AoC Position Paper: Technology and Learning in Colleges

Analysis of the Heart of Worcestershire College – e-Learning Academies Project

Contents

1. Introduction

This report is an analysis of the Heart of Worcestershire College – e-Learning Academies Project to date, its origins, funding and project development and future direction. It includes the contributions and plans of individual colleges and other stakeholders. The report also seeks to set the project outcomes within the emerging policy context.

The initial brief for this phase was to conduct interviews and undertake research on the Heart of Worcestershire College e-Learning Academies Project, the aim being to provide a detailed analysis of the project, including:

- Background to the project
- How funding was secured
- Its aims, business case and its desired outcomes
- Partnerships
- Project and change management
- Analysis of efficacy and impact

The desired outcomes of the project are:

- A unit-based skills qualification programme for young people and adults who want to gain individual units of skills or a full qualification in e-learning design (Level 3 and 4 Certificates and Diplomas);
- The qualification to include IT, Digital Media & Design, Learning Pedagogies and Cognitive Psychology as related to online learning;
- To develop, collaboratively, the curriculum content to support the qualification;
- To create advanced apprenticeship and higher level apprenticeship programmes based around the qualification and working in e-learning design in education and training settings;
- To set up and manage e-learning academy programmes in further education colleges to create qualified e-learning designers for employment in colleges, the wider education and training sector and the private e-learning industry.

The project has harnessed talented people from a range of colleges. Strong project management of this talent has resulted in the creation of a qualification, an apprenticeship framework and supporting materials, which can be used flexibly by colleges, other educational institutions and the e-learning industry. The project has identified a number of different approaches to e-learning in education, with views and approaches ranging from using e-learning to enhancing existing practices to moving to lower cost, higher volume learning through e-learning. It will be interesting to track the use of the Units and Qualifications and the impact on e-learning development nationally.

2. Background to the project

The background to this project was informed by the awareness of a skills gap in the design and development of e-learning programmes and materials and by changes in the government's policy agenda, in part reflecting changes in demand, that is placing a greater focus on the online delivery of education.

The rapid growth in the use of e-learning in training programmes in business, industry and the public sector is evidenced by:

- The 2012 IPSOS study of e-learning across Europe which identified that 27% of the total European Industry Training budget was spent on e-learning and this had grown by 10% from 2011;

- In 30% of firms globally at least half of their employees had taken at least one e-learning course, whilst in the UK it was 39%;

- The UK has the largest e-learning industry in the EU. In 2011 over 400 e-learning businesses generated £540 million through e-learning services in the corporate market.

- Engagement with businesses through the Learning Technology Show and the Learning Performance Institute confirm this ongoing growth;

- Growth in the demand for services such as those supplied by City and Guilds Kineo, evidenced through its wide reach to UK corporate customers, who are using its Moodle centred commercial platform Totara.

The project team argued that growth and competiveness is impeded by a lack of skills to create e-learning programmes to deliver the aspirations of organisations, teachers and learners

The policy and demand-driven growth in the further education sector has been illustrated by the work of the Further Education Learning Technology Action Group (FELTAG), the Education Technology Action Group (ETAG), the BIS response to the FELTAG recommendations and separate initiatives from the Skills Funding Agency (SFA). The main elements of the policy agenda which have helped to define the aims of the project are:

- FELTAG Recommendation - Funding 4: Mandate the inclusion in every publicly-funded learning programme from 2015/16 of a 10% wholly-online component, with incentives to increase this to 50% by 2017/2018. This should apply to all programmes unless a good case is made for why this is not appropriate to a particular programme and the BIS response to the FELTAG Recommendations in June 2014 that endorsed this point;

- SFA 2014/15 Management information and funding-related actions and plans: revision of GLH definitions to reflect e-learning; the addition of a new field in the ILR to collect the proportion of e-learning; introduction of online only trailblazers. Autumn 2014 – confirmation of online threshold. The suggested introduction of online only funding rate and business rule for approval of qualifications with online-only element.

It should be noted, however, that the findings of the FELTAG report and the changes proposed by the SFA do not imply any mandatory adoption of these targets – they remain aspirations – but indicate a trend in the way in which government wishes education to be delivered.

The implementation of government policy in this area will be coordinated by complementary initiatives delivered by the Education Training Foundation (ETF) and JISC. These include the ETF Learning Technology Self-Assessment tool and ETF Learning Technology Support Programme.

3. How funding was secured

Funding was secured through a successful bid to the Skills Funding Agency Curriculum Development Programme for further education colleges in May 2013. The bidding process was managed by the Association of Colleges (AoC). The total funding of £0.5 million was the largest allocation of funds for the projects approved in this category.

4. Aims, business case and desired outcomes

The aim of the project was to address the identified skills shortage by creating a new qualification framework and a shared curriculum across a consortium of partner organisations, to train a new group of technical staff that are able to process content for delivery through e-learning and, in so doing, create a new occupational role of e-learning designer. The skills which are required in order to be an e-learning designer cut across a number of subject specialisms and sector skills areas and the project aims to explore what is required to enable a skilled workforce to be developed to increase the UK's global advantage.

The business case for the project derives from the size of the e-learning industry in the UK, its rate of growth and the lack of a qualification pathway to train e-learning designers. The lack of a qualification pathway is also inhibiting further education colleges, schools, private training providers, Community Learning providers and universities from developing and delivering education and training through e-learning.

5. Partnerships

It was recognised from the outset that no one organisation had the specialist expertise to deliver the project and that partners working collaboratively were essential to deliver the desired outcomes.

The project team comprises:

- 8 further education colleges with strong track records in e-learning and entrepreneurial activity. The lead college for the project is the Heart of Worcestershire College which has managed the project financially and processed content for delivery through a blended learning approach ("e-learnification")

- Coralesce, a sector-focused organisation with strengths in project management, research and partnership working

- Cultural and Creative Skills, a Sector Skills Council

- Ascentis, an awarding body

- LogicSpot, a web development company

In addition, it was recognised that learning from international partners would help to support the business case for the project and inform its outputs by drawing on successful examples of curriculum design and delivery. International collaboration was enabled by:

- International partnership work, through the sharing of best practice, achieved through the project team visit to the US and Canada in October 2013;

- Partnerships with the e-learning industry and its representative body, the Learning and Performance Institute.

The structure and content of the project team visit to the US and Canada was informed by previous engagement with key stakeholders at the US Community Colleges Conference in April 2013. Key outcomes of the Project Team Study Tour, which have impacted directly on the project, include:

- An enhanced understanding of best practice in instructional design, in which the US excels;

- An understanding of different models of supporting e-learning;

- A practical understanding of the positive impact of e-learning on student recruitment;

- How standards can be applied to e-learning development in colleges;

- A template-based model for assuring the quality of e-learning provision.

6. How different college partners have approached e-learning

The colleges who participated in the project had a number of common characteristics as follows:

- A commitment to e-learning and plans to progress e-learning in the delivery of programmes;

- Senior management buy-in to e-learning and resourcing of appropriate staff structures;

- Experience of delivery of programmes through e-learning;

- An entrepreneurial approach;

- Innovative approaches to culture change.

Within this there were some interesting differences in approach and degrees to which these characteristics prevail. On-site interviews took place with the majority of colleges in the project. The interview was structured in two parts. One part discussed the college's contribution to the project and experience of it. Key findings have been reported under Project Management. The other part discussed the college's approach to e-learning generally. This was facilitated through the use of two mind maps; one which covered the college landscape for e-learning and approach to it and the other covered the people involved in e-learning and how they collaborate. Together these mind maps enable a view to be obtained of development of e-learning in a college, the culture for this and priorities. The information gathered through interviews was supplemented by participation in teleconferences, the Steering Group, Curriculum Working Group and desk research. Some highlights are given below.

■ Heart of Worcestershire College

The approach to progressing e-learning across the college is focussed on the SOLA Initiative (Scheduled Online Learning and Assessment) which aims for 30 hours of e-learning in Level 2 programmes and 60 hours at Level 3. This is supported by SOLA assessors. The college highlighted "the massive component of change management" to achieve this. The college's commitment and experience are evident through examples such as the design and delivery of a wholly online Payroll Management Course to 800 students nationwide, a Blended Learning Foundation Degree in Cyber Security and AAT delivery. There is a strong central support team of four which designs and supports e-learning delivery and this has been at the core of the DesigneLearn Project as well as the college's own work.

The college has a strong track record of collaborative working between curriculum leaders, teachers and Learning Technologists to progress e-learning. This is strongly supported by senior management buy-in and strong business leadership of entrepreneurial initiatives. There was a view that development of e-learning delivery should not lead to funding cuts and that this type of message can be damaging to enhancing learning.

■ South Essex College

This large multi-site college recognised the need for the project at an early stage. It has contributed specific games design expertise to the project. The approach to the project has provided a model for the college's own in-house development. The college has a proven approach to learning and is using e-learning to enhance this approach rather than replace it. There is good buy-in from senior leadership and staff felt that they were working in a culture where they were supported to progress e-learning. The approach to progressing e-learning in the college includes the development of a set of Moodle Standards, at four levels, which departments are targeted to meet, in appropriate timescales. Level 1, for example, includes assessment briefs, schemes of work and the assessment schedule. This is included in the SAR process and seeks to achieve more uniform use of the Moodle VLE across the college. This idea arose from the Study Visit to the US and British Columbia. It is envisaged that these standards can be mapped to the spectrum of blended to fully online learning.

The college operates a model of a Head of Learning Services, with 3 Learning Technologists supporting 12 departments complemented by a specialist Advanced Practitioner and a Moodle Manager. The Plan is to initially train five Designelearn apprentices to support this approach. There was a strong view that the use of e-learning should not be used to achieve a 10% funding cut and a question was raised as to how the FELTAG 10% recommendation could be audited.

Finally there was a plea for the use of plain language in the discussion of e-learning. In developing the use of games in e-learning, the college advocates that the user experience is more critical than graphical design and stressed the importance of adaptable learning and the use of badges.

■ Furness College

This entrepreneurial college has the second highest number of apprentices in the country and has a close working relationship with the BAE Nuclear Submarine Manufacturing base. BAE have their own Learning Development Unit and are interested in the use of the DesigneLearn qualification in this context. This would include specialist and health & safety-related training materials. 5% of the college programmes are bespoke full-cost ones. All students use the VLE and the college has a dedicated centre for online assessment. The college has recently benefited from a new build and this has provided an opportunity to reconsider the role of e- learning. Over time the college has moved its e-learning emphasis from technological to a balance of technology and pedagogy.

The college is working closely with its LEP to progress the contribution of e-learning and has submitted a bid to this effect. The staff roles that direct and support e-learning include a mix of functions such as directing HE and being an Advanced Practitioner. There is a strong belief at the college that further education should have the same access to the interactive e-learning development tools that the commercial sector has. There is a feeling, for example, that Moodle is limiting in this respect. This is an important consideration if programmes are to be delivered as total online, rather than blended learning, solutions.

◼ Grimsby Institute

The Institute is strong on specific digital expertise and this is exemplified through its operation of the first local TV station on national scale - Estuary TV. The Institute had already set a 10% e-learning target for the end of 2014/2015 prior to FELTAG. Staff have embraced the concept of the "flipped classroom" and there is a strong emphasis on making e-learning engaging.

The Institute is using the project to progress e-learning in the college as well as to market it to a wider group. This includes 1000 training businesses, local schools, Siemens and Phillips. The Institute also includes a 14-16 Academy. It is believed that every school will require an apprentice. The college envisages development of a cost-neutral model in rolling out the qualification internally and externally. An example would be that a school, having trained an apprentice, then rents this person out to an outside organisation and this funds the training of a new apprentice.

At the Institute the delivery of this project will be grounded in the Teaching and Learning Team that delivers Teacher Education as it needs to be linked to this area because of the importance of pedagogy. There is a strong view at the Institute that widespread adoption of e-learning in the sector will only be realised through making it mandatory and funding continuing development.

The college has contributed the first External Verifier for the qualification.

◼ Highbury College

The college has developed an approach to e-learning development which has the following characteristics. It is led from the top through a group of key stakeholders who form an eLT strategy group. It is firmly based on agreed pedagogical principles. These pedagogical principles are used to audit the actual use and current state of eLT technologies to inform changes in practice. This also informs training of staff through the eLT Training Programme – "Raising the Threshold", which is compulsory. Change is driven through with the support of resources and structures. Included in this is the use of students or apprentices to support ongoing development. This chimes well with the principles of DesigneLearn.

Led by the Principal, these developments are well supported by the roles which include: Director of Learning Technology, Head of Centre for Excellence in Teaching and learning, Head of Technology and Innovation and Director of Enquiry and Emerging Practices.

Highbury operates a virtual college which delivers wholly online courses, including: AAT Level 1, Heritage Construction Level 2 and Preparing to Work in Adult Social Care Level 1.

The strong grounding in pedagogy enabled the college to make the central contribution on this to the project.

◼ City College Norwich

The college has a well-established track record of innovation in e-learning. It is now part of the TEN (Transforming Education in Norfolk) Group which includes two academies and a university technical college. E-learning development is supported by two key roles: Director of New Media, Marketing and Communications (Norfolk Educational services for the TEN Group) and a Director of Learning Technology who performs the same role in the University of East Anglia. This offers an opportunity to deliver the DesigneLearn qualification in a range of institutions.

Development of e-learning at CNN is characterised by a bottom-up approach and there is deliberately no e-learning strategy but an approach whereby e-learning is embedded in the curriculum delivery, innovatively and wherever appropriate.

The study visit to North America has developed thinking in the college about e-learning. The approach in the US was seen as more of a "can do" one and less complex and technical than approaches in the UK. The college experienced initial challenges in contributing to the content development for Designelearn as it felt constrained by the structured template approach.

North Hertfordshire College

The Principal and an Assistant Principal have pioneered new approaches to learning in further education. This has been through *Entrepreneurship for further education (E4FE), an initiative to transform colleges in favour of employability, enterprise and entrepreneurship.* This includes a facilitated approach with wide use of blended learning. An Assistant Principal is currently seconded to the Enterprise Directorate – Policy & Strategy BIS. A Deputy Principal leads on Information and Technology development and the college has commercialised some of its learning and IT developments, which are purchased by other colleges. These developments and the changing nature of work impact on the requirement for different skillsets. This includes a "work from home" culture and moves away from "face-to-face" learning to lower cost, higher recognised volume e-learning. Further details of this approach are given in the Gazelle Group paper: [Further Education Reimagined](#)

The college's strong grounding in e-learning enabled a smooth and early contribution to materials development for the project.

Sparsholt College

This land-based college, which has a significant HE element, has a strong track record of progressing e-learning and is at the front of the pack in its field. It had initially set a 15% e-learning target in its strategic plan but this had since been taken out. Examples of e-learning in the college include the development and delivery nationwide and beyond (Ireland and the UAE) of an online City and Guilds Diploma for zoo staff. E-learning is also used for a range of college courses include one for Royal Veterinary College nurses. The college operates two MOODLE platforms, one for internal use and the other, LEDGE (Leading Engagement), for external use. The college is hoping to extend to e-learning, the collaboration that already takes place within LANDEX over the production of paper-based resources.

Ideas on supporting learners and collaboration in developing capacity were gained from the US and British Columbia visit. These ideas have influenced Sparsholt's approach to developing both individual units and overall capacity.

The college is actively planning the building of e-learning design capacity both through LANDEX and strong collaborative activity with other Hampshire colleges. The college recognises that it cannot build this capacity on its own but that through this type of collaboration materials can be created that will support a wide range of providers. This has influenced the first course being focused on a group of apprentices drawn from Hampshire colleges. It has been recognised that Sparsholt, working in this collaborative manner, has the potential to become an e-learning production organisation in a similar manner to the Heart of Worcestershire College.

The college is also hoping to market the qualification to employers such as IBM who are nearby.

The US visit has led to the college participating in the UTAH Euro launch of the CANVAS VLE to assess potential for its future use.

There is recognition that this project alone is not sufficient to achieve the FELTAG 10% and that there is a need for other complementary initiatives. There is also the recognition of the time challenge to college staff to be involved in tutoring Designelearn apprentices and in leading the development of materials.

7. Project and change management

7.1 The first apprentices

The first apprentices started their programme at Sparsholt College in the first week of October 2014 with a week-long residential at the college. Following this the group will attend college one day a month for the next year. These apprentices are drawn from a number of Hampshire colleges. Units covered during the residential week include: Introduction to the Digital Learning Environment, Audio and Video Production and Personal and Professional Development. The programme is facilitated by Coralesce. On the day I visited, the students were fully engaged in video and animation production. On the following day they were scheduled to visit Twinings, who are head-quartered in Andover, to view the e-learning system that is used in this business.

7.2 General project management

The model of using a sector-focused, experienced project management organisation, in the form of Coralesce, has proved very successful in maintaining the momentum of the project, ensuring timely outcomes and taking the burden of project management from the colleges. College managers have recognised the effectiveness of this approach in a climate where there is relatively little project management capacity available in colleges for this type of project.

The project is governed through a Steering Committee, chaired by a College Principal, with membership comprising senior representatives of the institutions involved. The development and delivery of the unit specifications and materials has been enabled through the Curriculum Working Group, led by a former Principal. This Group has captured and focused a wide range of specialist expertise in colleges to create the qualification and materials.

Project Communication with key stakeholders and the future market is well supported through the website: www.designelearn.com , which was available from the outset, was delivered by Logic Spot and has also established a brand for the qualification. The project has a social media presence with 610 Twitter followers (correct as of January 2015). The Designelearn brand is also used on the Moodle site for the learning materials and activities. The project has already achieved four out of the five outcomes (as listed above) and has made good progress in the remaining outcome with plans in place to complete this with the roll-out of qualification delivery across all participating colleges in 2014/15.

7.3 Qualification development - Ascentis

The development of the unit-based skills qualifications at levels 3 and 4 was completed on time. The development of the unit specifications was undertaken by the college members of the Curriculum Working Group working with Ascentis, with inputs from Creative and Cultural Skills and e-learning businesses, facilitated through the Learning and Performance Institute. This was an intensive exercise, in which Ascentis supported individual project team members, for some of whom this was their first experience of developing qualifications. This collaboration between college-based project team members, with their specialist expertise and Ascentis's experience of building qualifications, proved to be highly productive. The qualification was approved in record time by OfQUAL, with no requests for modification.

The Level 3 Diploma has a minimum credit value of 41 credits and the Level 4 Diploma a minimum credit value of 39 credits. The qualification structure comprises core mandatory units and two sets of optional units which are generally concerned with the context of the technology and specific skill sets for development. Please see Appendix 1 for the structure of the Level Three and Four Diploma.

7.4 Content development - the team

The Curriculum Working Group developed the curriculum content through a collaborative process. The approach to structuring content was informed from findings from the study tour to the US and British Columbia, in that all materials were developed and are available to users in a consistent structure using a similar approach to Quality Matters, where appropriate. On completion of the curriculum materials it was peer reviewed by the curriculum group members.

The content is available for delivery through a blended learning model. Accordingly, this material includes learner and tutor notes, talking heads, PowerPoint presentations, Videos, assessed tasks, projects and reference material. The material is structured to enable a mix of facilitated learning and independent study. Each unit starts with a scheme of work and unit specification and then uses a consistent structure for the learning and assessment elements. As an example, the scheme of work for the Level 3 Unit: User Experience Design is available to view.

This gives full details of learning sessions, timings and the resources to use. The Heart of Worcestershire College's combination of development and delivery experience enabled the college to be well placed to design the processes and manage the production of the Designelearn materials on Moodle. Using an Articulate Storyline approach the team has worked collaboratively with unit content authors to transform raw content into Moodle-based blended learning materials which are in a consistent and engaging format.

An experienced group of learning technology staff at the Heart of Worcestershire College processed the materials from raw copy to an engaging e-learning format. The material is available via the Moodle platform at the Heart of Worcestershire College, or for participating colleges to load on to their own servers. The materials have been trialled successfully from both a learner and tutor perspective.

All of the colleges in the partnership have contributed to content development. The result is a set of materials which meet the requirements of the qualification in both breadth and depth. The collaborative process has enabled colleges to contribute their specialist strengths. Examples of this are:

- E-learning related pedagogy from Highbury College;

- The use of games from the Grimsby Institute and South East Essex College;

- Quality assurance of the materials by Furness College.

These materials and the learning model are being piloted from this autumn by all of the colleges involved. There follow some screenshots which give an indication of the visual nature of the materials and the content:

An example of a unit front page showing the content and navigation

An example of the introduction to an independent learning element
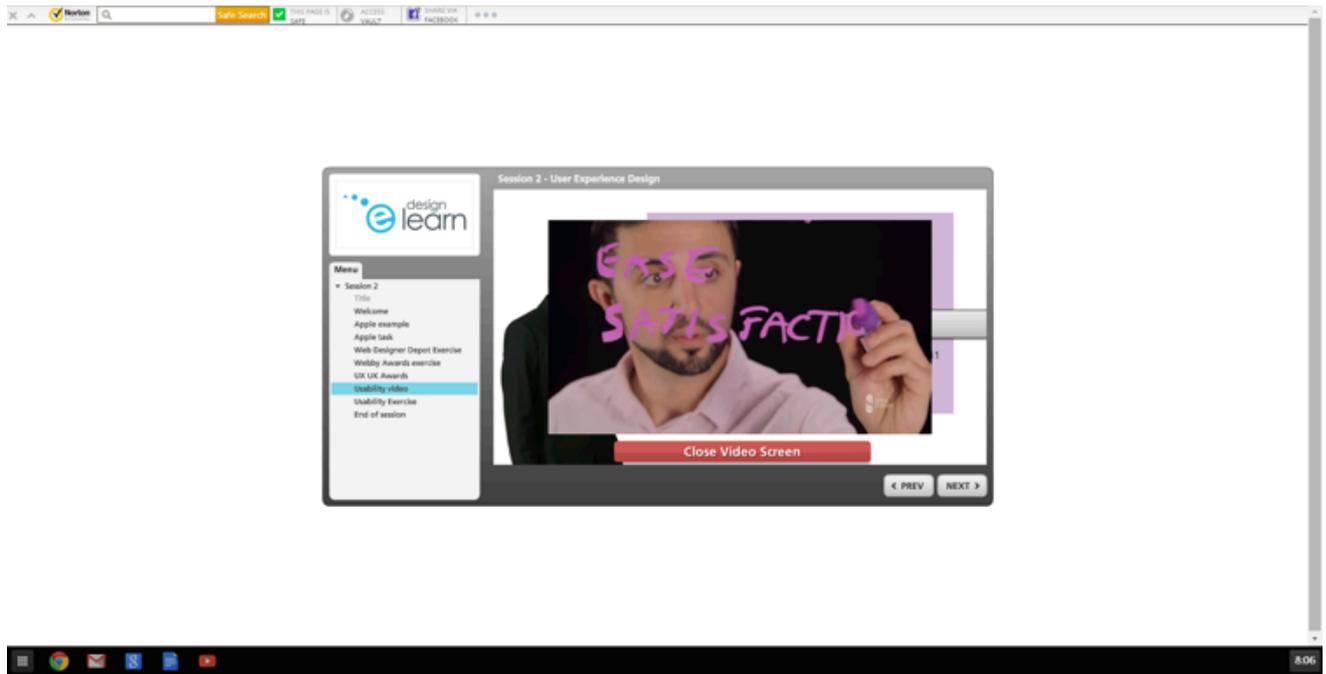
An example of a video which is an independent learning element

The clarity of the structure, the high quality of presentation and the depth of material available has maximised the capacity for new tutors to be able to facilitate delivery of the programme.

7.5 Apprenticeship framework development - Creative and Cultural Skills

The Apprenticeship Frameworks have been devised through the auspices of Creative and Cultural Skills. The Level 3 Advanced Apprenticeship Framework has been approved by the National Apprenticeship Service and by the Skills Funding Agency for funding at £9,500. It is based on the Diploma. The Level 4 Higher Apprenticeship Framework has been approved by the National Apprenticeship Service. It is based on the Extended Diploma.

The roles associated with the Level 3 Advanced Apprenticeship involve working as a team member and/or in a support role in jobs such as: Digital Learning Assistant, Virtual Learning Environment Administrator and Technology Enhanced Learning Co-ordinator.

The roles associated with the Level 4 Higher apprenticeship involve working in a team leader or management role in jobs such as Digital Learning Designer, Virtual Learning Environment Manager and Technology Enhanced Learning Manager.

For the Level 3 Advanced Apprenticeships, the off-the-job guided learning involves a combination of the Level 3 Diploma in Digital Design and Level 2 Functional Skills in Maths, English and ICT. The on-the-job guided learning involves the competence elements of the Level 3 Diploma in Digital Design.

For the Level 3 Higher Apprenticeship, guided learning hours do not apply. The combined knowledge and competence qualification is the Extended Diploma in Digital design.

Full details of the [Apprenticeship in Digital Learning Design](#) and [Higher Apprenticeship in Digital Learning Design](#) is available online.

8. Analysis of efficacy and impact

The process has involved significant consultation with the e-learning industry. E-learning businesses have welcomed the qualification enthusiastically and identified a clear demand for the framework. This includes demand for a completely online version of the qualification delivery. The development of the Apprenticeship Framework has taken place at a time of change in apprenticeship development through the Richards Review. Efforts were also made to position the qualifications in the Trailblazer Apprenticeships but this did not prove possible.

All partner colleges have plans to deliver the qualification from the autumn term of 2015. Most colleges are starting with the Level 3 qualification, with the exception of The Heart of Worcestershire College which will deliver Level 4 for adults rather than apprentices. A variety of approaches are being adopted. These recruitment models include:

- In-house recruitment of apprentices for own staff: Colleges recruit all the apprentices as in-house employees and they are being deployed in college to develop e-learning content. The funding rate of £9,500 is viable and offsets the wages to provide a new labour force to enable the college to drive forward on the FELTAG agenda. Example: South Essex College with five new apprentices delivered through online and supervision in the workplace;

- Recruitment across a sub-region, such as a county: Colleges collaborate within a sub-region for each college to have at least one apprentice and they work together to develop shared content across a range of subject areas. Example: Sparsholt College with six apprentices across the Hampshire colleges plus in-fill adults delivered by block residential, online and one day per month;

- Recruitment of adults: Colleges deliver the Level 4 Diploma in Digital Design and standalone units on a 90% online basis. Example: Heart of Worcestershire College who has 10 Diploma students and is delivering nationally from a London base.

- Open access recruitment of young people on apprenticeship with employer placements: The course is marketed openly with a mixture of industry and in-house apprentices. Example: Highbury College and Furness College are actively seeking to recruit young people delivered on a blended learning basis of online and one day per month. This could include working collaboratively with a LEP.

Since the launch of the new qualification, colleges have adopted open access recruitment and are joining the network to share the materials - these include Barnsley College (seven apprentices running an in-house e-learning design company, Elephant Learning Design @ eledesign) and Kendall College with five apprentices. The collaborative model, coupled with wider partnership working, has enabled effective change management within the project; an example of this is the qualification design process that involves the colleges working with Ascentis to design the unit specifications. Part of the process included the involvement of a number of e-learning companies and other business users of e-learning, who are members of the Learning Performance Institute, which facilitated their involvement. The involvement of these businesses was also driven by Creative and Cultural Skills.

There are wider change management considerations in the use of the qualification when e-learning designers start working in colleges and other providers. These will include the development of structure and culture, through which e-learning designers can work with teaching staff to develop and support the delivery of digital learning programmes and content.

8.1 Impact on the market to date

The emphasis at this stage of the project is on efficacy rather than impact. The work of the project team has, through the creation of the qualification, high quality content, well-targeted marketing and a sustainability plan, maximised the capacity for this project to have high impact. The real impact from this project will be evident once e-learning businesses, further education colleges and other educational institutions start using those who have qualified or are qualifying as e-learning designers.

Throughout this project there have been a number of well-focused activities to consult employers and to market the qualification, including:

- An early consultative event with employers;

- The Learning Technologies Show, where the project was showcased to the e-learning industry;

- A range of JISC national and regional events, where the project was showcased to the further and higher education market;

- Ascentis launch events for the qualification, in London and Manchester, which were attended by both colleges and the e-learning industry.

These events have led to interest and commitment from a number of e-learning and other businesses and a range of colleges to use the qualification. Creative and Cultural Skills are involving their own network of colleges, who will form their own academy.

8.2 Future challenges

Turning to the context of the ALT/AoC Review of the literature and progress on e-learning and the considerations for the future which arise from this, there are a number of key challenges for the future for Designelearn. These are:

- With the cessation of project funding, to maintain the momentum in the delivery by colleges of the qualification and materials;

- To move to mass roll-out of the qualification, in a sustainable manner, so that it might achieve its intended purpose;

- Development of the tutor capacity to deliver the programmes;

- The development of college working practices and cultures, which recognise and use the e-learning designer apprentices as a major force in progressing e-learning delivery of the curriculum, in accordance with FELTAG recommendations, the BIS Response and SFA's information and funding-related actions and plans;

- Engagement with universities, private training providers and schools and their representative bodies to sell the potential of e-learning designer apprentices;

- Further engagement with e-learning and other businesses and development of an online version of the materials;

- Mass marketing the apprentice framework/qualification to potential individual students and their employers.

Establishment of routes to higher education and professional qualifications and the development of e-learning design qualifications at Levels 2 and 5.

8.3 Meeting these challenges

The Project Steering Committee has addressed a number of these challenges through considering and agreeing how the project can be sustainable. After considering two potential models – creating a Learning Company or creating a Best Practice Network, it was decided to opt for the Best Practice Network entitled The Designelearn Network. This model is predicated on the building the trust of colleges and using the new generalised capacity of expertise. Details of this Best Practice Network are given below:

Purpose: The Designelearn Network has been set up as a good practice network to share best practice on delivering the new Digital Learning Design Qualification and Apprenticeship at Level 3 and 4 and the blended learning curriculum content to support delivery. It also aims to engage with employers and showcase the work of providers and learners using a shared website and social media.

The Designelearn Network provides automatic membership to the founding colleges and partners for 2014/15 and offers new colleges the opportunity to join and access the network. The benefits of joining the network are:

- New member colleges will be given a copy of all the blended learning materials for the Level 3 and 4 to self-host on their own MOODLE;
- Five Curriculum Group meetings, five times per year(face to face/online);
- Brokering the sharing of curriculum updates;
- Organising staff development events and an annual e-learning conference;
- Brokering verifiers across consortium;
- Brokering support for new centres;
- Maintenance of joint outputs of the project (website www.designelearn.com), social media: Twitter @designelearn, Facebook designelearn and LinkedIn Designelearn;
- Updated shared website with links and details about college courses;
- Providing advice to employers and signposting to colleges;
- Maintenance of archive of Branded Learning Platform which is accessed through the web portal and the curriculum content for all of the units against the new qualifications at Level 3 and 4;
- Provision of standard marketing templates for Designelearn and loaning promotional stands etc for partners;
- Running trade shows to industry including the Annual Learning Technologies Show at Olympia;
- Compiling membership statistics on learners, employer engagement and destinations to demonstrate impact.

The fee to new members will be £1,500 payable to Heart of Worcestershire College. This fee covers all of the materials and services. After 2014/15 all members can decide to stay with the network and pay an annual membership fee or they are free to leave but retain all of the curriculum materials. Heart of Worcestershire College is the fund holder for membership fees.

Following a tender process, Coralesce have been awarded a contract to manage the network and are actively promoting the network. Two colleges, Kendal and Barnsley, have already joined the network.

8.4 Marketing the apprenticeship framework/qualification to potential students and employers

Responsibility for this lies with individual colleges and employers, with support from Ascentis, Creative and Cultural Skills and the DesigneLearn Network. This will need to reach into schools. Whilst the overall concept of a qualified e-learning designer is easily understood, there could be challenges in implementing this given that it is a new job role which encompasses a range of disciplines and collaborates with others. To meet this challenge the team have devised a sample job description which colleges and other employers can adapt to their contexts. Details of this can be found in Appendix 2.

8.5 Market development

A move to deliver more of the further education curriculum online might be supported by e-learning designers. Coupling this with the identified demand for e-learning designers in the e-learning industry and the potential in independent training providers, schools and universities could create a sizeable new market for the training of e-learning designers. This would bring further funding to the colleges who train them. Whilst a number of senior college representatives involved in the project have expressed strongly that the move to e-learning should not be regarded as a mechanism for cuts, it presents an opportunity for new forms of income and new forms of learning. The community colleges that were visited in the study visit to the US and the colleges in British Columbia reported that the development of e-learning in their delivery was creating new streams of work and new income.

8.6 Supply and demand

Finally, given that we are currently at an early stage of delivery of these qualifications and that the apprenticeship programmes will normally take two years to complete, the demand for e-learning designers may well outstrip the rate of supply. There may be a need for strategic and operational interventions to accelerate supply.

8.7 Lessons from North America

The study comprised visits to a central agency and two colleges in each country as follows:

US

- Washington State Board
  - Policy Board that helps the 34 community colleges in Washington State work as a system through:
  - Strategic Technology Plan which directs resources at all learners
  - Common contracts enable central payment for resources and in other cases colleges buy into contract – both approaches enable a lower price
  - Sharing CPD and enabling students, who move from college to college, to access the same tools
  - Key to this is Quality Matters, a rubric for Instructional Design
- Shoreline Community College
- Seattle Community College

Canada

- British Columbia Campus (Provides services to 25 colleges and universities):
  - Collaborative and shared services to reduce resource cost
  - Open educational resources and open textbooks
- Vancouver College
- Camosun College

The main findings from the American and Canadian models are:

- The US Government has an educational strategy for e-learning via the Office of Educational Technology with the National Educational Technology Plan 2010 www.tech.ed.gov

- Federal funding is provided to State Education Boards to meet national targets for connected education and online learning;

- Development and delivery are highly influenced and supported by the Federal and Provincial government structures through delivery agencies;

- Central resourcing and 'evelopment' is present in both countries;

- 20% of students in Washington State colleges are fully online students (a growing market), 80% are blended learning or web-enabled in some way;

- In Washington State the Quality of Instructional Design is paramount and driven by the Quality Matters Rubric which focuses on the student experience;

- Instructional Designers were trained to postgraduate level and are important in mentoring staff on how to go online and use VLE effectively;

- The e-learning experience is not considered complete or effective unless it includes elements of interaction from face-to-face teaching: Teacher to Student, Student to Student and Student to Content (Seattle Community College);

- The view is that technology enhances but does not displace the work of instructors. Technology is not going to replace instructors. Instructors who use technology effectively are going to replace those who don't. (Seattle Community College);

- There is a need for a good on-screen instructor presence via video and audio (Seattle Community College);

- The British Colombia (BC) campus focuses on central procurement and shared services to reduce the cost of licences. It does not provide central services in instructional design but provides grant funding to provide time in individual institutions to develop materials;

- BC campus estimates that 10% of courses are fully online and 90% web enabled, which is similar to Washington State with a very high proportion of vocational courses and apprenticeships;

- BS campus runs an online course directory on behalf of all institutions in British Columbia https://coursesbc.ca/

- The BC campus runs the 'eprentice' project whereby online training resources have been developed to deliver the college based 'know-how' element of apprenticeships. This has enhanced learning beyond the face-to-face approach as students can use these resources

at their own pace to perfect a skill. The online courses now have the highest scores in British Columbia for success rates.

The general value of collaborative development, as in used in the American and Canadian colleges, has been adopted by the Design eLearn Project together with the key principles of Instructional Design. For instructional design the project team opted for advanced technician level rather than at postgraduate level.

The partnership, working with the Learning Performance Institute (LPI), has enabled:

- Structured consultation with key businesses in the e-learning industry, which has informed development of the qualification and materials;

- Plans for future collaboration, in this field, between the Further Education and the Private Sector. This is exemplified by LPI's intended use of the qualification as distinct from developing its own and through LPI discounting membership to a defined number of project participants.

9. Conclusion

This paper has sought to examine and assess the ways in which the Heart of Worcestershire College – e-learning Academies Project developed to date in order to define the notable features which have contributed to its success.

The project focused on creating better operational capacity in e-learning businesses and educational institutions, which will add to the efficiency and effectiveness of learning.

It is useful to evaluate this project through a consideration of the balance, in this case, between the four perspectives on operations strategy being: top-down, bottom-up, market requirements and resources.

The top-down perspective was present through:

- The need to comply with the rules for building qualifications and apprenticeship frameworks;

- The approach to develop the content in a prescribed format through a template storyline approach;

- The emerging national policy agenda relating to e-learning together with separate national initiatives on management information and funding – FELTAG, BIS, SFA.

The bottom-up perspective was present through:

- Colleges contributing their own content from their own knowledge and experience;

- Colleges devising their own models for delivery of the qualification (the four models which emerged);

- Colleges an businesses looking to adapt the material to me their own needs, for example through a totally online version.

- The market requirements perspective was present through:

- The identification of demand for these skills and the qualification by e-learning businesses and educational institutions.

The resources perspective was less present as:

There is an assumption that the technology is available to deliver the qualification. The qualification has been devised flexibly to enable it to be delivered in the context of the viable mix of technology.

In parallel with the way that government has developed, this project has exhibited a greater dominance of the bottom-up and market requirements perspectives than was present in e-learning developments of previous years. In previous years there tended to be a dominance of the top-down and resource perspectives. There is still a need for a top-down element but, in the case of this project, it has been limited to essential inputs.

The project clearly has potential to contribute to operational improvement in the delivery of learning. Accordingly, it has a key role in furthering the implementation of college strategy. There would be value in tracking over time, and using a suitable model, how the results of

the project enable educational institutions to progress from early beginnings in e-learning to become leaders in their field.

It would be interesting to analyse further how this project facilitates trade-off between the five performance objectives that are present in any organisation: quality, speed, flexibility, dependability and cost.

The project is well placed to contribute to the improvement of quality of learning and enabling it to be delivered on demand, in a flexible and dependable manner, whilst containing or reducing cost.

What has become clear is that such a complex project has relied upon a series of specific and general factors in order to achieve the results it has so far. These might be summarised as follows:

- The importance of upfront funding to 'kick start' the project;

- Coordinated project management, with clear roles and lines of communication, has been essential because of the number of partners and variety of approaches taken with regard to content creation;

- A flexible, 'template' approach has allowed for effective collaborative working to accommodate the particular needs of each college;

- Expert partners have provided the resources not available to colleges in the areas of content development and accreditation.

To a great extent, the challenges of such a complex project were addressed early as part of the bidding process to secure funding and might be defined as a form of project initiation planning. This suggests that without it the project would not have achieved the results it has so far.

The particular origins of the project, a bid to secure public funds to address clearly identified issues, has implications for future projects of this type. The scale and ambition of the project was realised because of secure funding that allowed for expertise to be brought into the project, without which it would have not been possible to accommodate the requirements of each partner college while ensuring that the outcomes of the project are scalable across the further education and skills sector.

Appendix 1- The structure of the Level 3 and 4 Diplomas

Level 3 Diploma

Rationale for the Rules of Combination

The knowledge and understanding of good working practice within Digital Learning is included in the mandatory Group A units. The optional Group B and Group C units allow learners to undertake units that are focused on specific areas of expertise and job roles.

Rules of Combination

Level 3 Diploma in Digital Learning Design			
Minimum credits: 41			
Minimum credit value at level of qualification or above: 41			
Group A - Mandatory Units			
Credit (from Group A) Mandatory Units: 23			
Title	**Level**	**Credit Value**	**GLH**	**QCF Unit ref**
Introduction to the Digital Learning Environment	3	3	30	R/505/9864
Professional and Personal Development	3	3	30	Y/505/9865
Working in a Digital Learning Lifecycle	3	4	40	D/505/9866
Effective Communication for Digital Learning Design	3	3	30	K/505/9868
User Experience Design	3	4	40	M/505/9869
Quality and Standards	3	3	30	H/505/9870
Investigating and Analysing Requirements for Digital Learning Designs	3	3	30	K/505/9871
Group B – Optional Units				
Minimum credit (from Group B) Optional Units: 9				
Minimum optional credit at level of qualification or above: 9				
Collaborative Technologies and Outcomes	3	3	30	T/505/9873
Emerging Digital Software	3	3	30	A/505/9874
Introducing Immersive Technologies	3	3	30	F/505/9875
Technical Advice and Guidance	3	3	30	J/505/9876
Using Social Media Technologies	3	3	30	L/505/9877
Developing Skills, Understanding and Confidence of Others in E-learning	3	3	30	R/505/9878
Group C – Optional Units				
Minimum credit (from Group C) Optional Units: 9				
Minimum optional credit at level of qualification or above: 9				
A/V Production	3	3	30	Y/505/9879
Converging Digital Technologies	3	3	30	L/505/9880

Graphic Design and Imagery	3	3	30	R/505/9881
Introduction to Website Production	3	3	30	Y/505/9882
Mobile IT Technologies	3	3	30	D/505/9883
Storyboarding	3	3	30	H/505/9884

Credits from equivalent Units:

Please contact the Ascentis office to request equivalences, and ask to speak to a member of the Qualifications Development Team.

Credits from exemptions:

Please contact the Ascentis office to request exemptions and ask to speak to a member of the Qualifications Development Team.

Level 4 Diploma

Rationale for the Rules of Combination

The knowledge and understanding of good working practice within Digital Learning is included in the mandatory Group A units. The optional Group B and Group C units allow learners to undertake units that are focused on specific areas of expertise and job roles. Learners must achieve 12 credits from the optional units with at least three credits from each optional group.

Rules of Combination

Level 4 Diploma in Digital Learning Design				
Minimum credits: 39				
Minimum credit value at level of qualification or above: 39				
Group A - Mandatory Units				
Credit (from Group A) Mandatory Units: 27				
Title	**Level**	**Credit Value**	**GLH**	**QCF Unit ref**
Professional and Personal Development	4	3	30	K/505/9885
The Digital Learning Project Lifecycle	4	4	40	M/505/9886
Managing Communications to Investigate and Define the Requirements of Digital Learning Designs	4	5	50	T/505/9887
User Experience Design	4	4	40	A/505/9888
Science of Learning and Design	4	3	30	F/505/9889
Quality and Standards	4	4	40	T/505/9890
Digital Assessment Design	4	4	40	A/505/9891
Groups B and C – Optional Units				
Minimum credit (from Groups B and C) Optional Units: 12				
Minimum optional credit at level of qualification or above: 12				
Group B – Optional Units				
Minimum credit (from Group B) Optional Units: 3				
Minimum optional credit at level of qualification or above: 3				

Accessible Learning Design	4	6	60	F/505/9892
Managing Digital Learning Environments	4	3	30	J/505/9893
Supporting Social Learning	4	6	60	L/505/9894
Safe and Responsible Online Use	4	5	50	R/505/9895
User-Centred Design	4	6	60	Y/505/9896
Digital Law and Compliance	4	3	30	D/505/9897
Developing Skills, Understanding and Confidence of Others in E-learning	4	3	30	H/505/9898

Group C – Optional Units

Minimum credit (from Group C) Optional Units: 3

Minimum optional credit at level of qualification or above: 3

Platform Development and Software	4	4	40	K/505/9899
Video Production	4	3	30	R/505/9900
Audio Production	4	3	30	Y/505/9901
Gamification	4	6	60	D/505/9902
Digital Storytelling	4	5	50	H/505/9903
Authoring Tools	4	4	40	K/505/9904

Credits from equivalent Units:

Please contact the Ascentis office to request equivalences, and ask to speak to a member of the Qualifications Development Team.

Credits from exemptions:

Please contact the Ascentis office to request exemptions and ask to speak to a member of the Qualifications Development Team.

This will enable the apprenticeship provider and participant to select appropriate units according to the emphasis of a particular working environment and the student's own interest. Full details of the qualifications, including detailed unit specifications, can be accessed on the Ascentis website:

- Level 3
- Level 4

Assessment is through the submission of a portfolio of task and project based evidence, using a range of media. Individual units can be separately accredited. Pathways are under discussion which would enable apprentices to progress to degree level.

Appendix 2 - Generic job descriptions for Digital Learning Designer Level 3 and 4 Apprentice

Level 3 – Take and Shape

The e-learning Design Apprentice will undertake a range of tasks to support e-learning development within the company.

To develop digital learning materials for blended and online learning.

- To assist with the creation of VLE content.
- To create interactive, blended online learning resources and activities.
- To develop resources for emerging technology.
- To contribute towards the creation of end user tutorial resources.
- To support curriculum staff to convert traditional resources to online versions.
- To assist with the creation of audio and video resources.
- Design online learning that reflects an understanding of the diversity of learners.
- To provide advice and guidance about the development of e-learning technologies.
- Assist in the effort to define standards/style guides for training materials.
- Develop appropriate online assignment activities.
- Be responsible for the quality control and copywriting of material developed for the online learning.
- Assisting with office administration as required.
- Completing project and administration tasks as required.
- Undertake a Level 3 Diploma in Digital Learning Design at xxx College to achieve an Advanced Apprenticeship.

Suggested Level 3 Units to be delivered to support job role:

- Introduction to the Digital Learning Environment – 3c, 30 Glh (m)
- Professional and Personal Development – 3c, 30 Glh (m)
- Working in a Digital Learning Lifecycle – 4c, 40 Glh (m)
- Effective Communication for Digital Learning Design – 3c, 30 Glh (m)
- User Experience Design – 4c, 40 Glh (m)
- Quality and Standards – 3c, 30 Glh (m)
- Investigating and Analysing Requirements for Digital Learning Designs – 3c, 30 Glh (m)

Selected Optional Units:

- Emerging Digital Software – 3c, 30 Glh (o)
- Introducing Immersive Technologies – 3c, 30 Glh (o)
- Developing Skills, Understanding and Confidence of Others in E-learning – 3c, 30 Glh (o)
- A/V Production – 3c, 30 Glh (o)

- Graphic Design and Imagery – 3c, 30 Glh (o)
- Introduction to Website Production – 3c, 30 Glh (o)

Level 4 - Plan, Create and Support

To plan, create and support the use of innovative learning materials and course design

- To create and monitor the usage of online content.
- To be responsible for supporting VLE system development.
- Provide start-up design and assistance for online courses.
- To provide advice to teaching staff on the choice of technologies and resources for particular learning purposes.
- To create interactive blended and online learning resources and activities.
- Plan, develop and test online curriculum using a range of software products. § Design online learning that reflects an understanding of the diversity of learners.
- To support the transfer of e-learning knowledge and skills to teaching staff by working with these staff on a group or one to one basis.
- To take a lead role in the piloting of specific pieces of e-learning technology, working closely with teaching staff who are involved in specific pilots.
- Be responsible for the quality control and copywriting of material developed for online learning.
- Stay informed of trends in digital learning design.
- Provide digital learning design evaluation and feedback.
- Troubleshoot and support potential digital learning issues.
- Help translate concepts into practice.

Suggested Level 3 Units to be delivered to support job role:
- Professional and Personal Development – 3c, 30 Glh (m)
- The Digital Learning Project Lifecycle – 4c, 40 Glh (m)
- Managing Communications to Investigate and Define the Requirements of Digital Learning Designs – 5c, 50 Glh (m)
- User Experience Design – 4c, 40 Glh (m)
- Science of Learning and Design – 3c, 30 Glh (m)
- Quality and Standards – 4c, 40 Glh (m)
- Digital Assessment Design – 4c, 40 Glh (m)

Optional B:
- Developing Skills, Understanding and Confidence of Others in E-learning – 3c, 30 Glh (o)
- Managing Digital Learning Environments – 3c, 30 Glh (o)

Or

- User Centred Design – 6c, 60 Glh (o)

Optional C:

- Gamification – 6c, 60 Glh (o)

Or

- Platform Development & Software – 4c, 40 Glh (o)
- Authoring Tools – 4c, 40 Glh (o)

Person Specification

This is an interesting and varied role and requires someone with initiative and intelligence who will enjoy the challenge of being both creative and tech savvy. The hours are flexible and would suit someone who would like to grow a job and earn while you learn. The successful candidate will have the following skills and capabilities:

- Good education (5 GCSEs at Grade C or above, including English and Maths)
- Good IT skills and be able or be willing to learn new elearning software
- Good visual design skills
- Excellent English
- Open and flexible approach to work
- Hard working and conscientious
- Personable with a good sense of humour
- Able to communicate effectively with remote partners and consultants
- Team player and able to work collaboratively
- Honest and trustworthy.