

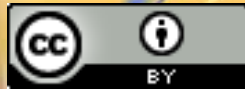
# Opening up Education: true and false promises of MOOCs

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***Academia Europaea &  
Wenner-Gren Foundations  
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1 Stockholm, May 21-23, 2015***





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**+ Epilogue 'The Mind of the Universe':  
Why and How**



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# ROOTS of the MOOCs



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# Twofold: major developments ...

## ... (1) towards *Open Education*

**back in 19<sup>th</sup> century:** University of London (correspondence education) and mid 20<sup>th</sup> century: UNISA (distance education)

**breakthrough:** OU UK ( $\pm$ 1970), followed up in many countries around the world (leading to mega universities ...)

**'classical' openness:** (1) open entry, (2) freedom of time, (3) place, and (4) pace, (5) open programming, and (6) open to all people and target groups (but diversity in profiles)

**since 2001** (MIT) flanked by **digital openness** with the concept of OER (2002/UNESCO), part of a larger family of 'open'

**CHANGING HEd WORLD SIGNIFICANTLY (DISRUPTIVE?):**

new players besides traditional actors:  
*profiling, scoping, blending, merging*



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# Twofold: major developments ...

## ... (2) towards *Online Education*

*initiated in the 1950s* with new technologies and media: radio, television, audio and video, computer animations/simulations, CBL, ITS, automated testing, ...

but this *never became mainstream* (viewed as an additive)  
*transformative in the 1990s* with the advent of the *Internet*  
with new powerful forms of *communication and interaction*  
acting in a *digital era* with expanding *online* learning services,  
*virtual* learning activities, and *digital* learning materials,  
offering high *potential for the people* of this planet *to learn*

**CHANGING THE WORLD SIGNIFICANTLY (DISRUPTIVE?):**

new players besides traditional actors:  
*profiling, scoping, blending, merging*



# Massive *Open Online Courses* ... ... including *additional ingredients*

*in 2011* a strong and ***sensational push*** came in when the first MOOCs were offered that were truly '***massive***' initially ***Ivy League*** universities, venture capital, strong attention of media and politicians, resulting in ***very high expectations*** MOOCs are '***courses***' often based on ***video*** lectures plus facilitated ***interaction***, learning communities, automated ***self-testing***, peer review, and ***certificates*** of different kind '***normalization***' of the movement has started by the decreasing exclusiveness and 'dilution' effect

***CHANGING HEd WORLD SIGNIFICANTLY (DISRUPTIVE?):***  
new players besides traditional actors:  
***profiling, scoping, blending, merging***



# Overarching Reference Model for 'Open' and 'Online'



# Such a model is indispensable ...

*lack* of a clear and solid *description* of what ‘open education’ and ‘online education’ stand for and ... *Wikipedia* provides *no help in the ‘jungle’* but ... both terms are very *frequently used* so ... *no certainty* about a common *understanding* we actually refer to *catch-all concepts* this *implies the need* for an analytical and practical *reference model* overarching ‘Open’ *and* ‘Online’





# 5COE Model

stands for '***Five Components for Open Education***'

contains 3 components on the ***Supply side***  
and 2 components on the ***Demand side***

required to ***fully specify 'Open Education'*** in a  
broad scope, incorporating also its  
***online instrumentation***

Mulder, F. (2015), Open(ing up) Education for All ... Boosted by MOOCs?  
In: Bonk, C.J. et al (Eds.), *MOOCs and Open Education Around the World*.  
<http://routledge-ny.com/books/details/9781138807419/> (June 2015)





# 5COE Model: Supply side

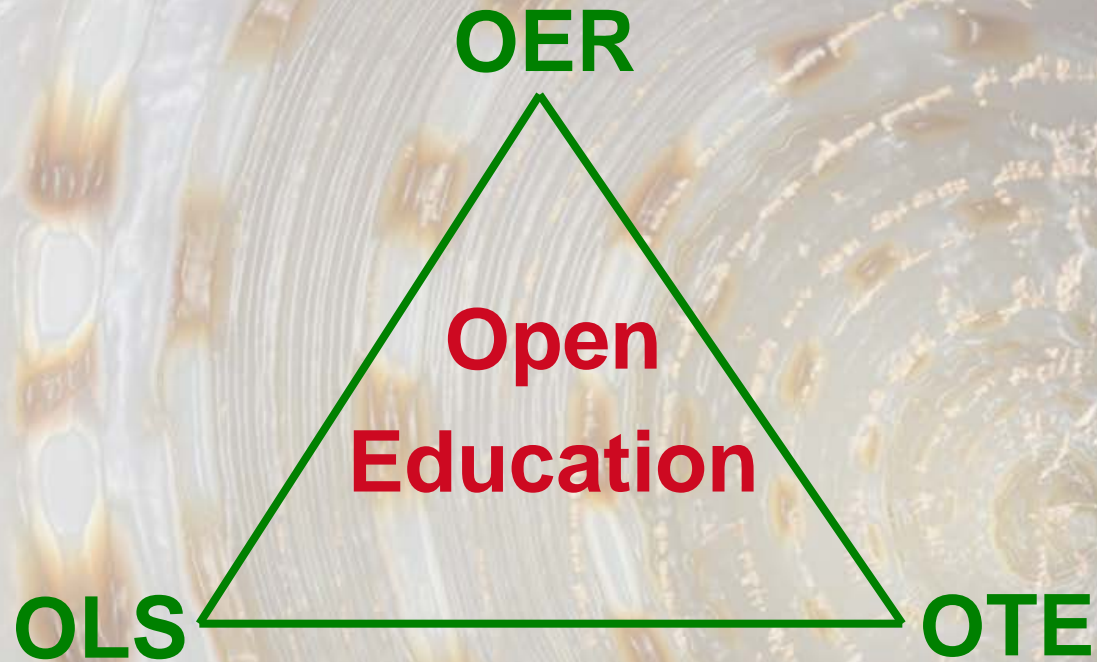


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# Open Education (*Supply*)



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# Open Educational Resources (OER)

“OER are teaching, learning, and research resources that reside in the *public domain* or have been released under an intellectual property *license* that permits their *free use* and *re-purposing* by others.

Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.”

*(Hewlett Foundation)*



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# Open Learning Services (OLS)

Complementary to OER, *free or to be paid*,  
and including a variety of  
*online* and *virtual facilities* for:  
tutoring, advice, meetings, communities,  
teamwork, presentations, testing,  
examination, consulting sources,  
internet navigation, etcetera ...

# Open Teaching Efforts (OTE)

Complementary to OER and OLS, *to be paid for*, referring to the *human contribution* to the education provided, the efforts of *teachers, instructors, trainers, developers, and support staff* in their various roles, in a professional, *open, and flexible* learning environment and culture.



# 5COE Model: + Demand side

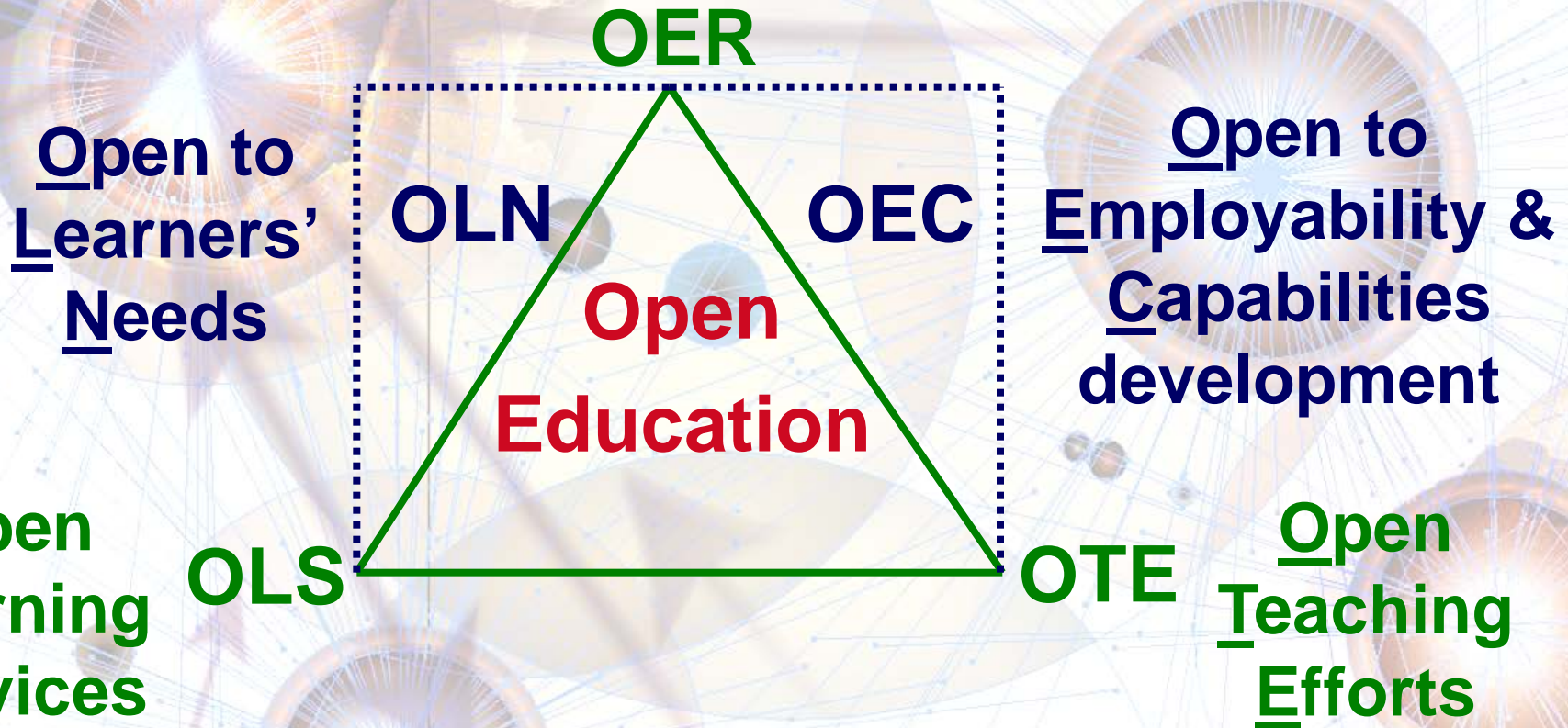


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# Open Education *(plus Demand)*





# Open to Learners' Needs (OLN)

*Learners expect* affordable, 'do-able', good quality, interesting, beneficial education, *but also the 'classical' openness (OUs):* freedom of time / pace / place, open entry, open programming, *and provisions for lifelong learning,* credentialing, smooth switching between formal and informal learning, etcetera ...



# Open to Employability & Capabilities development (OEC)

***‘Society’ expects education to suit the changing society and labour market, the decisive role of knowledge and innovation, and the influence of globalization, but also to offer scope for new skills, critical thinking, ethics, creativity, personal growth, and citizenship.***



# Opening up Education

as shown  
in 5COE





# Opening up Education (EU Sept 2013) *well-chosen umbrella*

*Opening up Education (OuE)* seems a subtle change to *Open Education (OE)* but is pretty relevant ...

**OuE underlines the dynamics and the process**  
(there is *no fixed model* for education over time)

**OuE can adequately accommodate diversity**  
(there is *no single ideal model* for education)

**Brings in Nuance**





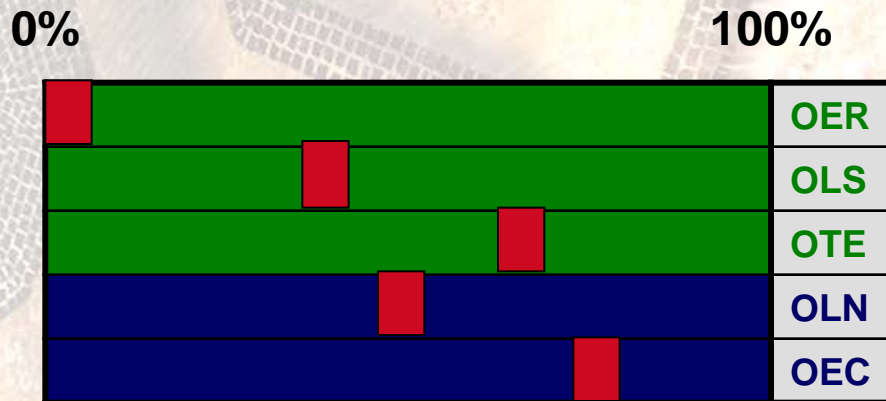
# OuE in a 5COE 'Profile print'



Example nr. 1  
*Institutional profile  
(fully converted to OER)*



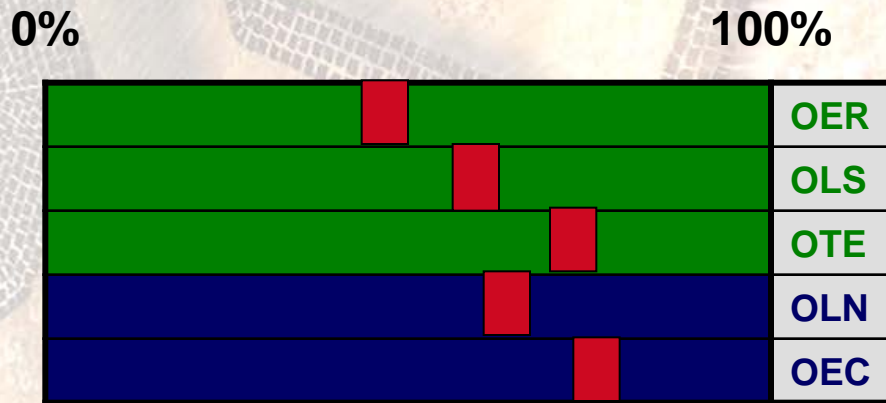
# OuE in a 5COE 'Profile print'



Example nr. 2  
*Institutional profile*  
*(more traditional)*



# OuE in a 5COE 'Profile print'



Example nr. 3  
*Institutional profile  
(as 2, but in Future)*



# OuE in a 5COE 'Profile print'



Example nr. 4  
*Typical xMOOC*



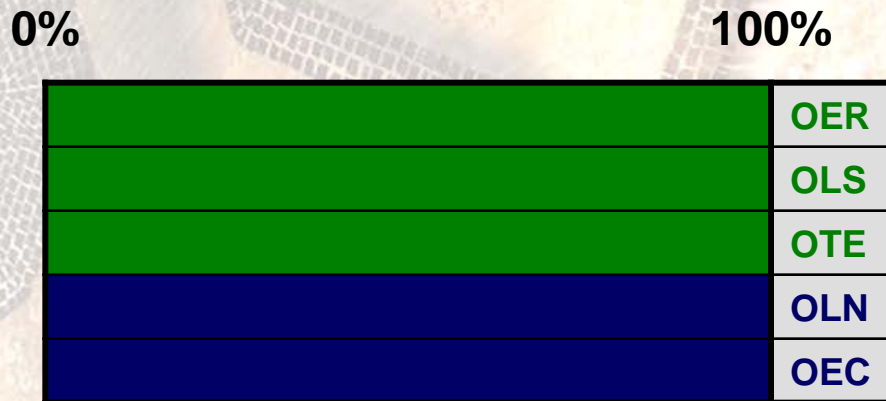
# OuE in a 5COE 'Profile print'



Example nr. 5  
*Typical cMOOC*



# OuE in a 5COE 'Profile print'

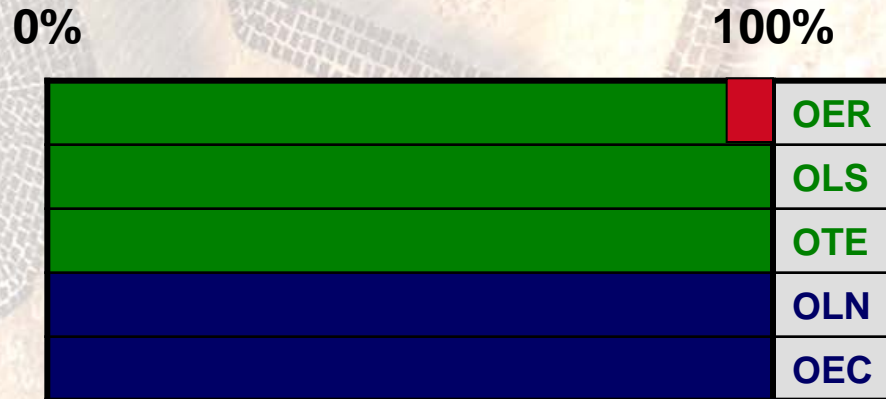


**Not recommended**  
***to have all sliders***  
***extreme left or***  
***extreme right***

**... with an exception for OER ...**



# No-REGRET with OER ...



Indeed **100% OER** can be **beneficial** and **proper** in all cases regardless of:

- > **institutional identity**
- > **learning philosophy**
- > **educational sector**
- > **political context**

and ... for **ALL LEARNERS!**



# Are MOOCs instrumental to open up education?



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# MOOCs drivers ...

Reputational gain and *marketing potential*

Start-up new business, *generating revenue*

*Innovating* university education *in a niche*

*Modernizing* university education *in synergy*

Responding to the *demands of learners and societies*



1. Opening up Education (to Learners)

2. Serving Values for Education (in Societies)



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# Two requirements (regarding learners / learning)

- All unnecessary **barriers to learning** should be **removed**, both at the **entry into learning** and along the **learning path**
- Learners should be facilitated with appropriate **incentives** to make **progress** and to **succeed** in their **learning efforts**

Mulder, F., & Jansen, D. (2015), MOOCs for Opening up Education and the OpenupEd initiative. In: Bonk, C.J. et al (Eds.), *MOOCs and Open Education Around the World*. <http://routledge-ny.com/books/details/9781138807419/>

(June 2015)





# Barriers to learning ...

## BARRIER

## Could MOOCs *remove* the barrier?

- |                               |                                     |
|-------------------------------|-------------------------------------|
| 1 <b>Economic</b>             | YES, they do                        |
| 2 <b>Entry requirements</b>   | YES, they do (formally)             |
| 3 <b>Location</b>             | YES, they do (but not for exams)    |
| 4 <b>Scheduling</b>           | NO (generally), but YES is possible |
| 5 <b>Network connectivity</b> | NO (external factor)                |
| 6 <b>Digital literacy</b>     | YES (by offering a dedicated MOOC)  |



# Barriers to learning, continued ...

## BARRIER

## Could MOOCs *remove* the barrier?

- |    |                                |   |
|----|--------------------------------|---|
| 7  | <b>Accessibility over time</b> | PROBLEMATIC, but YES is possible                |
| 8  | <b>Accessibility to all</b>    | PROBLEMATIC<br>(language, sanctioned countries) |
| 9  | <b>Cultural</b>                | PROBLEMATIC<br>(dominant 'Western' perspective) |
| 10 | <b>Legal</b>                   | YES, but ONLY with open licensing               |
| 11 | <b>Quality</b>                 | YES, to some EXTENT (no systems guarantee!)     |

# Incentives for progress & success ...

## INCENTIVE Could MOOCs offer the incentive?

**Satisfaction** YES, but it's a constant CHALLENGE  
(motivation, lay-out/text-graphics-video,  
learning environment, interaction)

**Completion** YES, but ONLY with DEDICATION to:  
online pedagogics, independent  
learning, context sensitivity, small units

**Recognition** YES, but PRIMARILY with the OPTION  
of formal credit & credit transfer (far  
from reality)



# Conclusion: mixed overall picture ...

## Remove barriers

Yes

4

5

Yes, but ...

2

5

No, but ...

1

--

Problematic

3

--

No

1

1 (connectivity)

## Offer incentives

Yes

--

2

Yes, but ...

3

1 (satisfaction)

# Epilogue

## *'The Mind of the Universe'*

- Why and How -





# The initiation ...

**VPRO** (Dutch broadcasting Company) preparing for an **open source TV** series exploring the **frontiers of knowledge**

**10 episodes** hosted by **Robbert Dijkgraaf** (former President Royal NL Academy of Arts and Sciences; currently Director IAS@Princeton), including in each episode different **eminent scholars from** diverse parts of the **world**

**The episodes:** *the explorer, maker, dreamer, thinker, conqueror, seducer, creator, seer, sorcerer, connector*

To be broadcasted by **Jan. 2017**, **funding** for NL **secured**

# Scaling up, widening, deepening, ...

**globalizing** the initiative to **variations of the TV program** for other **countries** / regions (use another language, replace the host, include other video clips, add other episodes, ...)

**multiplying** the TV content with an expanding **open digital content base** generated by a **community** of engaged and competent contributors (**Global North** and **Global South**)

**providing** open and active **learning experiences (LEX)** of great **diversity** through all available content (offering **multiple** small or big **'courses'**: different target groups, themes, levels, languages; and **built** on the **body of thought** of a wide range of **prominent researchers**)



# Why and How?

It is a truly **global** initiative in the **'World of Open'**: the message on the clear **benefits for learners and societies** should be experienced by a **large worldwide audience**

It will **provide access** for lots of **people, wheresoever and whosoever**, interested in what **science and technology** can offer for the **Global North** and the **Global South** (in terms of perspectives, solutions, and dilemmas)

It will **utilize a global collaboration** between eminent **scholars** and other academics, **creative** TV, video, and graphic experts, **educational** specialists, and others to become infused, and will **reach a worldwide community** engaged as consumers or as producers



# Way forward ...

Generating a growing **Network of People & Content**

on the principles of **Sharing & Openness**

Engaging **eminent Scholars** from the **Globe**

**Partnering** with relevant (**global**) **Organizations**

(**i**) involving their **Expertise & Networks**

or (**ii**) providing **Financial Support**

or (**iii**) in a role of **co-Developer**

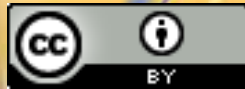
*“We make our world significant by the courage of our questions and the depth of our answers”*

**(Carl Sagan)**





**Thanks for  
your attention!**  
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# Open Education in Wikipedia (May 2013)

***“Open education is a collective term that refers to educational organizations that seek to eliminate barriers to entry. Such institutions, for example, would not have academic admission requirements. Such universities include Open University in Britain and Athabasca University in Canada. Such programs are commonly distance learning programs like e-learning, mooc and opencourseware, but not necessarily.”***





# Open Education in Wikipedia (May 2015)

**“Open education** is a collective term to describe institutional practices and programmatic initiatives that **broaden access** to the learning and training traditionally offered through formal education systems. The qualifier “open” of open education refers to the **elimination of barriers** that can preclude both **opportunities and recognition for participation in institution-based learning**. One aspect of openness in or “opening up” education is the development and adoption of **open educational resources**.

**Institutional practices that seek to eliminate barriers to entry, for example, would not have academic admission requirements. Such universities include Open University in Britain and Athabasca University in Canada. Such programs are commonly distance learning programs like e-learning, mooc and opencourseware, but not necessarily. Where many e-learning programs are free to follow, the costs of acquiring a certification may be a barrier, many open education institutes offer free certification schemes accredited by organisations like UKAS in the UK and ANAB in the USA where others offer a badge.”**

