

Virtual Learning Environment Activity in Further Education in the UK

A Supporting Study for the Joint Information Systems
Committee (JISC) and the Universities and Colleges
Information Systems Association (UCISA)

Prepared by

**The Social Informatics Research Unit, University of
Brighton
Education for Change Ltd
The Research Partnership**

November 2003

VLE RESEARCH FINDINGS

Data on VLE development was gathered from survey respondents in Section 4 of the questionnaire. References to Tables in the text are to section 1.3 below.

In June 2000 all FE colleges were required to produce an ILT strategy using a prescriptive template for what was to be covered. The strategies were evaluated by Becta and used to determine allocation of funding. The first template did not include a specific reference to VLEs, although many colleges recognised their importance and included them in their strategies. In 2001 colleges were allocated funds specifically for the purchase of a VLE.

1.1 Key issues

Comparison of responses from FE colleges and HE institutions indicates that the FE sector is at an earlier stage in the development and use of VLEs than the HE sector. The following key issues were identified in the responses of FE colleges:

- ?? There is a greater reluctance to commit to VLEs in smaller colleges
- ?? Only a relatively small minority of students are currently actively using VLEs to support their learning
- ?? A significant element of supporting activities associated with VLEs are being carried out by academic staff with particular skills or interests
- ?? Integration of VLEs with student record systems is not well developed
- ?? Staff development and training for VLEs is problematic
- ?? Student support and training is very underdeveloped

1.2 Conclusions from survey on use of VLEs in FE

82% of FE colleges in the survey use a VLE, compared with 86% of HE institutions. Within the FE sector, however, only 70% of responding sixth form colleges use a VLE and when these are removed from the sample, the remaining FE colleges have, at 85%, a similar take-up of VLEs to the HE sector. However, in the light of the specific funding provided to FE colleges for VLE purchase, this suggests that 15% of FE colleges have taken a deliberately strategic decision not to purchase a VLE.

Use of VLEs appears to be strongly related to the size of FE colleges. Just over half of the smallest colleges in the sample use a VLE whilst over 90% of the largest colleges use one.

Sixth form colleges are much smaller than other FE colleges and are specialist institutions focussed on full-time 16-19 general education. Because they are relatively small institutions, sixth form colleges would find it hard to fund additional staffing to support and develop a VLE. With their narrower focus, many take the view that a VLE is more suited to the broader general FE environment.

“We experimented with commercial products and have found that some of them are too complex for our needs. The needs of a large FE college are different from our own and we simply do not have the resources to make the progress that we would like.”
Comments from a Sixth Form College not using a VLE.

Type of application (Table 1)

The survey asked what VLEs, commercial or developed in-house, are used within institutions.

The largest category for FE colleges was the in-house development of intranet-based solutions (34%). The largest group in this category was sixth form colleges (45%). This may be because sixth form colleges tend to use student record systems that have close tracking facilities that can be combined relatively easily with intranet solutions. In-house developments in general are slightly less popular (45%) in the FE sector than in the HE sector (50%).

Blackboard (27%) and Granada Learnwise (22%) are the most popular commercial VLEs for FE colleges responding to the survey with a VLE. Blackboard is also the most popular with HE respondents (43%) but WebCT (34%) is the second most popular VLE with HE respondents and has been displaced by Granada Learnwise in the FE sector. This may be because Learnwise is a CAPITA product that integrates with other CAPITA products which are used widely in the FE sector for student records systems.

Subject areas using VLEs (Table 2)

Subject use of VLEs is significantly less well developed in FE colleges than in the HE sector. Within the FE sector, sixth form colleges with VLEs have greater subject coverage than other FE colleges.

Student and teacher use of VLEs (Tables 3 and 4)

The numbers of students and staff using VLEs in responding FE colleges reflect the level of subject development. FE colleges vary considerably in the numbers of students that they have but the data supports the view that students actively using VLEs in their learning are in a minority in most colleges. A similar conclusion can be drawn about HE institutions.

Staff usage, however, appears to be significantly more developed in the HE sector than in FE, even allowing for the difference in size of institutions. 33% of HE respondents report 200 or more staff using VLEs whereas 50% of FE respondents report less than 30 staff using VLEs.

Courses and modules actively using VLEs (Tables 5 and 6)

The survey supports the view that the use of VLEs as an integral component of learning is still in a relatively early stage in development in both FE and HE sectors, although with HE ahead of FE. 35% of responding FE colleges use VLEs for less than 10 of their courses or modules (HE: 14%). A significant proportion of FE respondents that used VLEs did not answer the survey question about *how* they used them – perhaps because it was difficult in practice to determine the level of dependence of courses or modules on VLE content. However, for those that did answer the question only 5% of courses were identified as fully online.

Maintenance, support and administration of VLEs (Tables 7, 8, 9 and 14)

The installation and maintenance of VLEs is handled centrally in 81% of responding FE colleges (85% for HE). FE colleges appear to involve more of their curriculum staff in installation and maintenance than do HE institutions (33% in FE compared with 15% in HE). This fits the general pattern in FE of tending to involve academic staff in tasks that support teaching and learning. This is typical of developments in FE in their early stages which are characterised by a gradual transfer from academic staff with relevant skills to specialist staff as the activity becomes main stream.

FE colleges and HE institutions provide the majority of technical support and system administration from central units. HE institutions rely more on internal central forms of support than FE colleges, however, who tend to supplement their support from external sources. 38% of responding FE colleges reported that they have no dedicated VLE support staff, compared with only 17% of responding HE institutions. However, HE and FE provide similar amounts of central support (FE: 48%, HE: 52%) the difference lying in the provision of support locally (FE:12%, HE: 25%).

Links between VLEs and student records (Table 10)

Efficient transfer of information between the VLE and student records is further developed in HE institutions than in FE colleges with 30% of responding HE institutions creating student accounts automatically in their VLEs from student records (17% in FE colleges). The most common pattern for both sectors, however, is having to transfer a file in appropriate format between the relevant applications (FE: 35%, HE: 42%). 38% of responding FE colleges reported that no links are provided, which implies that student data has to be manually entered into the VLE (HE: 24%).

Decision making (Tables 11 and 12)

Decision making about VLEs is centralised in FE colleges with 68% reporting that decisions are taken by the Senior Management Team. Since in FE colleges the ILT strategy would have to be approved by the Senior Management Team, 68% seems low. It suggests that respondents were trying to identify the effective locus of decision making – which in turn suggests that decisions about VLEs are taken *de facto* at the point of greatest interest and enthusiasm in the organisation. Only 40% of responding FE colleges have a stated target for the use of VLEs, which is low given the current focus on target-driven planning in the FE sector.

The most popular reason given by responding FE colleges for considering the introduction of a VLE or for its use is the enhancing of teaching and learning (72% of respondents) and the next two most popular reasons were widening access (13%) and reasons associated with efficient management (11%). HE respondents were also concerned with the enhancing of teaching and learning (66%) but their second most popular reason was associated with efficient management (16%). This reflects the concerns that FE colleges have for meeting performance targets for retention, achievement and widening participation.

Support and encouragement for VLE development (Table 13)

The most common method for encouraging the development of VLEs used by responding FE colleges is providing academic staff with time for development

(67%). This method is particularly popular with sixth form colleges (76%) followed by giving support staff time for development (45%). FE colleges use a significant amount of project funding (55%) and this is the second most popular method for non-sixth form college FE (59%). It is likely that sixth form colleges, having fewer resources at their disposal, are not as successful in bidding for project funding (37%) as other FE colleges (59%). The pattern is similar to that of responding HE institutions, but they attract more project funding than FE (69%) and make less use of academic staff development time (55%).

Staff development and training for use of VLEs (Tables 14, 15 and 16)

In providing staff development and training for VLEs, sixth form colleges – the smallest FE colleges – rely strongly on their central IT functions. Other FE colleges tend to use dedicated VLE support staff where they have them (see Table 14). All FE colleges make some use of their staff development units for VLE training, particularly for teaching and learning with VLEs. There were significant numbers of colleges with VLEs that did not respond to sections of the question on staff development (typically, about 1 in 5). Coupled with the large variation in approaches to development and training on different aspects of VLE use this suggests that this area is problematic for colleges.

Support staff who help other staff with the use of VLEs appear to be provided with a range of training and development opportunities. The most popular of these is seminars and workshops and are commonly consortium activities with other colleges.

Student support and training in the use of VLEs (Tables 17 and 18)

Responding FE colleges report that they make heavy use of their academic staff to support and train students in their use of VLEs. The most common method is face to face training as part of course delivery. The large number of non-responses for other methods (50% in some cases) suggests that these are underdeveloped at present. This conclusion is further supported by the much smaller amount of specialised support and training in the use of VLEs for students with special or particular needs provided by responding FE colleges than responding HE institutions.

1.3 VLE section of the questionnaire

Question 4.1: Does your institution currently use any virtual learning environments (VLEs)?

The incidence of those institutions using a VLE currently is as follows:

- ?? 70% of responding Sixth Form colleges
- ?? 85% of other responding FE colleges
- ?? 82% of all responding FE colleges
- ?? 86% of responding HE institutions

Question 4.2: What VLEs, commercial or in-house, are used in your institution?

Table 1: Institutions using types of VLE

	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions	All respondents
Blackboard	16%	30%	27%	43%	32%
Bodington	3%	3%	3%	33%	3%
Colloquia	0%	0%	0%	1%	0%
COSE	3%	3%	3%	0%	2%
FirstClass	3%	2%	2%	19%	7%
Fretwell Downing	0%	8%	6%	1%	5%
Granada Learnwise	26%	21%	22%	7%	18%
Lotus Domino	0%	1%	1%	7%	2%
Lotus Learning Space	0%	0%	0%	5%	1%
Merlin	0%	1%	1%	1%	1%
Top Class	0%	1%	1%	0%	1%
TekniCal Virtual Cam	5%	17%	15%	0%	10%
WebCT	0%	17%	14%	34%	20%
Other VLE - developed in-house	5%	12%	11%	23%	14%
Commercial intranet-based product	3%	2%	2%	5%	3%
Intranet based - developed in-house	45%	32%	34%	26%	32%
Other	8%	9%	9%	18%	11%

Question 4.3: What subject areas or departments are using VLEs in your institution?

Table 2: Subjects/departments etc using VLE

Subjects	Sixth Form colleges	Other FE Colleges	All FE colleges	HE institutions	All respondents
All subjects	21%	12%	13%	13%	13%
1-5 subjects listed	13%	23%	22%	6%	17%
6-10 subjects listed	24%	18%	19%	7%	15%
11-15 subjects listed	3%	5%	4%	6%	5%
16-25 subjects listed	3%	2%	2%	3%	3%
26-35 subjects listed	0%	1%	1%	5%	2%
36 or more subjects listed	0%	1%	1%	2%	1%
All departments/faculties/schools	11%	7%	8%	23%	12%
1 or 2 faculties or schools	3%	3%	3%	6%	4%
3-5 faculties or schools	3%	5%	5%	8%	6%
6-10 faculties or schools	0%	2%	1%	8%	3%
Pilots only, 1-5 listed	5%	4%	4%	0%	3%
Pilots only, more than 5 listed	0%	2%	4%	2%	2%
Pilots only, unspecified number	3%	5%	2%	0%	3%
Most subjects/departments	5%	2%	2%	5%	3%

Question 4.4: How many students currently use VLEs in your institution?

Table 3: Number of students using VLEs

No. of students	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
None	8%	5%	6%	4%
499 or less	34%	47%	45%	36%
500 – 999	29%	18%	20%	17%
1000 – 1999	24%	14%	15%	12%
2000 – 2999	3%	3%	3%	7%
3000 – 4999	-	3%	2%	5%
5000 – 7499	-	2%	2%	5%
7500 – 9999	-	1%	1%	3%
10000 or more	-	1%	1%	6%
Information not collected	3%	6%	5%	5%

Question 4.5: And, how many teaching staff currently use VLEs in your institution?

Table 4: Numbers of staff using VLEs

No. of staff	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
None	3%	1%	1%	0%
9 or less	18%	17%	17%	9%
10 – 29	21%	34%	32%	11%
30 – 49	21%	18%	19%	8%
50 – 99	21%	8%	11%	17%
100 – 199	11%	10%	10%	13%
200 or more	-	7%	6%	33%
Information not collected	5%	4%	4%	6%

Question 4.6: How many courses or modules currently actively use VLEs in your institution?

Table 5: Number of modules using VLEs

No. of modules	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
None	5%	5%	5%	0%
9 or less	26%	30%	30%	14%
10 – 29	37%	25%	27%	9%
30 – 49	18%	6%	8%	8%
50 – 99	3%	12%	10%	10%
100 – 199	3%	5%	4%	16%
200 – 299	-	1%	1%	8%
300 – 399	-	-	0%	3%
400 – 499	-	1%	1%	6%
500 – 999	-	1%	1%	15%
1000 or more	-	1%	1%	6%
Information not collected	8%	11%	11%	5%

Question 4.7: How do all the VLE courses or modules in use in your institution divide between the following categories?

Table 6: Mean percentage of course or modules in each category

Category	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Web supplemented, online participation is optional for the student	60%	56%	57%	57%
Web dependent, participation required through interaction with content	23%	14%	15%	13%
Web dependent, participation required through communication with staff/students	3%	9%	8%	10%
Web dependent, participation required through interaction with content and communication	8%	10%	10%	13%
Fully online course	3%	5%	5%	5%

Question 4.8: What units are responsible for installing and maintaining the VLEs in your institution?

Table 7: Responsible units

Units	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Central Information Technology support	82%	81%	81%	85%
Distributed Information Technology support	5%	5%	5%	21%
Curriculum staff	42%	30%	33%	15%
Other	8%	25%	22%	19%

Question 4.9: What units provide VLE technical support in your institution?

Table 8: Technical support units

Units	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Central Information Technology support	84%	83%	83%	86%
Distributed Information Technology support	-	5%	4%	17%
Learning and Teaching Support Unit (LTSU)	5%	4%	4%	22%
Educational Development Unit (EDU)	-	4%	3%	9%
Dedicated VLE support	16%	17%	17%	26%
Local	8%	5%	6%	6%
Outsourced supplier or specialist	16%	11%	12%	6%
Other	8%	18%	16%	6%

Question 4.10: And, what units provide VLE system administration support in your institution?

Table 9: System administration support

Units / suppliers	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Central Information Technology support	71%	50%	54%	69%
Distributed Information Technology support	-	4%	3%	19%
Learning and Teaching Support Unit (LTSU)	8%	11%	11%	31%
Educational Development Unit (EDU)	-	3%	2%	10%

Units / suppliers	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Dedicated VLE support	16%	24%	23%	23%
Local	11%	7%	8%	13%
Outsourced supplier or specialist	5%	5%	5%	3%
Other	11%	25%	23%	8%

Question 4.11: How are links provided between the VLEs and student records?

Table 10: Linking methods

Method	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Automated creation of student accounts in VLE from student records	16%	18%	17%	30%
Creation of student accounts file for data transfer into VLE	32%	36%	35%	42%
Automatic creation of student access to specific courses/modules	13%	9%	10%	21%
Automatic transfer of assessment results between VLE and MIS	5%	2%	3%	2%
Other – please write in	-	4%	3%	5%
No links provided	42%	37%	38%	24%

Question 4.12: At what level in your institution are decisions made about VLE implementation?

Table 11: Decision-making level

Level	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Institution	66%	61%	62%	73%
Faculty	5%	10%	9%	14%
School/Department	11%	11%	11%	31%
Principal	5%	20%	17%	7%
Senior Management Team	61%	69%	68%	47%
Department level	29%	19%	21%	21%
Section staff	5%	13%	12%	13%

Question 4.13: Does your institution have a stated target for the use of VLEs (e.g. 10% of courses)?

- ?? 34% of responding sixth form colleges have a stated target;
- ?? 42% of other responding FE colleges have a stated target;
- ?? 40% of all responding FE colleges have a stated target;
- ?? 31% of all responding HE institutions have a stated target

Question 4.14: What are the main reasons for moving to or considering the use of VLEs in your institution?

Table 12: Reasons for considering or using a VLE

Reason	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Enhanced teaching/learning	74%	72%	72%	66%
Efficiency/management/coordination/centralisation	5%	12%	11%	16%
Distance learning/remote access/external environments	3%	6%	5%	0%
Flexibility	5%	9%	8%	7%
Funding/cost issues	0%	4%	3%	2%
Student demand/expectations	0%	2%	1%	3%
Widening access/opportunities/choice	3%	15%	13%	6%
Competitive edge/increased market share	3%	3%	3%	5%
Stable/advanced technology	3%	4%	3%	1%

Question 4.15: How is VLE development supported or encouraged within your institution?

Table 13: Development methods

Method	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Project funding	37%	59%	55%	69%
Allowing academic staff development time	76%	64%	67%	55%
Allowing support staff development time	45%	40%	41%	43%
Career enhancement	11%	14%	13%	9%
Other	13%	5%	7%	1%
VLE development not supported or encouraged	0%	3%	2%	3%

Question 4.16: Are dedicated staff employed to support VLEs?

Table 14: Staff support

Support	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Yes centrally	45%	49%	48%	52%
Yes locally	3%	4%	4%	2%
Yes both	3%	9%	8%	23%
No dedicated VLE support staff	47%	36%	38%	17%

Question 4.17: Moving on to consider the support offered to staff, which units across the institution provide staff development and support for use of VLEs?

Table 15: Support offered to staff in FE

Support units	Staff development of learning and teaching use of VLEs		Support in creating new courses		Support in adding content and maintaining courses		Creating web pages	
	Sixth Form	Other FE	Sixth Form	Other FE	Sixth Form	Other FE	Sixth Form	Other FE
Central IT/LIS	58%	28%	40%	20%	45%	26%	53%	36%
Distributed IT	3%	2%	0%	1%	3%	3%	3%	3%
LTSU	3%	8%	3%	9%	5%	9%	5%	6%
EDU	0%	4%	0%	3%	0%	3%	0%	2%
Staff development unit	24%	44%	21%	22%	16%	20%	18%	22%
Dedicated VLE support	13%	33%	13%	35%	16%	36%	16%	25%
Local	16%	8%	11%	8%	11%	12%	16%	10%
Other	18%	16%	11%	14%	13%	15%	11%	16%
Not answered	8%	9%	37%	18%	18%	12%	16%	16%

Question 4.18: What training and development activities are offered to support staff who help other staff in the use of VLEs?

Table 16: Training and development offered to VLE support staff

Training and Development	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Regular seminars/ training sessions/ workshops run	32%	40%	39%	38%
Training & development activities offered, little or no detail	21%	12%	14%	17%
Specialist full-time staff appointed/trained available	11%	22%	20%	14%
External/vendor/ supplier training courses	18%	21%	20%	13%
Training & development activities under development	3%	5%	4%	3%
None	5%	2%	3%	5%
Not answered	21%	13%	14%	11%

Question 4.19: And which units across the institution provide student support and training in the use of VLEs?

Table 17: Units providing students support and training in use of VLEs

Support Units	Face to face training as part of course delivery		Face to face training as part of an IT skills induction		Printed guides		Info on Intranet/ Internet		Online training and support through the VLE	
	Sixth Form	Other FE	Sixth Form	Other FE	Sixth Form	Other FE	Sixth Form	Other FE	Sixth Form	Other FE
Central IT/LIS	13%	8%	16%	8%	26%	15%	18%	26%	13%	7%
Distributed IT	0%	1%	0%	2%	0%	2%	0%	2%	0%	1%
LTSU	0%	5%	5%	4%	5%	8%	3%	6%	3%	6%
EDU	0%	2%	0%	1%	0%	1%	0%	2%	0%	2%
Dedicated VLE support	3%	11%	5%	8%	8%	18%	13%	18%	8%	17%
Local	0%	10%	0%	9%	3%	8%	3%	6%	0%	6%
Academic staff	71%	64%	37%	47%	24%	25%	40%	28%	13%	22%
Other	3%	6%	8%	7%	3%	8%	3%	7%	0%	6%
Not answered	21%	19%	42%	35%	40%	36%	37%	32%	63%	50%

Question 4.20: Do any of the following groups of students receive more focussed or specialised support and training in the use of VLEs?

Table 18: Students receiving specialised support and training in use of VLEs

Training and Development	Sixth Form colleges	Other FE colleges	All FE colleges	HE institutions
Students with special needs	18%	18%	18%	25%
Distance/off-campus learners	0%	21%	17%	38%
Not answered	79%	67%	69%	55%