOVA					
Index of OER Use Frequency					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.157	2	.079	.229	.796
Within Groups	142.647	415	.344		
Total	142.804	417			

Further complementing the analysis, the variable concerning the Status of the Institution was re-codified into two categories, the second category including the options Private not-for-profit and Private for-profit. A T-test was used to assess the difference in means, where, once again, it was proven that the frequency of OER use is not determined by the type of status of the respondent's institution (sig>0.05) (Annex 2).

Frequency of OER use and Dimension of the Institution in terms of learners/students (Q1.6)

Table 5.13 – Dimension of the Institution in terms of learners/students

What is the size of the institution in terms of learners/ students?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Less than 500	50	10.6	11.8	11.8
	2 501 to 1000	39	8.3	9.2	20.9
	3 1001 to 5000	103	21.9	24.2	45.2
	4 More than 5000	233	49.6	54.8	100.0
	Total	425	90.4	100.0	
Missing	5 Don't know	28	6.0		
	System	17	3.6		
	Total	45	9.6		
Total		470	100.0		

It is clear that respondents are part of large-sized institutions with respect to the number of learners (around 79% integrate institutions with more than 1000 learners). How far the dimension of the institution determines the frequency of OER use will be established next. For this purpose, the frequency of OER use was correlated with the size of the institution. The results may be found in the table below.

Table 5.14 – Correlation between Frequency of OER Use and Dimension of the Institution

			What is the size of the institution in terms of learners/ students?	Index of OER Use Frequency
Spearman's rho	What is the size of the institution in terms of learners/ students?	Correlation Coefficient	1,000	-.092
		Sig. (2-tailed)	.	.076
		N	425	377
	Index of OER Use Frequency	Correlation Coefficient	-.092	1.000
		Sig. (2-tailed)	.076	.
		N	377	418

As it is easily established, the correlation between these two questions is not significant (sig>0.05).

Frequency of OER use and the Type of education offered by the institution (Q1.8)

Education offered by the institution is divided into three different types: online, traditional and mixed; the latter is the most frequent among the respondents' institutions.

Table 5.15 – Type of education the institution offers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Online (also Distance Education)	44	9.4	9.7	9.7
	2 Traditional (Campus-based)	175	37.2	38.6	48.3
	3 Mixed	234	49.8	51.7	100.0
	Total	453	96.4	100.0	
Missing	System	17	3.6		
Total		470	100.0		

It is expected that the frequency of OER use is related with the type of education of each institution. This seems to be the case, as depicted in the table below. By applying a One-Way Analysis of Variance (ANOVA) it may be concluded that there is a relation between these two questions (sig<0.01).

Table 5.16 – OER Use Frequency, by Type of Education the Institution offers: ANOVA test

ANOVA					
Index of OER Use Frequency					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.674	2	2.337	7.087	.001
Within Groups	131.903	400	.330		
Total	136.577	402			

But what is the meaning of this relationship? Which groups differ in terms of frequency of OER use?

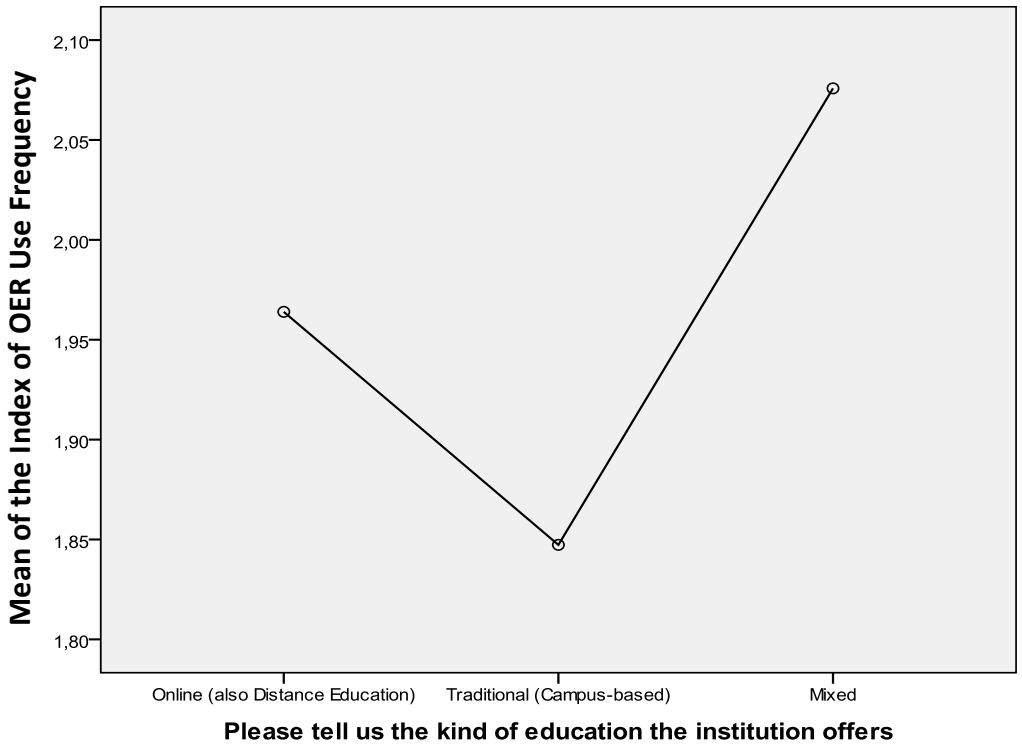
Table 5.17 – Multiple Comparisons

Multiple Comparisons

Dependent Variable: Index of OER Use Frequency							
	(I) Type of education the institution offers	(J) Type of education the institution offers	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	1 Online (also Distance Education)	2 Traditional (Campus-based)	.11665	.10507	.540	-.1415	.3748
		3 Mixed	-.11187	.10235	.551	-.3633	.1396
	2 Traditional (Campus-based)	1 Online (also Distance Education)	-.11665	.10507	.540	-.3748	.1415
		3 Mixed	-.22852*	.06075	**.001**	-.3778	-.0793
	3 Mixed	1 Online (also Distance Education)	.11187	.10235	.551	-.1396	.3633
		2 Traditional (Campus-based)	.22852*	.06075	**.001**	.0793	.3778
*. The mean difference is significant at the 0.05 level.							

Groups 2 and 3, i.e., groups of traditional education and mixed education, are those which differ the most as regards the frequency of OER use (sig<0.01). The mean of the values of the OER use frequency index is lower in traditional education.

Diagram 5.5 – OER Use Frequency, by Type of Education the Institution offers



Frequency of OER use and Existence of an open resources' programme or initiative in the institution (Q1.9)

Among the respondents having knowledge of the existence of an open resources' programme or initiative at their institution, responses were quite balanced: around 55% of respondents said such a programme already exists.

Table 5.18 – Does an OER programme or initiative already exist in the institution?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Yes	171	36.4	54.5	54.5
	2 No	143	30.4	45.5	100.0
	Total	314	66.8	100.0	
Missing	88 I do not know	139	29.6		
	System	17	3.6		
	Total	156	33.2		
Total		470	100.0		

It is legitimate to conclude, on the basis of the responses obtained, that the index of OER use frequency is higher in institutions where such programme or initiative already exists. Thus, a T-test was used to assess the difference in means, and the result is presented below. As expected, this test indicates that there is a relation between these two questions (sig<0.000). Looking at the descriptive statistics (first table), the conclusion is indeed that the frequency of OER use is higher in institutions where an open resources' programme or initiative already exists (mean = 2.1776).

Table 5.19 – OER Use Frequency, by already existent programme or initiative in the institution: mean differences

Group Statistics					
	An OER programme or initiative already exists in the institution	N	Mean	Std. Deviation	Std. Error Mean
Index of OER Use Frequency	1 Yes	152	2.1776	.56631	.04593
	2 No	124	1.9328	.56065	.05035

Table 5.20 – OER Use Frequency, by already existent programme or initiative in the institution: Independent Samples Test

		Levene's Test for Equality of Variances		t-Test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Index of OER Use Frequency	Equal variances assumed	.784	.377	3.589	274	.000	.24484	.06822	.11053	.37914
	Equal variances not assumed			3.592	263.992	.000	.24484	.06815	.11064	.37903

Chapter VI - Explaining Open Educational Practices

The Multiple Linear Regression model aims at identifying the variables that better explain the frequency of OER use. For that purpose it takes into account the relations found between this frequency and the independent variables[6], restricting the model to the use of those variables which demonstrated a relation with that frequency in the bivariate analysis previously presented.

Firstly, the stepwise statistical method was used, which selects variables with significant explanatory capacity, excluding the remaining. In this first regression model a greater explanatory capacity was found in the independent variable concerning the existence of OER programmes or initiatives in the institution. This variable alone explains about 5% of the total variability of the frequency of OER use. After it, the variables that better explain the OER frequency are precisely the dimensions of the professionals' attitudes: the attitudes of professionals which are more other-oriented coming in first place, followed by the attitudes of professionals which are more self-oriented. We may therefore conclude that overall, according to the model found, the three variables explain 12.2% of the variability of the dependent variable: frequency of OER use[7].

Subsequently, we undertook a multiple linear regression analysis in blocks, using the enter method. The purpose of this analysis is to understand which block of questions contributes most to the increase in the explained variance. In this case, two blocks coming from the previous analysis were integrated, including the variables which were more significant for explaining the variability. The first block concerns the institutional variable pertaining to the type of education offered by the institution and to the existence of OER programmes or initiatives in the institution, while the second block concerns the dimensions of attitudes of professionals vis-a-vis OER.

This analysis in blocks allowed us to understand that both clusters contribute in almost the same way to the increase in the explained variance; the integration of the second block, concerning the dimensions of attitudes of professionals vis-a-vis OER, originated a 5.7% increase and the first block, concerning the institutional variable pertaining to the existence of OER programmes/initiatives, originated a 5.2% increase when explaining the variance in frequency of OER use.

Table 5.21 – Main Factors Explaining OER Practices: Multi Linear Regression Model (multistage)

Explanatory variables	*OER PRACTICES*
OER Programmes/Initiatives (Yes=1; No=0)	0.165*
	ΔR^2=5.2%
Other-oriented Attitudes Self-Oriented Attitudes	0.184* 0.151*
	ΔR^2=5.7%
Constant	2.065
Stepwise Method	Adjusted R^2 = 12.2%

[6] The independent variables considered which did show a relation with OER practices are the institutional variables pertaining to the type of education offered by the institution and to the existence of OER programmes or initiatives in the institution, the dimensions of educational agents' representations of barriers to OER use, namely the dimensions of Lack of institutional support and Lack of skills and time of users; and the attitudes of educational professional vis-a-vis OER, other-oriented attitudes and self-oriented attitudes.

[7] The regression model presented herein is statistically significant, with F=7.470, p<0.001. The assumptions underlying this analysis were verified and are in annex (annex 3). There is no multicollinearity between the independent variables used.

It may thus be concluded that, regardless of educational professionals considering OER to be important for themselves or for others (*e.g.*, students), the lesser the fear, insecurity or discomfort vis-a-vis OER, the higher the frequency of OER use.

As regards the existence of open resources' programmes or initiatives in the institution, as expected, individuals from institutions where such programmes/initiatives already exist did show a higher frequency of OER use.

Although the small amount of explained variance of the model, we find it an interesting result, considering the reduced number of variables introduced and, mostly, its exploratory nature. Future analysis should focus on the importance of variables related to social representations vis-a-vis OER and OEP (other than representations of barriers), as well as exploring further dimensions of use of OER as dependent variables (purposes and types of use). One should consider in-depth analysis of qualitative variables with few responses and proceed to exploratory analyses that enable the identification of a topology of OEP (*e.g.* MCA) and, finally, a typology of users (cluster analysis).

References:

1. Atkins, D., Seely Brown, J., Hammond, A., *A review of the Open Educational Resources movement: Achievements, challenges and new opportunities,* Creative Commons: 2007.
2. Lima, M. L. P. (1993). Atitudes. In J. Vala, M. B. Monteiro (Eds.), *Psicologia Social* (pp. 167-199). Lisboa: Fundação Calouste Gulbenkian.
3. OECD, *Giving Knowledge for Free: The Emergence of Open Educational Resources*, Paris: 2007.

ANNEXES

Annex 1 – Distribution of the variables pertaining to the use of OER in the four target groups

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Using existing OER from the web for teaching/ learning	439	1	3	2.13	.679	-.160	.117
Creating OER myself and publishing them on the web	431	1	3	1.87	.778	.226	.118
Changing existing OER to fit my needs for teaching/ learning	432	1	3	1.95	.700	.064	.117
Valid N (listwise)	418						

Annex 2 – Distribution of the variables pertaining to representations of barriers to the use of OER

	N								Percentiles		
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Skewness	Std. Error of Skewness	25	50	75
Not invented here syndrome: no trust in others resources.	343	127	2.66	3.00	3	.789	-.211	.132	2.00	3.00	3.00
Lack of time to find suitable materials	347	123	2.91	3.00	3	.704	-.428	.131	3.00	3.00	3.00
Lack of Internet connectivity	344	126	2.31	2.00	1	1.136	.255	.131	1.00	2.00	3.00
Lack of software to adapt the resources to the user's purposes	344	126	2.63	3.00	3	.898	-.096	.131	2.00	3.00	3.00
Lack of access to computers	346	124	2.25	2.00	1	1.144	.361	.131	1.00	2.00	3.00
Lack of quality of the OER	337	133	2.77	3.00	3	.850	-.340	.133	2.00	3.00	3.00
Lack of OER that are culturally relevant to the user	342	128	2.82	3.00	3	.819	-.363	.132	2.00	3.00	3.00
Lack of OER in the user's native language	343	127	2.81	3.00	3	.935	-.371	.132	2.00	3.00	4.00
OER are not embedded into the learning scenarios	341	129	2.88	3.00	3	.769	-.381	.132	2.00	3.00	3.00
No reward system for staff members devoting time and energy to OER development	343	127	3.30	3.00	4	.790	-.903	.132	3.00	3.00	4.00
Lack of interest in pedagogical innovation among staff members	340	130	3.09	3.00	3	.776	-.578	.132	3.00	3.00	4.00
No support from management level of higher education institutions.	339	131	3.17	3.00	3	.750	-.757	.132	3.00	3.00	4.00
Lack of policies at national/regional level to support OER development	341	129	3.13	3.00	3	.768	-.656	.132	3.00	3.00	4.00
Lack of a policy at institutional level supporting the creation or use of OER	340	130	3.21	3.00	3	.744	-.871	.132	3.00	3.00	4.00
Lack of interest in the creation or use of OER.	339	131	3.06	3.00	3	.737	-.499	.132	3.00	3.00	4.00
Educational professionals lack the skills to create or use OER.	340	130	3.03	3.00	3	.790	-.557	.132	3.00	3.00	4.00
Students/learners lack the skills to create or use OER.	338	132	2.67	3.00	3	.856	-.135	.133	2.00	3.00	3.00
Educational professionals lack the time to create or use OER.	341	129	3.08	3,00	3	.778	-.559	.132	3.00	3.00	4.00
Students/learners lack the time to create or use OER.	340	130	2.65	3.00	3	.812	-.035	.132	2.00	3.00	3.00

Annex 3 – Descriptive statistics of the indicators of the attitudes vis-a-vis OER, on the part of the educational professionals

		I am relieved, because I do not need to create my own materials.	I am uneasy, because I do not know how to assess the quality of the OER.	I feel uncomfortable, because as an educational professional, I feel that I am obliged to create the learning materials.	I feel uncertain, because I do not know what my students might think of me, if I use another person's educational resources instead of creating my own.	I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes.	I feel uneasy about openly sharing the learning resources that took me a lot of time and effort to produce.	I have no interest in using OER.
N	Valid	266	261	259	262	262	260	254
	Missing	204	209	211	208	208	210	216
Mean		2.66	3.02	3.05	3.21	2.48	2.95	3.66
Median		3.00	3.00	3.00	3.00	2.00	3.00	4.00
Mode		3	3	3	3	2	3	4
Std. Deviation		.810	.688	.697	.653	.777	.794	.580
Skewness		-.114	-.239	-.547	-.493	.460	-.370	-1.738
Std. Error of Skewness		.149	.151	.151	.150	.150	.151	.153
Percentiles	25	2.00	3.00	3.00	3.00	2.00	2.00	3.00
	50	3.00	3.00	3.00	3.00	2.00	3.00	4.00
	75	3.00	3.00	3.00	4.00	3.00	3.75	4.00

Annex 4 – Survey questionnaire (EN)

OPEN EDUCATIONAL QUALITY INITIATIVE

A survey on the use of Open Educational Resources (OER) and Open Educational Practices (OEP) in Higher Education and Adult Learning Institutions

Introduction

Thank you for participating in this OPAL study (http://oer-quality.org) on the use of OER and OEP. It will take you between 10-15 minutes to complete the survey.

In this survey we are interested in the practice of using open educational resources (OER) in higher education and adult learning institutions. The survey is part of an important study mapping the use of OER and finding out if they improve the quality of educational practices. We are also interested in how they change learning scenarios and educational institutions. In addition we will look at the strategies of policy makers and institutional leaders to support OEP in their regions and institutions.

The survey elicits quantitative information from four educational roles:

- Policy Makers
- Managers/Administrators (also institutional policy makers)
- Educational Professionals
- Learners

The survey findings will be openly shared amongst participants and then on a broader scale within the educational community. Your responses will be kept **confidential**.

Definitions

In this survey, we use the following definitions.

- ***Open Educational Practices (OEP)*** *are a set of activities around instructional design and implementation of events and processes intended to support learning. They also include the creation, use and repurposing of Open Educational Resources (OERs) and their adaptation to the contextual setting. They are documented in a portable format and made openly available.*
- ***Open Educational Resources*** *are digital materials for educators and learners to be used and/or reused for teaching, learning and research that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others.* (Based on the definitions provided in OECD-CERI, *Giving Knowledge for Free*, 2007, p. 30, and in Atkins, D., Seely Brown, J., Hammond, A., *A review of the Open Educational Resources movement: Achievements, challenges and new opportunities,* 2007, p.8).

This definition of **Open Educational Resources** (**OER)** includes:

1. Open courseware and content.
2. Open software tools (*e.g.* learning management systems).
3. Open material used for the e-learning capacity building of educational professionals.
4. Repositories of learning objects.
5. Free educational courses.

OPAL is an initiative of UNESCO, the International Council for Distance Education (ICDE), the European Foundation for Quality in E-Learning (EFQUEL) and a consortium of universities: The Open University (UK), Aalto University (Finland), the University of Duisburg-Essen (Germany) and the Catholic University of Portugal, with the support of the Lifelong Learning Programme of the European Union.

With the support of the Lifelong Learning Programme of the European Union

Please select the language to respond to this survey!
(English, Spanish, French or Portuguese)

SECTION 1: GENERAL INFORMATION

* Response required.

Q. 1.1. In which country do you work or study? *
(Country list for Dropdown)

Q. 1.2. Please tell us your age and your gender: *

Age	
You are below 30	1
30-39	2
40-49	3
50-59	4
60-69	5
You are over 69	6
Gender	
Male	1
Female	2

Q1.3 Please tell us which educational role you belong to primarily: *

I am an educational **policy maker** at a European/international level (e.g. European Parliament, European Commission), at a national level (e.g. national government, or ministry), at a regional or local level (e.g. municipality, local government)	**1**
I am an institutional policy maker, or involved in the **management or administration** of an educational organisation (manager, administrator)	2
I am an **educational professional** in an educational organisation (professor, teacher, curriculum designer, learning technology specialist, trainer, etc.)	3
I am a **learner.**	4

Q1.4 Please indicate your primary area of interest, i.e., if you are currently enrolled in, or work for, a higher education establishment (university, technical college, etc.), or an adult learning institution, or still if you are engaged in policy making in (Please choose only one option): *

Higher Education	1
Adult Learning	2

Q1.5 What is the status of the institution?
(PLEASE CHOOSE ONLY ONE OPTION) *

Public	1
Private not-for-profit	2

Private-for-profit	3

[Questions 1.6 to 1.10 for all except policy-makers]

Q 1.6 What is the size of the institution in terms of learners? *

Less than 500	1
501 to 1000	2
1001 to 5000	3
More than 5000	4
I do not know	5

Q1.7 In which country is the institution located? *

_____

(Country list)

Q1.8 Please tell us the kind of education the institution offers
(PLEASE CHOOSE ONLY ONE OPTION): *

Online and/or distance education/training.	1
Conventional (e.g., face-to-face, campus-based).	2
Mixed	3

Q1.9 Please tell us if an OER programme or initiative already exists in the institution
(PLEASE CHOOSE ONLY ONE OPTION): *

Yes	1	
No	2	Filter: Please go to Section 2
I do not know	88	Filter: Please go to Section 2

Q1.10 If it does and you would like to provide the website of such programme(s)/initiative(s), please type the URL in the space below:

SECTION 2: YOUR EXPERIENCES WITH THE USE OF OPEN EDUCATIONAL RESOURCES

Q2.1 Open educational resources are resources which are freely available and can be used, shared or adapted. Please tell us if you have ever used or produced/provided such materials for teaching or learning.
(YOU MAY CHOOSE ALL THE OPTIONS THAT FIT YOUR PERSONAL CASE)

	Never	Sometimes (occasionally)	Often (regularly)
Using existing OER for teaching/training/learning.	1	2	3
Creating OER myself and publishing them.	1	2	3
Adapting existing OER to fit my needs for teaching/ training/learning.	1	2	3

Filter: The following question is only for learners and educational professionals

Q2.2 How would you describe the kind of OER that you use for teaching/ learning?
(YOU MAY CHOOSE ALL THE OPTIONS THAT FIT YOUR PERSONAL CASE)

Complete courses/programmes.	1
Parts of courses/programmes.	2
Other materials for learning (e.g., individual websites, documents, videos, etc.).	3
Other. Please specify: _____	4

Filter: The following question is only for educational professionals

Q2.3 For what purpose do you use OER? (YOU MAY CHOOSE ALL THE OPTIONS THAT FIT YOUR PERSONAL CASE)

I am using OER:	
To prepare for my teaching/training or get new ideas and inspiration.	1
To teach in the classroom.	2
To give to learners as self-study materials.	3
To substitute my teaching/training in the classroom.	4
To offer online and/or distance education/training.	5
To provide e-learning materials to learners.	6
To compare them with my own teaching/training materials in order to assess the quality of my materials.	7
Other. Please specify. _____	8
I am not using OER.	9

SECTION 3: YOUR EXPERIENCES WITH OPEN EDUCATIONAL RESOURCES AND PRACTICES

Filter: The following question is only for managers, educational professionals and learners

Q3.1 Based on your experiences, how would you rate the following statements?

The use of open educational resources…	**Strongly agree**	**Agree**	**Disagree**	**Strongly disagree**
…improves the quality of education (formal, non formal, informal).	1	2	3	4
…leads to pedagogical changes.	1	2	3	4
…increases the participation of learners in educational scenarios.	1	2	3	4
…does not affect the teaching process at all.	1	2	3	4
…shifts education/training provision from content to activity-based learning.	1	2	3	4
…shifts the role from teachers/tutors/trainers to facilitators.	1	2	3	4
…shifts the role of learners from passive receivers to active producers.	1	2	3	4
…demands for completely new models of education/training (incl. pedagogy, assessment, organisation of educational institutions).	1	2	3	4

Filter: The following question is only for educational professionals

Q3.2 How do you feel about using OER in your educational practice?

	Strongly agree	**Agree**	**Disagree**	**Strongly disagree**
I am relieved, because I do not need to create my own materials.	1	2	3	4
I am uneasy, because I do not know how to assess the quality of the OER.	1	2	3	4
I feel uncomfortable, because as an educational professional, I feel that I am obliged to create the learning materials.	1	2	3	4
I feel uncertain, because I do not know what learners might think of me, if I use another person's educational resources instead of creating my own.	1	2	3	4
I feel challenged, because it is not so easy to understand how exactly they fit into my course programmes.	1	2	3	4
I feel uneasy about openly sharing the learning resources that took me a lot of time and effort to produce.	1	2	3	4
I have no interest in using OER.	1	2	3	4

Filter: The following question is only for policy makers, managers and learners

Q3.3 Please tell us what in your experience is the value of OER for education/training (formal, non formal, informal), by rating the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
OER raise efficiency because materials can be re-used.	1	2	3	4
The quality of OER can be a problem.	1	2	3	4
OER are not so relevant for me, because educational institutions usually have fixed curricula in which OER often do not fit.	1	2	3	4
Using OER often is not accepted, because they are considered as not being one's own achievement.	1	2	3	4

[Higher education questionnaire]

SECTION 4: OPEN EDUCATIONAL PRACTICES

Filter: only for policy makers

Q4.1 What is your view on open educational practices in higher education institutions today?
(PLEASE CHOOSE ONLY ONE ANSWER)
Do you think that…

... they are sufficiently developed?	4
... they are moderately developed?	3
.. they are underdeveloped?	2
.. they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in higher education institutions.	1	2	3	4
There is a need for specific public policies to support and regulate the **use** of OER in higher education institutions.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your opinion, and from a policy perspective, how relevant are the following aspects in support of the effective use of OER in higher education?

	Very important	Important	Unimportant	Very unimportant
Support for OER promotion/ awareness building.	4	3	2	1
Institutional support/recognition concerning OER projects/initiatives.	4	3	2	1
Support for localisation/ adaptation/ translation of existing OER.	4	3	2	1
Support in implementing appropriate licensing schemes regarding copyright.	4	3	2	1
Promotion of quality assurance for OER.	4	3	2	1
Access to appropriate technology/ infrastructure.	4	3	2	1
Promotion of guidelines/standards for OER creation and use.	4	3	2	1
Provision of financial/sustainability support.	4	3	2	1

Q4.4 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of higher education institutions.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in creating or using OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for managers/administrators

Q4.1 Consider open educational practices in higher education institutions today.
(PLEASE CHOOSE ONLY ONE OPTION)
Do you think that…

… they are sufficiently developed?	4
… they are moderately developed?	3
… they are underdeveloped?	2
… they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in higher education institutions.	1	2	3	4
There is a need for specific public policies to support and regulate the **use** of OER in higher education institutions.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your higher education institution, how would you rate the following factors in support of the use of OER?

	Implemented organisation-wide	Implemented in some departments/units	Individual efforts	Not existing

			exist	
An explicit institutional policy.	4	3	2	1
A partnership with other organisations.	4	3	2	1
Specific quality assurance processes for OER.	4	3	2	1
Specific technological infrastructure for OER (e.g., an OER repository).	4	3	2	1
Specific pedagogical scenarios and models for open educational practices.	4	3	2	1

Q4.4 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
Using OER also leads to opening pedagogical scenarios.	1	2	3	4
Using OER leads to institutional innovations.	1	2	3	4
Adopting open practices is challenging for higher education institutions.	1	2	3	4
The use of OER leads to new pedagogical practices.	1	2	3	4
In order to stimulate the use of OER', specific skill support at institutional level is needed.	1	2	3	4

Q4.5 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of higher education institutions.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for educational professionals

Q4.1 Consider open educational practices in higher education institutions today.
(PLEASE CHOOSE ONLY ONE OPTION)

Do you think that …

…they are sufficiently developed?	4
…they are moderately developed?	3
…they are underdeveloped?	2
…they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in higher education institutions.	1	2	3	4
There is a need for specific public policies to support and regulate the **use** of OER in higher education institutions.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your higher education institution, how would you rate the following factors in support of the use of OER?

	Implemented organisation-wide	Implemented in some departments	Individual efforts exist	Not existing
An explicit institutional policy.	4	3	2	1
A partnership with other organisations.	4	3	2	1
Specific quality assurance processes for OER.	4	3	2	1
Specific technological infrastructures for OER (e.g. an OER repository).	4	3	2	1
Specific pedagogical scenarios and models for open educational practices.	4	3	2	1

Q4.4 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
Some colleagues are using OER on a regular basis.	1	2	3	4
Teaching strategies promoting the use of OER are explicitly supported in my higher education institution.	1	2	3	4
Adoption of open educational practices is specifically supported in my higher education institution.	1	2	3	4
Using OER leads to improvement in educational practices.	1	2	3	4
Using OER leads to institutional innovation.	1	2	3	4
Adopting open practices leads to institutional innovation.	1	2	3	4
Using OER leads to new pedagogical practices.	1	2	3	4
In order to stimulate the use of OER, specific skill support is needed.	1	2	3	4

Q4.5 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1

Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from management level of higher education institutions.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.				
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for learners/students

Q4.1 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
The use of OER is sufficiently developed in the courses and programmes I am enrolled in.	1	2	3	4
Teachers/tutors explicitly support the use of open and freely available learning materials.	1	2	3	4
As a learner, I am encouraged to develop learning materials myself and share those with others on the Internet.	1	2	3	4
The quality of open educational resources is too diverse for OER to be really useful.	1	2	3	4
OER allow me to study and learn without support from teachers/tutors.	1	2	3	4
The use of open educational resources allows me to become independent from my higher education institution.	1	2	3	4
In my experience open educational resources are not relevant for my studies.	1	2	3	4
In order to use OER I would need a different form of learning environment in my higher education institution.	1	2	3	4

Q4.2 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1

Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of higher education institutions.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Thank you for your support!

If you wish to receive the final report of this survey
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To learn more about the Open Educational Quality Initiative go to:
http://oer-quality.org

[Adult learning questionnaire]

SECTION 4: OPEN EDUCATIONAL PRACTICES

Filter: only for policy makers

Q4.1 What is your view on open educational practices in adult learning organisations today?
(PLEASE CHOOSE ONLY ONE ANSWER)
Do you think that…

…they are sufficiently developed?	4
…they are moderately developed?	3
…they are underdeveloped?	2
…they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in adult learning organisations.	1	2	3	4
There is a need for specific public policies to support and regulate the **use** of OER in adult learning organisations.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your opinion, and from a policy perspective, how relevant are the following aspects in support of the effective use of OER in adult learning?

	Very important	Important	Unimportant	Very unimportant
Support for OER promotion/ awareness building.	4	3	2	1
Institutional support/recognition concerning OER projects/initiatives.	4	3	2	1
Support for localisation/ adaptation/ translation of existing OER.	4	3	2	1
Support in implementing appropriate licensing schemes regarding copyright.	4	3	2	1
Promotion of quality assurance for OER.	4	3	2	1
Access to appropriate technology/ infrastructure.	4	3	2	1
Promotion of guidelines/standards for OER creation and use.	4	3	2	1
Provision of financial/sustainability support.	4	3	2	1

Q4.4 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1

Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of adult learning organisations.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for managers/administrators

Q4.1 Consider open educational practices in adult learning organisations today. (PLEASE CHOOSE ONLY ONE OPTION)

Do you think that…

…they are sufficiently developed?	4
…they are moderately developed?	3
…they are underdeveloped?	2
…they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in adult learning organisations.	1	2	3	4
There is a need for specific public policies to support and regulate the **use** of OER in adult learning organisations.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your adult learning organisation, how would you rate the following factors in support of the use of OER?

	Implemented organisation-wide	Implemented in some departments/ units	Individual efforts exist	Not existing
An explicit institutional policy.	4	3	2	1
A partnership with other organisations.	4	3	2	1
Specific quality assurance processes for OER.	4	3	2	1
Specific technological infrastructure for OER (e.g., an OER repository).	4	3	2	1
Specific pedagogical scenarios and models for open educational practices.	4	3	2	1

Q4.4 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree

Using OER also leads to opening pedagogical scenarios.	1	2	3	4
Using OER leads to institutional innovations.	1	2	3	4
Adopting open practices is challenging for adult learning institutions.	1	2	3	4
The use of OER leads to new pedagogical practices.	1	2	3	4
In order to stimulate the use of OER, specific skill support at institutional level is needed.	1	2	3	4

Q4.5 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from management level of adult learning organisations.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for educational professionals

Q4.1 Consider open educational practices in adult learning organisations today.
(PLEASE CHOOSE ONLY ONE OPTION)
Do you think that…

…they are sufficiently developed?	4
…they are moderately developed?	3
…they are underdeveloped?	2
…they are not developed at all?	1

Q4.2 This question is about the level of public policies that are needed around OER. Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
The public policies only need to support the access to and availability of OER in adult learning organisations.	1	2	3	4

There is a need for specific public policies to support and regulate the **use** of OER in adult learning organisations.	1	2	3	4
Public policies are necessary to support skill development for open educational practices of educational professionals and institutional leaders.	1	2	3	4

Q4.3 In your adult learning organisation, how would you rate the following factors in support of the use of OER?

	Implemented organisation-wide	Implemented in some departments	Individual efforts exist	Not existing
An explicit institutional policy.	4	3	2	1
A partnership with other organisations.	4	3	2	1
Specific quality assurance processes for OER.	4	3	2	1
Specific technological infrastructures for OER (e.g. an OER repository).	4	3	2	1
Specific pedagogical scenarios and models for open educational practices.	4	3	2	1

Q4.4 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
Some colleagues are using OER on a regular basis.	1	2	3	4
Teaching strategies promoting the use of OER are explicitly supported in my adult learning organisation.	1	2	3	4
Adoption of open educational practices is specifically supported in my adult learning organisation.	1	2	3	4
Using OER leads to improvement in educational practices.	1	2	3	4
Using OER leads to institutional innovation.	1	2	3	4
Adopting open practices leads to institutional innovation.	1	2	3	4
Using OER leads to new pedagogical practices.	1	2	3	4
In order to stimulate the use of OER, specific skill support is needed.	1	2	3	4

Q4.5 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of adult learning organisations.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation	4	3	2	1

or use of OER.				
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1
Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Filter: only for learners/students

Q4.1 How would you rate the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
The use of OER is sufficiently developed in the courses and programmes I am enrolled in.	1	2	3	4
Teachers/tutors/trainers explicitly support the use of open and freely available learning materials.	1	2	3	4
As a learner, I am encouraged to develop learning materials myself and share those with others on the Internet.	1	2	3	4
The quality of OER is too diverse for OER to be really useful.	1	2	3	4
OER allow me to study and learn without support from teachers/tutors/trainers.	1	2	3	4
The use of open educational resources allows me to become independent from my adult learning organisation.	1	2	3	4
In my experience OER are not relevant for my studies.	1	2	3	4
In order to use OER I would need a different form of learning environment in my adult learning organisation.	1	2	3	4

Q4.2 Please evaluate the relevance of the following barriers to the use of OER from your personal experience:

	Very important	Important	Unimportant	Very unimportant
Not invented here syndrome: no trust in others' resources.	4	3	2	1
Lack of time to find suitable materials.	4	3	2	1
Lack of Internet connectivity.	4	3	2	1
Lack of software to adapt the resources to the user's purposes.	4	3	2	1
Lack of access to computers.	4	3	2	1
Lack of quality of the OER.	4	3	2	1
Lack of OER that are culturally relevant to the user.	4	3	2	1
Lack of OER in the user's native language.	4	3	2	1
OER are not embedded into the learning scenarios.	4	3	2	1
Insufficient reward system for educational professionals devoting time and energy to OER development.	4	3	2	1
Lack of interest in pedagogical innovation among educational professionals.	4	3	2	1
Insufficient support from the management level of adult learning organisations.	4	3	2	1
Lack of policies at national/regional level to support the creation or use of OER.	4	3	2	1
Lack of policies at institutional level to support the creation or use of OER.	4	3	2	1
Lack of interest in the creation or use of OER.	4	3	2	1
Educational professionals lack the skills to create or use OER.	4	3	2	1

Learners lack the skills to create or use OER.	4	3	2	1
Educational professionals lack the time to create or use OER.	4	3	2	1
Learners lack the time to create or use OER.	4	3	2	1

Thank you for your support!

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