In this concluding chapter I will revisit some of the themes of this book and attempt to make the case for why openness really matters in the future of education. I will also set out some recommendations for considering open education in the short to medium term.

In chapter 1, I made the claim that openness has been victorious in many respects, and this was reinforced by examining the success of open access publishing, OERs, MOOCs and open scholarship. However, to many working in higher education, this would seem a rather overblown claim. They may work in contexts where open scholarship is not only not recognised, but actively discouraged, where the mention of OERs would be met with blank expressions and any proposed change to take advantage of the opportunities of open education is actively resisted. Any notion
that openness has won seems like the fancy of a privileged few, perhaps operating within an open education bubble.

I have sympathy with this view, so before we progress it is worth revisiting this claim and clarifying it somewhat. During the course of this book, I have set out many examples that I think demonstrate the success of the open approach: the open access mandates: the numbers of learners and media interest in MOOCs; the impact and sustainability of open textbooks; and the changing nature of fundamental scholarly practice as a result of open approaches. To suggest that openness has been successful is not to claim that it has achieved saturation or 100% uptake. Rather it is that all of these separate successes point to a larger trend – this is the moment when openness has moved from being a peripheral, specialist interest to a mainstream approach. To use that oft-quoted (and perhaps meaningless) term, it is at a tipping point. From this moment, the application of open approaches in all aspects of higher education practice has both legitimacy and a certain inevitably. This is not to say that it will always be adopted, just as the open source approach to software is not always pursued, but it is an increasingly pervasive method. The speed of acceptance will be influenced by a number of factors, such as disciplinary cultures, national programmes, policies, funding, the presence of champions and immediate benefits.

The victory of open education, then, is that it is now a serious contender, proposed by more than just its devoted acolytes as a method for any number of higher education initiatives, be they in research, teaching or public engagement. This transition is at the heart of this book, since inherent in it are opportunities and challenges, just as a small start-up business must face a whole different set of issues when it grows and becomes a larger multi-national corporation. In this transition there are many potential pitfalls – the whole enterprise
can fail, it can be taken over by others or the fundamental value and identity that characterised that embryonic stage can be lost.

**Open Policy**

One aspect of this transition is that it moves from informal to formal practice. One form this will take is the increase in policies relating to open educational practice. These can be at a national, regional, funder, institutional or departmental level and can address different aspects of practice, such as open access publishing, release of open data, academic profiles online, release of open education materials and so on.

Given this wide variation in what constitutes an open education policy, it is difficult to chart their uptake. The ROARMAP project at Southampton University records open access policies at funder, institutional and sub-institutional level, while Creative Commons hosts a registry of OER-related policies (Creative Commons 2013b) and the OER Research Hub (2014) maps all such policies.

The POERUP project has been examining OER policies in depth and highlights the complex nature of the field (Bacsich 2013). In the US, there are a growing number of state or school policies, but these are often targeted exclusively at the provision of open textbooks, largely with cost savings as a driving factor. This form of OER is less prevalent in Europe. In addition, there are policies which may have a strong influence on open education but which are not directly open education policies themselves. For instance, agreed systems of assessing prior learning and acknowledging informal learning would aid the adoption of OERs and MOOCs, without explicitly being OER policies.

There are two rather conflicting messages from this work, which can be seen as representative of the broader state that
open education finds itself in. On the positive side, there is evidence of a growing number of policies that are directly or indirectly related to open education. Open access policies are perhaps the most obvious of these, but these have been followed by policies regarding open data (i.e., that not only should publications arising from public funding be made openly available, but the experimental data should also) and open textbooks. This indicates a succession model, wherein once one element is open then it follows that others should be also (this is explored below). From this perspective, open policy looks like it might well be the next major breakthrough for the open education movement, and as such, it will mark a significant point in its transition into the mainstream.

However as Bacsich as well as Farrow and Frank-Bristow (2014) suggest, it is currently a very mixed area, with different types of policy, and at the OER level, often a lack of substantial policy. Often an OER project is undertaken by a specific project within a university, and once that funding finishes, the project ceases. Farrow and Frank-Bristow suggest that policy forms part of a formula that is often seen with successful OER projects, which requires a pilot study, funding, a champion and policy to achieve sustainability and substantial impact. Unless such a sustainable model is established with senior management commitment, many projects do not lead to an OER policy being adopted by the institution. Developing a policy that relates to OER is crucial for the longevity of such policies, but too often it is not expressed as an explicit goal, and thus the project rather fizzles out for want of a strategic direction. As open education moves into the next phase, policies should be seen as not only a driver for this, but also an aim; the explicit intention to establish such a policy should form part of an open education project.
The Lesson from the LMS

The open policy example gives a broader indication as to the response that educators need to take to openness if it is to continue to be successful and meet their needs. We can also look at a recent example which offers a cautionary tale to help inform this direction. This is the Learning Management System (LMS), or the Virtual Learning Environment (VLE).

In the late 1990s elearning was seen as a novel approach to education. It was subject to much of the same promise, hype and anxiety that we now see with MOOCs. It could variously offer a cheap way of providing education (Noam 1995), make lecturers redundant (Noble 1998), provide a route to innovative ways of teaching (Weller 2002) or remove the barrier of distance (Mason 2000). While many in education embraced the possibilities of elearning by adopting innovative pedagogies and using a range of media and tools, there was reluctance and resistance from many. A combination of the perceived efficiency benefits, flexibility for learners and ability to reach new audiences meant that elearning was soon on the agenda of most senior managers in universities.

The early stages of elearning adoption were often characterised by a mixed economy of technologies, with different departments adopting different systems, usually driven by champions and early adopters. The early ’00s saw an inevitable consolidation phase; the maintenance of so many disparate systems became problematic and, in order to gain the perceived benefits of elearning, a uniform approach was required. This is when the LMS became a dominant solution, for instance, in the UK by 2003, 86% of higher education institutions had one (Brown and Jenkins 2003). The LMS provided a convenient suite of tools, and with a standard system, it allowed universities to implement staff development
programmes and allowed for students to have access to consistent technology. All of this facilitated the uptake of elearning, and if one was a champion of such an approach, it could be viewed as a positive advancement. The LMS was the key to elearning becoming a mainstream approach.

However, there were two unfortunate side effects to the widespread adoption of LMSs. The first was that academia often outsourced the technology and also the approach to elearning. By adopting commercial systems such as Blackboard, they gained a robust and quick solution, but they often lost the expertise or the control required to innovate in this area. Such relationships were not always mutually beneficial either, such as when Blackboard attempted to impose patent rights to generic elearning requirements such as tutor group formation (Geist 2006).

The second issue was largely a function of the first: rather than being a stepping stone to further elearning experimentation, the LMS became an end point in itself. As institutional processes came into place, they created a sediment around the system, so the question was no longer one of ‘what can we do with elearning?’ but rather one of ‘what do I need to do with the LMS to meet the university requirement?’ The online classroom model, or using the LMS as a repository for lecture notes, came to be seen as elearning itself, and further experimentation often ceased. This demonstrates the importance of policy in establishing uptake, but also of allowing a policy that has sufficient room within it to allow for innovation.

Groom and Lamb (2014) see the LMS as the prime suspect in a loss of innovation around elearning in universities. Their case against the LMS has five main points:

- Systems – The LMS privileges a technology management mindset.
• Silos – The artificially closed and protected environment of the LMS does not allow for the benefits of openness.
• Missed opportunities – Learners use a system that is unlike anything outside of education and spend their time learning to use the LMS itself.
• Costs – LMSs drain the financial and also the human resources, so there is little capacity to support any innovation outside of the system. In essence the LMS becomes the answer to all elearning problems.
• Confidence – there is a lack of enthusiasm for LMSs, and educational technologists who might otherwise be undertaking innovative work are required to manage the system, leading to a loss in confidence to experiment beyond this.

Referring to the manner in which universities often eschew innovative use of the internet in teaching, Groom (2014) sums it up, claiming, ‘In a depressing twist of fate, higher ed has outsourced the most astounding innovation in communications history that was born on its campuses.’ The resonance with open education is very strong; one could almost substitute commercial MOOCs for LMSs in the above and the same would be true. This recent history illustrates the potential danger in allowing control and direction of open education to be determined by external parties. Universities too quickly become the consumers of this solution rather than the driving force behind it.

**Education Challenges**

Having looked at one possible area of open education progression in policy and the importance of involvement and ownership
regarding the future direction of open education, we will now revisit the value of the open approach, to reinforce the significance of engaging with open education. In Chapter 2, I listed some of the possible motivations for adopting an open approach at an individual level. In this section, the possible benefits of openness as a solution to the broader challenges facing education will be outlined.

One issue for universities is the justification of their social relevance. In a digital age, what is the role of the university? In a world of Wikipedia and Google, why do people need to go to a university to study for three years or more? One only has to look at the comments section of any newspaper article about universities to see such views expressed. They are often perceived as being ivory towers, behind the times or out of touch. Of course, one can easily counter such arguments, stressing the quality and depth of a university education, the critical skills that are developed, as well as the social function of universities. The problem is not that claims regarding the irrelevance of universities can be refuted, but that they become commonly accepted beliefs, regardless of evidence. As we saw in the chapter on the Silicon Valley narrative, once myths become pervasive, they are difficult to counter.

The solution open education offers here is to easily demonstrate all of the aspects of higher education that might be championed as worthwhile. If it is the quality of resources, then OERs can reveal why there is depth beyond the Wikipedia article. If it is about research, then open access articles demonstrate the value of in-depth research that is not commercially funded and biased. Open scholarship highlights that individual academics are not operating in isolation and are engaged with the broader community and implications. A practical example is provided by Oregon State University library. Just as the question of relevance is raised
The Future of Open

for universities, so the role of libraries in the digital age is also under examination. The OSU library, in collaboration with their own university press, is working with academics to create open textbooks for undergraduates (OSU 2014). This is mainly aimed at addressing the issue of cost for students, but it also enhances the university’s reputation, as these books are open to all, and increases student satisfaction, as the material can be adapted to suit the changing needs of curriculum. University libraries are perfectly positioned to perform this function with all the requisite skills and resources, and it arguably offers a better return on investment than procuring access to journals which are read by only a small group of researchers.

All of these forms of openness are relatively easy to realise and aim at simply exposing the good practice within universities. In a digital, networked age, erecting boundaries around the institution is harmful because it speaks of isolation.

A related issue is the suitability of the learning experience in the world the graduate will encounter when they leave education. It is a frequent complaint that graduates are not suitably equipped with the skills they need for employment (e.g. Levy 2013). It’s possible that this claim is ill-founded and rather it is that employers may not be equipped to deal with the modern skill set their graduates possess. However, if there is validity in it, then open practice again provides a partial solution. To revisit one of the objections of Groom and Lamb, the LMS, and indeed the university physical environment, is one that is largely unlike any other. Too often assessment and coursework focuses on artificial tasks or contrived examples. Open practice allows students to engage in the type of tasks and develop the type of skills they may need in any type of employment, without reducing a university education to merely vocational training. For instance, establishing an online
identity and blogging for an open audience requires the development of communication skills beyond a narrow focus. Editing Wikipedia articles necessitates engagement with a process of evidence gathering and collaboration. Creating YouTube videos requires creativity and the ability to learn skills independently, and so forth. This is not to suggest that all university education is conducted in the open; there are valuable reasons behind nurturing confidence in a closed environment. But I would suggest that the development of the skills required to operate in the open internet are more likely to provide employers with attributes that are useful to them than a purely ‘closed’ model of education.

Underlying these two concerns is often one of cost. Given the high price of a university degree (whether it is funded by the state or the individual student), are there cheaper alternatives available? Does the university model still represent the best value for money? This promise of cheaper education was one of the drivers behind elearning and the enthusiasm for MOOCs. It is rarely borne out, though; the cost of producing elearning courses was not as cheap as many envisaged, and as we saw in Chapter 5, MOOC financial models are far from stable.

So claims about dramatic cost reductions should be treated with some scepticism. What open education can do effectively, however, is influence related factors. For example, creating a course using a wide range of good-quality OERs will reduce the amount of bespoke material that is required. This may reduce the time required to produce the course or provide a higher-quality course for the same investment. As we saw in the discussion on OERs, they are frequently used by students prior to study or while engaged in formal education. This may reduce the number of students who take a subject they subsequently don’t like or help retain those who are already in a course. More directly, open textbooks provide a
free resource, saving students or schools money on purchasing these. MOOCs and OERs themselves provide opportunities for the leisure learner to satisfy a learning need without any financial investment, although they may then desire to go further in to study.

These three areas of social relevance, graduate suitability and financial cost are all recurring themes for universities. Openness is not the only solution to them, but it is one that is relatively easy to adopt and could address them without resorting to the wholesale revolution approach that is often called for.

The Price of Openness

In Chapter 1, the analogy with greenwashing was made, with openwashing demonstrating that the label ‘open’ has acquired a certain market value and is worth proclaiming. While I would resist a dogmatic approach to allowing the use of the term, what this suggests is that one response to the use of openness is not to allow the use of the term lightly. If ‘openness’ has a market value, then we should demand of those who use it for their benefit some adherence to general principles of openness – for example, that their content is openly licensed.

One such example that is often encountered is the number of research articles that address open education in some form but which aren’t published under an open access licence. It is ironic to say the least to encounter an article about the benefits of OERs and be asked to pay US$40 to access it.

As was outlined in Chapter 3, increasingly there is a shift to make all articles open access anyway, but for any research in the field of open education (MOOCs, OA, OER, open data, etc.), it is reasonable to expect that the resultant publications are open access. As soon as a researcher commences in this area they are,
I would argue, morally obliged to publish their results under an open access agreement, whether it is Green or Gold route. This research is only possible because others have been open (even if they are critical of it), so the researcher is therefore beholden to reciprocate in a like manner. Openness is the route that facilitates this research and it also has value; people will want to read the article because it is about openness. Both the researchers and the publishers are benefitting from openness and shouldn’t get these benefits for free – open access is the price of admission.

Similar examples may be found with MOOCs or technology platforms. If the ‘open’ moniker is adopted, then it comes with at least a challenge as to the extent of that openness.

**The Open Virus**

One way of viewing the open approach is analogous to a virus. Once adopted, it tends to spread across many other aspects. For example, in personal practice, once an academic publishes a paper under an open access license, then there is then an incentive to use various forms of social media to promote that paper, which as we saw in Chapter 7, can positively impact views and citations. Similarly, although the free cost is the initial driving factor for the adoption of open textbooks, once this has become established, the ability to adapt the material to better suit their particular needs becomes an important factor for educators. When educators and institutions begin to use OERs in their own teaching material, then the question arises as to why they are not then reciprocating. As we saw in Chapter 4, this practice is not guaranteed and may be slow to penetrate, but the act of sharing becomes legitimised by the adoption of materials from high-reputation institutions.
It is no coincidence that many of the MOOC pioneers had also been early adopters of open access, active bloggers and advocates of open licenses. Creating open courses seemed the next logical step, because they were interested in the possibilities that openness offered and had seen the benefits elsewhere in their practice. This spread of the open virus is by no means guaranteed; many practitioners remain immune, and for others the open practice remains limited to a very specific function. But it does seem to be a pattern that is repeated across all aspects of open practice. It is significant in the context of this book, because if we are now entering a transition period when open practice enters the mainstream, then (to stretch the metaphor) the number of people ‘exposed’ to the open virus increases dramatically and it becomes a pandemic. It is also significant because it requires individuals to be the agents of action. The compartmentalising of openness into specific projects or outsourcing it to external providers creates a form of barrier that isolates individual educators from exposure. The impact of openness is thus contained. One might conclude, from the virus metaphor, that a good approach to spread open practice is to seek easy entry points or Trojan horses, where the initial aspect of openness can be seeded. However, as with the LMS example, this initial easy success should not become the endpoint.

Conclusions

In this chapter, a number of aspects of openness have been considered which have implications for its future direction. Policy will be the lever by which open practice can become sustainable and mainstream. However, the LMS lesson demonstrates that any such policy approaches must also allow sufficient scope for innovation and experimentation, as these are the route to the
real benefits of openness. The innovation that openness affords provides solutions to a number of the very substantial challenges facing higher education. In some respects the digital, open revolution is the cause of these challenges, and it is also the solution. This victory of openness is evidenced by the value that the term ‘open’ acquires as a marketing phrase, and one response to this is to make demands on those who seek to bend the term to their own ends. Lastly, it was suggested that openness has a virus-like ability to spread across many different practices once it has been adopted in one place.

What all of these directions for openness have in common is ownership. In this book I have attempted to establish two arguments about openness: that it is a successful approach to adopt for much of education and that it is now at a crucial stage regarding its future direction. Underlying the success of openness for education is the opportunity for experimentation and innovation. MOOCs, OERs, open access and open scholarship have all been the result of those working within higher education seeking to engage with the possibilities that openness allows. Having won the first battle – that it is an effective way to operate – it is essential that the second battle regarding the future direction of openness is not lost by abdicating responsibility and ownership. This is not to say that only universities can engage with open education; there are many different ways it can be approached, and it would be foolish to be prescriptive. But it does mean that those working in education need to engage with the debates set out in this book and decide best how openness can work for them. Failure to do so will mean that others decide this on their behalf.