Open Education Practices as answer to new demands of training in entrepeneurship competences

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Agenda

- The Entrepreneurship Education (EE)
- Sucess factors in Open Education
- A study case in Open EE: The OER Gateway
- Study case Learning Analytics in EE

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Entrepreneurship Education

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Aspects in Entrepreneurship Education

- EE refers to the development of a wide range of different abilities.

- Increasing importance in the European panorama: alternative for young people

- EE as a lifelong learning process:
  - Primary
  - Secondary
  - Higher education
  - Personal career

Skills for the 21st Century

Seven "survival skills" for college and career readiness

1. critical thinking
2. collaboration
3. effective oral and written communication
4. agility and adaptability
5. initiative and entrepreneurialism
6. accessing and analyzing information
7. curiosity and imagination

Tony Wagner: The Global Achievement Gap

http://cdn.slidesharecdn.com/ss_thumbnails/elacc21stcenturyskills-100124115736-phpapp02-thumbnail-4.jpg?1264355898
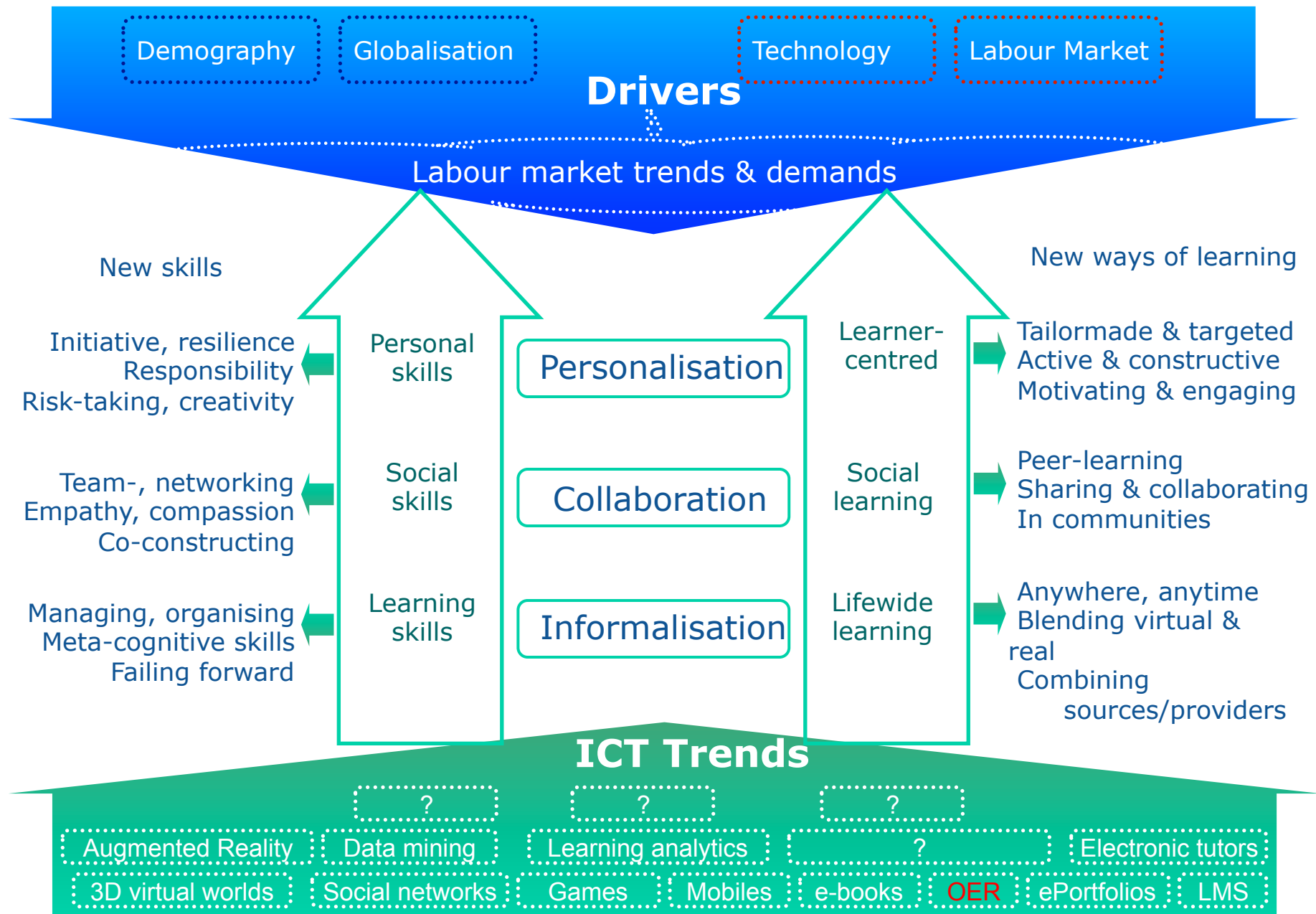
Effects and impact of entrepreneurship programmes in higher education

Brussels, March 2012

- The demand for entrepreneurship learning has been and is still steadily increasing.
- There are obstacles hindering the uptake of entreneurship education, such as:
  - A shortage of human resources and funding for this type of education
  - There has been a tendency in academic /teaching communities to perceive it with learning how to start and run a business

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Drivers

Demography Globalisation Technology Labour Market

Labour market trends & demands

New skills

New ways of learning

Initiative, resilience
Responsibility
Risk-taking, creativity

Personal skills

Personalisation

Learner-centred

Tailormade & targeted
Active & constructive
Motivating & engaging

Team-, networking
Empathy, compassion
Co-constructing

Social skills

Collaboration

Social learning

Peer-learning
Sharing & collaborating
In communities

Managing, organising
Meta-cognitive skills
Failing forward

Learning skills

Informalisation

Lifewide learning

Anywhere, anytime
Blending virtual & real
Combining sources/providers

ICT Trends

? ? ?

Augmented Reality Data mining Learning analytics ? Electronic tutors

3D virtual worlds Social networks Games Mobiles e-books OER ePortfolios LMS

Source: IPTS (2011): „The Future of Learning: Preparing for Change",
http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=4719

Success factors in Open Education

- The Entrepreneurship Education (EE)
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Open Education starts with ideas as:

- Education is sharing

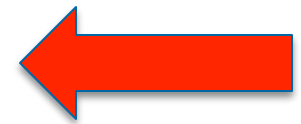- Open allows more rapid building and sharing at a larger scale
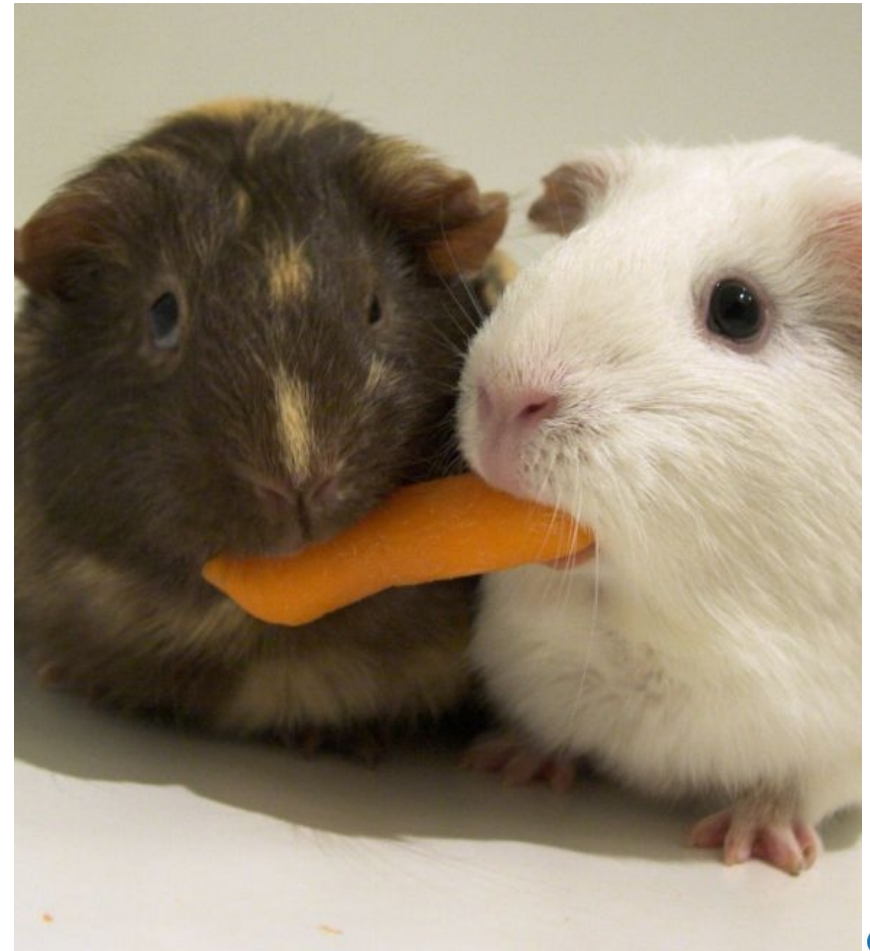
OER are building blocks for innovation

bdesham   http://www.flickr.com/photos/bdesham/2432400623

What does EC mean with *Opening up education?*

Opening up education means bringing the digital revolution into education. Digital technologies allow all individuals to learn, anywhere, anytime, through any device, with the support of anyone

EC Recommendations for Higher Education Opening up Education

review their organisational strategies
exploit the potential of Massive Open Online Courses (MOOCs)
stimulate innovative learning practices such as blended learning
equip teachers with high digital competences
equip learners with digital skills
think about how to validate and recognise learner's achievements in online education
make high quality Open Education Resources (OER) visible and accessible

Ossiannilsson_Kazaktsan014

Success factors

Diffusion and adoption of OER

The road to OER success
through collective
ambition and competence
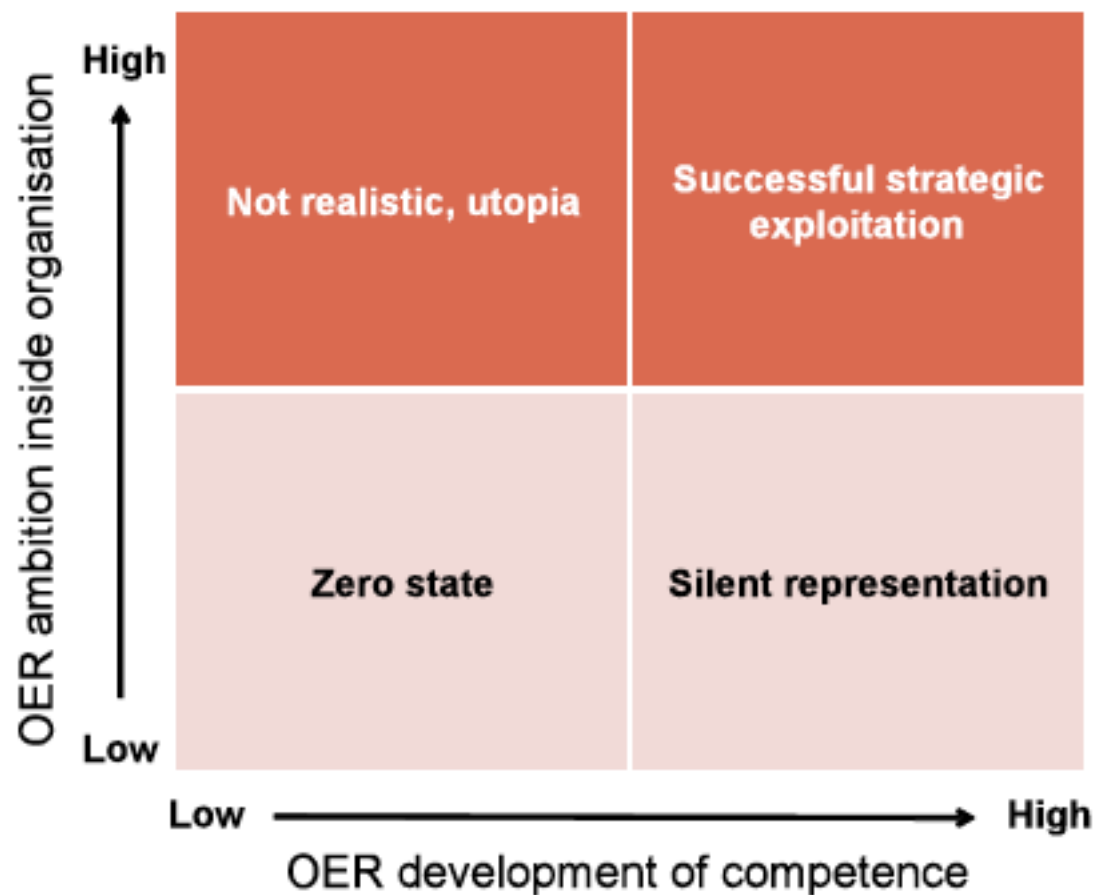
Three aspects of Communities of Practice may hinder or enhance learning

Wenger, E. (1998). Communities of Practice, Learning, Meaning, and Identity, Cambridge University Press, New York.

Aspects	What does it mean
Mutual engagement	Members come together because they are engaged in actions whose meaning they negotiate with one another. They develop shared practices and are linked through their mutual engagement in such activities.
Joint enterprise	Members work together, explicitly or implicitly, to achieve a negotiated common goal, which may or may not be officially defined.
Shared repertoire	A common history and culture is generated over time by shared practices, stories, tools, concepts and repeated interactions. Writing, routines, rituals, ways of doing things and so on, become a common repository.

Quality Assurance for OER :
The four layers of the TIPS Framework

T — teaching and learning processes

I — information and material content

P — presentation product and format

S — system technical and technology
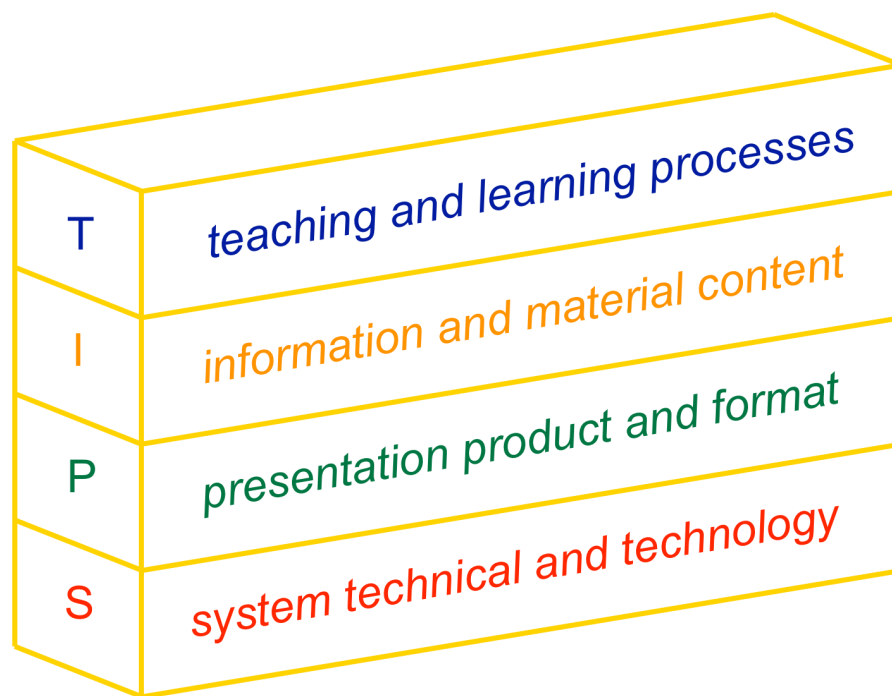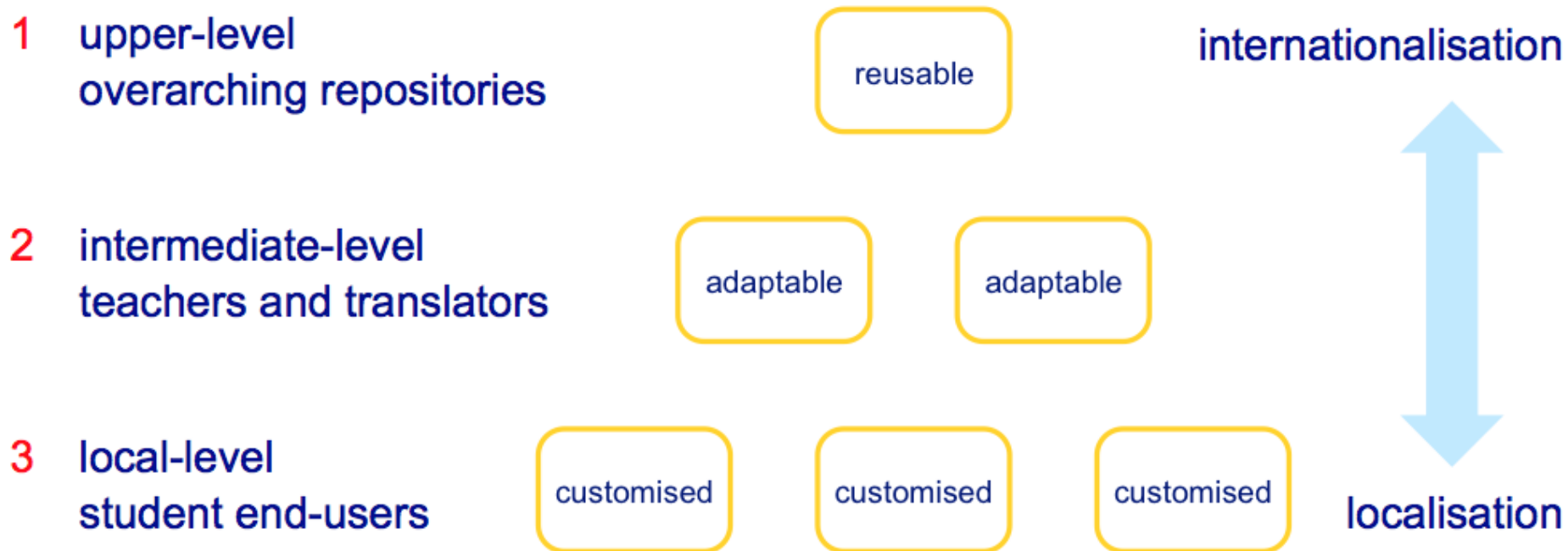
http:// www.open-ed.net/oer-quality/tips.pdf
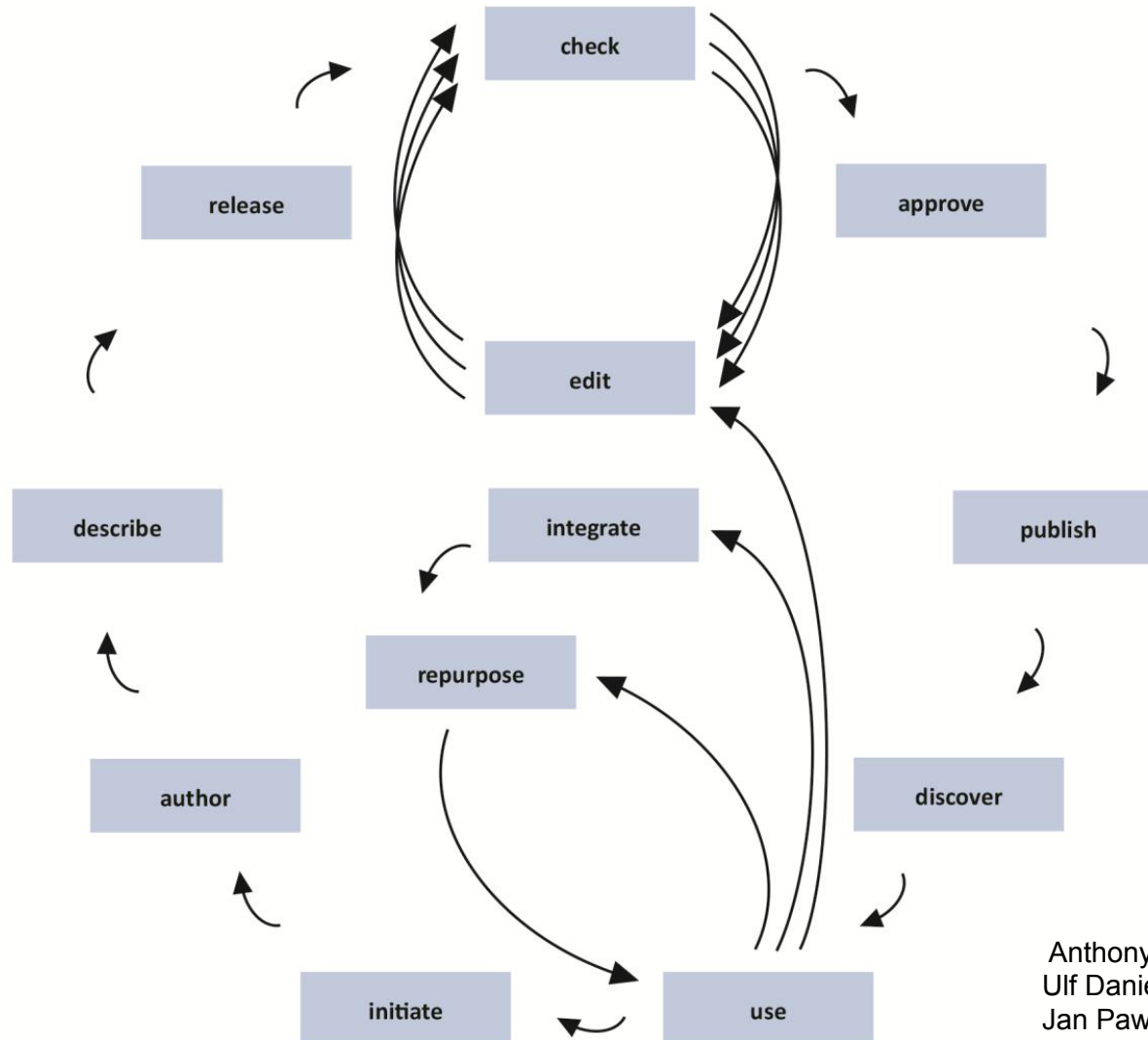
Dimensions of Quality

Box 1	: Dimensions of Quality
(i)	Achieving Exceptional Excellence : surpassing some pre-set criterion-referenced standard
(ii)	Achieving Perfection : focusing on first making a machine that is successful 100% of the time, rather than trial-and-error or envisaging improving it later on
(iii)	Achieving Fitness for Purpose : satisfying the aims or reasons for producing the item, according to the judgements of the various stakeholders - particularly the consumers
(iv)	Achieving Value for Money : focusing on relative efficiency, and the (immediate output, mid-term outcome, and long-term impact) effectiveness
(v)	Achieving Transformation : enhancing and empowering the consumer, eg equipping the student with the 21st-century knowledge-creative skills

Harvey, L., & Green, D. (1993). Defining quality. Assessment and Evaluation in Higher Education, 18 (1), 9-34.

The OER localisation processes

1 upper-level
overarching repositories

2 intermediate-level
teachers and translators

3 local-level
student end-users

reusable

adaptable   adaptable

customised   customised   customised

internationalisation

localisation

By Pail Kawachi in eLearning Papers 40

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A typical usage scenario for Open Educational Resources

Anthony F. Camilleri
Ulf Daniel Ehlers
Jan Pawlowski

Initiate

Authoring

Describing
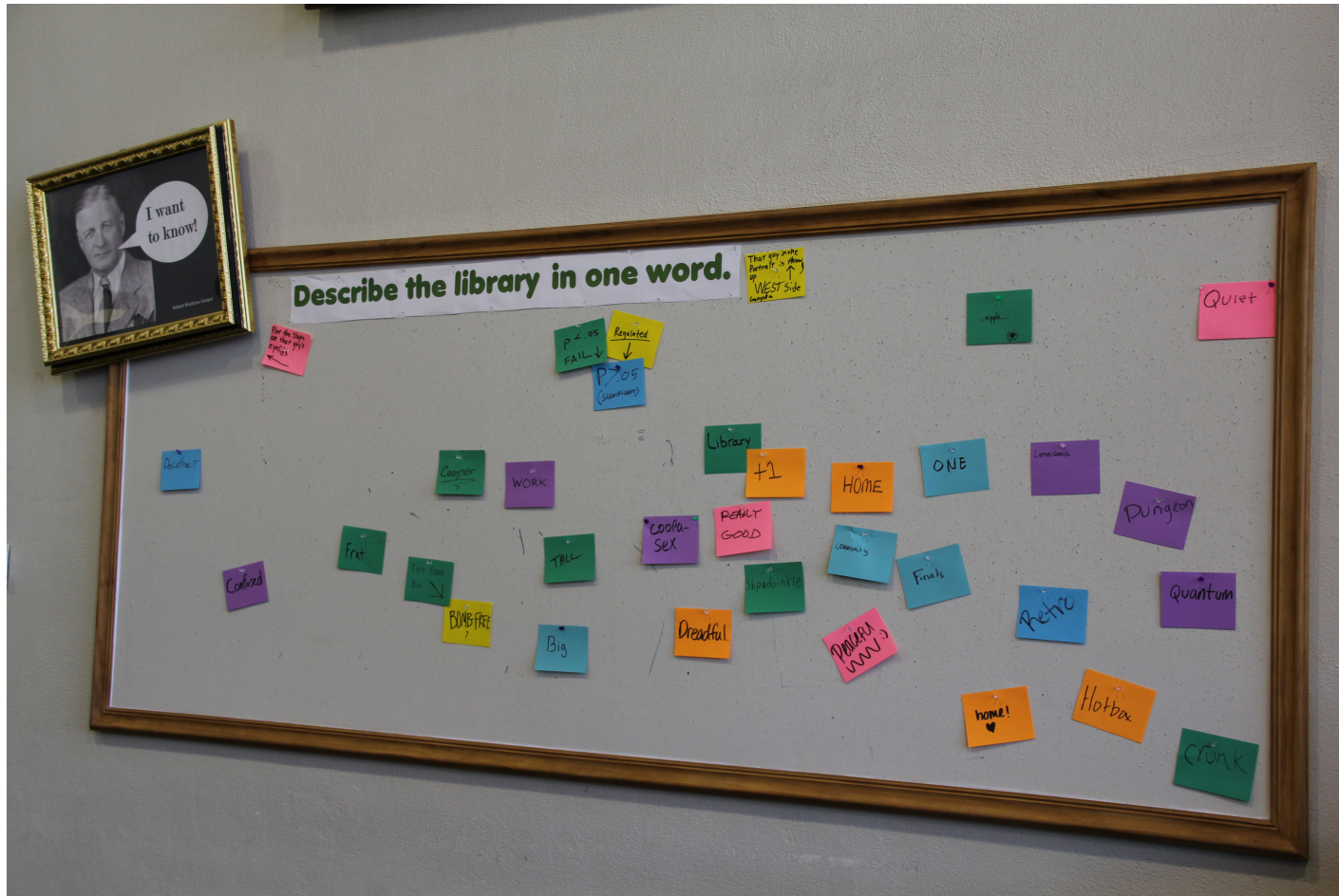
Release

Check/edit /approve
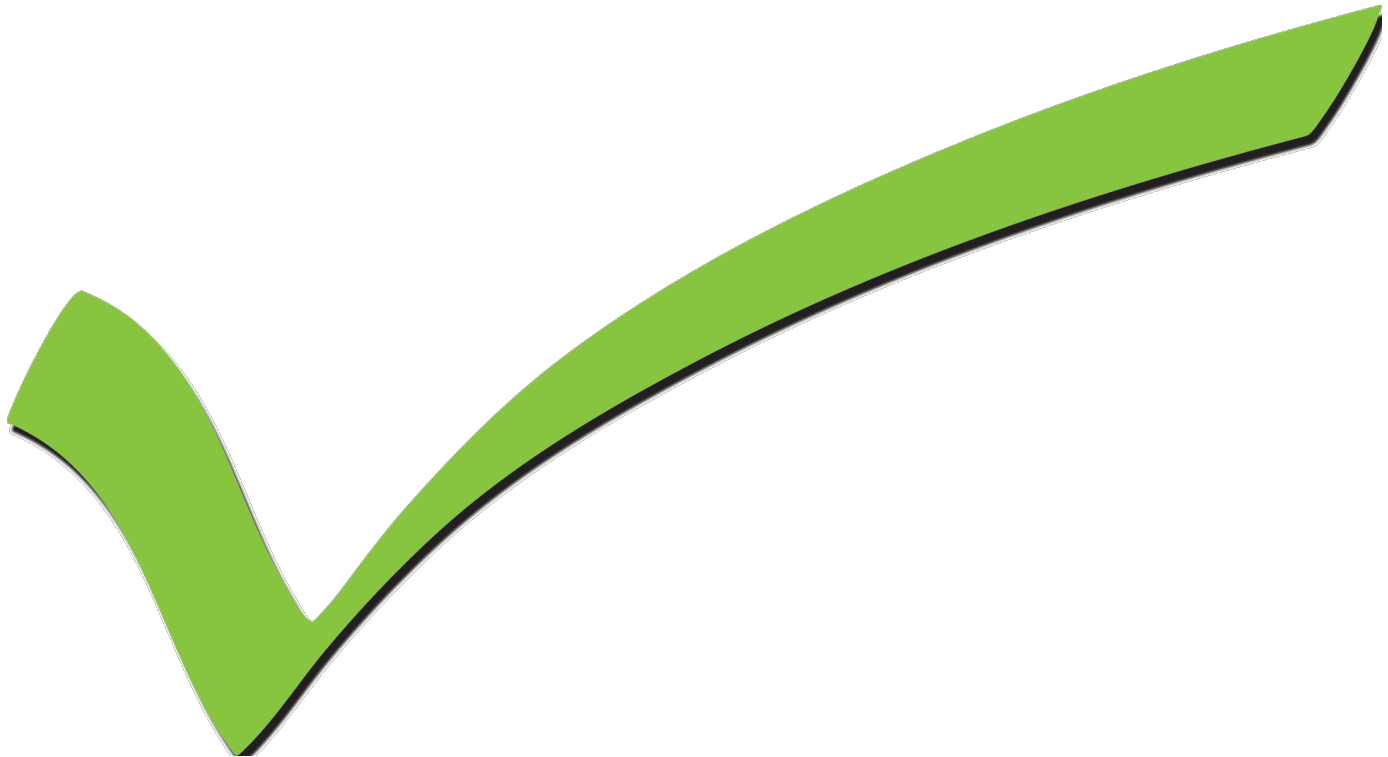
Publish
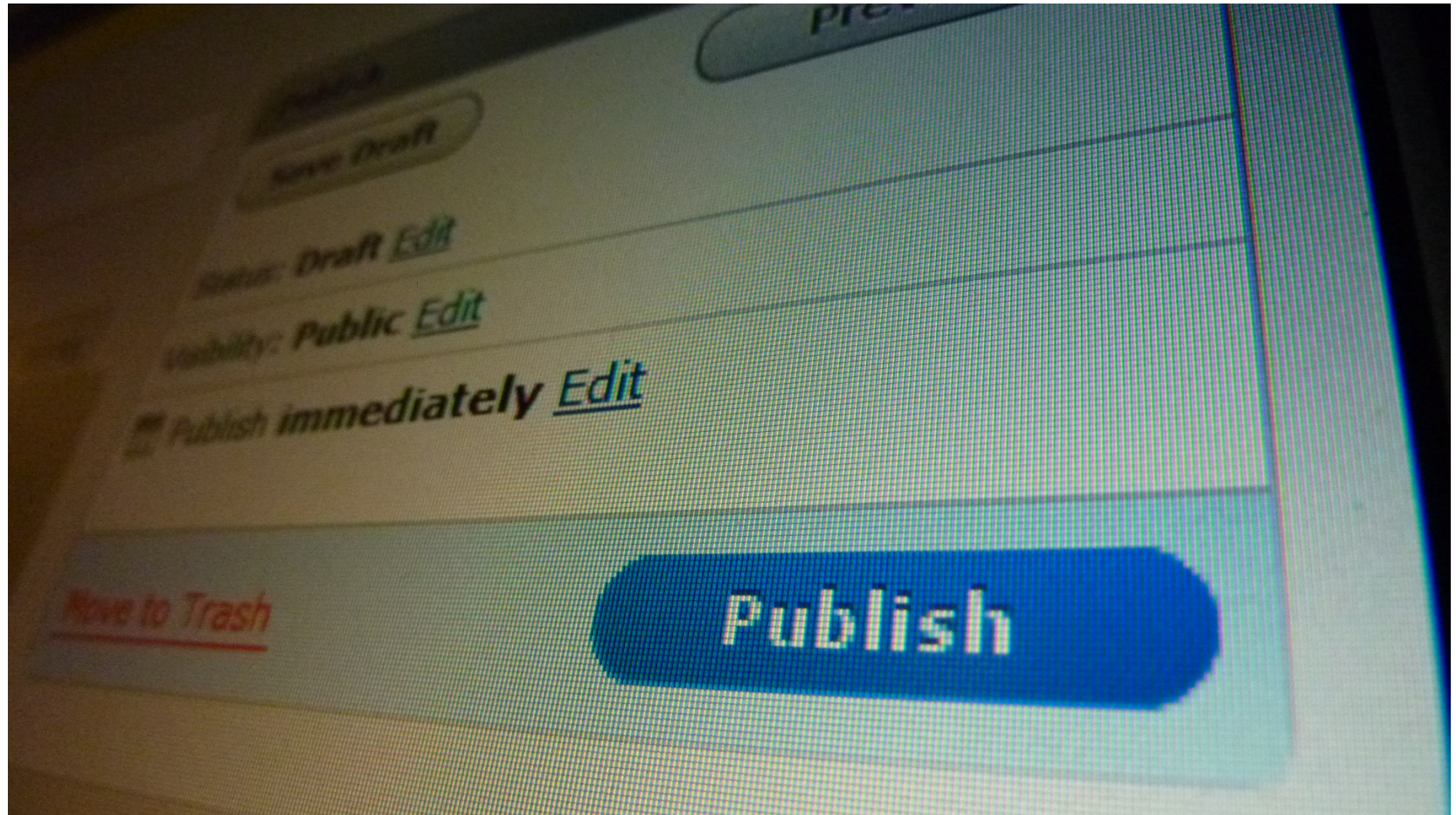
Discovering

Use, integrate, repurpose

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Evaluation and rating
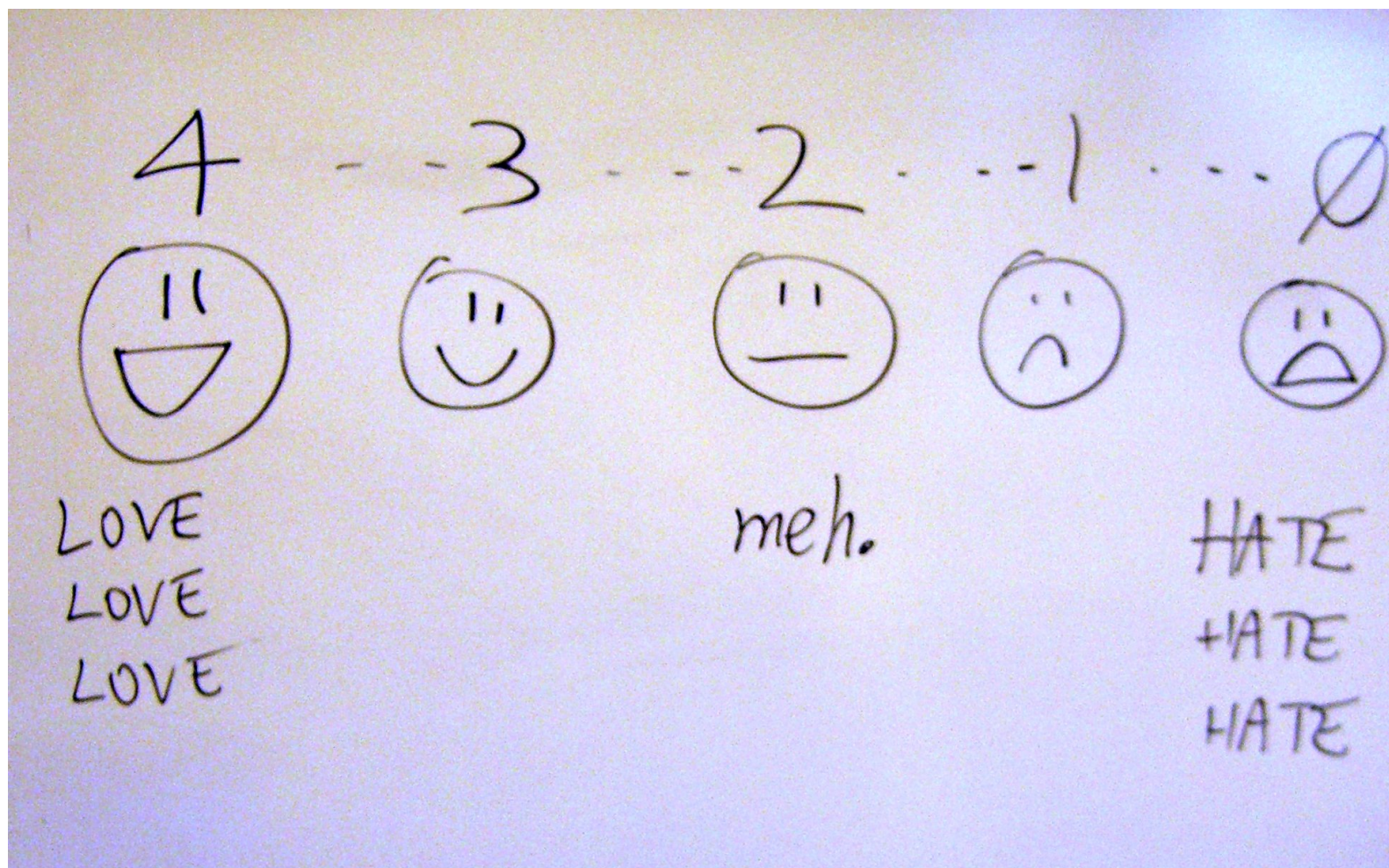
PLE

- Designing and organising their own learning
- Autonomous learning
- PLE approach implies that **learning is not located in a specific time and place, but is an ongoing, ubiquitous and multi-episodic process**

A study case in Open Entrepreneurship Education

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StartUP
intelligent training needS assessmenT and open educAtional Resources to fosTer entrepreneUrshiP

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StartUP Projects aims to.....

"to develop an entrepreneurial mind-set that enables learners to start a new business or increase their employability".

StartUp objectives

- Set up an *innovative* method for **evaluating** individual users **learning needs** in the **entrepreneurial** sector
- Provide effective **OER** corresponding to the actual **individual** learning **needs**
- Set up a peer-review and sharing **community** to ensure the **quality** of the individual learning path

OER GATEWAY

**LEARNING
ENTREPRENEURIAL
SKILLS
USING OERS
SELECTED FOR YOUR
PERSONALIZED
TRAINING**
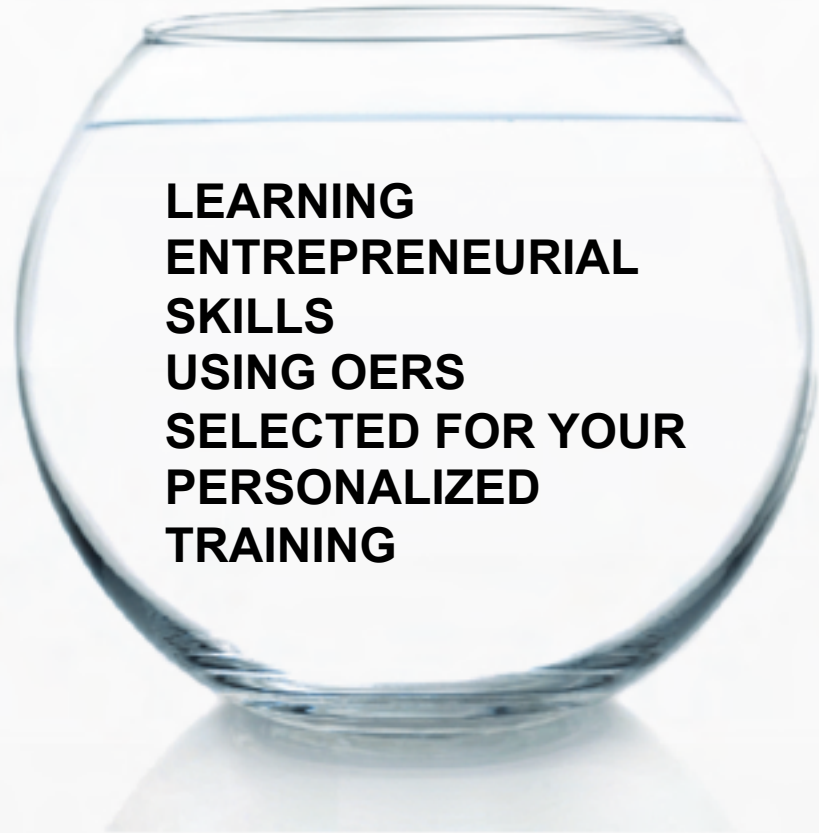
Cluster and Competences
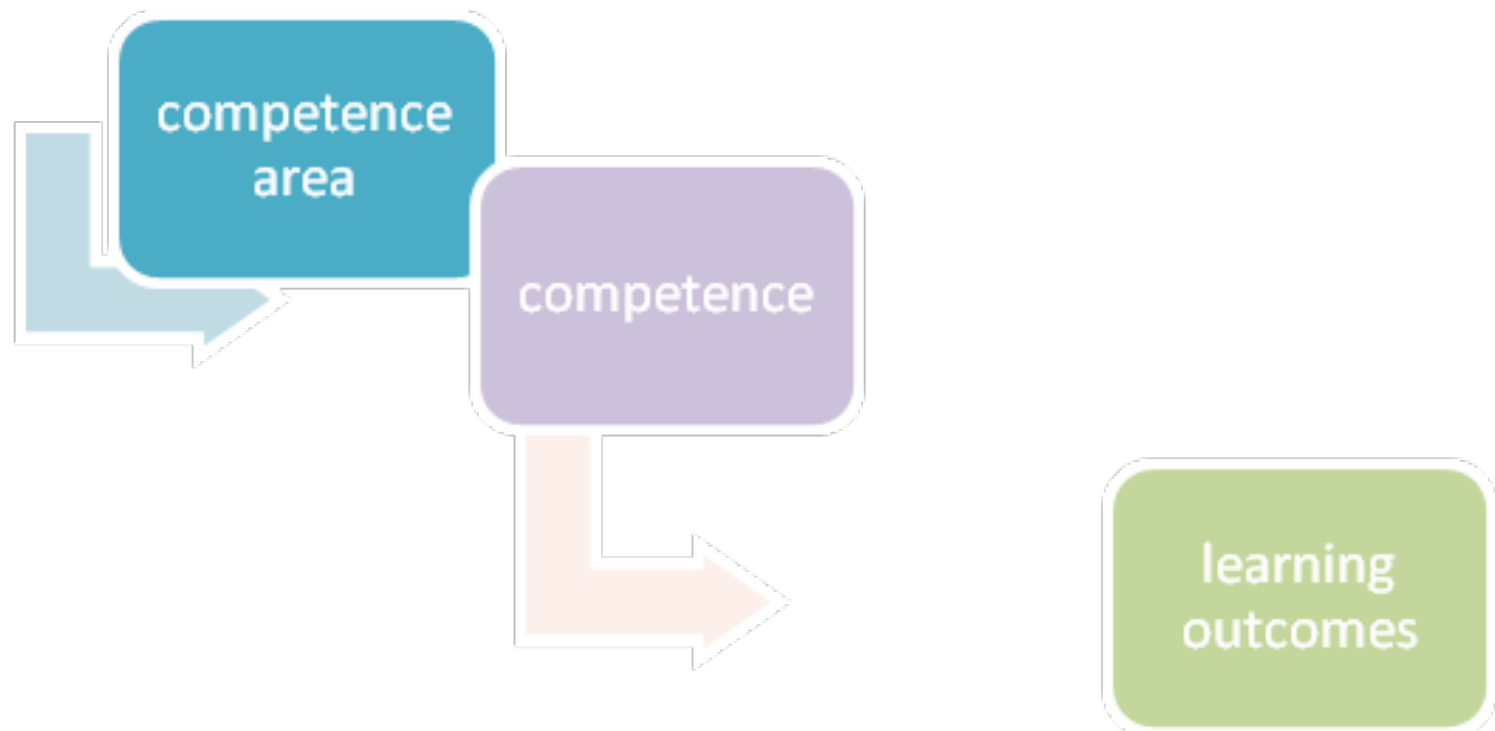
Entrepreneurial Competences Catalogue

StartUP: Why based on OER?

- COMMUNITY SOCIAL Learning: Widening participation
- Different stakeholders
  - School and University Teachers and students
  - Trainers
  - Trainees
  - Non-formal learners
- International
- Life Long Learning
  - Specially appropriated

Training Paths with OERs

Entrepreneur Context - Training based on OER

Interaction between User Profile, Learning Paths and OER

User Profile ⇔ Learning Paths ⇔ Open Educational Resources **Metadata**

Feeding the community in a personal learning environment

OER provided by Serendipity Web Services

Semantic resources from LOD-Cloud (Dbpedia.org)

OER/Users/Hashtags provided by Social Network Analysis - Web Services

Query concepts extracted from Dbpedia.org

Management

Resources

Serendipity
Linked OpenCourseWare Data Faceted Search

Description

Management in all business and organizational activities is the act of getting people together to accomplish desired goals and objectives using available resources efficiently and effectively. Management comprises planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal.

Concepts (extracted from LOD-CLOUD)

| Leadership and initiative | Project management | Action planning and goal setting | Time management | Risk management | Outcome orientation | Cooperation and team-working | Technology

Nro.skills 8

OERs from Collective Intelligence

StartUP Startup demo social OER discovery

Extracted from twitter using SNA metrics

Results to **Management** -» **Project management**

| **Resources** | **Users** | **Hashtags** |

This resources were published by the most influential Twitter users that publish about this thematic. And ordered through an algorithm that uses criteria of collective intelligence.

"Mom, What is Project Management?" | Edutopia

| text/html | 👁 |

Guest blogger Chris Hare, project manager and parent, uses a book report assignment to demonstrate how project management is already in place in the classroom, and how easy it would be to fine-tune this practice.

Project Management Keeps Learning on Track | Edutopia

| text/html | 👁 |

Turn pandemonium into productivity by harnessing tech tools and cultivating self-directed students.

Online Project Management Certification Exam Training 2013 | Project Management and Templates

| text/html | 👁 |

Are you looking for project management certification exam study material? Which door is the suitable for online PMP training 2013?

Episode 267: Integration of Project Management and Ongoing Business (Premium) #PMOT

| text/html | 👁 |

Project Management for Beginners and Experts. Are you looking to improve your Project Management Skills? Then listen to The Project Management Podcast, a weekly program that delivers best practices and new developments in the field of project management.

Merlin for Mac – ProjectWizards presents Merlin – Project Management for OS X

| text/html | 👁 |

ProjectWizards presents Merlin, the leading Project Management software for Mac OS X. Plan and manage your projects. Work on a Mac with a feature set similar to Microsoft Project on Windows and stay compatible to other project management applications on Mac or Windows.

5 tips on how online project management tools can help your business

Relevant users mined from twitter

Startup demo social OER discovery

Click on user account to access twitter profile

Results to **Management** -» **Project management**

| Resources | **Users** | Hashtags |

Betweenness is a centrality measure of a vertex within a graph (there is also edge betweenness, which is not discussed here). Betweenness centrality quantifies the number of times a node acts as a bridge along the shortest path between two other nodes. It was introduced as a measure for quantifying the control of a human on the communication between other humans in a social network

jobz4pm

| 👁 |

#ProjectManagement #jobs

CheriEssner

| 👁 |

Cheri Essner, PMP & founder of http://KoreBuilders.com Team building is my passion & I share my experiences of renewing empowerment to take U from Me to We!

Project_agent

| 👁 |

project management, project tools, business projects

projecttimes

BarryHodge

| 👁 |

A Project Manager who loves Formula 1 & Plymouth Argyle. I tweet about my passion of #projectmanagement #pmot and the great work my colleagues do @bromford

Go_Freelancer

| 👁 |

#Employers are you spending a fortune on #employees? Stop now! Find quality professional #freelance #workers. Get job done hassle–free for less. Visit us now!

PRINCE2PROJECT

| 👁 |

Project Management Community for Project Managers | #ProjectManagement Guidelines for #ProjectManagers | Please ReTweet

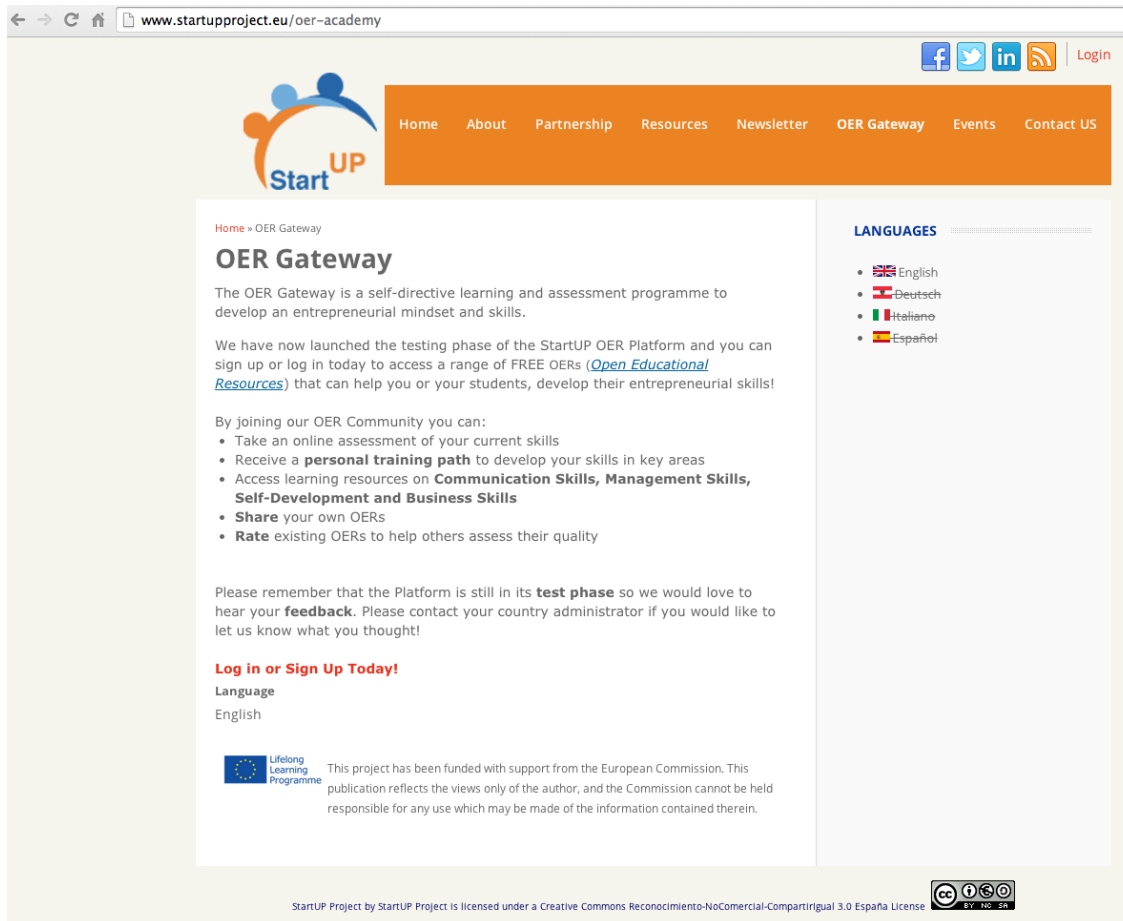# A study case in Open Entrepreneurship Education. The OER Gateway

- The Entrepreneurship Education (EE)
- Experiences in EE
- Sucess factors in Open Education
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StartUP Website

www.startupproject.eu

StartUp Platform

http://www.startupproject.eu/?q=oer-academy

Log in

Username tester

Password •••••••• Log in

☐ Remember username

Forgotten your username or password?

Cookies must be enabled in your browser ⓘ

Some courses may allow guest access

Log in as a guest

Is this your first time here?

Hi! For full access to courses you'll need to take a minute to create a new account for yourself on this web site. Each of the individual courses may also have a one-time "enrolment key", which you won't need until later. Here are the steps:

Fill out the New Account form with your details.

An email will be immediately sent to your email address.

Read your email, and click on the web link it contains.

Your account will be confirmed and you will be logged in.

Now, select the course you want to participate in.

If you are prompted for an "enrolment key" - use the one that your teacher has given you. This will "enrol" you in the course.

You can now access the full course. From now on you will only need to enter your personal username and password (in the form on this page) to log in and access any course you have enrolled in.

Create new account

You are not logged in.

Home

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Virtual Expert

Home ► Virtual Expert Block Settings ► Virtual Expert

▼ Virtual Expert: Communication skills

Please fill in the following form to let the virtual expert to provide your customized training path. All the fields are mandatory. Levels range from 1 (strongly disagree) to 5 (strongly agree).

I give my full attention to the person who is talking to me.   [2 ▼]

I can block out background noise when I am in a conversation or listen to somebody.   [3 ▼]

I take the time to listen and understand my clients' needs.   [1 ▼]

I am aware of the impact of non-verbal communication e.g. eye contact, gestures, body position.   [3 ▼]

I am good at reading others' body language and adjust mine accordingly.   [5 ▼]

I am aware that the cultural background strongly influences communication habits.   [2 ▼]

I am at ease in written and oral communication.   [1 ▼]

I am often taking every opportunity to improve my public speaking skills.   [2 ▼]

I feel confident when speaking in public.   [0 ▼]

I aim to establish a good communication atmosphere ("rapport") when talking to somebody.   [2 ▼]

In a negotiation I can deliver my point of view to the other.   [3 ▼]

I take the time to investigate the needs and wishes of my clients to address those in my market communication.   [3 ▼]

Using modern communication technology and strategic planning of professional communication is part of entrepreneurship e.g. marketing, online-conferencing etc.   [3 ▼]

I rely on the communication technology I use and am good at using the tools at use.   [1 ▼]

I use modern communication tools to reach my clients (when appropriate).   [4 ▼]

[Save changes]   Cancel

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OERs in English

Turn editing on

Based on the answers you have given, we recommend that you work on the following areas.

Listening

Competence: Listening, Level: Basic, Target Group: Professionals

Communication Skills: Speaking and Listening

tips on empathy, how to ask questions or give feedback

Assessment of your communication skills

Test to analyse your communication skills and to advice you how to improve them

Effective Communication

Website with tips to improve your communication skills

Suggested topics: Psychotherapy, Counseling, Behavioural sciences, Workplace, Relationship counseling

Non-verbal communication

Competence: Non-verbal communication, Level: Intermediate, Target Group: Professionals

Communication Types

Explanation of the three communication types: passive, aggressive and assertive

Hashtags: #Nonverbal   #autism   #Communication   #Language   #Body
Twitter Users: @mediatrainer_75   @Com_non_verbal   @Psych2morrowmag   @Comm_Matters   @VenusCaelestis
Suggested topics: Communication, Human communication, Semiotics, Gestures, Nonverbal communication

Public Speaking and Presentation Skills

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Based on the answers you have given, the Virtual Expert has selected these Open Educational Resources for your Training Set. Each OER will help you develop a competence on a certain level. You can access your Training Set several times and complete your learning at your own pace. You can also access the Virtual Expert again and access a different cluster of knowledge. Use this powerful tool!

Cluster: Communication Skills

Cluster: Communication Skills, Competence: Listening, Level: Basic, Target Group: Adult Learners

Competence: Listening, Level: Basic, Target Group: Adult Learners

Communication Skills: Speaking and Listening

Voters:1, **Average Score:**5

Assess the Quality   Assess the Relevance

tips on empathy, how to ask questions or give feedback

Assessment of your communication skills

Voters:0, **Average Score:**0

Assess the Quality   Assess the Relevance

Test to analyse your communication skills and to advice you how to improve them

Effective Communication

Voters:1, **Average Score:**2

Assess the Quality   Assess the Relevance

Website with tips to improve your communication skills

Follow experts and discussions on this topic on Twitter to further develop your skills and network

Suggested topics: Psychotherapy, Counseling, Behavioural sciences, Workplace, Relationship counseling

StartUP Metadata Edit

Navigation

Administration

▶ Expand all

▼ **Metadata**

Please fill in the following form to describe the OER:

OER URL

Title *
My first OER

Alternative Title

Abstract *
Lorem ipsum dolor sit amet, consectetur adipisci elit, sed eiusmod tempor incidunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquid ex ea commodi consequat. Quis aute iure reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint obcaecat cupiditat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Tags

Author First Name
John

Author Last Name
Doe

Author Organisation
ACME Ltd

Date
24 ▼ June ▼ 2014 ▼ ☐ Enable

Provider

License *
Public Domain ▼

Encoding Format *
Text ▼

Duration `0` `minutes ▾`

Choose at least one Target Group:

Target Group* `School Students (aged 14+) ▾`

Target Group `University Students ▾`

Target Group `VET trainees ▾`

Target Group `Adult Learners ▾`

Target Group `Please select ▾`

Target Group `Please select ▾`

Competence Area `Communication Skills ▾`

▼ **Communication Skills**

Select the competences covered by the OER (at least one), and the associated level of explanation:

☐ Listening `Please select ▾`

☑ Non-verbal communication `Intermediate ▾`

☐ Public Speaking and Presentation Skills `Please select ▾`

☐ Interpersonal skills `Please select ▾`

☐ Technology `Please select ▾`

▼ **OER Removal**

`Delete this OER`

`Save changes`   Cancel

There are required fields in this form marked *.

OERs in English

StartUP Recommender

UP Courses ► en

Click one of the next links to validate an OER

ave given, we recommend

lls

1. Business Planning
2. Financing and financial planning
3. Legal aspects
4. Sales and Marketing
5. Technology
6. Networking skills
7. Emotional Intelligence (including empathy)
8. Motivation (including Recognizing)
9. Assertiveness
10. Conviction/self-belief
11. Creativity skills
12. Leadership and initiative
13. Project management
14. Action planning and goal setting
15. Time management
16. Risk Management
17. Conflict Management
18. Listening
19. Non-verbal

, Level: Basic, Target Group:

tion Skills: Speaking and Lis

how to ask questions or give

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al communication, Level: Int

tion Types

e three communication types

#Communication   #Comr
eensandy08   @mediatraine
mmunication, Human comm

Main Components

VIRTUAL EXPERT	AUTHORING SYSTEM	RATING SYSTEM	RECOMMENDER SYSTEM
-USER PROFILING -SELF-ASSESSMENT -TAILORED TRAINING PATH BASED ON OERs	REVISE - REUSE - REMIX - REDISTRIBUTE	--COMMUNITY OF USERS -QUALITY and RELEVANCE CONTROL	-More resources for training paths -Helps networking with Twitter

https://www.youtube.com/watch?v=uxcxztxwCxQ

Get Involved!

Mini Course for authors

- Oct 2014

Restricted Community Test

- Nov-Dec 2014 (we aim for 140 users)

Open Community Test

- Jan 2015 (we aim for +500 users)

Learning path integration

- ongoing

Contacts

www.StartUPproject.eu

info@StartUPproject.eu

StartUP
intelligent training needS assessmenT and
open educAtional Resources to fosTer entrepreneUrshiP

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- **Short-questionnaire (open test):**
- http://goo.gl/forms/ZWtvD6drfm

edmundo.tovar@upm.es

Success factors A review for StartUp project

- Diffusion & Adoption
- Communities
- Personal Learning Environment
- Success
- Usage scenario
- Quality

A study case in Open Entrepreneurship Education

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Building a knowledge base on MOOC learners. IPTS Goals

✓ To assess the current perspective of learners as participants of European MOOCs.

✓ To collect a large-scale data basis about participants of (European) MOOCs Longitudinal and systematic data collection (2014-2016)

✓ Addressing intention vs behavior gaps

✓ IMPACT of Open Education on labor market conditions and formal education outcomes

✓ Standardized & multilingual questionnaires

✓ Audiences:

       policy-making by the European Commission

       MOOC providers to build open online education

MOOCKnowledge

Building a knowledge base on European MOOC learners
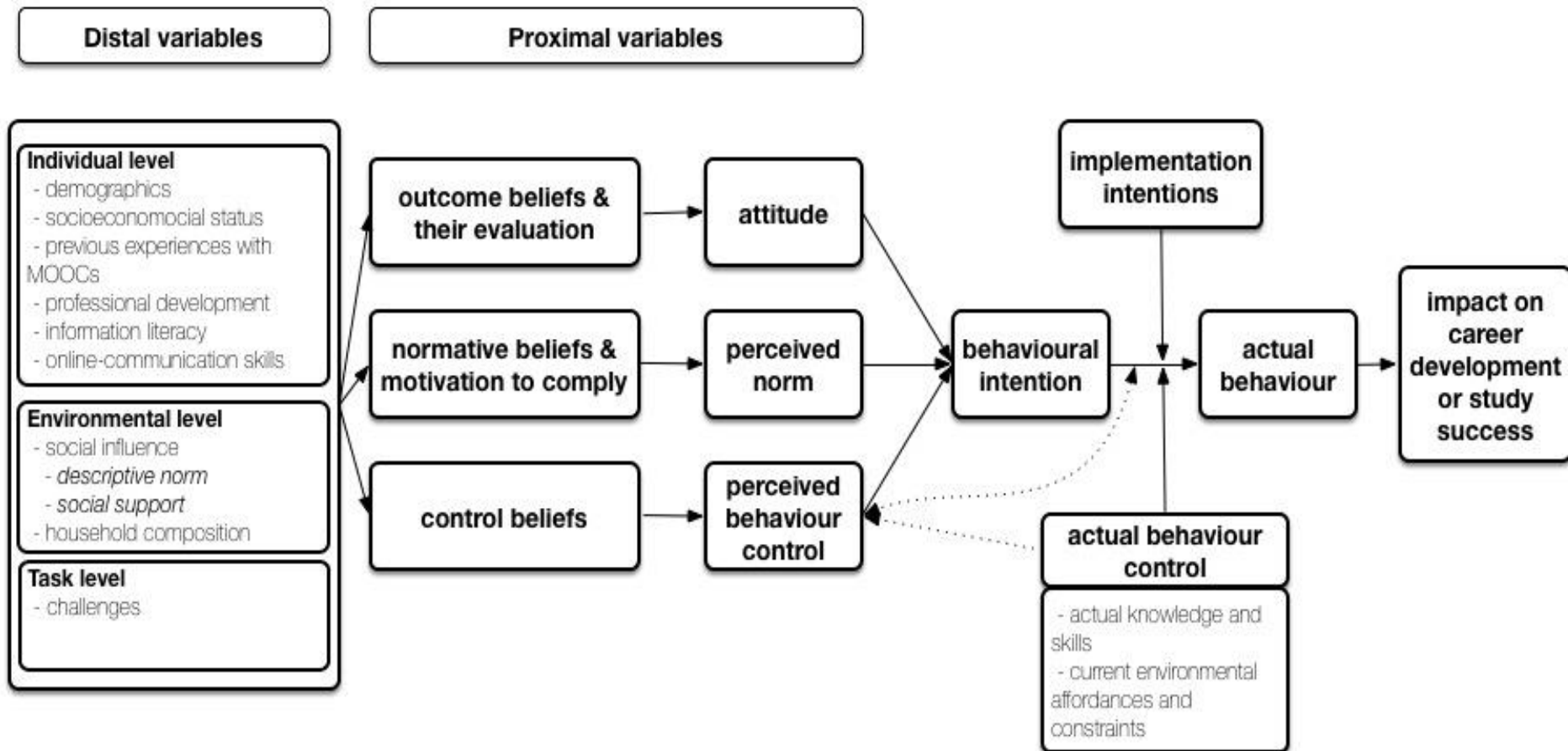
✓ The project aims to establish large-scale cross-provider data collection on European MOOCs

✓ The project aims to deliver insights about the following variables collected from participants of European Massive Open Online Courses (MOOCs):

- socio-economic profile,
- lifelong-learning profile,
- ICT-profile,
- MOOC profile,
- Motivation
  Impact on study success /job success

Research model

| Distal variables | Proximal variables |

Individual level
- demographics
- socioeconomocial status
- previous experiences with MOOCs
- professional development
- information literacy
- online-communication skills

Environmental level
- social influence
  - *descriptive norm*
  - *social support*
- household composition

Task level
- challenges

outcome beliefs & their evaluation → attitude

normative beliefs & motivation to comply → perceived norm

control beliefs → perceived behaviour control

attitude, perceived norm, perceived behaviour control → behavioural intention

implementation intentions

behavioural intention → actual behaviour

actual behaviour → impact on career development or study success

actual behaviour control
- actual knowledge and skills
- current environmental affordances and constraints

The behaviour under study is defined as:

First data collection

	Topic	Language	Number of enrolled students	Number of fully filled in pre-questionnaires
MOOC A	Teacher education	English	1672	173
MOOC B	Entrepreneurship	Spanish	11000	316
MOOC C	Anxiety Management	Spanish	10000	715
Total			**22672**	**1204**

1,204 fully filled in questionnaires from the pre-survey and 172 questionnaires from the post-survey.

Results. Demographic details

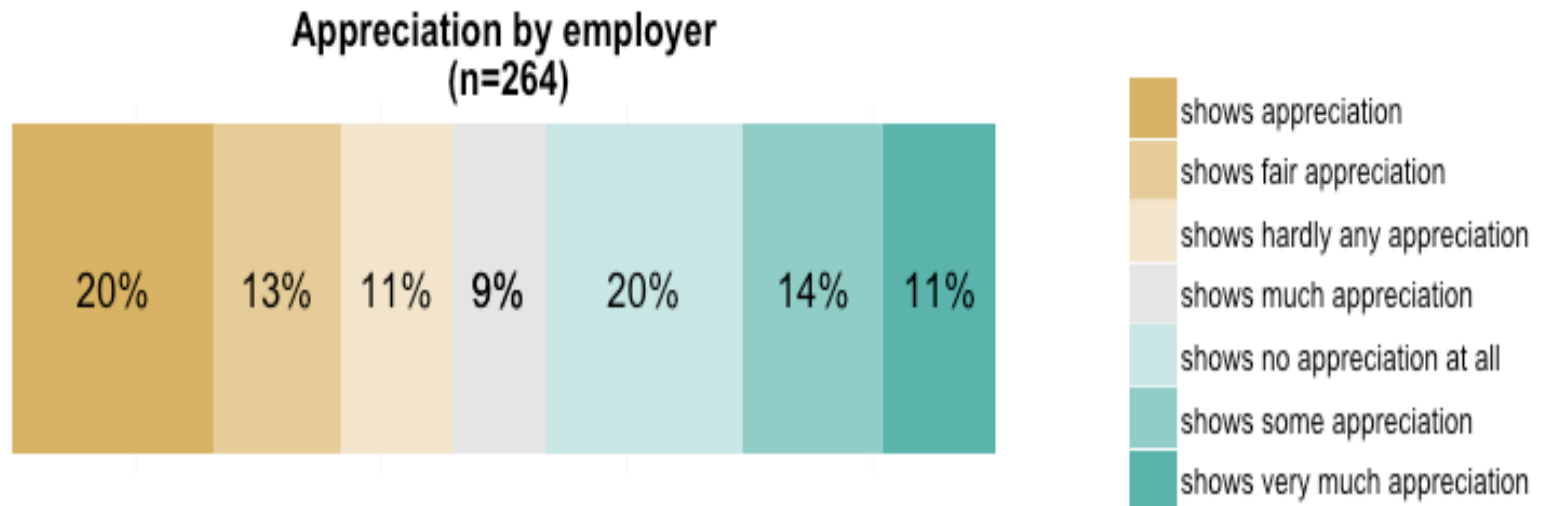# Results. Economic profile and employer appreciation

Employment Status
(N=1204)
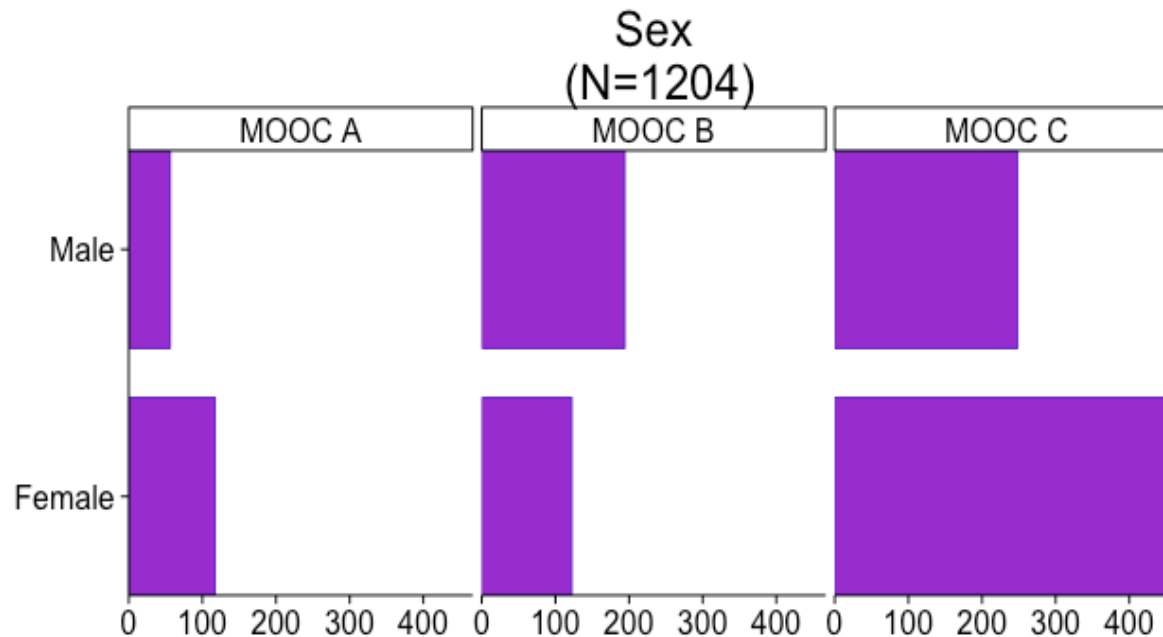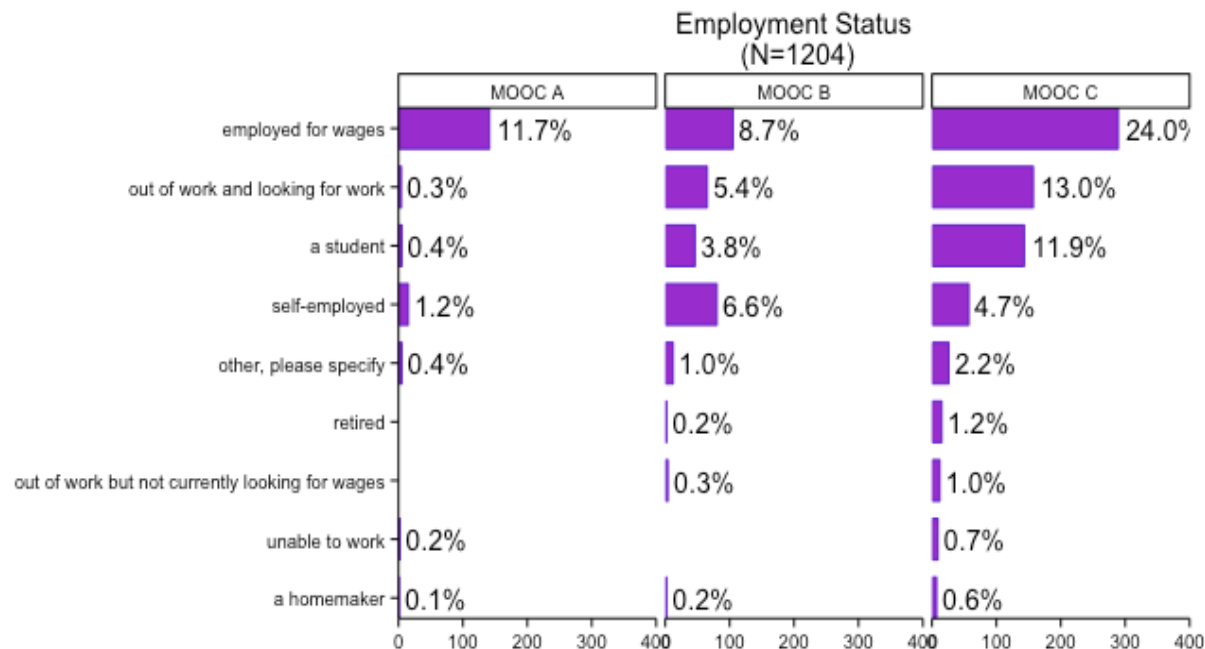
Nearly 45% of the sample is currently employed for wages, while
18.5 % is currently unemployed. 15.8 % of
the sample are students and 12.7% are self-employed.

Results. Economic profile and employer appreciation

Appreciation by employer
(n=264)

| 20% | 13% | 11% | 9% | 20% | 14% | 11% |

- shows appreciation
- shows fair appreciation
- shows hardly any appreciation
- shows much appreciation
- shows no appreciation at all
- shows some appreciation
- shows very much appreciation

Results. Economic profile and employer appreciation

Influence of certification in appreciation (N=218)

Category	Percentage
Has much influence	15.1%
Has influence	18.3%
Has fair influence	10.1%
Has some influence	12.8%
Has a little influence	9.2%
Has hardly any influence	12.4%
Has no influence at all	22%

Results. Economic profile and employer appreciation

Employer support (n=811)

- yes — 32.6%
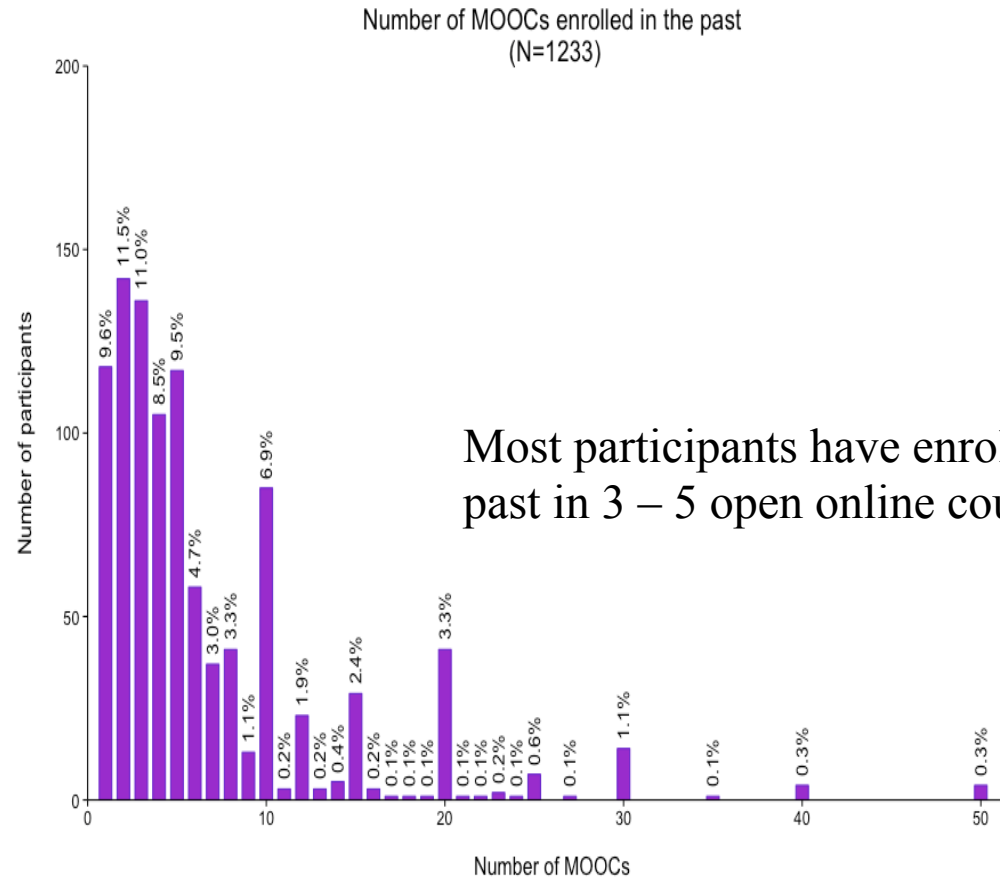- no — 9.9%
- Employer does not know about participation — 57.6%
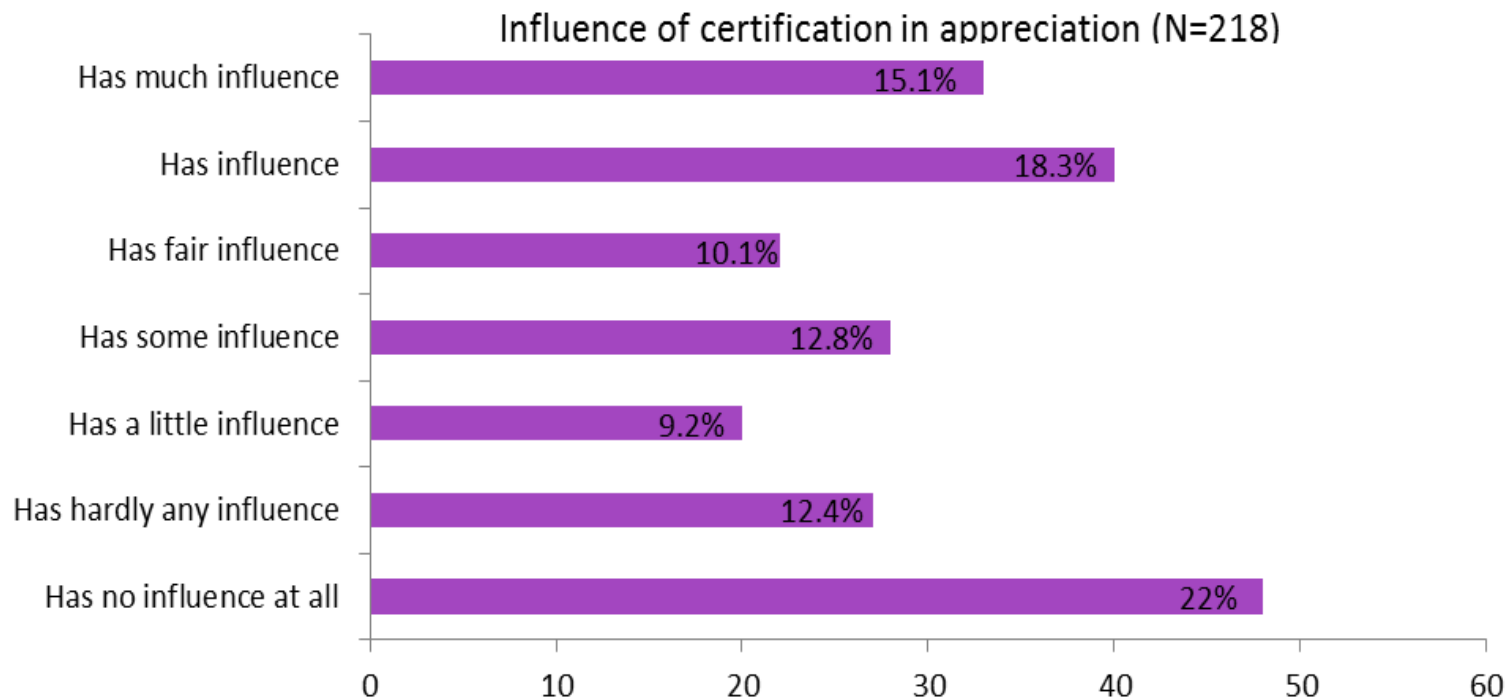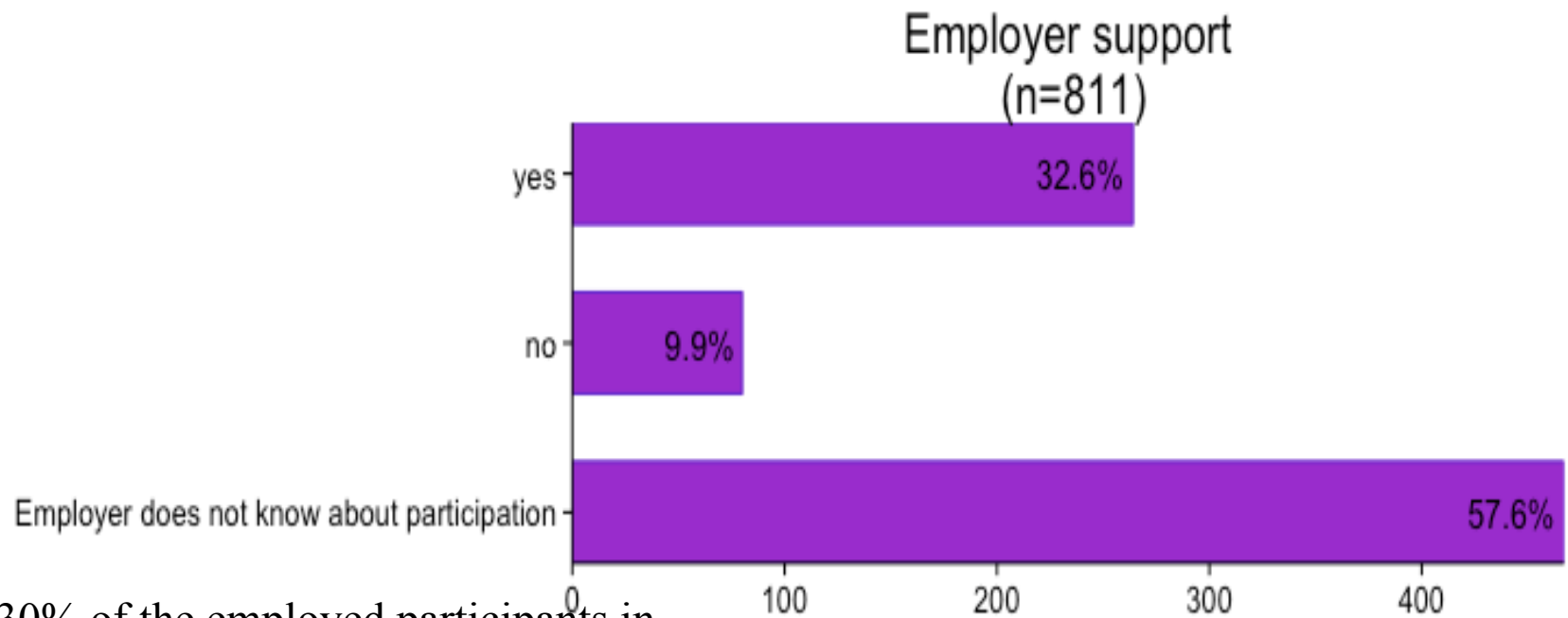
Around 30% of the employed participants in MOOCs report that there is some form of support by their employer to professional development in general

Only the 21% of fresh entry-level position are supported by employers, while approximately 47 % of the managers are supported.

Results. Economic profile and employer appreciation

Type of support (N=264)

Cost	8.3%
Time	20.1%
Encouragement	79.9%

Results. Lifelong learning profile

Number of MOOCs enrolled in the past
(N=1233)

Most participants have enrolled in the past in 3 – 5 open online courses.

Results. Lifelong learning profile

Number of completed MOOCs (n=998)
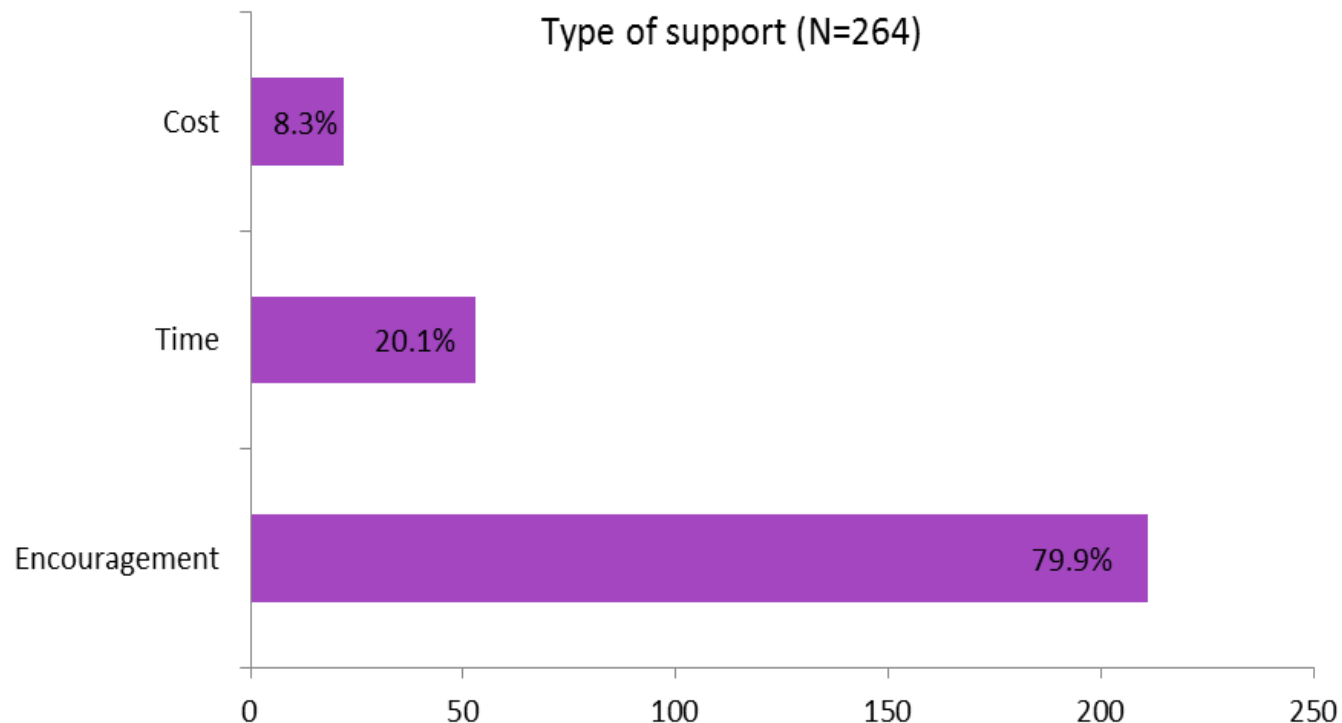
Approximately 50% of the participants have completed between 1 – 3 open
online courses before.
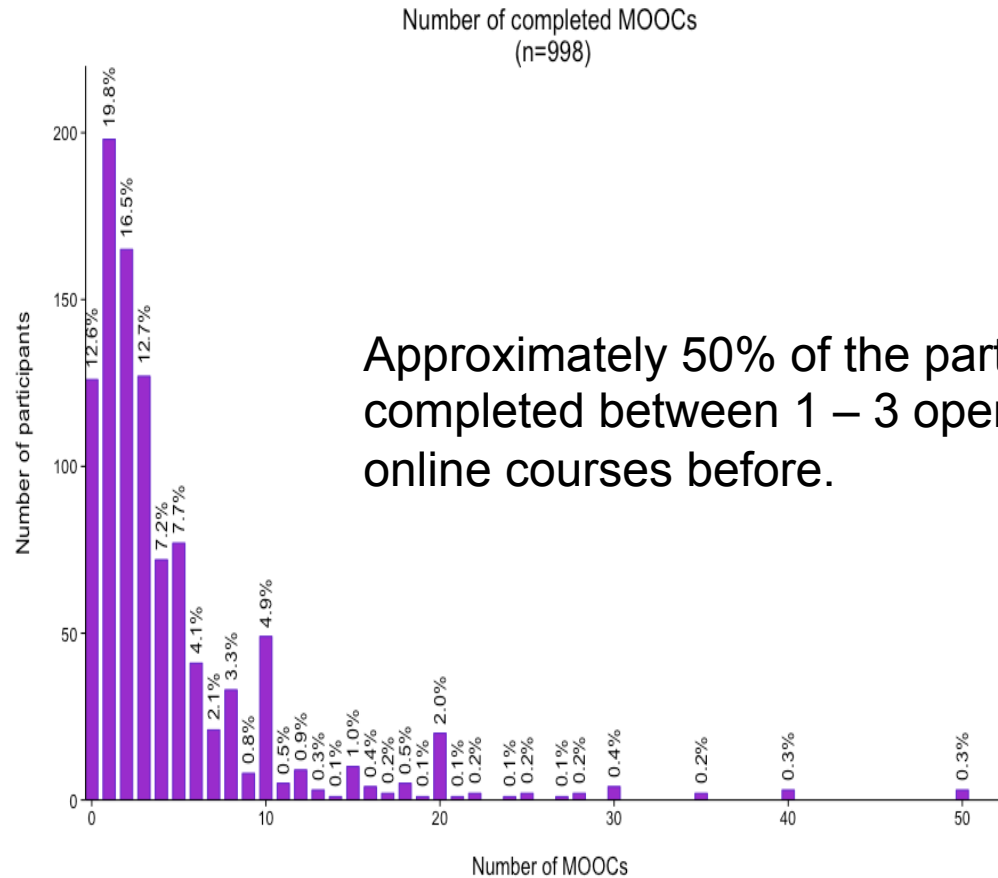
Discussion

MOOC A	MOOC B	MOOC C
Female	Male	Female
44 years	40 years	39 years
High presence of employed for wages	High presence of self-employed (but still predominance of employed for wages)	High variety (but still predominance of employed for wages)
High employer support	Medium employer support	Lower employer support

Thank you for your attention!

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