



# Open education

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The Open University

Walton Hall, Milton Keynes

MK7 6AA

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# Open education

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## Course overview

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Welcome to the free OpenLearn course on open education. This course runs over seven weeks and is focused around the subject of openness in education. The course is an adapted extract from the Open University Masters-level course

[H817 \*Openness and innovation in elearning\*](#).

This is the 'stand alone' version of the course, so you will be studying it independently of other students. This means others may not be studying at the same time, so the interaction found through blogs and forums may not be relevant, and is not monitored by the course team.

The course operates an activity-based pedagogy, so within each week there will be approximately four activities: in these you will typically be expected to read some material (or view some other media), perform an activity and create a short blog post. It is through the process of sharing the outputs of these activities through blogs and forums, and reflecting on the experience of other learners that learning occurs for much of this course. We will look at pedagogy associated with open learning in Week 5.

The course is set out week by week as many learners prefer to structure their study this way and, particularly for an open course, it helps to coordinate discussion. But it is not essential that you study it in this manner. If your other commitments mean you have to work ahead sometimes or need to catch up, this is fine – there is a lot of flexibility built into the structure of the course. The course is aimed at a postgraduate, Masters level, with the expectation of approximately 16 hours of study each week. However, the informal learners may choose to only select some of the activities in any given week.

The topics you will study in the coming weeks are:

- Week 1: Openness in education
- Week 2: Open education resources
- Week 3: Moving beyond OER
- Week 4: MOOCs
- Week 5: Pedagogy in open learning
- Week 6: Operating in an open world
- Week 7: Conclusion

## Learning outcomes

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After studying this course, you will:

- understand the issues in open education
- be able to critically appraise the evidence around open education
- have experienced what it is like to participate in an open course.

# 1 Openness in education

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## 1.1 Week 1 Introduction

As the course is about openness in education, in this first week you will explore some of the different interpretations of openness and consider priorities for research in this area. The aim of this week is to familiarise you with some of the concepts and to get you thinking about some of the issues involved. We will then explore these in more detail in the coming weeks.

## What to expect this week

This free OpenLearn course is looking at openness in education and all the different aspects of that term.

I often say that The Open University struck it lucky with its name. Forty years after its founding, openness is more of a relevant topic in education than it was then. If you were starting a new university now, then Open would be a good choice. But what is meant by open education has changed considerably, particularly since the advent of the internet and it is these new interpretations that we will be looking at.

They include:

- Open educational resources
- Open licences
- Open courses or MOOCs
- Pedagogy for open education
- Literacies and technology for openness.

## A word or two about studying an open course

To get the most from this course we recommend you enrol so that you can actively participate in the forums and activities.

While this course is unsupported, we hope that you may find support from your peers via the forums, Twitter or blogs.

We're experimenting with a blog aggregator; this may not work for all blogs, and it isn't essential for your blog to appear here. But it will hopefully give a flavour of blog postings.

The course is structured around activities that are reasonably independent of one another. This means you don't have to do all of them, although it will of course be better if you do. The allocated time for this level of study is about 16 hours a week, but informal learners in particular may find this level of commitment difficult, so may want to choose one or two activities a week.

I think the key to an open course is to enjoy it and make good network connections, so I hope you find it useful, and enjoyable.

## 1.2 Week 1 Learning outcomes

After studying this week, you should:

- understand the areas of debate and priorities in the changing area of open education
- be able to make an initial consideration of evidence to support priorities in open learning research
- be able to make initial readings in open education literature
- be able to create a representation of openness in education.

## 1.3 The open course environment

During this course we will look at open courses in some detail, as well as the technology used to support open learning. For now, we will set out the technologies used in this course which, since the course needs to be open to all, are open technologies. You can familiarise yourself with these and do any setup required before the course starts.

### OpenLearn

The Open University's OpenLearn website is a version of the VLE software Moodle, so may be familiar to many. Created as part of the [OpenLearn](#) project, it houses open educational content, which users are free to use and to form communities around.

### Blogs

Many of the activities will require you to post your answer or reflections on your own blog. If you do not have one already, then you need to set up a blog, using a free service such as [wordpress.com](#), [blogger.com](#), [tumblr](#), and so on. There are often options to buy extensions or upgrades to these services, but for the purposes of this course, the free options are fine. If you have an existing blog, you are free to carry on using that (although you may wish to set up a distinct blog to keep the course material separate).

If you prefer to keep this blog private, then, for the purposes of this course, set up a separate one using one of the free services mentioned above.

### OU Live

You will be using the OU Live system for this open course. OU Live is powered by Blackboard Collaborate and allows live chat and sharing of materials. Although you can't access the session until one hour before the official start time, you can test your setup and adjust your audio by following the guidance in the Getting Started documentation.

Recordings will be made of all OU Live events so that if you miss a session you can still view it later. The recordings will be uploaded to the OU Live recordings section 48 hours after an event.

## Twitter

As well as blogs and the forums in the OpenLearn environment, there will be discussion on Twitter for the course. This is not compulsory, but you will find it a useful way to find and connect with other learners. If you post anything on Twitter that is relevant to the course, end it with the hashtag #h817open, so others can find it and we can gather together the conversation around the course. For example, a tweet about the course may go something like: 'Just enrolled for the open course at the OU, looking forward to discussing with others. #h817open'.

### Activity 1: Getting to know the open environment

**Timing:** 4 hours

Familiarise yourself with the open environment we are using for this open course by doing the following:

- 1 Look at the content of other units in the OpenLearn environment to get a feel for the navigation and the overall environment. You can explore any topic from the [OpenLearn home page](#).
- 2 If you have not already done so, set up a blog, as mentioned above.
- 3 Post an introductory post to your blog, in which you explain why you're studying this course and what your background is. Remember to tag it with #h817open (an explanation about tags can be found on [Wikipedia](#)).

## 1.4 Flavours of openness

The Open University (OU) is arguably in a unique position to consider the nature of what 'open' means in higher education. When the OU was founded it defined 'open' as meaning open access, which was realised through not setting any formal educational qualifications for entry, and using a part-time, distance education model. But with the advent of the internet and digital technologies, what it means to be 'open' with regards to education has begun to change. In this week you will explore these different interpretations of openness, to set the scene for the remainder of the course.

### Activity 2: Open education reading

**Timing:** 1 hour

- Read Weller (2012), [The openness–creativity cycle in education](#).
- View Anderson (2009), [Alt-C Keynote](#).

### Activity 3: Representing open education

**Timing:** 4–6 hours

The two resources you've just read and viewed provide views on different aspects of what openness means in higher education.



- Create a visual representation that defines openness in education by drawing on some of the concepts listed in Weller and Anderson (although it is not necessary to include all of them). You can use PowerPoint, an online tool such as Prezi or any other tool of your choice. The key is to provide a representation that draws together the key concepts of openness as you perceive them. Save it in a form that is shareable, e.g. an image or an embeddable file from elsewhere (such as Flickr, Prezi, etc.).
- Put your representation in a blog post, with a brief description of it.

#### Note

If you have difficulty with visual representations, then you can alternatively create a representation in another medium, including text lists, or audio.

## 1.5 Priorities of openness

Over the next two weeks you will look at one of the most prevalent, and successful, interpretations of what open education means, namely open education resources (OER). This is the process whereby universities, institutions and individuals make their learning content freely available. These can be whole courses, parts of a course, lecture notes, video lectures and so on. The key characteristics are that these learning materials are free to use and have a copyright licence that encourages reuse. We will be looking at OER and different types of licence in more detail but for now it is sufficient to think of OER as freely available learning content from universities or other providers.

Much of the research around open education has been derived from the OER movement. A number of key questions have arisen, which can apply to most aspects of open education, including:

- **Sustainability** – many OER projects have received initial funding from organisations such as the Hewlett Foundation. How sustainable are they after the funding stops?
- **Pedagogy** – are different ways of teaching required to make effective use of open education?
- **Barriers to uptake** – what prevents individuals or institutions from either using or engaging with open education?
- **Learner support** – how can learners best be supported in these open models?
- **Technology** – what technologies are best suited to open approaches?
- **Quality** – how can we assure the quality of open educational content?
- **Rights** – how do we protect the intellectual property of individuals while encouraging wide distribution?

During this course you will engage with these questions for different aspects of open education.

### Activity 4: Identifying priorities for research

**Timing:** 3–4 hours

Imagine you are advising a funding organisation that wishes to promote activity and research in the area of open education.

- Set out the three main priorities they should address, explaining each one and providing a justification for your list.

In this activity you are just expected to start thinking about these issues, and to use your own experience and intuition; you are not expected to research them in depth. You will build on this work during next week, and also for the assignment.

After creating your list of priorities, consider the following questions, which will give you some ideas as we move into the second week of the course:

- 1 Do you feel some issues would be more easily solved than others?
- 2 What would be effective ways to address some of the priorities listed?

## 1.6 Week 1 References

Anderson, T. (2009) *Alt-C Keynote* [online]. Available at <http://www.slideshare.net/terrya/terry-anderson-alt-c-final> (accessed 2 November 2012).

Weller, M. (2012) 'The openness–creativity cycle in education', Special issue on Open Educational Resources, *JIME*, Spring 2012 [online]. Available at <http://jime.open.ac.uk/jime/article/view/2012-02> (accessed 2 November 2012).

## 2 Open education resources

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### 2.1 Week 2 Introduction

This week you will be looking at arguably the most prominent manifestation of open education in recent years, that of open education resources (OER).

### What to expect this week

This week we will build on some of the initial thinking we did last week on issues in open education, and look particularly at open educational resources in more detail.

OERs, as they're called, are probably the most mature and visible of the new flavours of openness. This week you will look at a bit of their history, consider the issues they face, and then explore some OER collections in detail as you try to construct a course outline.

By the end of the week you should have a good understanding of OERs, and an appreciation for how they might be used in practice.

## 2.2 Week 2 Learning outcomes

After studying this week, you should be able to:

- identify the key issues for open education resources
- analyse OER literature to identify issues
- specify a course design using OER
- review the learning object approach.

## 2.3 Learning objects

The OER movement (although even calling it a movement can be contentious) grew out of earlier work around 'learning objects'. As elearning moved into the mainstream (around the year 2000), educators and institutions found they were creating often expensive learning resources from scratch. There was a relentless logic that, with the digitisation of content, these resources could be shared between institutions.

In the following activity you are asked to read an article by Stephen Downes, in which he sets out the case for learning objects and provides a comprehensive analysis of the subject.

### Activity 5: The case for learning objects

Timing: 1 hour

- Read Downes (2001), [Learning objects: resources for distance education worldwide](#).

#### Comment

**Note:** Downes goes into detail on many aspects that are not necessary for this course. You do not need to read the article in detail – your aim is to gain an understanding of what learning objects were and why they were seen as important.

The vision of a large pool of shareable resources never quite materialised, despite the economic and pedagogic benefits they may carry. A number of criticisms have been raised regarding learning objects. We would now like you to take a look at some of these criticisms.

### Activity 6: Criticisms of learning objects

Timing: 1 hour

Three criticisms of learning objects are given below: you should read/watch at least one of these:

- David Wiley sets out what he terms the '[reusability paradox](#)'.
- Norman Friesen raises three objections to learning objects in this paper: [Three objections to learning objects and e-learning standards](#).

- In this 2009 [video](#) [Transcript] Brian Lamb describes his experience with learning objects, which addresses many of the reasons why they didn't realise the aims that Downes and others envisaged for them. Brian Lamb also explains some of the problems he encountered.

#### Discussion

Part of the problem of learning objects was that it often seemed alien to everyday practice, so that getting educators to share their content in learning object repositories proved to be a barrier. Unlike sharing research findings in published journals, or sharing teaching resources informally within an institution, there was no real incentive or established practice for sharing teaching material on this scale. And, as Brian Lamb points out, there was a tendency to over-engineer the systems required, with specific standards that had a language of their own.

You might reflect here on whether you have, or would, share teaching resources using the learning object approach. What do you think would be the main issues for educators and teachers?

The work on learning objects led to MIT's OpenCourseware project, which is commonly seen as the start of OER.

## 2.4 OER issues

In 2001 the OER movement began when MIT announced its [OpenCourseWare initiative](#). MIT's goal was to make all the learning materials used by their 1800 courses available via the internet, where the resources could be used and repurposed as desired by others, without charge.

At the time this was revolutionary, since much of the accepted wisdom was that content was a key asset (the adage was that 'content is king') and it couldn't be given away. The OpenCourseWare initiative also addressed some of the issues that were arising with learning objects, since it took existing teaching content and simply released it.

In reality, it wasn't that simple to release the teaching content, since the material often required reversioning, rights clearance, or some form of adaptation. But nevertheless the initiative didn't rely on individual educators engaging with complicated standards and adopting a new set of practices. Instead, OpenCourseWare built on existing practice by taking existing course materials and releasing these, rather than developing bespoke learning objects.

Following on from the MIT announcement, an OER movement began, with many other universities following suit. In 2006 The Open University launched its own OER initiative, releasing distance education material via the OpenLearn project.

In the next activity you will look at some of these OER projects in more detail.

### Activity 7: Exploring OER issues

**Timing:** 5 hours

Last week you created a list of three priorities you determined for open education. This activity builds on that work, but is based on further research in the area of OER.

- Read three articles of your choice from a [suggested OER reading list](#) on Cloudworks. (Some are quite lengthy reports so you may wish to read just parts of these, depending on time.)
- Based on your reading, write a blog post of around 500 words, setting out what you perceive as the three key issues in OER, and how these are being addressed. For instance, if you feel that accreditation of informal learning is a key issue then you should state why this is significant and link to some of the ways it is being addressed; for example through [Mozilla badges](#) or the [Peer 2 Peer University](#).

## 2.5 Exploring OER

OER are commonly gathered together in repositories. These can be the output of one project or several projects gathered together. For example, the OU's OpenLearn project gathers all of the OU's open education material. The Ariadne Harvester project acts as a search engine across many repositories.

In the next activity you will explore the type of content found in OER repositories.

### Activity 8: An OER course

**Timing:** 8 hours

#### Scenario

Imagine you are constructing a course in digital skills for an identified group of learners (e.g. undergraduates, new employees, teachers, mature learners, military personnel, etc.). It is a short, online course aimed at providing these learners with a set of resources for developing 'digital skills'. It runs for five weeks, with a different subject each week, accounting for about six hours study per week.

- Devise a broad outline of the topics to be covered every week. Don't deliberate too much on this; it should be a coherent set of topics but you don't actually have to deliver it.
- Now see how much of your desired content could be accommodated by using OER repositories. Search the following repositories and make a quick evaluation for each week of your course of the type of content that is available.
  - [Ariadne](#)
  - [Jorum](#)
  - [Merlot](#)
  - [MIT](#)
  - [OpenLearn](#)
  - [Rice Connexions](#)
- You can use the following template for your evaluation. In the final column judge whether the resources are good, medium or bad in terms of suiting your needs.

Week	Topic	Resources	Suitability (G/M/B)
1			
2			
3			
4			
5			

Alternatively, you can input your evaluation into the form below.

## Week 1

Topic:

Resources:

Suitability (G/M/B):

## Week 2

Topic:

Resources:

Suitability (G/M/B):

## Week 3

Topic:

Resources:

Suitability (G/M/B):

## Week 4

Topic:

Resources:

Suitability (G/M/B):

## Week 5

Topic:

Resources:

Suitability (G/M/B):

- Write a blog post, using your evaluation as the basis. Reflect upon whether the use of OER caused you to change what you wanted to teach, and what time saving (if any) would be gained by using OER.
- Compare your evaluation with that of other students and comment in the forum on any differences.

### A note on accessibility of OER repositories

Repositories often contain material from a wide variety of authors, and repositories take different approaches to ensuring the accessibility of these resources. Some make accessibility a requirement, while others offer guidelines. The accessibility of resources drawn from a wide range of authors is another factor in the use of OER that you should consider.

John Richardson has drawn together the accessibility policies of each of the repositories listed above in *Accessibility of Open Educational Resources*.

## 2.6 Week 2 References

Downes, S. (2001) 'Learning objects: resources for distance education worldwide', *IRRODL*, vol. 2, no. 1 [online], <http://www.irrodl.org/index.php/irrodl/article/view/32/378> (accessed 6 November 2012).

Friesen, N. (2003) 'Three objections to learning objects and e-learning standards' in McGreal, R. (ed.) (2004) *Online Education Using Learning Objects*, London, Routledge, pp. 59–70. Draft available online at <http://www.learningspaces.org/papers/objections.html> (accessed 6 November 2012).

Lamb, B. (2009) *Who the hell is Brian Lamb?* (video), Barry Dahl blog, 26 October [online], <http://barrydahl.com/2009/10/26/who-the-hell-is-brian-lamb/> (accessed 6 November 2012).

Wiley, D. (2004) *The Reusability Paradox*, Connexions [online], <http://cnx.org/content/m11898/1.18/> (accessed 6 November 2012).

## 3 Moving beyond OER

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### 3.1 Week 3 Introduction

This week you will continue to look at OER and, in particular, the issues of rights and sustainability. The overriding goal of OER is reuse – if no one reuses a resource then it may as well be closed.

### What to expect this week

Welcome to Week 3 of the open course on open education.

Having looked at OERs last week, this week you will be addressing some related issues. The first is around the nature of reuse. It is reuse that really defines OERs, that is the whole point of them, to be taken and reused by others.

There is often confusion around whether online resources, such as a YouTube video, can be reused, and this is where licences are important, so this week you will consider Creative Commons Licences.

You will also look at the issue of sustainability and OERs; that is, are they viable in the long term as an approach for universities?

And lastly you will look at what we mean by an open educational resource. Is it just material released through universities? Or is it any resource created that can be used in education?

Building on Week 2, by the end of this week you should have a clear understanding of OERs and reuse.

## 3.2 Week 3 Learning outcomes

After studying this week, you should understand:

- the use of appropriate licences
- the sustainability of OER
- different approaches to OER
- the evidence for approaches to sustainability.

## 3.3 What does reuse mean?

David Wiley (2007) has been one of the key thinkers and drivers in open content, and he proposes the [4Rs of Reuse](#):

- **Reuse** – the right to reuse the content in its unaltered/verbatim form (e.g. make a backup copy of the content)
- **Revise** – the right to adapt, adjust, modify or alter the content itself (e.g. translate the content into another language)
- **Remix** – the right to combine the original or revised content with other content to create something new (e.g. incorporate the content into a mashup)
- **Redistribute** – the right to share copies of the original content, your revisions or your remixes with others (e.g. give a copy of the content to a friend).

Wiley makes the argument that the 'open' in 'open content' relates to licensing. It is about what the provider permits others to do with the content. It isn't necessary for all 4Rs to be permitted, but the degree to which they are restricted makes a resource less open.

Many resources you encounter online have no rights information associated with them (think of most YouTube clips for example). This can place the educator in an awkward position – did the uploader have permission to use that video? If I use it in an educational context am I breaking copyright?

## Creative Commons Licence

Most OER projects and repositories deliberately want to encourage reuse so they adopt specific licences to promote this. The most common licence is the Creative Commons licence, although other licences exist.

The Creative Commons licence has a number of 'flavours', so the rights owner can choose whether or not to place a set of restrictions on the reuse of their material and what



those restrictions should be. These are explained on the [Creative Commons website](#). The following Slideshare presentation also explains the different rights and the logic behind them:

- Yann Geffrotin (2007), [Creative Commons: Spectrum of Rights](#).

Alternatively, this video, [Copyright and Creative Commons](#), also explains Creative Commons and has a transcript available.

For its OpenLearn project the OU selected a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 Licence. There are three elements to this licence:

- **Attribution** – anyone reusing this content needs to attribute the OU as the original creators. They can't pass it off as their own content, for example.
- **Non-commercial** – people are free to reuse the content, as long as it is not for commercial purposes. So they can't take OpenLearn material, repackage it and sell it, for example.
- **Share Alike** – anyone taking your material and adapting it must share it under a similar licence.

These are actually fairly easy conditions to meet for most cases, and the key to the Creative Commons licence is that it assumes reuse as the default. So the user (or reuser) needn't ask for permission to reuse the content if they meet these conditions. This doesn't mean, however, that other forms of reuse are prohibited, just that they do need explicit permission.

The Non-Commercial licence is one in particular that causes some anxiety because what constitutes commercial use can be a grey area. For example, if you use some Creative Commons – Non-commercial (CC-NC) material in a course and then charge students a fee to study that course, does that constitute commercial use?

In [The Case for Free Use: Reasons Not to Use a Creative Commons – NC License](#) (2005), Erik Moller argues that the NC licence is 'harmful', while Alma Hales and Andy Lane set out the reasons why the OU adopted the Creative Commons licence in Creative Commons and The Open University.

### Activity 9: Choosing a licence

**Timing:** 1 hour

For your blog content and other material you produce, consider which of the Creative Commons licences you would use, and justify your choice. You can post this in the forum or in your blog, remembering to use the tag #h817open.

## 3.4 Sustainability

One of the issues that is often raised for OER projects is that of sustainability. Many OER projects have received funding from bodies such as the [William and Flora Hewlett Foundation](#). Producing OER and maintaining large projects with associated staff is not a zero cost activity, and so questions arise about maintaining such projects when the original funding ends. This is what sustainability refers to in OER terms.

In a report for OECD in 2007, David Wiley defined sustainability as ‘an open educational resource project’s ongoing ability to meet its goals’ (p. 5). Wiley proposed three models of sustainability, which he labelled:

- the MIT model
- the USU model
- the Rice model.

### Activity 10: Applying sustainability models

Timing: 3 hours

- Read Wiley (2007), [On the Sustainability of Open Educational Resource Initiatives in Higher Education](#).
- Then look at the following open education initiatives, and for each one determine which of Wiley’s three models of sustainability you think they are operating:
  - [Change MOOC](#)
  - [Coursera](#)
  - [Jorum](#)
  - [OpenLearn](#)
- Consider the following:  
Was the sustainability model for each OER initiative apparent?  
Did Wiley’s models cover all approaches or did you think a different model was operating for one or more of them?
- You can share these reflections in either the forum or in your blog.

## 3.5 Big and little OER

In [The openness–creativity cycle in education](#) (Weller, 2012), I suggest that another way of thinking about OER is in terms of their granularity. We have seen large-scale projects such as MIT’s OpenCourseWare that can be viewed as institutional approaches to OER. It is these types of project that Wiley focuses on, and which we can classify as ‘Big OER’. However, another approach to OER is to produce them at the individual level, as a by-product of the everyday activity of educators, researchers and teachers. This embraces not only specifically designed teaching material, but also other types of content that could be used in a teaching context; for example, presentations, articles, blog posts, etc. This ‘Little OER’ approach is not in conflict with the larger projects but represents another means of tackling sustainability.

### Activity 11: The advantages and disadvantages of big and little OER

Timing: 3 hours

- From the list below, either read the chapter or view the slidecast:

- Weller (2011b), [Public engagement as collateral damage](#) (chapter).
- Weller (2011a), [Academic output as collateral damage](#) (slidecast).
- Write a blog post of less than 500 words on the benefits and drawbacks of big and little OER approaches. Remember to tag your post with #h817open.

## 3.6 Week 3 References

Common Craft (2013) *Copyright and Creative Commons* [online]. Available at <http://www.commoncraft.com/video/copyright-and-creative-commons> (accessed 10 January 2013).

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## 4 MOOCs

### 4.1 Week 4 Introduction

So far we have looked at open educational resources that can be taken and reused by other educators, or used by learners. Another approach to open education is to run courses that are freely open to all. These have been labelled MOOCs (massive open online courses) and are the focus of this week.

## What to expect this week

This week we move away from OERs and look at a more recent development in open education, namely massive open online courses, or MOOCs. Whereas OERs are concerned with open resources that can be used anytime and adapted, MOOCs are courses that take place over a set time frame, studied with a cohort.

You will look at the background to MOOCs, the learner perspective and also compare different MOOCs.

Such open courses make a virtue of people being connected and networked, and without the formal support of a lecturer or tutor, this peer support becomes important. So the last activity in this week will look at what is called the personal learning network.

## 4.2 Week 4 Learning outcomes

After studying this week, you should understand:

- the different types of MOOC and the issues surrounding them
- the evidence of learner behaviour and the effectiveness of MOOCs
- the learner experience in MOOCs
- the strengths and weaknesses of MOOCs as an approach
- personal learning networks.

## 4.3 What are MOOCs?

Although the 'massive' of the title implies that vast numbers of students are necessary, this isn't always the case; some MOOCs can be relatively small in scale but many have attracted large numbers of students.

The term 'MOOC' was coined by Dave Cormier and arose after his analysis of one of the first MOOCs, the 'Connectivism and Connected Knowledge' course (known as CCK08) run by George Siemens and Stephen Downes. Other early pioneers include David Wiley and Alec Couros: they both ran open versions of campus courses, whereby a course with fee-paying students with access to the course instructor was also made open to anyone to participate. However, the non-fee-paying participants didn't receive the direct support of a tutor or lecturer (the model we have adopted for this course).

MOOCs need to be open to all, so tend to adopt a range of technologies. The result is often a more distributed course structure than traditional courses, with learners using their own blogs in combination with a central asynchronous system (such as a blog or a VLE) and a synchronous tool (such as Collaborate).

One of the most innovative MOOCs in its use of technology has been [DS106](#), the digital storytelling course run by Jim Groom. In this course learners keep their own blogs, which are aggregated together into the main course blog. There is also an assignment bank where learners suggest assignments, and a radio station that is open to anyone to use for broadcasts.

The early experimentation led to more mainstream adoption of MOOCs, and in 2011 two Stanford professors offered an open course in artificial intelligence that attracted over 100,000 students. This was followed in 2012 by Harvard and MIT announcing the

formation of [edX](#), a joint initiative to offer open courses. In addition, the Stanford team founded Udacity, a commercial enterprise to offer open courses, and a number of universities started offering courses through Coursera.

### Activity 12: Background to MOOCs

Timing: 4 hours

- Watch this interview in which George Siemens and Dave Cormier are interviewed by Martin Weller, about a range of issues concerning MOOCs.
- Read McAuley et al. (2010), [The MOOC Model for Digital Practice](#). This is a lengthy report so if you do not have time to read it all focus on the Executive Summary and the section entitled 'Gaps in knowledge about MOOCs'.
- Read Weller (2012b), [MOOCs Inc.](#)
- Before we examine MOOCs in more detail, briefly consider if the MOOC approach could be adopted in your own area of education or training. Post your thoughts in your blog and then read and comment on your peers' postings.

#### Additional resources

[The MOOC Guide](#): Stephen Downes (undated) sets out some of the history of MOOCs.

[Amnesimoooc](#): Martin Weller (2012a) outlines the differences between online distance education courses and large-scale online open courses.

[What is a MOOC?](#): JISC webinar (2012) describing the MOOC phenomenon and demonstrating examples of practice and support in the UK.

## 4.4 The learner experience in MOOCs

There is a strong emphasis on learner independence and peer support in MOOCs. Partly this is a result of their scale and that they are free – the providers of the course cannot afford to employ sufficient staff to provide support. This approach has also derived from the values of the early adopters, who wanted to explore pedagogies based around social connections. This has led to some criticism that MOOCs are only suitable for more experienced learners and those who are technologically competent. Arguably, the MOOCs arising from commercial ventures have adopted a more traditional pedagogic approach.

The completion rate for MOOCs is very low, as this [article in \*The Atlantic\*](#) points out. However, if courses are free and people are trying them out, then a high drop-out rate might be expected, but it is worth considering whether this high attrition rate raises problems for MOOCs as a general approach.

### Activity 13: Reading

Timing: 1 hour

- Read Kop (2011), [The challenges to connectivist learning on open online networks: learning experiences during a massive open online course](#).
- Read Daniel (2012), [Making sense of MOOCs: musings in a maze of myth, paradox and possibility](#), which provides a comprehensive review of MOOCs.

### Activity 14: Comparing MOOCs

Timing: 4 hours

- Compare either [DS106](#) or the [Change MOOC](#) with offerings from [Udacity](#) or [Coursera](#). (You may not be able to access a course on these sites without signing up – there is no need to do this but you do need to ascertain what you can from the information around the course and the approach of the providers.)
- Write a blog post comparing the courses with regards to:
  - technology
  - pedagogy
  - general approach and philosophy.

## 4.5 Personal learning networks

In MOOCs, and also in other online learning communities, the phrase ‘PLN’ (personal learning networks) is often used to emphasise the role of the network of peers that are important in learning. As we saw with the idea of little OER, use of an individual network not only provides a means of disseminating and finding resources, it also provides a means of discussing ideas and connecting with peers.

The concept of a PLN grew out of earlier talk of a PLE (personal learning environment). The idea of a PLE is that with the advent of so many free, easy-to-use tools that are not formally controlled by an institution, people were constructing a set of tools that helped to structure their informal, everyday learning. This was in comparison with a VLE (virtual learning environment, also sometimes called an LMS or learning management system) for instance, which is very structured and is organised and hosted by the institution.

A PLN emphasises that it is the people in the network that are significant, and places less focus on the actual technologies. For instance, you may have a well-developed network of peers in Twitter that helps inform your professional practice, but if that network migrated to another tool, for example Google Plus, the personal value to you is derived from the people and their expertise, not the specific tool they use.

### Activity 15: Defining a PLN

Timing: 2 hours

As with many new terms, PLN is used in a variety of contexts. The Wikipedia entry defines it as:

‘an [informal learning](#) network that consists of the people a learner interacts with and derives knowledge from in a [personal learning environment](#). In a PLN, a person makes a connection with another person with the specific intent that some type of learning will occur because of that connection.’ ( [Wikipedia, 2012](#))

- Use search tools and the discussion in the forum to formulate your own, one-sentence definition of a PLN.

### Activity 16: Examining a definition

Timing: 3 hours

Now you have a definition of PLN, the question you need to answer is:

‘Does this offer anything new?’

In terms of innovation, can we say a PLN is truly innovative, or merely a rebranding of existing practice? As with many new terms in educational technology, some people find a PLN usefully captures a new development, while others say it is simply a new term for an old practice.

In considering this, take into account the scale and possibilities offered by new technologies, past networking practice and any of the references you found when constructing your definition.

Now:

- Write a blog post setting out a position statement on what PLNs are and whether it is a useful term or not.

## 4.6 Week 4 References

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## 5 Pedagogy in open learning

### 5.1 Week 5 Introduction

This week you will examine the pedagogy and approaches to teaching used in open education.

In the last activity you were encouraged to critically examine the term 'personal learning networks' and whether this was a useful contribution to educational technology or not. This can be seen as representing one of the key questions for those in educational technology, which can be summarised as: 'How much of this is new and therefore requires new theories or practice, and how much is an extension of existing practice?'

This question is particularly relevant when it comes to the pedagogy adopted in open education approaches. It is this question that we will consider in detail this week, by examining some of the emerging pedagogic theory in open education.

### What to expect this week

Having looked at two recent developments in open education, namely OERs and MOOCs, this week you will consider what teaching and learning approaches are suitable for open learning.

Do we need new theories of pedagogy, or are these just adaptations of existing ones?



To answer this you will consider the impact of abundant content, and then look at two theories that are sometimes applied to open education, namely connectivism and rhizomatic learning.

For these you will be considering whether they help you in framing approaches to open learning, how you might implement them, and whether they are useful.

## 5.2 Week 5 Learning outcomes

After studying this week, you should understand:

- the impact of abundant content
- connectivism as pedagogy for online courses
- rhizomatic learning
- how to take into account learner experience when designing a connectivist course
- the advantages and disadvantages of specified pedagogies.

## 5.3 Abundant content

The advent of the internet combined with easy to use tools (which means content can be created and shared easily) has seen a fundamental shift in our relationship to content, from one of scarcity to one of abundance. This has had profound implications in other sectors, such as the music industry, but is only beginning to be felt in education. In the next activity you will consider the impact the arrival of abundant content has had (or could have) on teaching.

### Activity 17: The role of abundance

**Timing:** 4 hours

- Read Weller (2011), [A pedagogy of abundance](#). In the conclusion two questions are posed: 'The issue for educators is twofold I would suggest: firstly how can they best take advantage of abundance in their own teaching practice, and secondly how do we best equip learners to make use of it?'
- Post a comment to contribute an answer to one of these questions, drawing on your own context and experience. For example, you might suggest that we could best equip learners to make use of abundant content by developing their critical analysis skills.

#### Comment

Any real solution to either of these questions would involve a set of different approaches, but you are only required to suggest one element, not the complete answer, although hopefully an answer may emerge from the range of contributions.

## 5.4 Connectivism

Connectivism has been described by George Siemens, its original proponent, as a learning theory for the digital age. As such, connectivism is often referenced when people talk about MOOCs or learning with OER. Most learning theories were developed prior to the digital, networked age and have been adapted to fit with it, whereas connectivism was developed specifically in response to the possibilities offered by a global network. The question 'Does this give us anything new?' is also relevant for connectivism, as some of the criticism about it has been that connectivism repackages existing ideas.

In the next activity we'd like you to read a paper by George Siemens outlining his theory of connectivism. We'd then like you to read a blog post by Stephen Downes in which he explains his perspective on what connectivism is, and also attempts to address some criticisms of it.

### Activity 18: Theory of connectivism and its critics

Timing: 2 hours

- Read Siemens (2005), [Connectivism: a learning theory for the digital age](#).
- Read Downes (2007), [What connectivism is](#).

#### Discussion

We can view connectivism as a perspective on learning, which places the network at the core of its approach. While other learning theories may be applicable in this context, none are so deliberately focused on the importance of the network. Connectivism is not without its critics, and the aim of this activity is for you to explore whether you feel it offers a useful framework for considering education.

Perhaps the best way to think about connectivism is to implement it, so that is what we'd like you to do in the next activity.

### Activity 19: Implementing connectivism

Timing: 6 hours

In this activity you will be devising a course that takes a strong connectivism approach, based on some key principles devised by Siemens:

- Learning and knowledge rests in diversity of opinions.
- Learning is a process of connecting specialised nodes or information sources.
- Learning may reside in non-human appliances.
- Capacity to know more is more critical than what is currently known.
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas and concepts is a core skill.

- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.
- Take the description of the short course on digital skills that you developed in Week 2 and recast it, so that it adopts a highly connectivist approach. Or, if you prefer, you could take this 'Open education' open course as an example and recast it in a more connectivist model, or another course you have familiarity with. You should take each of the principles set out above and state how they are realised in your course, either as a general principle or by giving an example activity.
- Blog your course outline, along with how the principles are realised, using the hashtag #h817open (or use the forum for a general discussion if you prefer).

## 5.5 Rhizomatic learning

Another learning theory closely associated with MOOCs and open education is that of rhizomatic learning. This invokes the biological metaphor of a rhizome, likening learning to the roots of a plant. The roots can spread out laterally and horizontally, consisting of a series of nodes, with no distinct centre, beginning or end, and no defined boundary – the only restrictions to growth are those that exist in the surrounding habitat. Rhizomes resist organisational structure and chronology and instead grow and propagate in a 'nomadic' fashion. Seen as a model for the construction of knowledge, rhizomatic processes hint at the interconnectedness of ideas as well as boundless exploration across many fronts from many different starting points.

The rhizome work develops a metaphor proposed by French post-modern theorists Deleuze and Guattari (1987), but [Dave Cormier](#) has done most work on this as a theory in modern education. Cormier suggests that rhizomatic learning is a means by which learners develop problem-solving skills for complex domains.

For the educator, supporting rhizomatic learning requires the creation of a context within which the curriculum and knowledge are constructed by contributions made by members of the learning community, and which can be reshaped and reconstructed in a dynamic manner in response to environmental conditions. As Cormier (2010) puts it, 'the community is the curriculum'. The possibly open syllabus represents the scope of the local habitat the rhizomatic learning process can explore, and provides the context for a community-negotiated curriculum. The learning experience itself may build on social, conversational processes, as well as on a personal knowledge-creation process, through the creation of large, unbounded personal learning networks that may incorporate formal and informal social media.

Some examples of rhizomatic learning are often found in MOOCs, where students are expected to operate in a networked, open manner and offer peer support. At the University of Regina, Alec Couros runs an open course in educational technology. Students in Couros's class work from a curriculum created through their own negotiations

and form their own personally mapped networks, thereby contributing to the rhizomatic structure in their field of study. You may like to take a look at their wiki for this course, [Social Media & Open Education](#).

Work with adolescent gamers by Kathy Sanford, Liz Merkel and Leanna Madill (2011) looked at how adolescent gamers' experiences revealed the complex learning systems in which they contributed, created and participated in their gaming communities. The authors of the paper conclude that there is 'no fixed course' in gaming, and that their subjects actively blurred the boundaries of the following traditional identity categories: producer/consumer, teacher/learner and individual/collective.

The advantages of a rhizomatic approach are that, as with connectivism, it is more 'network native' as a theory than many existing pedagogic approaches. It promotes peer support, learner responsibility and an appreciation of the power of the network. You may like to consider the differences and similarities between connectivism and rhizomatic learning.

### Activity 20: Exploring rhizomatic learning

Timing: 3 hours

- Watch Dave Cormier explaining rhizomatic learning in this video, *Embracing Uncertainty – Rhizomatic Learning in Formal Education* (2012).
- Consider your reaction to the video.
  - Were you convinced by rhizomatic learning as an approach?
  - Could you imagine implementing rhizomatic learning?
  - How might rhizomatic learning differ from current approaches?
  - What issues would arise in implementing rhizomatic learning?

## 5.6 Week 5 References

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## 6 Operating in an open world

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### 6.1 Week 6 Introduction

This week you will explore the types of technology used in open education, and why they have been adopted.

#### What to expect this week

The focus of this week is to really consider what it means to operate in an open context as an educator and a learner.

Firstly you will look at the issue of technological determinism and the significance of technology and pedagogy. This is a very large, contentious topic which we only begin to address here, but in areas such as open education, where technology is influencing practice, it is important to consider the interplay between the two.

There are then two quite sizeable activities which relate to this. The first is to consider what technologies are significant for open education. Your focus here should be on the open part of education in particular, and not just education in general.

The next activity is to think of the learner perspective and consider what skills, or literacies, are important for an open learner. Again the emphasis is on someone operating in this open context, rather than all learners.

### 6.2 Week 6 Learning outcomes

After studying this week, you should understand:

- the relationship between technology and pedagogy
- which technologies are effective in open education
- digital learning literacies
- the development of open learning literacies
- how to use specific technologies in education.

## 6.3 Technology versus pedagogy

There is often a tension between the significance of technology and pedagogy in educational technology. For some, the technology is not significant and their focus is on pedagogy. Others prefer to emphasise the possibilities that technology offers us and wait for theory to catch up. It is probably more useful to think of the two as being involved in an iterative dialogue. Technology opens up new possibilities and is used in ways that its designers never intended, which in turn drives theoretic development which feeds back into technology development, and so on.

This view of technology, and particularly how it relates to education, is addressed by Martin Weller (2011) in Chapter 1 of *The Digital Scholar*, reproduced below.

### Technology determinism

This talk of technology ‘allowing’, ‘facilitating’, ‘affording’ or ‘suggesting’ methods of working or approaches raises the issue of technological determinism. This subject arises in almost every discussion around technology and education, so it is worth addressing it early. Technology-related viewpoints tend to be dystopian or utopian in nature. Examples of such views are not only to be found in science fiction. Educational technology literature over the past twenty years shows the promises and fears that have been associated with a variety of technologies, including computers, CD-ROM, computer-assisted learning, artificial intelligence, virtual reality and videodisc. The Internet and social media are just the latest in this list.

What both the positive and negative viewpoints have in common is that they see the technology itself as shaping human behaviour, so-called technological determinism, a phrase first coined by American sociologist Thorstein Veblen. The technological deterministic viewpoint is that technology is an autonomous system that affects all other areas of society. Thus human behaviour is, to a greater or lesser extent, shaped by technology. This seems to remove human will, or ingenuity, from the social process, and is thus usually rejected as excessively mechanistic. However, there seems to be such an anxiety about being labelled a ‘technological determinist’ that many people in education seek to deny the significance of technology in any discussion. ‘Technology isn’t important’, ‘pedagogy comes first’, ‘we should be talking about learning, not the technology’ are all common refrains in conferences and workshops. While there is undoubtedly some truth in these, the suggestion that technology isn’t playing a significant role in how people are communicating, working, constructing knowledge and socialising is to ignore a major influencing factor in a complex equation.

As this book seeks to explore the ways in which approaches founded in new technologies can influence scholarly practice, the charge of technological determinism may well be raised. It is not my contention that the presence of the technology will automatically lead to certain changes. Indeed, many of the interesting examples of digital scholarship are entirely unpredicted, what is often termed ‘emergent use’, which arises from a community taking a system and using it for purposes the creators never envisaged. This is particularly a feature of the kind of fast, cheap and out-of-control technologies that constitute much of the social media/Web 2.0 collective. For instance, it has been well

recorded that Flickr developed from a company which was aiming to manufacture an online game, and the photo-sharing application was just a simple tool to aid the game. As founder Caterina Fake commented, 'Had we sat down and said, "Let's start a photo application", we would have failed. We would have done all this research and done all the wrong things' (Graham 2006). Similarly, the proliferation of applications that have been built to interact with Twitter and Facebook were not predicted by the founders of those companies, nor the way in which people have used them.

A deterministic perspective would underestimate the role of people and the context in which the technology is used. Kling, McKim and King (2003) propose a 'sociotechnical interaction network', which emphasises the interaction between people, institutions and technologies. They analysed 'e-scholarly communication forums' to reveal the relationship between participants, resource flows, business models and other individuals and groups who do not participate in the network directly. Their work builds on what has been termed 'social construction of technology' (or SCOT), which is seen as a direct response to technological determinism (Pinch and Bijker 1984). In this perspective technology development is seen as the result of competition and negotiation between different groups or actors, rather than a finished artefact that is released (or inflicted) upon a rather submissive society.

SCOT is not without its critics, for example, Clayton (2002), and the detailed debate around the interplay between actors and technology is beyond the scope of this book. What the work of Pinch and Bijker and Kling et al. highlights is that it is possible to examine technology, technological influence and practice without falling into the trap of technology determinism. In this book it is the complex co-construction of technology and associated practice that is intended, with an iterative dialogue between the technology and the practices that it can be used for. Inevitably though, for the sake of simplicity and to avoid repetition, this complexity may be somewhat glossed over, and I will refer to a technology or an approach as if there is a direct line between them. For this I ask the reader's indulgence and request that it should not be taken to be demonstrative of a technological deterministic mindset, while at the same time recognising the significance of technology in the overall process.

(Weller, 2011)

This tension between the role of technology and pedagogy is particularly acute in open education. Many of the approaches we have looked at would simply not have been possible without internet technology. But in turn, as we have seen with MOOCs, educators need to devise practices that will enable these possibilities to be realised. We now also need to develop concepts and theories to interpret what is happening, which is itself shaping the next phase of technology development to support MOOCs.

The focus of this week then is on the types of technology that support open education, as an understanding of these is important in appreciating the direction and possibilities in the field.

### Activity 21: The chicken and egg conundrum – technology and pedagogy inter-relate

**Timing:** 3 hours

- Use your blog to discuss the relationship between technology and pedagogic theory and practice, drawing on your own context and experience.  
What is your own experience and view?  
Do you regard either pedagogy or technology as more significant than the other?  
How do technology and pedagogy influence each other?  
Do you have experience where either technology or pedagogy has been given more weight than the other?

## 6.4 Technologies for openness

What technologies are important in open education? This will depend on what you want to achieve, but we would suggest a few have been particularly significant in shaping the type of practice that has arisen.

### 6.4.1 Blogs

Blogs were a relatively early technology adopted by a few practitioners in education. The informal nature of the communication that takes place in blogs, and the removal of the filter for publishing, meant they appealed to some educators. Ideas could be shared easily and, because blogs tend to link to each other and users comment on each other's blogs, they soon gave rise to a community of 'edubloggers'.

This type of exchange seemed more personal and intimate than the formal publication routes, and the publication route more immediate. This made blogs a useful medium for experimenting, sharing ideas and connecting with a global network of peers.

The software entrepreneur and blogger [Loic Le Meur](#) (2005) suggests the following social norms for blogging, which are summarised below:

- A willingness to share thoughts and experiences with others
- A recognition of the value of input from others, with the blogger asking directly for input or feedback
- Willingness to collaborate
- Gathering information from a wide variety of resources
- Control and personalisation of news feeds
- The emergence of a 'common code': a vocabulary, a tone, and behavioural codes
- Importance is placed on the ability to feedback and participate
- A culture of speed and currency
- A need for recognition

If these are indeed values that constitute a 'blog culture' then they provide an interesting counterpoint to the cultural norms of academia. The result is that blogs appealed to a group of practitioners who came to share some of the values above.



## 6.4.2 RSS

RSS stands for Really Simple Syndication, and is a means of subscribing to a feed. For example, you can use a blog reader such as Google Reader and subscribe to the RSS feed of a number of blogs. You will then receive updates of those blogs without needing to visit each one.

RSS was more than a way to read blogs, however. Its significance was that it provided a format for open information, which the end user could mix and match. You could thus combine several RSS feeds in one place, such as feeds from a blog, the BBC news, a Google search on a particular subject, an open access journal. You could then search across all the feeds and create filters and so on to investigate data or to create your own information portal. This simple format made it easy for users to disseminate information as well as to manipulate and aggregate it.

As social networks became popular, they too started using RSS; for example, both Facebook and Twitter had easy RSS feeds for their systems. This meant that these feeds were open to end-user manipulation without having to visit their sites. Both of these sites have moved away from RSS recently, causing some to speculate that '[RSS is dead](#)' (Ingram, 2011) and that social networks are moving towards a more closed model of operation.

From the point of view of open education, the significance of RSS is that it represents a range of standards and approaches that were based on openness and easy sharing. These created the context within which open education could flourish.

## 6.4.3 Links and embeds

As with RSS, the significance of hyperlinking was that it allowed easy connections to be made between content. The theory of connectivism is in many ways premised on the simple method of making links between one web document and another, using HTML.

This seems fairly obvious but almost as significant was the embed code, which allowed people to easily embed content from one site in another. For example, rather than linking to a YouTube video you could embed it into your own blog post by copying the embed code provided for every YouTube video.

The embed code was an essential element in the rise of what became known as 'web 2.0'. This saw people creating content easily and also having a simple means by which to share and spread that content. There was thus a virtuous circle between the rise of blogs (and later social networks) where many people were now writing online regularly, and their search for content to link to and write about. Being able to embed content in your own site was invaluable in maintaining a blog, or later a MySpace or Facebook page, because it meant you didn't have to send the reader to another site to view the content; they could view it in situ.

For open education this was significant as it allowed the easy creation of learning content that drew on different resources; for example, a Slideshare presentation, a document in Scribd and a YouTube video. It also created a motivation to create and share content, since it could spread in a viral fashion. This encouraged academics to adopt many of the web 2.0 tools as a means of dissemination.

## 6.4.4 Social networks

The rise in popularity of social networks, most notably Twitter and Facebook, really became significant from around 2008. These can be seen as an effective means of

combining the preceding elements, as they encourage easy sharing, connections and combinations of media. The use of social networks in education is varied, from individual educators having popular Twitter accounts, to course-specific feeds on Google Plus, to Facebook pages for universities or subject areas.

You will undoubtedly have your own opinion regarding social networks and their use in education. For open education they have been significant for a number of reasons:

- 1 They facilitated the connections between peers, which gave rise to some of the significant open education developments. (For instance, the early adopters of MOOCs were all active on social networks and in contact with each other.)
- 2 They provided some of the tools for use in open education. For instance, Twitter was used as a communication channel for live synchronous events.
- 3 They provided a conduit for sharing and disseminating OER or gaining involvement in MOOCs.

The open nature of social networks has been significant because anyone can participate in the discussion – it does not take place in a closed environment.

### 6.4.5 VLEs

Virtual learning environments (VLEs) or learning management systems, such as Moodle and Blackboard, provide many of the tools required for elearning in one system. They have grown in use since the early 2000s and now almost all universities have an institutional VLE.

They may seem a somewhat surprising technology to select in terms of open education, since much of the open education movement has been conducted in contrast to institutional VLEs. Many of those in the open education movement prefer open technologies such as blogs, and see VLEs as a closed environment that stifles innovation (see for example [The VLE is dead](#) debate at the ALT-C Conference in 2009).

However, VLEs have been significant in open education for two main reasons. The first is that they created the baseline competence for elearning for both educators and learners. It would be difficult for any open education to flourish if users did not have a common experience to build upon. Much of what happens in open education may be defined in terms of contrast with this experience, or building upon it: having a base set of knowledge around using forums and content has meant that not every enterprise in open education has had to explain the basics. VLEs provided many educators with their first exposure to elearning, and from this they have gone on to explore other approaches.

In addition to this core set of competencies, VLEs have also provided a useful platform for hosting open education projects. In particular, the open source VLE Moodle has been widely used. The Open University's OpenLearn project is delivered via Moodle for instance, and many of the early MOOCs used Moodle as their platform for asynchronous discussion and content hosting.

### 6.4.6 Other open technologies

We've suggested five technologies that have been significant in the development of open education. You may, or may not, agree with the list produced, and probably have your own suggestions for other technologies to include on the list. In the next activity you will be proposing one such additional technology.

## Activity 22: An open education technology

Timing: 2 hours

- Write a short blog post suggesting one additional technology that is important for open education, either from the role of a learner or a provider. The technology can be one that has been significant, or one that you feel is going to become increasingly relevant. What you include as a technology can be quite broad: for instance, it can be a general category (such as social networks), a specific service or a particular standard.
- In your post briefly explain what the technology is, and then why you think it is important for open education. The emphasis should be on open education in particular, and not just education in general.

## 6.5 Open learning literacies

There has been much talk of 'digital literacies', i.e. skills and competencies required to operate effectively in the digital, connected environment. These can be couched in terms of skills for learners, teachers or researchers. For example, Jenkins et al. (2009) suggest 11 'new skills' for learners, arguing that, 'Schools and afterschool programs must devote more attention to fostering what we call the new media literacies: a set of cultural competencies and social skills that young people need in the new media landscape.'

The skills they list are:

- Play – the capacity to experiment with one's surroundings as a form of problem solving
- Performance – the ability to adopt alternative identities for the purpose of improvisation and discovery
- Simulation – the ability to interpret and construct dynamic models of real-world processes
- Appropriation – the ability to meaningfully sample and remix media content
- Multitasking – the ability to scan one's environment and shift focus as needed to salient details
- Distributed cognition – the ability to interact meaningfully with tools that expand mental capacities
- Collective intelligence – the ability to pool knowledge and compare notes with others toward a common goal
- Judgement – the ability to evaluate the reliability and credibility of different information sources
- Transmedia navigation – the ability to follow the flow of stories and information across multiple modalities
- Networking – the ability to search for, synthesise and disseminate information
- Negotiation – the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

The next activity asks you to read a JISC report from Helen Beetham, which provides a useful review of work in the digital literacies area.

### Activity 23: Review of work in digital literacies

**Timing:** 2 hours

- Read Beetham (2010), [Review and Scoping Study for a Cross-JISC Learning and Digital Literacies Programme: Sept 2010](#).

Digital literacies subsume many other types of literacy and skills, such as information literacies. It is possible to propose that a set of 'open education literacies' may exist also. At the ALT-C Conference in 2009 Terry Anderson gave a presentation on open scholarship in which some of the characteristics of an 'open scholar' were proposed. In the next activity you are going to suggest a set of open learner literacies.

### Activity 24: Considering open learner literacies

**Timing:** 5 hours

- Draw up a set of open learner literacies. These should be based on what you have experienced and researched so far in this course. They should cover the types of skill you feel are important for an individual to learn successfully in an open learning context (whether that is using OER, in a MOOC or through informal, lifelong learning).  
The level of detail is at your discretion: you may choose to operate at the abstract level, such as Jenkins's list, or at a more detailed task level if you prefer.  
The number of skills is up to you, although they should cover most of what you feel is important in being an effective open learner. Each literacy should be accompanied by some explanation and justification.
- Blog your list of literacies. You should reflect upon the following:  
Are there literacies that are particularly related to the open element, or would your list apply to all learners?  
Did you find literacies suggested by others that you would like to add?  
If these are important literacies, how would you go about developing them for learners?

## 6.6 Week 6 References

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## 7 Conclusion

You are now at the end of the Open Education open course. To pull it together and help you check your understanding of what you've learned, we suggest that open learners do the following activity.

### What to expect this week

In this concluding week there is only one activity, which is for you to reflect on the course, or consider aspects of open education.

#### Activity 25: Reflecting on openness

In this activity you will create a video and share it via your blog, using YouTube, Vimeo or other video-sharing sites. If you prefer not to create a video then you can use

another tool or medium of your choice, but avoid just plain text in this instance if possible.

In your video reflect on what you have learned in this course, covering **one** of the following elements:

- What aspect of openness in education interests you most (and why)?
- What the future direction of open education will be in your opinion, justifying your answer.
- Your experience of studying an open course versus traditional, formal education.

Post your video to your blog.

This is the end of the open course. We hope you have found both the content and the experience useful.

Openness in education is undergoing a period of rapid change, with different forms of openness being proposed in all areas of higher education. Sometimes this doesn't turn out the way the initial proponents of openness hoped that it would, and we are seeing many discussions arising around what constitutes openness. For example, [this presentation from Gardner Campbell](#) at the Open Ed 2012 conference repeats the refrain 'that is not what I meant at all'.

The intention of this open course has been to provide you with sufficient experience and knowledge to engage in these debates and discussions as the field progresses.

If you wish to explore OER further, you could study a [short block](#) of free material, where you will have the opportunity to examine the underpinning ethos of the OER movement, and also redesign some OER. That block is adapted from the Open University course [H800 Technology-enhanced learning: practices and debates](#), which is a companion course to H817 within The Open University's [Master's in Online and Distance Education](#).

## Week 7 Forum

The videos below capture the audio and main screen, but not the chat window. The Java file below captures the full session, but requires Java 7.21 to run and this does not work in all browsers.

Video content is not available in this format.

[George Siemens talking about openness and the future of higher education in the age of MOOCs \(25 March 2013\)](#)

Video content is not available in this format.

[Discussion about the use and interpretation of the term 'personal learning network' \(11 April 2013\)](#)

File attachments are not available in this format.

[Discussion about the use and interpretation of the term 'personal learning network' \(11 April 2013\)](#)

Martin Weller's reflections on this open course (2 May 2013) are available on Slideshare:  
<http://www.slideshare.net/mweller/h817open-reflections>

## Acknowledgements

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