Developing a strategy for continuing UK leadership in global education

Proceedings from a policy roundtable discussion

November 2013
This paper is based on the proceedings of a policy round table discussion convened by the Association for Learning Technology (ALT) in partnership with Intellect, representing the UK technology industry.
ALT is the UK’s leading membership organisation in the learning technology field and represents over 1300+ members, both individuals and organisations such as universities, colleges and schools.

The purpose of this paper is to provide useful input for policy makers and those leading innovation in education across sectors in reference to effective use of digital technology in classroom and virtual settings and the development of the economic potential of the education and overseas provision. This paper will further inform the work of the ALT Policy Board.
Executive Summary
International Education is currently growing at 7% pa. It is a key export industry for the UK estimated as worth £17.5bn. This is recognised by the government. There is some shift towards online delivery worldwide. We need to keep pace with developments to retain our strong position.

Theme 1: Effective use of technology
Large scale online learning could provide continuity for learners throughout their lives between different education systems. It could broaden access and fitness-for-purpose of learning in different contexts. This involves appropriate standards and should work cross sectorally and between countries.

Technologies and pedagogies would continue to evolve to allow learners access to learning experiences including cost effective support, which was of a quality independent of the mode of access. This could be selected at the point of learning which itself would have more options than at present.

Institutions are responsible for their own futures and should be given the option of not competing in this area. If they compete then they need to acquire, train, retain and retrain appropriate expertise. Some central infrastructure was however still required.

Theme 2: Leadership
Understanding of technology and associated pedagogy should play a more significant role in leadership and professional development. Change is occurring through initiatives and age workout but needs to be accelerated to help retain global competitiveness.

Teachers, at any level, however qualified and innovative, cannot accomplish change without support from senior leaders. They need to accept this as do the leaders.

Horizon scanning, "reading the market" and preparing for new developments is an important function of institutional leadership. Leaders should for instance set the example in collaboration across sectors and beyond their comfort zone.

Theme 3: Support structures
Technology and pedagogy at scale now has the potential to make a significant step towards breaking the 1:25 support barrier by the use of crowd sourcing and peer support mechanisms. Unfortunately, it is not delivered in a consistent fashion and needs further research, experimentation and evaluation. This should be at scale with solid quantitative and qualitative techniques used for analysis. Much of this is likely to be international collaborative work.

This may involve more teamwork "outside the box" than that to which some teachers will have been used as well as potentially more intrusion into the teaching and learning processes to collect data. There is thus a consequent development issue.

Government must make sure that their processes that surround this activity are suitable and encourage successful moves from experimentation to deployment. This involves standards
work, updating and improving quality assurance processes (smart QA), and encouraging large scale developments within and between institutions and sectors.

In addition, it is necessary, through the various levers that government possesses, to create funding regimes that motivate such work by individuals in institutions, by institutions, and by potential partners of and donors to institutions.

**Theme 4: The UK in the global education sector**

At a time of economic downturn, encouraging cross sectoral and international collaboration and funding is more crucial. Learners benefit from international partnerships and exchanges.

Employability is increasingly a global attribute. Skills competition from developing nations makes delivering excellent education more important than before.

The UK has a good set of organisations that can potentially partner institutions and facilitate and broker with those in other countries.

It was important for the UK to be seen as internationally aware, sensitive to learner needs and concerns, and prepared to move quickly to align with emerging international practice. This may require some work by institutions, in partnership with others.
**Introduction**

The global education sector was estimated to be worth $4.5 trillion in 2012. It is forecast to grow at 7% per annum (pa) for at least a five-year period. Education exports by the UK were estimated as worth £17.5 billion in 2011 with over 75% coming from students studying in the UK. The majority of international students are in higher education (488 thousand students in 2011/12). This is thus a significant sector for the UK as a whole and very significant for many institutions (see International Education Growth and Prosperity, HMG, 2013).

A significant current area of concern for all global UK-based education providers, and hence for their supplying industries such as government, publishing, and equipment, is that of formulating strategies to help them to remain a leading force in the global education sector. With developments such as open online courses, e.g., MOOCs, gaining traction and technology providing solutions to delivering flexible, personal learning at scale, there is arising a clear demand to share existing and shape future thinking across educational sectors. Education providers who do not currently operate outside of their local community are meanwhile looking to assess how online provision could broaden access and encourage participation from across the country, or further afield. This applies particularly to providers delivering vocational, skills, and adult education.

Global reach, closer collaboration across sectors and working effectively with innovative education technology are essential parts of being able to meet future education needs at scale both in the UK and overseas. Furthermore, the problem is increasingly global and affects all sectors of UK education, even schools.

An additional factor for many providers is the potential loss of overseas students based physically in the UK following decisions of the government reflected in UKBA policy: many have for some time relied on overseas students coming to the UK to underpin their finances and some of this revenue stream is perceived as being under threat. The problem is one of maintaining a significant market share globally, while delivering a highly-valued student experience to students from the UK, who with the rise in tuition fees and through the increasingly influential National Student Survey have become more focused on the need to gain additional skills and experience alongside a qualification in order to remain competitive in the job market.

Threats come from other major provider countries and increasing repatriation of education in some countries. In addition, large-scale online providers with top US and other brands have arisen and are attracting massive numbers of learners from across the world. Venture capital is being provided to private sector and public sector providers but is significantly targeted at specific areas thereby possibly “cherry picking” the market. The opportunity for UK providers is two-fold and not without challenges: there is firstly the opportunity to meet some of the rapidly increasing demand from societies developing at a large scale and fast pace. While capacity to deliver high quality education in countries such as India is being built, there is scope to share the most effective practice and innovative research as well as supplying provision in key subject areas such as engineering, computing, or mathematics.

The opportunity closer to home is similarly complex as not only does provision need to keep pace with technological, social and economic realities, but assessment and quality assurance processes must remain effective and relevant. Most importantly, within the UK we need to recognise the pace of change across all areas and aim to develop into a more agile, evolving learner sensitive set of institutions.

The main section of this paper explores the key questions in the context of the deliberations of the experts at the round table meeting, enhanced by the result of wider consultation within ALT structures.
Theme 1: Effective use of technology

What pedagogies/technologies/standards should be watched for the future and what central support is missing in this area?

It was felt that there was a growing need for effective pedagogy and standards that support real hybrid learning. The ideal was that the learner could make decisions on where to be at the point of learning. One was looking for the option of being virtually present, on the fly, and enjoying the same experience in a discussion, seminar or whatever. This required a lot of work to better support those people not physically present but progress was being made although often it involved significant cost.

There was also a need to invest in pedagogy, technology and standards that made crowdsourcing support more efficient. An example was MOOCs but it was by no means restricted to this area. We needed good “citizen teachers” and means of identifying them, analysing and replicating their characteristics and putting in place reward and support mechanisms. This was an area of great importance if the crucial 25:1 support barrier was to be broken.

At the moment too much education, especially in HE, was strongly cohorted (students learn in lock step or are assembled into “gondolas” of learners who then work together albeit with different gondolas having different start times. In order to improve on this and allow learners to learn at their own pace but still have available other learners to work with in a variety of ways at key stages of their learning pathway, better organisation was required and technology and standards for supporting the process. Clearly large scale education makes this easier and this potentially leads to suggestions to simplify the current very diverse set of offerings available to learners. There is evidence from within UK HE that such simplification is already underway.

The group was firmly of the opinion that central support should be largely be in the provision of infrastructure and that the central activity should be driven by educators and institutions and not by the centre. However, there would be a need to be involved in the development and tracking of relevant standards, to provide advice on their adoption, and to support and provide appropriate staff development though Initial Teacher Training (ITT) and otherwise.

It was important that these activities were cross sectoral. This would not only make the task easier for the UK but help learners especially when in transition between sectors. This was an important central role.

While it might seem as if these three areas of change were currently ambitious and futuristic, it was likely that adoption by those at the leading edge was imminent and that the UK could not afford to be left out of development and adoption.
What do institutions need to do at what cost to compete and what current pedagogies/technologies do they need to get going?
The discussion here began by deconstructing the question, in particular in terms of the neo-liberal, market-orientated ideology it implied around education as a commodity rather than as a social good. Some members of the group then rejected such approaches in general.

In terms of what institutions need to do, the group discussed the need for the short term seamless integration of learners’ own devices. They also felt that due consideration needed to be given to ethical and quality assurance issues as well as a consideration of a disaggregation of constituent parts of the learning experience.

It was also felt that pedagogical models were needed that took seriously the need for appropriate support for learners (at a distance) from a range of backgrounds, with a range of interests, prior educational experiences and needs.

Different contexts require a different balance of knowledge acquisition and analysis, practice-based enquiry and reflection as well as participation and collaboration.

Manageability and critical mass were two key issues in relation to the Schools Science review. These factors needed to be taken on more widely to avoid expensive institutional errors. The economic argument was rejected by the group but it suggested that LT deployment should be increasingly in those areas where there was a sufficient return from success to justify investment.

In terms of technologies, the recent renaissance of digital video as part of the ecology of resources was important. In addition there was a need to use VLEs more fully and not just as simple repositories of support materials, recorded lectures and as places where assessments are submitted and processed.

Theme 2: Leadership

What is necessary to bring the required changes about?
Leadership was needed to provide support and championship for new technology and pedagogy based on an understanding of the issues.

There was a need for leadership to develop the professionalisation agenda. Too much had been done from a “gifted amateur” standpoint and the need to have structures and especially standards in place to make progress across an institution was currently not widely recognised.

There was a resultant need for all staff to be appropriately prepared for their roles. In the case of schools there was a need to lobby for ITT programmes that fulfilled this role. There were signs that the time was right for such an approach as the area is being revamped substantially.

Leadership in making sure that lessons learned were retained was also increasingly necessary. The gathering and distilling of knowledge and innovation needed more pressure.

There was a complementary leadership role for professional bodies such as ALT. They needed to ensure that they representing the voice of our members effectively and were a strong voice for professionalism, and evidence based innovation. Community bodies could influence policy makers as well as institutional leaders.
A distributed approach to leadership was likely to be the most effective. Government, sectoral and institutional leadership that were in line would be most likely to achieve successful results.

Leadership in reading the market is required – there is still a tendency for institutions to follow rather than lead internationally, albeit there are some excellent exceptions. UK institutional leadership is reported as risk averse and there is a need for more calculated risk taking. To do this successfully however requires considerable knowledge - of the technology, staff readiness and market. Few would claim to have all of this.

Market research more generally needs more investment of leadership activity. Anecdotes seem to be used more as drivers. The ocTEL MOOC was built on a substantial evidence base and has been successful – but there are also many cases where institutions have done things without much evidence base or impact analysis. For some reason this is an area where normal procedures of fully researched and documented business cases is yet to take a complete hold.

At a more international level it is clear that in the USA at least, it is believed widely that this is an area for investment and that global leadership is there to be taken. It is felt that there will be a significant positive effect on economic growth. This is especially true of MOOCs where potential investors seem to be plentiful. Some UK institutions have joined the resulting US led structures.

To think longer term one perhaps needs to ask whether a US led technology movement is in the best interests of the UK – but there is unlikely to be little choice.

One area where US leadership is a positive force is that of governance and structures. US institutions seem to be more agile in their establishment of partnerships and innovation and so there is not the same level of inertia as is the case say in Europe.

**Staff development needs, in institutions and elsewhere.**
Firstly there is a need to identify more carefully the needs for Staff Development within an institution in this area. There is then a need to embed the use of Technology in Professional standards such as QTS and QTLS.

One possibility for Higher Education is to use the Higher Education Academy’s UK Professional Standards framework. To get accreditation within this, one requirement of core knowledge relates to ‘the use and value of appropriate technologies’ (Core Knowledge - K4). Full details can be found at http://www.heacademy.ac.uk/assets/documents/ukpsf/ukpsf.pdf. ALT’s CMALT accreditation is being mapped with the UKPSF to identify commonality and save work for those seeking accreditation.
The staff development programme should provide incentives for innovative use of technology in teaching and learning and should be identified at Leadership and Governance levels.

**Theme 3: Support structures for learners and the wider sector**

This theme addresses the support issues – how do we breach the 25:1 ratio that seems to be a constant of much current provision?

This is an absolutely essential part of going forward successfully. Possible measures include the development of pedagogies for student support at scale, and support teachers.

There is a need to experiment with online versions of pedagogies for managing large numbers and differentiation, and to record and disseminate the results. One area where there is already success is in the use of technology to reduce the cost of supporting students by getting the technology to track and monitor and encourage the learners (progress chasing or “shoulder tapping”). Technology can also be used effectively in getting the student cohort to pace their work within the course’s set milestones. Finally, the collection of learner analytics and their use to support the whole process is being developed rapidly to good effect.

Work is needed in experimenting with modelling the use of teacher time for course preparation and student support. This can be difficult as such work can be viewed as intrusive but needs to be continued because it is especially important for scaling up to large numbers.

As with all such activities the best researchers can be the practitioners. It is therefore important to give teachers the time to reflect about new ways of delivering learning, both generally and in their own discipline. One possibility might be using models of good teaching in Moodle to create ‘starter packs’ to help teachers get started.

There is a problem in that not all teachers are keen on being able to support courses at ratios better than 25:1. They therefore do not always cooperate in such experimentation. It is therefore important for the need to do this to be effectively articulated in ways with which they can relate. Handling “buy-in” will continue to be important.

**Central structures needed/ government involvement**

One area where the centre has and needs to have an ongoing role is in Quality Assurance. What is required is smart enough QA. That is it must not get in the way of quality, should challenge people to raise their game, and needs to report on progress in an open constructive and comparable fashion.

The UK has traditionally been said to be good at concept but bad at moving to market. Part of the reason may be insufficient funding to move proof of concept to market.
Plenty of funding for the experiment (cottage industry stage) and funding once things work in a proven fashion for roll out have been supplied but there is a large gap between the two and many sustainability strategies are merely to ask for further money.

Such funding does not necessarily need to be from central government but recognition of such activities as evidence of impact in the Research Excellence Framework (REF) would undoubtedly help. Institutions need to find funding for “spins - in” and have staff development money set aside to enable uptake to be faster. Third parties may also be interested especially if there were more tax breaks for donors to institutions as in several other countries.

Ongoing structures are needed to support the evaluation and recording of the evaluations of innovations. This is a team game and perhaps there is a role for a broker such as ALT. There is certainly a need for a collegial/sharing forum structure.

Pedagogy development and deployment should largely be left to institutions but it must then be made clear that they are responsible in a QA sense if it is not successful. Carrot supplying agencies however may continue to fund experiment.

There is a need to stay in line with international standards and there is a role for government in helping bring that about. Standards for interworking are important as is the presence of an authoritative UK voice in outside discussions. This should cover not just boxes and wires but data sharing, open standards, cloud standards etc. There is an ongoing need for co-ordination and QA, such as that which Jisc has traditionally provided. The 1980s experiment of selling the British voice on international standards bodies to manufacturers should not be repeated.

**Theme 4: The UK in the global education sector**

**What are the major inhibitors to greater UK market share?**
It was felt that immigration issues were not going to go away and that the resulting feeling of being not wanted was going to mar the overseas based student experience in the UK for some time. The issue was perceived as increasingly popular with the electorate: education and loss of competitiveness would not be a sufficient argument to reverse the trends.

UK education had traditionally had more staff contact for learners than many competitors, especially that involving senior members of the academic community. There was still doubt about whether education as an experience can be sustained online. Cultural and social roles for education (the trainee adult etc.) may be harder to support online.

This again led to discussion of supporting student engagement in for instance MOOCs. In addition the UK had a quality culture involving completion rates and many crowd-sourced educational experiences could find that difficult.

Some countries were attempting to repatriate education as a national strategy – replacing the acquisition of the output of education by the acquisition of the know-how and thus replacing the delivery process by a local one. This had started with school and school exams and was now steadily becoming a more global phenomenon.
As part of this some countries now wish to exert political influence on what is taught to their learners and how it is taught. There may for instance be reaction against more open education in some countries - especially if it involves accessing resources that are deprecated in the country.

The UK has traditionally imposed its own cultural traditions of learning on learners studying on its courses. There is perhaps less acceptance of having to take the “complete package”, at a time of globalisation. This may constrain the types of activity in which learners are happy to participate.

Assessment and feedback is already a wide problem, as shown by NSS results and otherwise. What happens as you scale up and diversify the student body? More formative or diagnostic assessment may improve the student experience, but does not always scale well. Possible opportunities for stable areas (e.g. drill and practice in medicine and other more factual areas) may be worth further experiment. The “worst cases” may be in critical thinking types of courses.

Europe has developed a fairly sophisticated system of credit transfer but it is idiosyncratic and not available worldwide. The UK could get stuck with it but needed to be part of a wider system. Ideally one could collect credit from different providers, partnerships, etc. and cash in towards a degree or otherwise with appropriate certification and quality regimes.

Traditionally the UK is viewed as over bureaucratic and carrying high overheads.

**Who are the partners (UK and abroad) and what do they need to do?**

Within the UK it was felt that the government and sectoral partners available to institutions were well known. They included ALT, Jisc, the HEA, Ofsted; AoC; QAA; BIS, DfE, the British Council and the FE Guild.

However there was some a perception that they did not always join up especially well especially across sectors although even within some sectors there had been some replication of effort and unnecessary competition (perhaps leading to the loss or curtailment of activities of some bodies).

There was possibly a need to work more carefully with some commercial bodies in key areas such as training, getting market data (as with the NSS), and recruitment.

The role of government and agencies included informing, standard definition and propagation, quality assurance and reporting. Most important was the influence that government had with all as a result of holding purse-strings.

Membership bodies such as ALT had a role as brokers and disseminators. They provided a good forum for debate and for bringing into being partnerships as well as trying ideas such as ocTEL.

Jisc had had an horizon scanning and gap analysis role but this now needed to be shared with others, perhaps including in the commercial sector, and made more responsive to user pressures.

Staff development was an essential area. In school provision, ITT and PGCE programmes were central but CPD was also important. In other sectors the importance of the learning technology area needed stressing as part of programmes. There were signs that there is now movement in what was traditionally perceived to be a very conservative view of the area.
Some institutions are becoming more gregarious in their choice of partners but this could lead to some mismatches of expectations. However the gregariousness was a requirement for further work and CPD. This was especially the case with overseas partners.

There were bodies with similar value sets to the UK’s such as ascilite, the Sloan consortium, eaTEL, ILTA and ista. However, many overseas partners involved clashing cultures and mismatches of expectation and thus it was important to have good intelligence and understanding.

It was perhaps necessary to have defined for all such partnerships a good expression of what was intended, what were the underlying values, and also where there were “lines in the sand” for each party.

It was also necessary to have clearly defined in all such partnerships the role of the learning technology and the values that were supported. Again staff development was key and needed to be seen as more important.