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REPORT 07

eCollege

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Edited by Paul Bacsich

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**Editor’s Introduction**

*The Competitor Analysis Function*

The competitor analysis function goes back to the pre-history of UKeU. Among the early studies that HEFCE commissioned in 2000, shortly after commissioning the main business model study, were three so-called “e-Tools” studies. One of these was done over the summer of 2000 by a team of experts at Sheffield Hallam University (SHU) with the assistance of two Open University experts. Impatient with the “feature wars” or “tick box” style of procurement, the SHU team in their proposal had proposed a radically new method of assessing Virtual Learning Environments. This proposal was accepted by HEFCE. Full details of the method and its application can be found in Chapter Sixteen of the e-University Compendium, “The e-Tools (1) Report: Pedagogic Assessment and Tutoring Tools (Learning Platforms)”, http://www.heacademy.ac.uk/learningandteaching/eUniCompendium_chap16.doc.

However, for convenience, the main features of the approach are summarised in the Appendix to this report (which is a direct copy of Appendix C of Chapter Sixteen).

Although there was sporadic work from time to time on proposed solutions to sub-components of and competitors to the slowly emerging UKeU learning environment, the next time that any serious work was done seems to have been in early 2003 when as part of the overall technical studies that SHU were doing for Sun Microsystems on behalf of UKeU, a request came in to carry out some speedy technical comparisons on the main VLEs used in UK HE.

This competitor analysis function was continued when Paul Bacsich and some of his colleagues joined UKeU, and in the summer of 2003 a more systematic programme started, not only to analyse the main systems used in UKeU but also to look at several systems used in the corporate world, as by that time UKeU was considering business opportunities in the corporate world for ASP solutions as well as for content. In particular there were a number of corporate customers and professional associations whose requirements were seen as not too dissimilar from those in academia and so would allow UKeU to “sell what’s on the truck”.

UKeU also increased its efforts to find opportunities for an ASP service oriented to HEIs, in particular those who were too small or specialised to be able to mount and support their own VLE. Staff had observed some successes from ASP providers in the FE market and also the need for some regional support at a level above institutions of the sort that the JISC Regional Centres do for FE.

Since eCollege is an ASP not a product as such, some modifications had to be made to incorporate this fact before the methodology could be applied. (The methodology can be more clearly demonstrable in terms of a software product.) We have included Appendix A to demonstrate how the 2003 version of the methodology was applied. Appendix B (newly created by the author) gives the main sources used by the author.

* By Paul Bacsich.
Appendix C provides some later information on eCollege and Appendix D is a micro case study of Peirce College, one of the more sophisticated users of eCollege for distance e-learning provision. The Report and these four appendices represent the main information on eCollege that is in the UKeU electronic archives prior to the HEFCE restructuring decision in February 2004.

Author’s Remarks

In discussion with the author, she was at pains to point out the relative paucity of information on eCollege, which made it difficult to produce an insightful report. This was not just an artefact of Google. The information retrieval tools used within UKeU included not only Web searching (Google, etc) but also LexisNexis (for retrieval of journal articles, etc), financial databases and several other commercial online information sources (see footnotes for examples when relevant). Despite this range of tools, information remained scanty on eCollege at any level deeper than just who was using it.

Further Reading

There are two main issues that UK readers interested in this report series may wish more information about:

1) What has eCollege done in the UK, and what are its current plans?

2) What is the potential of the eCollege system for distance e-learning?

eCollege in the UK

Over the last few years, eCollege has maintained some sales capability in the UK and has appeared as a partner in a number of UK projects. See for example the North Lincolnshire College project “Bringing a human dimension to computer based learning” (at http://www.ccm.ac.uk/ltech/projects/proj2000/intreps/reports/nlincs_final.pdf). There are anecdotes and fragmentary signs of other activity. Interested HEIs could no doubt obtain further information from JISC advisors; FE colleges could consult their JISC Regional Support Centres, some of whom maintain information on eCollege.

eCollege for Distance e-Learning

In the early years of this new century there was impassioned debate among experts as to the features in a VLE needed to support distance (as opposed to on-campus) e-learning. It now seems, as the years go by, that students and vendors (rather than experts) make these decisions now. (Indeed, it is now likely to have more to do with human system service levels around the technology than the technology itself – but that is another story.) Both the main VLE suppliers, WebCT and Blackboard, now support a range of institutions world-wide who offer distance e-learning. The origins of eCollege were in fact in distance provision but sometimes, perhaps because eCollege was much less well known in the UK, it was assumed by UK experts that eCol-
lege was largely for on-campus use. Perusal of the eCollege customer list will dispel that view.

In particular, DeVry University (who have now taken over the Keller Graduate School of Management, well known in distance online provision) offer pure online delivery and also a specific page oriented to “international” (i.e. non-US) students wishing to study online – see http://www.devry.edu/admissions/international.jsp.

Peirce College (lesser known, except to experts) is another example (see http://peirceonline.net and Appendix D). They note (our italics):

Located in Philadelphia, Pennsylvania, Peirce College is one of the oldest accredited Colleges offering a true online degree program in the United States. Peirce offers a complete degree program online for students wishing to finish a degree, or new students who are focusing on an online degree program.

Peirce is one of a few colleges that grants a 4-year college degree online. Earn your degree anytime, anywhere with its Online Degree Program. By choosing to learn online, you can take your courses whenever you have time throughout the week, wherever you have access to a computer, the Web and email.

A third example is the CyberCampus at Golden Gate University in San Francisco (http://cybercampus.ggu.edu/cybercampus).

There are several other examples, large and small, in the eCollege customer list at http://college.ecollege.com/customers/clist.learn?Page=3100.

For more information on the many regional consortia (several of which use eCollege), see the report Virtual College and University Consortia: A National Study carried out for the State Higher Education Executive Officers (SHEEO) and WCET, August 2003 (see http://www.wcet.info/resources/publications/vcu.pdf).


Note on Provenance

This document was in wide circulation in draft and then final form at UKeU from summer 2003 onwards. This was mainly because of its relevance to the UKeU work on setting up a commercial ASP proposition outside the core business areas of degree and CPD courses. It was stored on the Sales and Marketing area of the UKeU electronic archive. Regarding the appendices:

- Appendix A is reproduced from the e-University Compendium.
- Appendix B was generated by the author.
- Appendix C was found in the UKeU electronic archive.
- Appendix D was supplied by the editor.
Production Notes

The “12-criteria” methodology used in the system-style comparisons has always (since 2000) used lettered main sections A–E rather than numbers – thus for consistency with other Reports of that ilk the editors decided to follow the same style. In all other respects the layout is the standard for the UKeU Report series.

The competitor analysis reports were not distributed outside UKeU at all, and like many such reports, were designed purely for an audience familiar with such matters and used to using Web searches for information. Thus in places there is a telegraphic style and an absence of URLs – many of the firms and agencies mentioned were well known to the UKeU staff who most read these reports. The editors have used footnotes not only to update material (where it was easy to do so) but also to add URLs and points of clarification.

The original document now follows, starting on the next page.
A Company Name and Contact Details

eCollege
eCollege Building
4900 S. Monaco Street
Denver, CO 80237

Phone: + 1 (888) 884-7325 or +1 (303) 873-7400
Fax: + 1 (303) 873-7449

B General Description of the Company

eCollege is a provider of e-learning technology and integrated services, offering online environments for distance and blended learning. Its services include online course and campus design, development, management and hosting, as well as ongoing administration, staff and student support, training, evaluation and consulting services. eCollege supports degree, certificate/diploma and professional development programs for 268† customers, including American and Canadian colleges, universities, schools, corporations and public organisations. eClassroom, the K–12 division of eCollege, supports virtual schools, school districts and entire US states.‡

eCollege provides customers with a fully-hosted, turnkey online programme solution (ASP), a structure it maintains improves student completion, retention and graduation rates. Students registered at eCollege’s client institutions can use the internet and a standard Web browser to access both their own course materials and institution-wide portals provided by eCollege, offering centralised access to such services as financials and a bookstore.

Founded in 1996, eCollege is headquartered in Denver, Colorado. Since its inception, its customers have had approximately 793,000 student enrolments in online courses and course supplements (for on-campus learners). It is estimated that eCollege offered 8,100 online “eCourses” in Spring 2003, with another 5,400 eCompanions supporting traditional classroom learning.

Despite its success to date, eCollege does not market itself globally and has very few customers outside of North America. An exception is Knowledge Access (KA), eCollege’s first international expansion initiative, founded in 2002. A joint venture with Dubai Internet City (DIC), KA offers a variety of professional and business support

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† The original version said “eLearning” since that phrasing was the corporate standard within UKeU.
† All figures are as of September 2003. Any updates are given in footnotes.
services for educational and corporate institutions in the Gulf Coast region (see http://www.ka.ae).''

Another international effort is with Onward Education (P) Ltd, headquartered in Bangalore, though the precise relationship with eCollege is difficult to determine – see [www.onwardedu.com].'' However, the eCollege client list does include the Indian Institute of Information Technology, Bangalore (iiit-b).'' Another international client is Hotelschool Den Haag (The Hague) in the Netherlands."

eCollege established several key alliances early in its development which remain crucial to its operations. The most important are with Microsoft (who keep a consultant on-site), an alliance which “serves as the foundation for eCollege products and technology infrastructure”; and with Dell, “the single source provider to eCollege’s data centre”. eCollege is also partnered with Design Science, Inc., the developer of WebEQ, allowing users the ability to develop complex equations easily.‘’ Other partners and associates include Respondus, iTransact and MyJobCoach; EBSCO, AskERIC and LexisNexis for library services; Impatica for PowerPoint file conversion/upload; and Thomson, McGraw-Hill, Pearson, Houghton-Mifflin, Element K, Elsevier, John Wiley and Sons, The Princeton Review and Tata for content.

eCollege has been recognised as one of the 100 most innovative and successful companies driving growth in the learning markets by Eduventures” in 2003, and its success in the first part of this year has succeeded all expectations. Eduventures’ Distance Learning at the Tipping Point, published in September 2002, reported that eCollege “has distinguished itself as the clear leader in the fully online distance-learning market with its focus on the comprehensive, programmatic needs of distance-learning participants – institutions, administrators, faculty, students and staff”.

* The site http://www.ka.ae consists of a directory listing only. The sub-site http://www.ka.ae/ka/ contains more information but the press information fades out before 2003 starts and the copyright note on pages is dated 2003. All this suggests that activity since then has been on the minimal side.

† The Onward Education Web site appears now to be non-functional and the organisation is not listed on the eCollege customer list. However, it does appear in a list of international customers at http://college.ecollege.com/company/Intnl.learn – but perhaps that list is out of date (the copyright notice says 1999–2003).

‡ See http://www.iiitb.ac.in.

§ Hotelschool Den Haag is at http://www.hotelschool.nl. A current eCollege customer list is at http://college.ecollege.com/customers/clist.learn?Page=3100. Inspection of this reveals no new international customers since 2003. Note that the Australasian College of Herbal Studies is now called the Australasian College of Health Sciences and is actually US-based though originating in New Zealand (see http://www.achs.edu) Note also that the Thames Valley District Virtual Academy is actually in Canada! (See http://www.tvdva.ca.)

** This is not unusual. Specialist “VLE plug-in” companies like Design Science (the leaders in creation and manipulation of mathematics content on the Web – see http://www.dessci.com) ensure that they partner with all the main players; thus as well as eCollege they have agreements with WebCT and Blackboard (the other two of the “top three” in the US) but also Desire2Learn, QuestionMark – and Microsoft (several Microsoft products, not only Word, include Design Science’s Equation Editor). See http://www.dessci.com/en/company/links.htm for a full list.

†† UKeU senior staff, competitor analysis, financial, legal and market research staff had access to and used a range of commercial online information sources including Eduventures, financial databases, British Council (GETIS), Chronicle of Higher Education, Times Higher Education Supplement, etc.
A publicly-traded company, eCollege’s top institutional shareholders include Federated Investors, William Blair & Company, LLC, Barclays Bank Plc and The Vanguard Group Inc.

C General Description of the Product Including Pedagogic and Organisational Needs that it Satisfies

eCollege provides customers with various products and levels of service as required, from a basic course delivery system designed for wholly online distance learning to a portal that supports on-campus student life. Various levels of training, content development, project management and evaluation are available for purchase in modules, as are several public-facing services, e.g. establishment of a site devoted to marketing, course catalogues and brochures. eCollege also offers some customers free assistance with the transfer of courses developed on other platforms into its own systems.

Each eCollege customer is assigned a Client Services Consultant and a back-up team to provide assistance with administration, user management, communications and reporting. The consultant acts as on-site representative, offering “single-point program management accountability at all times”.

eCollege’s technical consulting team typically work with the institution’s IT department or a third-party application provider to integrate with other enterprise-wide systems or complementary applications on a customised basis. They will also build any type of Web site to meet the needs of a school, department, or programme within the institution.

eCollege claim that in many cases, a complete online campus can be in place in 60 days, inclusive of all academic and administrative staff training.

a. Features of the AU+ Course Management System†

- CourseFlex NavigationSM (flexible, visual course design) with Content ConnectorSM (for linking course materials) and Style ManagerSM (simple interface for customising a course); Microsoft Tools (automatically converts MS Office files to HTML); Syllabus Builder (templates and template generation for common syllabus items); ability to toggle between authoring and student views in one click; ability to copy an entire course (or parts of a course) for multiple offerings.

- Exam Builder PlusSM (includes “kick-out” time limits and password access, customisable question orientation, scale coding direction, required questions

† The focus of competitor analysis on systems (as opposed to providers) was on the technology and pedagogy not the company, thus the “Section B” in such reports was normally quite brief. Those who want to read up more on eCollege as a company are referred to the standard company information sites – for example see MSN Money information on eCollege (for an overview of the company see http://news.moneycenral.msn.com/ticker/sigdev.asp?Symbol=ECLG) or Computer Business Review at http://cbronline.com/companyprofile.asp?guid=DC417AE2-0C88-41C8-A0C3-E512A85C47FD.

† These are taken from the eCollege Web site circa September 2003.
etc); Gradebook and Gradebook CalculatorSM (work offline; also link to Assignment DropBox); What’s New (alerts tutor re student assignment submissions since last login).

- Group Manager (automatically generates email alias, chat rooms and Document Sharing area for groups); Course SchedulerSM (sets start/end dates for courses and activities); Coursework (overviews and due dates); User Activity Reporting (includes access to a wide range of standard or ad-hoc reports via bar charting, descriptive statistics, frequency distribution and percentage distribution; supports formats using either HTML or Microsoft Excel); ability to assign roles.

- Evaluation Solutions (comprehensive online course and instructor evaluation process); the ability to send pre-scheduled messages to a subset of users via email or through a post to the user’s personal home page.

- Threaded Discussions/Forums; Document Sharing; ClassLiveSM synchronous suite and Whiteboard (including equation editing, PowerPoint slideshow upload and display, list of active users, embedded/ detachable chat and live instructor polling); email; one-way or two-way audio (for virtual “office hours” or group work without additional conference call technology); and Synchronized Archives, in which ClassLive sessions are played back as a streaming video.

- Fully-integrated (WebEQ) Equation Builder; Toolbars for mathematics, chemistry and accounting; Announcements; Calendar (integrated and downloadable to PDA); DropBox.

- WebliographySM (resources as posted by both instructor and student); Journal (weblog/learning log, which can be private or shared).

b. Portal Design and Development: Gateway Campus and CampusPortal

These are online campus portal products which offer community, academic and administrative functions similar to a physical college campus. The Gateway Campus provides access to online campus services, courses and course supplements, and includes academic and administrative services. CampusPortal offers a range of options, including online campus services, online community access, and includes a Web-based front-end to, and integration with, existing back-office systems for registrations and other administrative student services. Services such as library and bookstore, advising, career counselling, student union, bursar’s office and financial aid can all be provided.

eCollege offers a full module layout from which clients can select which services to purchase. Each campus’s eCollege Portal System is branded in an institution’s colours and logo. Users can access a Personal Homepage for general campus services and the Academics Page for their online courses and academic support services.

As mentioned above, a “public-facing” site may be developed parallel to the one used for registered students, consisting of an online course catalogue, online registration,
financial aid and tuition information, academic advising information, career development resources and more.

D General Observations

eCollege does not market directly to students, depending rather on a client (usually a university or a college) to attract its own customer base. This necessarily leaves the company vulnerable to the success of the client’s programme.

In April 2002 eCollege announced the launch of its Publisher Toolkit, enabling publishers to extend the distribution of their content to academic staff and students through the eCollege platform. The Toolkit provides publishers with an infrastructure, professional services, PIN technology, and end-user support to deliver their content online. It is free for publishers to have their content converted; eCollege takes a percentage of revenue earned through purchases.

E Details of the Product – 12 Criteria

E.1 Architectural Approach

eCollege has two full data centres built on Microsoft Windows 2000 Servers and Microsoft SQL Servers. They depend primarily on Dell hardware and maintain “99.99% internal system reliability”. With usage volumes averaging about 10 million database transactions per day, the eCollege data centre is one of the largest SQL Server operations used in education today.

eCollege advertises “redundancy at every possible point of failure”, having built default back-up in every critical area including security, switches, communication servers, network management, web servers, application servers, database servers, and data storage.

The eCollege system consists of the following:

- Two full-scale data centres (primary centre with a synchronized hot backup facility);
- Multiple hardware load-balanced Web farms (providing reliability and scalability);
- Stateless Environment (Redundant network access with multiple Tier-One providers and a completely separate backup access point);
- Multiple VLANs in a routed network architecture based on 10/100 and GB Switches;
- Clustered High Availability Application Servers based on Storage Area Network (SAN) and Network Attached Storage (NAS) technologies;
- Distributable components;
- Microsoft N-Tier Architecture with Windows DNA;
- 85 production level servers in the two data centres with an equal amount of additional servers in the QA and Dev supporting environments;
- The latest equipment from DELL, EMC2, Network Appliance and Foundry;

An undated eCollege guide to ASP selection states that the eCollege system offers 16 Web servers, three database servers, four media servers, two chat servers, two LDAP servers, three routers and six switches. It also states that eCollege can guarantee under 30 seconds of downtime in the event of system failure; the ability to restore up to 30 minutes worth of “lost” data from database transaction logs; that full backups of all
data will kept online for two months, during which accidentally deleted data can be restored within 15 minutes; and that all backups will be transferred to tape for storage following this two-month period.

Ensuring connectivity are the following:

- Full OC-3 and Gigabit Ethernet connections to 10 upstream providers in four regions; Private peering relationships that ‘encourage Internet traffic to travel over the least congested routes available’; Multiple providers to insure instant data rerouting if one of the connections should ever fail; ‘Alt Access™’, a completely separate alternate network path to client web sites; World Wide network and application performance monitoring.

eCollege utilises various tools to facilitate a rigorous monitoring schedule including: “Mercury Interactive, NetIQ Web Trends, Freshwater Software SiteScope, Microsoft Operational Manager, DeepMetrix IP Monitor, and Dell IT Assistant”.

### E.2 Standards, Interoperability, Accessibility Compliance, Foreign Language Support and Mathematics Support

#### E.2.a Standards and Interoperability

The eCollege Open Platform Initiative is built around the principle of multi-vendor system interoperability, and eCollege has embraced Microsoft .NET as the key to this initiative. Microsoft claims that .NET simplifies XML implementation in developing applications and building SOAP-based Web services. The use of ASP, .NET, and XML, along with other protocols such as XSL/XSLT, and SOAP, provides the flexibility for eCollege to move to a more open and flexible architecture. eCollege reports that “standards such as IMS and SCORM play an important role in all product development activities” but does not detail specifics of compliance.

eCollege’s commitment to Microsoft .NET enabling technologies will span several areas from using the developer tools for existing and future product development to use of Microsoft’s .NET Framework and .NET Servers.

#### E.2.b Integration with Student Systems

In the initial phase of its Open API initiative, eCollege used .NET technologies to integrate staff and student information between online programmes supported within the eCollege platform and student information systems operated by institutions. The open API creates XML requests in IMS Enterprise Specification v1.1 format to create student and staff identities in the eCollege system, assign staff to and enrol students in courses, and update student and staff information. Benefits include “increased reporting and management efficiencies, simplified administrative processes by elimination of manual work, and a clear system of record where all student and faculty data resides, as well as real-time capability to share information between systems”.

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* eCollege are not listed as a “Contributing Member” to IMS on the relevant page [http://www.imsglobal.org/members.html](http://www.imsglobal.org/members.html).
eCollege has built its solutions largely upon Microsoft technology, a relationship that has allowed eCollege to participate in the early adoption of new Microsoft applications, including a Joint Development Program with Microsoft Office 2003. Under this program, eCollege developed an application utilising Web Services and Excel in Office 2003 as a user interface to its open SIS API to help administrators edit and approve IMS Enterprise Specification data passing between multiple systems.

Through the combination of eCollege’s open API and the Office 2003 editing/approval tool, institutions can keep their SIS as their primary system of record, while still allowing for the flexible and automatic transfer of information. By providing this level of flexibility in the API, eCollege enables institutions to customise their business process to meet their unique needs, rather than forcing them into a single model supported by conventional APIs.

(In a press release from June 2003, eCollege reports that their open Student Information System API “allows for the real-time, seamless transfer of data between online programs managed within the eCollege platform and any SIS or other administrative back-office system”.)

eCollege is also part of the Electronic Portfolio Consortium (ePortConsortium), a collaboration of “select higher education and IT institutions working to define, design, and develop software for [the] forthcoming electronic portfolio environment and system”. It intends to collaborate with IT institutions to define and adopt interoperability and transportability measures and standards while building prototypes to test scenarios and conceptual environments. Blackboard is also a member of the consortium.

A technical consulting group at eCollege offers custom code development to help meet interoperability needs specific to particular institutions. This includes working with centrally managed legacy systems and various home-grown applications, either working with an institution’s internal technical support group or delivering its own solutions.

Beyond linking to third-party applications, eCollege has already implemented full integration with the WebEQ equation editor; with Respondus, an offline exam authoring application; and with Impatica, a desktop tool that converts PowerPoint files for streaming over the Internet, even at modem speeds, for dynamic presentations within the eCollege platform.

A menu-driven HTML converter/editor is integrated into the eCollege AU+ CMS for authoring functions, “provided through the Microsoft DHTML edit control”. Full integration with Microsoft Office products allows automatic conversion of Word, PowerPoint, and Excel files to HTML within the eCollege AU+ CMS.

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† As is Microsoft.
‡ WebEQ has been described earlier. Respondus is at [http://www.respondus.com](http://www.respondus.com) and Impatica at [http://www.impatica.com](http://www.impatica.com). (URLs for companies are not always so straightforward as these.)
E.2.c. **Accessibility Compliance**

During a three-year Research and Development effort, eCollege developers and human factors engineers worked directly with members of the disabled community to “re-engineer company processes, products and services” to support new levels of accessibility. eCollege complies with Section 508, the U.S. Federal Accessibility Standard for electronic and information technology, and has exceeded the defined student requirements by providing an accessible environment for disabled academic staff to author course content. eCollege Technical Consulting also offers assistance in applications outside of the eCollege solution set to help institutions comply with Section 508 requirements. The company offers Section 508 workshops via each of its training options (see below).

A notably accessible feature of the eCollege system is Chat, which offers assistive technology users the choice of either Java- or HTML-based chat rooms.

E.2.d **Language Support**

eCollege does not appear to offer any foreign language options or support.

E.3 **Life-Cycle Costs**

eCollege employs what it describes as a “Pay-as-You-Grow” pricing structure, in which a single all-inclusive per-student price covers all technology and support required. The size and success of a course will therefore determine the fees due to eCollege, as will the modules an institution chooses to purchase. For example, a university which chooses a full range of portal and integration options will no doubt pay considerably more than one that chooses only online course delivery.

Typically, eCollege pricing has been considered to be quite reasonable and predictable. For example, a recently-developed growth strategy to increase adoption of its course management system means that the company has been offering its on-campus products and services at reduced prices.

Unfortunately for analysts, eCollege does not publicise further specifics of its pricing methods. Some institutions do make their IT budgets publicly available, however, and a few eCollege pricing schemes have been located online:

- One US university paid eCollege $95,000 for a single year of online and supplementary courses for 2000 students. In the previous year (its first with eCollege), it had paid over $140,000.
- At one US high school, eCollege was purchased for $10,000 p.a. for 700 students and 50 staff.

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* There appears to be no specific information on UK accessibility issues for eCollege on TechDIS, the reference site on accessibility for UK HE and FE enquirers (http://www.techdis.ac.uk); but there are several pieces of information on UK Web sites about accessibility issues related to eCollege, since eCollege has been trialled at a number of UK institutions.
A US community college with 6500 students has committed to paying eCollege a minimum of $60,500 in its first year of implementation.

In the above examples, the cost per student ranges from $9.30 to $70.00 each, for an average of $35.00 per student. As stated above however it is impossible to know what level of software/service has been provided in each case.'

Through a programme which ended quite recently, eCollege awarded $12 million in grants and scholarships to universities who applied and were selected as eligible. Through this arrangement eCollege essentially provided clients with heavily discounted products and services, in exchange for which it was guaranteed joint press conferences, press releases, direct access to the client’s students, permission to use the client’s name in advertising, etc. eCollege states that no further grants will be awarded.

E.4 Scalability (Including “Footprint” Issues)

As of summer 2003, eCollege will have demonstrated its ability to support 230,000 enrolled users across its client base. Of these, 130,000 will have been engaged in fully online learning, while 100,000 accessed supplements that supported traditional classroom learning. During the same time period last year, eCollege was supporting only 128,000 students; this rate of increase does suggest a highly scalable system. However, no data is available regarding simultaneous users.

E.5 User Interface (Including Internal and External Consistency)

All eCollege users (administrators, students and academics) access materials via a web browser and login. Calendar data can be downloaded to PDA.

E.5.a Portal Users

eCollege uses the same basic design template for all portal clients, and there is indeed a noticeable portal uniformity not just within an institution, but across all eCollege clients perused in this study. Universities can determine their own colour schemes and logos, but much of the rest appears to be standardised in what some have felt is an “unappealing” manner.

E.5.b AU+ Users

The eCollege course management system has embedded and integrated all features examined in this study; a user is likely to find significant consistency across the plat-
form because of this. Designers are provided with templates to use in their course design, which would (if used consistently) promote further uniformity.

**Basic System Requirements**

eCollege notes that all students will require a computer, internet access, a Web browser with Java capability and an email account whose address does not use special characters. Windows and Macintosh requirements are as follows:

- **Windows 98, 98SE, Me, NT, 2000, or XP; 64 MB RAM; 28.8 kbps modem (56K Recommended); Sound card and speakers; Internet Explorer 5.5, 6.0; Netscape Communicator 4.77, 4.78, 4.79.**

- **MacOS 8.1–9.1 (OS X 10.1 in “classic mode”); (OS X 10.2 (Jaguar) compatibility is currently being tested); 32 MB RAM (64 Recommended); 28.8 kbps modem (56K Recommended); Sound card and speakers; Internet Explorer 4.5, 5.0, 5.01 (IE 5.1 and IE 5.2 compatibility for Mac are currently being tested); Netscape Communicator 4.77, 4.78, 4.79.**

A screen resolution of 800 x 600 pixels is recommended. Netscape 7.0 is not currently compatible with the course delivery system, though may be in the near future.

**Other System Requirements**

The components below are required to access certain features of the system, although students who lack them will still be able to access a scaled-down version of their courses. For Windows, eCollege specifies:

- For ClassLive (synchronous tool): 64 MB RAM; Sun’s Java 2 SDK (Java 1.3.1); Microsoft JVM (Windows XP SP1 only).

- For ClassLive Audio: 56K kbps or higher modem (Instructor Only Requirement for Audio Encoding); Windows Media Encoder 7.1 (Instructor Only Requirement for Audio Encoding); Microphone (Instructor Only Requirement for Audio Encoding); Windows Media Player 7.1 (Student Requirement if Instructor Utilizes Live Audio).

- RealPlayer 8 Basic Player; Macromedia Flash Player; Macromedia Shockwave Player.

- Assistive Technology: JAWS 3.7, 4.0; Window-Eyes 4.11; Tutorials & Information (if needed by the user).

*This was correct as of summer 2003. Interested users should check the current technical situation with eCollege.*
For Macintosh OS, eCollege specifies:

- For ClassLive (synchronous tool): 128 MB RAM; Microsoft Internet Explorer 4.5 or higher (IE 5.1 and IE 5.2 compatibility for Mac are currently being tested); MacOS Classic Java (MRJ 2.2.5)

- For ClassLive Audio: Windows Media Player 7.1 (Student Requirement if Instructor Utilizes Live Audio)

- RealPlayer 8 Basic Player; Macromedia Flash Player; Macromedia Shockwave Player

E.6 Reference Sites

- DeVry University Online, DeVry University, DeVry, Inc. [http://www.devryonlinedegrees.com](http://www.devryonlinedegrees.com)

- Strayer Online, Strayer University, [http://online.strayer.edu](http://online.strayer.edu)

- Kentucky Virtual High School, [http://www.kvhs.org](http://www.kvhs.org)

E.7 Reliability

eCollege assures 99.99% reliability of its system, complete with an entirely separate second data centre and numerous monitoring techniques, as described in great detail under “Architectural Approach”, above.

eCollege also makes much of its Help Desk, which provides on-call engineers and staff assistance 24x7x365 with “industry leading response and resolution rates”. The Help Desk staff is co-located with the system software developers, the data centre staff, product management and project management, and thus works cross-departmentally to fully resolve problems as they materialise. In the 6 months from January to June 2002, 98% of calls were answered live; 97.5% were answered in under 5 minutes; and the average email turnaround time was 24 minutes.

E.8 User Empowerment

Each eCollege client can customise their eCollege site with their choice of colours and logo. However the completed sites do all look and feel quite similar, as described in the “User Interface” section above.

* A word of explanation about the referencing of three sites. Dating from the HEFCE studies in 2000, all potential suppliers to UKeU were asked to provide three reference sites as similar in size and style as possible to UKeU, preferably universities in the UK, but if not, universities or colleges in countries similar to the UK. An up to date list of relevant sites from eCollege would now include Laureate Online (http://www.laureate-inc.com/univOnline.php), a network including Walden University, the National Technological University, and Laureate Online Education, B.V., the exclusive worldwide e-learning partner of the University of Liverpool – see [http://www.uol.ohecampus.com/home/](http://www.uol.ohecampus.com/home/). The eCollege relationship with DeVry has also deepened in the last two years.
Numerous features exist in eCollege to simplify the work of the content creator, including integration with familiar MS Office applications. Having access to WYSIWYG visual editing is a great relief for many academics unfamiliar with HTML or other editing techniques; many also appreciate the ability to toggle between author and student views with a single click during course development. The ability to work with eCollege’s Exam Builder offline, and to link it to the Assignment DropBox automatically, also presents a tutor with options previously unavailable in such systems.

The eCollege hosted model also means that users are automatically provided with the same uniform versions and improvements as they are released, and are thus freed of the complexity and cost of upgrading.

E.9 Company Size and Stability

Initially known as RealEducation, the Denver, Colorado-based eCollege was initially backed by venture capital from various sources, among them the former cable giant MediaOne. The company is reported to have had 210 employees in 2002, including a stable technology team with an “industry-low” 2% turnover rate. It had 268 customers under contract as of March 2003, almost all of whom were in the US and Canada. Of these a single client accounts for 11% of its profits.

Between 1997 and 2002, eCollege experienced an increase in revenue of 1604%. It announced record revenue of $6.7 million for the first quarter of 2003, up 20% from $5.6 million in same quarter in 2002. The Company has begun to make its first true profits this year; with a positive cash flow from operations of $1.4 million during the first quarter of 2003, compared to negative cash flow from operations of $1.0 million for the first quarter of 2002.

The number of distance courses that ran in the spring term of 2003 was estimated at 8,100, an increase of 34% compared with the spring term of 2002. The number of on-campus course supplements was approximately 5,400, an increase of 162% compared with the spring term of 2002.

Customers have developed approximately 22,000 unique online courses and course supplements on the platform in total, of which 4,500 were developed with the aid of eCollege course development services.

eCollege received a single research grant from the US National Institute of Standards and Technology in 1998, totalling $1,859,000, but otherwise has had no funding from the US government.

A publicly traded company,* the worth of eCollege’s stock has increased substantially in the first half of 2003, and investors are paying an increased amount of attention to the company. Its reputation is regarded as unparalleled in the North American e-learning market.

* Nasdaq symbol ECLG. For more financials see the MSN Money or other relevant stock market site covering Nasdaq companies (details in earlier footnote).
E.10 Ease of Support (and Training)

E.10.a Course Development

eCollege courses can be self-developed, using only consultative support from eCollege (“iSupport”), or developed as a collaborative course-building effort using eCollege’s Course Development team to upload content (“CD Bundles”). A course can also be developed completely by eCollege (“Custom eCourse”). The Custom eCourse can be developed in collaboration with an individual faculty member or from existing course materials, textbook or CD, and includes development of course structure and templates, uploading of all course materials, development of threaded discussion topics, quizzes and assessments and Webliography entries.

E.10.b Competitor Content Conversion

This form of support is intended to assist a customer to consolidate to a single platform, or to migrate course content from an existing competitor system to the eCollege platform. Free conversion is available based on “commitment to future growth” in the future. Customers can also benefit from discounted hourly conversion rates and “Train-the-Converter” on-site workshops.

E.10.c Academic Staff Training

eCollege offers a variety of training opportunities on the subject of teaching, developing and learning online. Topics of instruction include: Beginning Course Development, Advanced Course Development, Teaching Online, Educating Faculty; Section 508 Workshop; Growing Successful Online Programs; and Creating Effective Multimedia.

Staff training courses are developed and led by eCollege’s in-house team of 30+ Instructional Designers and Course Developers, and can be held either at eCollege’s headquarters in Denver or on-campus at partner institutions. Alternately eCollege offers numerous online training courses, including “Real Time Learning Labs”, 90 minute synchronous workshops on specific areas of the eCollege AU+ system.

E.10.d Evaluation

Course Audits

eCollege offers Course Audits, designed to address course quality issues through an individualized, comprehensive review of an existing online course. The audit consists of a thorough course appraisal, using a rubric developed by the Instructional Design team. An Instructional Designer then provides specific, concrete suggestions and instructional strategies for course enhancement and improvement. The audit also includes individual action items for improving course effectiveness.
Self-Assessment

The Faculty Self-Assessment Course is a self-directed review of an existing course, based on the course audit rubric, developed by the eCollege Instructional Design team with input from the University of Dallas, Texas. The audit rubric is structured as an online exam, which lecturers use to review their courses. Assessment results are presented in the Gradebook along with links to Best Practice examples located throughout the Faculty Self-Assessment Course. Results can be accessed through the eCollege Gradebook.

E.11 Current and Proposed Capability to Embed New Technology

The eCollege Open Platform Initiative demonstrates a level of commitment from eCollege to “an interoperable future”, which bodes well for the company’s future capability to embed new technologies. Similarly important in eCollege’s case will be its alliances with Microsoft and Dell, whose early support has already benefited its development and will no doubt continue to do so in the future.†

eCollege already offers several features that other systems offer only via third-party agreements, as described in some detail above. It has also demonstrated its ability to integrate successfully with student information systems. This solid track record suggests that eCollege is prepared to adapt to whatever the future may bring.

It is also worth noting that the ASP model of delivery means that the client is provided with an apparently seamless transition to new versions, upgrades etc. Given this structure and eCollege’s entire system of “redundancy at every possible point of failure” and second full-scale data centre, the company has the ability to thoroughly trial new components and upgrades without affecting the user.

eCollege has also stated its desire to offer more offline functionality in the future.

E.12 Current and Proposed Capability to Embed New Pedagogy

The eCollege model assumes that most courses will be developed by academic and other staff already employed by the client institution, and it would therefore be the customer’s responsibility to assure the pedagogical soundness of a course. However, eCollege does offer instructional design counselling and hands-on assistance as required, so it is curious that the word “pedagogy” does not even appear on the eCollege Web site.’ The issue does not seem to register as bearing much significance in the eCollege model. Nevertheless, the company’s confirmed ability to embed new technologies suggests that future changes in the pedagogical approach can be accommodated.

eCollege has also established a Center for Internet Technology in Education (CiTE) to “bring together leading educators to address the challenges and opportunities pre-

† There is an eCollege page on this at http://www.ecollege.com/products/opp.learn.
† This may have been true in September 2003 but is far from true now. A Google search for “pedagogy” on the site ecollege.com (and all its sub-sites) turned up 27 hits – with 10 on www.ecollege.com.
See in particular the Academic Services FAQs at http://academicservices.ecollege.com/faqs.html.
presented by the use of technology in education”. The CiTE advisory board is made up of key individuals university-wide from over 30 post-secondary institutions involved in successful e-learning programmes, who attend bi-annual meetings to provide feedback on eCollege service and product initiatives.

References are also made to an eCollege Faculty Forum, consisting of “70 eLearning instructors whose input helps guide the company’s decision-making”. Presumably, issues of pedagogy may be addressed in these fora.

* It is a little hard to find information on CiTE – particularly since a key link page [www.ecollege.com/educator/Cite.html] is no longer active. This could give the impression that CiTE is no longer active as a Centre. However, CiTE certainly still exists as an annual conference, with information on the March 2005 conference at http://www.ecollege.com/CiTE2005/ and an advertisement for the 2006 conference at http://www.ecollege.com/CiTE2006/.

† The Forum is harder to find traces of. A Google search for “eCollege Faculty Forum” turns up just one hit, a CV of a person created/updated in 2005, which lists his membership of the eCollege Faculty Forum as current. A wider search for “Faculty Forum” AND “Center for Internet Technology in Education” yields a further CV, but with no data beyond 2002. In addition, there is only one hit for “Faculty Forum” on the site ecollege.com and its sub-sites. All this does not suggest a high level of activity.
Appendix A: Vendor Survey Methodology

A  Company name and contact details including contact person and role

Please fill in full details here. Ideally the person should be the one likely to be responsible for dealing with the UK e-University.

B  General description of the company

Please fill in full details here. Include your UK sales arrangements.

C  General description of the product including pedagogic and organisational needs that it satisfies

One page maximum. If there is more than one relevant product, then please submit separate reports. If your product is designed to link in with products from other vendors, please give details of these other products and vendors.

D  General observations

For example, comments on the state of play in testing or using your or similar technologies in real world situations (UK and non-UK), including any evaluation reports; and on likely future developments and the timetable for these. This is for the general parts of our report.

E  Details of the product – 12 criteria

If you have some feature of the product that does not seem to fit the classification below, please describe it in Section C above.

1  Architectural approach

Please fill in full details here. Include any restrictions on the content that it can deliver (e.g. maths, chemistry) and give a description of the content that is available at present.

2  Standards and interoperability

Please fill in full details here. Include compliance with current and emerging standards fora, such as IMS. Also include interoperability with other types of system including student records systems and learning management systems.

* This is a copy of Appendix C of Chapter Sixteen, “The e-Tools (1) Report: Pedagogic Assessment and Tutoring Tools (Learning Platforms)”, to be found in Volume One of the e-University Compendium at http://www.heacademy.ac.uk/learningandteaching/eUnicompendium_chap16.doc. Small adjustments to that approach were made within UKeU to cope with the march of time and technology.
3 Life-cycle costs

We appreciate that costs are commercially confidential and dependent on procurement. What we are looking for is cost indications. Include not just purchase cost but also cost for ongoing support, software upgrades, training, etc.

4 Scalability (including “footprint” issues)

The system has to grow to support perhaps several hundred thousand users within a few years.

By “footprint” we mean the configuration required to run the client end of the system, and how this compares with similar systems.

5 User interface (including internal and external consistency)

Please fill in full details here. Include compatibility with Internet browsers and other major packages that students are likely to use for word processing and email. Also cover user interface issues for tutors, administrators and developers.

6 Reference sites (at least 1 in UK)

We would like three reference sites of most relevance (in your judgement) to the UK e-University. Ideally, at least one of these sites should be a UK university making substantial use of your system. Other sites may be universities or corporate universities in the UK or elsewhere, but please try to ensure that the sites are as relevant as possible (in your judgement) to the UK e-University context.

7 Reliability

How reliable is your system, both server and client? What measurements do you have?

8 User empowerment

Please give full details of how students, tutors administrators and others can customise your system. For example, some systems are extremely easy to use, but extremely hard to customise.

9 Company size and stability

If your company is wholly devoted to e-learning, please give details of company sales over the last few years, and other evidence of stability.

If your company has a Division devoted to e-learning, please give figures for that Division. If you have several products, please attempt to break figures down to the product level.

If your company is a start-up or university spin-off, we appreciate that you will have less of a track record, however please provide other evidence to support your claim for company stability (e.g. size of venture funding, strategic partners, long-term sales contracts, etc).
10 Ease of support (and training)

Please fill in full details here including typically how user sites will acquire their training, e.g. from vendor, independent trainer, self-training material, zero training need. Also include details of what specialist training is needed, e.g. for tutors, administrators, course developers, systems developers.

11 Current and proposed capability to embed new technology

New forms of networking such as wireless, mobile and fibre are coming along which will change the parameters of many systems including allowing full-motion video to be an “object” anywhere in the system. There are also developments of non-PC devices such as palm-tops and set-top boxes. Please explain how the architecture of your system and structure of your company will allow you to adapt to such technologies.

12 Current and proposed capability to embed new pedagogy

Educational researchers continue to develop new approaches to teaching, often exemplified by hard-to-deploy technology. Current hot topics include Virtual Labs and co-operative knowledge building. Please explain how you make your system open to new pedagogic approaches.
Appendix B: Full Lists of Resources Consulted

Media Sources

“eCollege\textsuperscript{SM} Announces Third Quarter 2002 Conference Call”, PR Newswire, 14 October 2002.

“eCollege\textsuperscript{SM} Named Fifth on List of Colorado’s Fastest Growing Technology Companies in Deloitte & Touche Technology Fast 50 Program”, PR Newswire, 9 October 2002.

“New Eduventures Study Identifies Online Distance Learning As Unique Market With Unique Needs; Study Recognizes eCollege(SM) as Leader in Supporting Fully Online Academic Programs”, PR Newswire, 27 September 2002.


Selected Reports and Other Sources

eCollege Web site, including numerous publications and press releases, \texttt{http://www.ecollege.com/}.

eCollege, \textit{Everything You Wanted to Know About ASPs But Were Afraid to Ask} (Whitepaper).

eCollege, \textit{eCollege AU+\textsuperscript{SM}} (Whitepaper).


eCollege Careers “Instructor Support Specialist” advertisement (Department: Course Services).

\* By Sara Frank Bristow. List prepared September 2003.


SEC Filings for 2001–2003, Yahoo Finance; also, Yahoo Finance entry for “Ownership Information: eCollege.com”.

Microsoft Faculty Center, [http://microsoft.ecollege.com/](http://microsoft.ecollege.com/).


Appendix C: Later Information on eCollege

[This Appendix consists of edited extracts from a 12-page report on a visit by the author to the EDUCAUSE conference, Anaheim, November 2003. As usual, names of people are not given. Acknowledgements and thanks are due to JISC for sponsoring a UKeU manager as part of the UK delegation to EDUCAUSE.]

Unusually for UKeU reports (which were usually very much “confined to the building”), in view of the support from JISC and the facilitation by WUN of the author’s attendance at a number of conferences around this event, versions of the 12-page EDUCAUSE report were distributed to both these agencies.]

The eCollege system is moving on in the general direction that others are, within a .NET paradigm (so Microsoft have no pressing need to develop an MLE, everyone else is doing it for them) but some think it looks a bit of a follower rather than as much of a leader as it once did. However, note that eCollege have announced a new secure “high-stakes” online testing environment, ExamGuard, in partnership with QuestionMark – so that they are up with the flow in this area – see http://www.ecollege.com/stories/press_10_15_03.learn?page=2200†.

There was nothing about eCollege sales that would concern UKeU, in particular nothing about sales outside the US to large distance learning providers. But in the US there is no doubt that the eCollege system now occupies a natural niche – the one that institutions think about when they decide not to install Blackboard or WebCT and go for a Managed Service.

Later in the conference I had the good fortune to be passing the Microsoft stand when the CTO of eCollege was giving a presentation about scalability of Microsoft servers. He gave a stonking‡ presentation on the eCollege system, which is impressive, even more so since it runs 100% on Microsoft servers. (Note that eCollege uses all-Microsoft servers and it is a massive operation, with over 100 Microsoft servers.)

I had a meeting with an eCollege person responsible for new business development, who among other things is responsible for international business. He claimed that eCollege have so much business and future growth potential in the US, that they are not looking at all beyond the country, not even to Canada.§

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† By Paul Bacsich.
§ UK slang for “impressively good” (see http://www.freesearch.co.uk/dictionary/stonking).
‖ There are a few eCollege sales in Canada now, in particular Thames Valley District Virtual Academy and Durham Virtual High School (http://www.durhamvc.org).

Note also that whatever the views expressed by eCollege (and others) in Autumn 2003, from early 2005 onwards (and some OBHE articles indicate a change of mind in 2004) the for-profit US institutions active in HE e-learning changed their minds about overseas sales – see in particular the Hezel report on the “Global E-learning Opportunity for U.S. Higher Education” at http://www.hezel.com/globalreport/index.htm. Germany, Japan and South Korea are seen as particular targets – in that context UKeU Report 05 on Japan is interesting.
eCollege think that they (via their partners) have around 5% of their students outside the US but have no real way of telling.

Another eCollege contact revealed that eCollege (via the partner HEIs) has between 65-70% of their students on fully online courses.

eCollege has a nice-looking evaluation tool. My contact told me that eCollege had in the early days excellent programme-wide evaluation results but later their HEI partners became reluctant to share such information with other HEIs.
Appendix D: Peirce College Use of eCollege

[The following is taken from a report to UKeU of the Sloan Asynchronous Learning Network conference, Orlando, November 2003. Acknowledgements and thanks to WUN for financial support for the author’s attendance. Similar reports with difference nuances were prepared for WUN and ALT.]

US Providers

Despite the doom and gloom† about the rise of blended learning, there are an increasing number of US players in the not-for-profit sector each with thousands of remote students taking pure distance e-learning – and some of them making a point of saying this on their brochures.

The information below and information from other recent conferences and press releases (especially Capella, Hong Kong OU and Swiss Virtual University) would make the average reader feel that WebCT and eCollege can certainly deliver off-campus pure e-learning, with Blackboard not far behind. This seems to make some UKeU MLE propositions a bit subtle.

Peirce College

While at morning coffee with WUN colleagues discussing evaluation, the President of Pierce College came over and introduced himself to us. Peirce College – http://www.peirce.edu – is a private degree-granting institution describing itself as “one of the first Business Colleges in the United States”, specialising in Business Administration, IT and paralegal studies.

* By Paul Bacsich.
† This coded remark referred to not only the increasing realisation within UKeU (under way since summer 2003) that blended learning had to have much greater emphasis but also the emerging signs of a wider backlash in the UK against so-called “pure-play” e-learning since the HEFCE consultation document on e-learning strategy (Circular Letter 21/2003) was released in July 2003 for HE comment by 1 December 2003 (see http://www.hefce.ac.uk/pubs/circlets/2003/cl21_03.htm). Those with their “ear to the ground” in the sector (including listening to the comments at ALT-C 2003) did not need to wait for the consultants’ report to be published in May 2004 stating that “Respondents overwhelmingly requested a strategy that emphasises ‘blended’ approaches to learning and teaching – where e-learning via the web or other technologies is augmented by more traditional methods including classroom sessions, and the use of books and other resources – rather than wholly e-based learning” (para. 4 of Circular Letter 09/2004, http://www.hefce.ac.uk/pubs/circlets/2004/cl09_04/).

In the main report of the consultants there was of course the telling paragraph:

There is evident tension for the sector between the vision of UKeU and the reality of campus-based provision. The prominent role proposed for UKeU at the centre of the strategy meets with considerable criticism, particularly as the impact of UKeU is not yet seen by the sector as fully and positively evaluated. The emphasis on UKeU also gives rise to concerns about the extent to which it is a facilitator of change and best practice, a business partner or a privileged competitor to HEIs.

(See http://www.hefce.ac.uk/pubs/rdreports/2004/rd04_04/rd04_04.doc.)
Peirce College Online – [http://www.peirce.edu/Online/online.asp](http://www.peirce.edu/Online/online.asp) – offers pretty much the same courses and operates across the US in a “pure-play” online mode. Their degree-level IT curriculum, offered via the eCollege Managed Service (for which Peirce say they are one of the biggest customers), has four areas:

- Technology Management
- Networking
- Business Information Systems.

They also offer an innovative-looking non-degree course “Application Development with .NET” offered entirely online. They describe this as follows:

> The Application Development program follows a Constructivist methodology, where courses are mainly self-study/self-discovery. A series of business case projects offer students the opportunity to gain additional knowledge, practical experience, and the mastery needed to pass industry certifications.

This looks like the kind of thing UK HE e-providers should be doing more of, i.e. courses related to degree, with a similar pedagogy, rather than completely different CPD courses. For more details see [http://www.peirce.edu/Info_Tech/vb.asp](http://www.peirce.edu/Info_Tech/vb.asp).

* The mention of constructivism is interesting as a counterweight to a large amount of UK thinking (including from some vendors) that dismiss US distance e-learning as pedagogically unsophisticated.