Management and implementation of Virtual Learning Environments A UCISA funded survey

Acknowledgements

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This report presents findings from the VLE survey conducted by the Teaching and Learning sub-group of the UCISA Teaching and Learning Information Group. There have been many contributors to this report, which has resulted in some different styles of presentation between sections.

Executive Summary

UCISA is aware that a number of issues relating to VLEs are having a significant impact on Computing/Information services. They also represent cultural challenges for both academic staff and students in how they engage with their learning and teaching. Issues relate to choosing a VLE, its implementation, technical support and a whole range of support, training and pedagogic issues relating to its use. In order to gain an insight into how these questions are being addressed in Higher Education, with particular reference to their impact on the UCISA community, UCISA commissioned the Teaching and Learning sub-group of UCISA-TLIG to conduct a national survey.

The survey employed two questionnaires; one to UCISA Directors, the other to those providing local support.

The overall conclusions, which are expanded upon with the report, are as follows:

- VLEs are widely recognised as an important component of an institutional strategy, but this is yet poorly matched by delivery. Motivators range from efficiency to pedagogic reasons and increasing flexibility. Their potential in distance-learning is widely anticipated but accessibility issues are as yet poorly considered.

- There is currently little integration with MIS to deliver a comprehensive Managed Learning Environment (MLE) but this is identified as a strong objective.

- Central Services take primary responsibility for the choice, funding, installation and maintenance of VLEs and their technical support. Support for the administration of courses, though highly visible within central support, is increasingly likely to be found from units such as Learning Technology Support (LTSU) and Educational Development (EDU). Pedagogic support is strongly focused on LTSUs and EDUs.

- There are some identifiable differences between pre- and post-1992 Universities, most notably in the areas of strategy, technical and administrative support, which are more likely to be located centrally, and student support more locally in the post-92 Universities. Post-92 Universities have a somewhat longer history of engagement. There is a discernable trend throughout the sector towards greater centralisation, away from local, departmental support.

- VLEs are a new development for many institutions and, with a few exceptions, the level of staff and student engagement is correspondingly limited. Mature support mechanisms have therefore yet to be comprehensively developed across the sector. Time available for staff development is often very limited or unavailable and support for students is even more limited.

Recommendations

Core Recommendation

> **UCISA should seek to collaborate with all stakeholders to ensure the dissemination of best practise in the obtaining, training and use of VLEs.**

Recommendations

The UCISA community primarily represents support staff in Computing/Information Services. The recommendations that follow are in part where UCISA can act as an agent for change for its own constituency and where, in collaboration with other agencies, it can contribute to more holistic strategic developments.

1. UCISA should provide a strategic statement regarding VLEs, to assist Universities in preparing their own Strategy documents.

2. UCISA should invite its own members to identify what additional assistance they need in order to select and support VLEs within their own institutions.

3. UCISA must take into account that many key support staff work outside Computing/Information Services and identify ways of involving them.

4. UCISA could produce a gateway of relevant Web-based information and discussion lists.

5. UCISA should ensure that appropriate collaborative relationships are forged with all other relevant external agencies and stakeholders.

6. UCISA should encourage the development of local support teams, in which academics and support staff can collaborate both strategically and in course development and maintenance.

7. UCISA should support the availability of academic staff training, especially as part of any institutional accreditation schemes, in both pedagogic and practical use of a VLE.

8. UCISA should share experience and resources regarding the most appropriate way of providing support to students.

9. UCISA should contribute to, participate in and publicise activities that promote good practice.

Contents

1.0 Introduction

1.1 Origins of the VLE Survey

Within the UCISA community, issues surrounding the acquisition and deployment of VLEs began to be considered in some detail at the UCISA-TLIG (in conjunction with the SDG) conference at Lancaster, in April 2000 (see: http://www.ucisa.ac.uk/TLIG/conf/tlig00/d2/ for a summary of this discussion). The introduction of a VLE was highlighted as a major investment for any institution and subsequent feedback indicated that there is considerable interest in continuing to share ideas and experiences in their introduction, implementation, management and support, including how to effectively link to management information systems (MIS).

Consequently, at a meeting of the Teaching and Learning Sub-Group of UCISA-TLIG, in June 2000, it was agreed to submit a proposal, which was subsequently accepted, for UCISA 'Pounds for Projects' funding, to develop a survey focusing upon how VLEs are being implemented and supported within HEIs. The changing roles of the UCISA community had already been flagged in 1999 when this sub-group conducted a survey entitled: *Support for the use of Technology in Teaching and Learning* (see: http://www.ucisa.ac.uk/TLIG/teach/docs/survey99/final.html). It explored the array and nature of support to achieve pedagogically effective integration of technology to support learning and teaching. Although the term 'VLE' was not used, the technologies then being discussed were in large measure the various components that are now perceived to be integral to any VLE. The broad conclusion was that the most successful applications of Information and Communications Technology (ICT) to pedagogic issues occur when support staff are involved collaboratively with academics at the earliest possible stage in the life cycle of any course development.

This was highlighted in a follow-up workshop at Cheltenham and Gloucester in June 1999 entitled *Supporting Learning and Teaching through Collaboration* (see: http://www.ucisa.ac.uk/TLIG/teach/courses/chelt.htm).

2.0 Survey Implementation

2.1 Purpose of the Survey

This survey wished to address some of those questions raised at the Lancaster conference and explore further the collaborative agenda.

Specifically, this survey wished to focus on:

- Decision-making process for the selection of VLEs
- Strategy for the implementation of VLEs
- Technical support provided for VLEs
- Implementation of VLEs, including staff development, student training and dissemination

Anticipated sub-themes that would be explored when the questionnaires had been returned were:

- Differences (if any) in nature of responses between pre and post 1992 Universities
- The relative involvement of different types of staff and their institutional location in the chain of activities between choosing, purchasing, implementing, maintaining and supporting usage of the VLE
- The timing of employing a VLE in relation to external and internal drivers

Some of the anticipated outcomes of the survey were:

- To identify different strategies for supporting VLEs
- To assist in providing a resource to help those choosing VLEs
- To identify ways UCISA can provide help and support through workshops etc
- To identify what constituencies UCISA needs to collaborate with in the support of VLEs
- To enable UCISA to make informed responses to proposals or discussion papers in this area.

2.2 Survey implementation

The definition of a VLE employed in the survey was *'learning management systems that synthesise the functionality of computer-mediated communications and on-line methods of delivering course materials*' (Britain & Liber, 1999).

The survey consisted of two questionnaires. Questionnaire One was sent to the UCISA Directors JiscMail list and the questions asked endeavoured to obtain an institutional overview. Questionnaire Two was targeted at users and those providing local support for VLEs. If more than one VLE was used within a department or institution, a separate questionnaire was completed for each VLE used. A wide range of JiscMail lists were informed of the existence of this second questionnaire, to ensure that as many people as possible in Higher Education, whatever the nature of their particular involvement, had the opportunity to complete it. The lists used were:

UCISA TLIG
TLT Officers
TEACHING-ON-LINE
BLACKBOARD-USERGROUP
WEBCT-UK
UCISA SG

Survey one was sent to all those on the UCISA Directors mailing list and also made available on the web using Snap software. Questionnaire two was only made available on the web. Copies of the questionnaires are given in Appendix One. The questionnaires were sent out and publicised in late February 2001, the initial closing date for completion of both questionnaires was set at the 30th March 2001. A second call was then made for responses with a final deadline of 27th April 2001.

2.3 Questionnaire Returns

At the 30th March 2001 there had been 53 returns for questionnaire one and 64 for questionnaire two. After the second call the final return rate for Questionnaire one was 51% with 75 returns in total; the majority of these returns were made by use of the paper based questionnaire and were then entered onto the online forms for entry into the Snap database. The final number of returns for questionnaire two was 89 from 67 different institutions.

2.4 Preliminary presentations

Prior to the publication of this report, draft findings have been presented at several workshops and conferences, all by Martin Jenkins, the Chair of the TLIG Teaching and Learning Sub-Group. An overview of the findings from Questionnaire 1 were presented in July 2000 at a workshop at Glamorgan organised by MISG, SG and TLIG and entitled *Managed and Virtual Learning Environments: What do they mean for you?* Both a textual Abstract and a PowerPoint presentation are available via the programme at: http://www.ucisa.ac.uk/SG/events-papers/mle-vle/mle-vle-home.htm A second presentation was made at the 1st INSPIRAL project workshop at De Montfort University on 21st August 2001 (http://inspiral.cdlr.strath.ac.uk/about/about.html). Finally, a paper focusing on support issues was given at the Alt-C conference at Edinburgh in September 2001. (http://www.ed.ac.uk/altc2001/).

3.0 Overview of VLE use

It is clear from the survey that the current use of VLEs is widespread within the UCISA constituency. Of those who returned questionnaire 1, 81% responded positively that a VLE was in use in the institution. Perhaps of more interest is the number who are using more than one VLE within an institution, with 24% using two and 25% using three. Of those using more than one VLE, there is ??one for central support/none???

It is also interesting to look at the change in uptake of VLEs over time. Four years ago, only a handful of institutions, around 7%, were using a VLE at all, whereas the last 12 months has seen 40% of institutions joining the VLE ranks. The table below gives a breakdown of number of institutions using a VLE for different timespans.

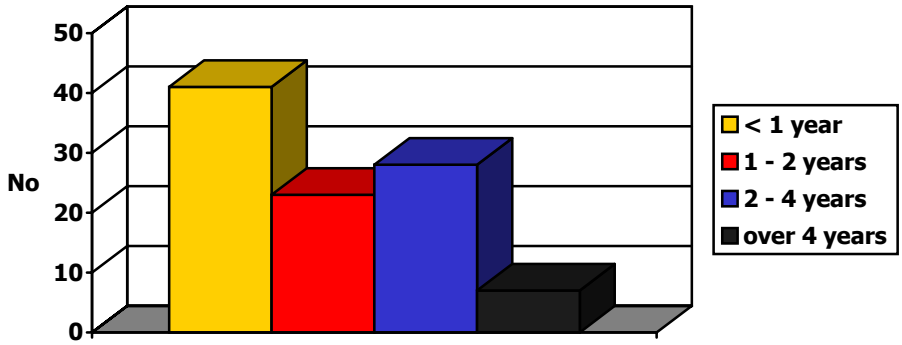

Fig 3.1: Uptake of VLEs over time (Questionnaire one, question six)

One aspect of the survey not shown in this table is the difference in uptake between the old and the new universities. New universities appear to have been using VLEs for longer, on the whole, that old universities.

This may have something to do with critical mass i.e. as more institutions began to use these VLEs, other institutions felt that they needed to invest in this area also. There are also market forces that have led to a number of commercial suppliers entering the market at this time, all achieving high profiles at a number of national events, such as ALT-C, ALT Workshops, UCISA conferences etc. From the survey returns, it can be seen that one VLE supplier is starting to dominate and that is Blackboard (Bb). WebCT and FirstClass show a similar 'market share' following Bb.

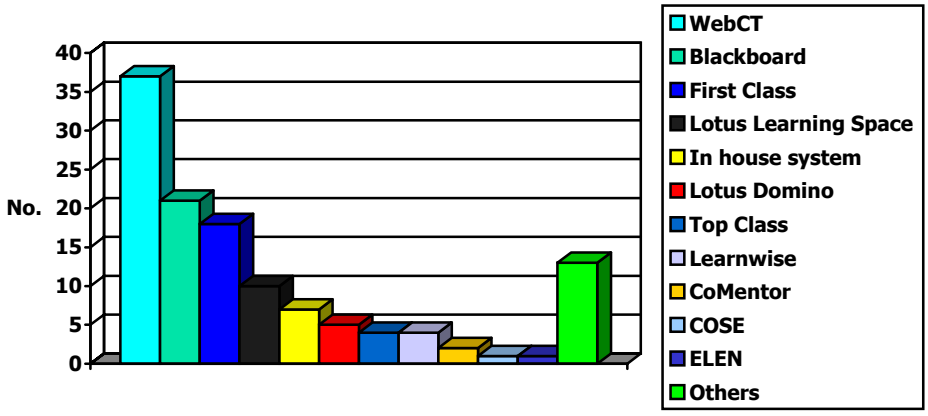

Fig 3.2: VLE used in institutions (Questionnaire one, question six)

If we look at the cross tabulation of time used against which VLE system is used we can see that four years ago Blackboard was not around at all, showed very little uptake between 1-4 years ago, but a phenomenal growth in the past year. WebCT can be seen to show a similar pattern, but with a slightly greater presence in the sector throughout the time ranges selected.

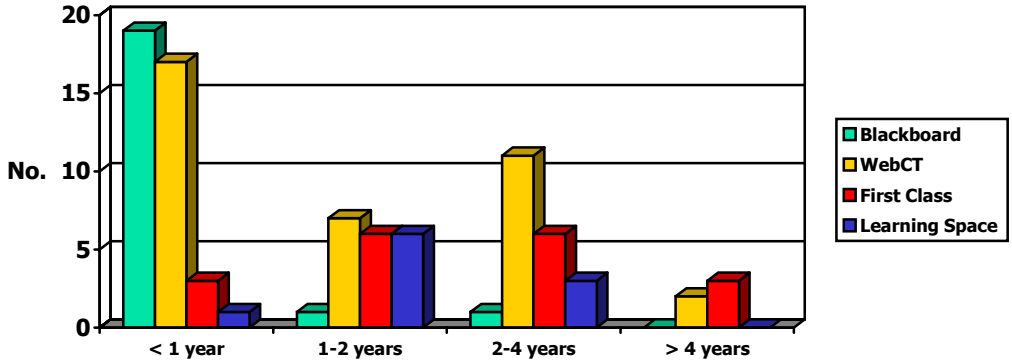

Fig 3.3: VLE used against length of time in use (Questionnaire one, question six)

The survey also found that use was not necessarily University-wide, even if the VLE was centrally supported. Use was frequently localised, especially in older universities.

So, having established that over 80% of institutions who responded actually have a VLE, to what extent are these environments actually being used with students?
The graph below shows the student numbers against percentage of Universities who indicated that level of usage.

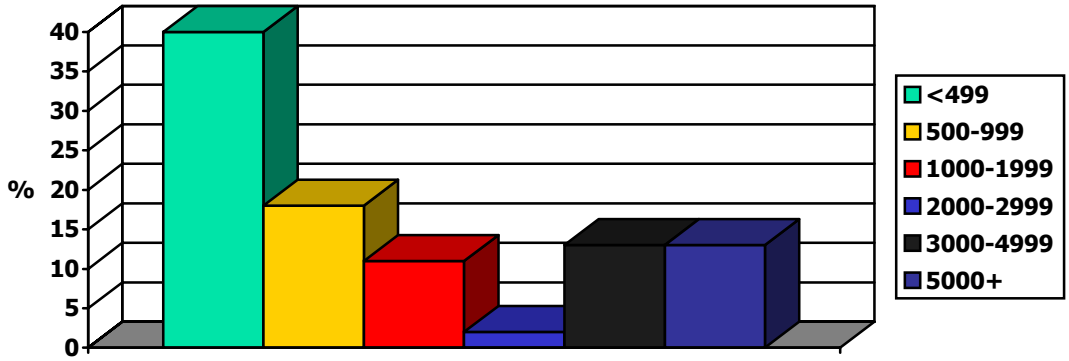

Fig 3.4: Numbers of students using VLEs within institutions (Questionnaire one, question seven)

The highest column shows that 40% of those institutions who have a VLE are using them with less than 500 students. Whilst it could be argued that level of usage will be affected by the size of an institution, this still seems to indicate that there is somewhat less than widespread use of VLEs in many institutions. However, if we combine the last two columns that show usage for 3000-5000+, about 28% of institutions do have apparently large scale use of VLEs. Clearly a useful comparison would be to look at institutional use against size of institution, but this is outside the remit of this current report.

We also asked about level of use by academic staff. From the returns it appears that the number of academics using a VLE is typically less than 30 in over 50% of cases. However 26% have 100+ using the system. This level of academic use closely mirrors that of the number of students using a system i.e. a peak at the low end and another peak at the higher end of the scale.

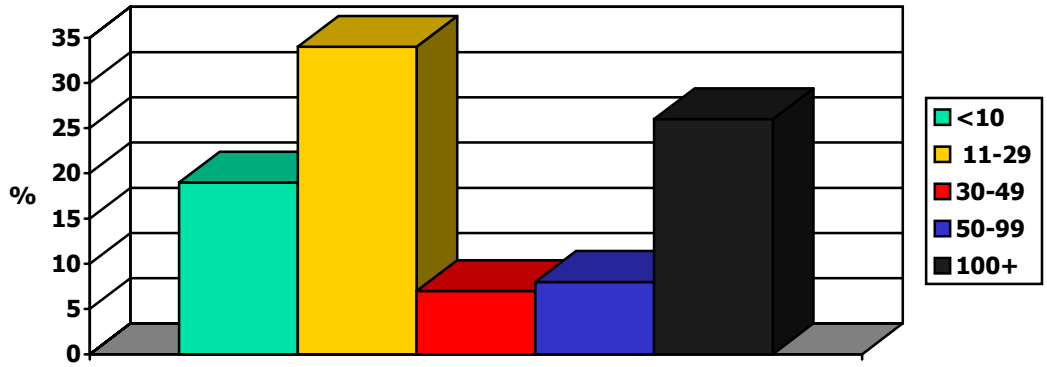

Fig 3.5: Numbers of academic staff using VLEs within institutions (Questionnaire one, question eight)

These levels of use beg the questions - what are the institutional incentives to using these environments? To what extent are these allied to levels of use by academics and students? One can imagine that where the use of a VLE is tightly aligned with the Universities corporate plan and institutional goals, the use will be higher than in those institutions where its use is seen as less core to the University's mission. These issues are addressed in the next section of the document.

4.0 Strategy and decision making

This section of the report looks at the strategy and decision making within institutions for the introduction and support of VLEs. It seeks to identify what are the reasons driving the choice of VLEs, how institutions are managing their implementation.

4.1 Institutional strategy and targets

It is apparent that HEIs recognise the potential importance of VLEs as 76% of responding institutions state they are recognised in institutional strategy documents. These most common documents identified were:

- Teaching & Learning Policy
- ICT Strategy
- Information Strategy
- E-learning strategy

This institutional recognition is not fully complemented by the setting of targets for VLE use within institutions; questionnaire one returns identified 26% of institutions having set targets for VLE use. Returns from questionnaire two were higher and 43% of respondents indicated they had a set target.

Comparisons by institutional type are also interesting on this point; the returns indicate that post 92 universities are more likely to have VLEs recognised in strategy documents and have set targets. This comes out most strongly in the returns from questionnaire one.

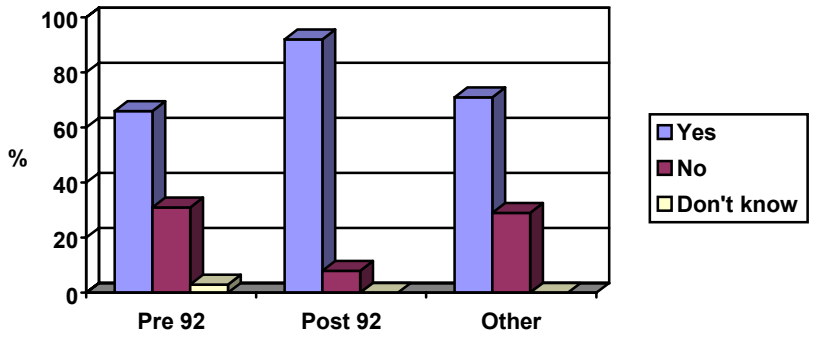

Fig 4.1: Use of VLEs recognised in institutional strategy documents (Questionnaire One, question 13)

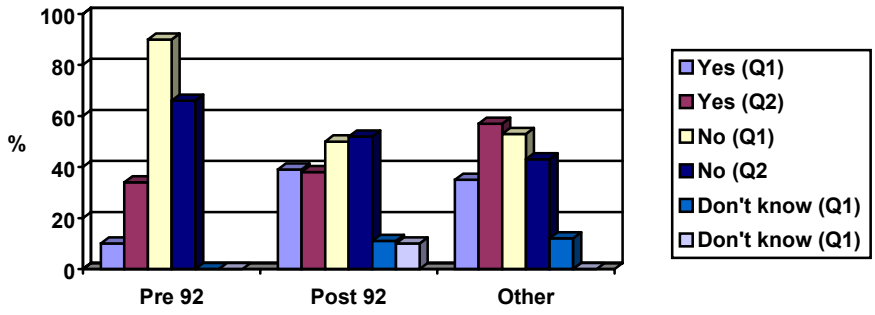

Fig 4.2: Stated targets for use of VLEs (Questionnaire one (question 14) and questionnaire two (question 10))

Examples of targets set by institutions include:

- 100% by 2 to 3 years time
- To deliver a part of every undergraduate programme

- Available to all courses by summer 2002
- All level one modules using technology to support learning by December 2002 (not all via VLE)
- 100% of all courses to be using enhanced intranets by the end of 2001/2002
- 5000 students, implementation across all faculties by 2003
- 50% of courses in pilot departments by September 2001
- At least one module per school by July 2002

These targets show a wide range, from institutional to pilot activities. This combination with the fact that the setting of targets is still a minority reinforces the perception that use is localised in the majority of institutions.

4.2 Reasons driving change

Respondents to the questionnaires were also asked to identify the main reasons why they were moving to or considering the use of VLEs. A wide range of options were presented, it was though possible to cluster these responses. The responses from UCISA Directors or their representatives from questionnaire are shown in table 4.1.

Table 4.1: Reasons for moving to or considering VLEs (Questionnaire one, question 15)

Enhancing teaching and learning	43%
Efficiency/Management	31%
Distance learning	25%
Flexibility	15%

Respondents to questionnaire two did though give a different balance of reasons. The main reasons identified by are shown in table 4.2.

Table 4.2: Reasons for moving to or considering VLEs (Questionnaire two, question 11)

Flexibility	49%
Efficiency/Management	37%
Enhancing teaching and learning	14%
Distance learning	12%

4.3 Decision making

Who is involved in the decision making process within institutions. Responses to questionnaire one are shown below:

Table 4.3: Departments involved in choosing VLEs (Questionnaire one, question 18)

IT Services/LIS	96%
Academic Faculties	88%
Educational Development Units	75%
MIS	42%

Table 4.3 shows that IT services/LIS are heavily involved in the decision making process as might be expected. These responses also indicated that in 88% of cases the decisions were taken at institutional level and 33% of cases at a local level; this recognises that some institutions have more than one VLE. These responses, indicating who is involved in the process come from UCISA Directors; a comparison with the results from questionnaire shows a different pattern, this is shown in table 4.4.

Table 4.4: Departments involved in choosing VLEs (Questionnaire two, question 12)

IT Services/LIS	63%
Academic Faculties	57%
Educational Development Units	56%
MIS	21%

How was the decision making process organised? Table 4.5 lists the main processes and factors identified as being used as part of the decision making process.

Table 4.5: Processes and factors identified as being used as part of the decision making process (Questionnaire one, question 19)

Organisation of Demonstrations	80%
Recommendations from other Institutions	77%
Evaluation by Specialist Unit	70%
Published Reviews	70%
Cost	70%
Technical Reports by Staff	64%

4.4 Funding

The survey also sought to identify what patterns of funding were being adopted for VLEs. The table below identifies the responses, recognising that more than one response was received from some institutions:

Table 4.6: Finding of VLES (Questionnaire one, question 20)

Centrally funded	80%
Project funding	27%
Faculty funding	17%
External funding	13%

5.0 Technical Support and MIS Integration

This section of the report looks at how VLEs are technically implemented and maintained and how they integrate with Management or Corporate Information Systems (MIS/CIS), to approach a Managed Learning Environment (MLE), if indeed there is evidence of integration with these systems at all.

5.1 Integration with MIS

The survey indicates that there is a low level of integration between VLEs and MIS systems to date. This may indicate that although use of VLEs is increasing there is little evidence yet of a shift to the centre and the automated inclusion of student records within such a learning environment.

Table 5.1 indicates the level and type of integration activity for VLEs that have been implemented (Questionnaire one, question 23)

Limited Automated Link	**27%**
Automated Creation of File for Transfer	19%
Access to Student Records	11%
Input of Student Records	8%
Output of Assessment Results	4%

Given that 36% of respondents who gave a reason for moving to a VLE cited improved efficiency and management control as a reason you might expect these figures to be slightly higher. Certainly this indicates an impetus to moving eventually towards integrated systems even if implementation of this is limited at the moment.

Of those respondents who specified the type of MIS system to be used for integration 45% used a commercial system and 30% had an in-house developed system.

5.2 Installation and Maintenance

This section relates firstly to the units that physically install and maintain the VLE system and secondly which units provide technical level support for the VLE. The figures here indicate a large responsibility for Central Services in installing and maintaining systems, with two thirds fulfilling this role as shown by Table 5.2. This breakdown does not vary considerably between pre 1992 and post 1992 universities.

Table 5.2 Units responsible for installing and maintaining VLEs (Questionnaire one, 21)

Central IT Services	67%
Distributed IT Services	7%
Other	35%

It is interesting to compare these responses with the type of funding the VLE receives as shown in Fig 5.1. This reinforces the role of Central IT services for centrally, project and externally funded VLE implementations. Perhaps unsurprisingly Central IT Services has a more limited role where the VLE is funded through a faculty.

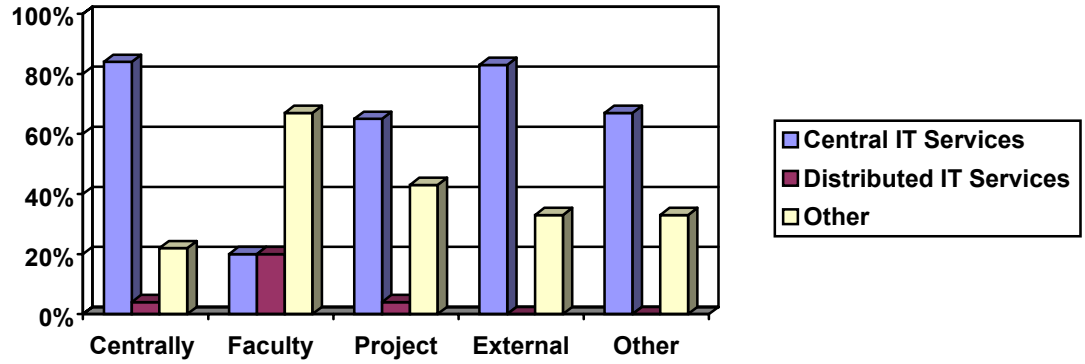

Fig 5.1: Provision of installation and maintenance by type of project funding (Questionnaire one, question 20 & 21)

This indicates a movement of VLE installations into the IT centre especially when funded centrally or through project funding

5.3 Technical Support and System Administration

This section examined the units that provide technical support for the VLE. This is supporting users with technical rather than content development support or advice on how to use the VLE. Given the tendency identified above for installations to be through Central IT services, a similar trend could be expected here and the results of the survey support this with Central Services providing technical support in three quarters of installations, although there is evidence of a number of other units pitching in with support in this area, as can be seen in Table 5.3.

Table 5.3 Provision of Technical Support by Unit (Questionnaire one, question 22)

Central IT Services/Learning and Information Services	75%
Distributed IT Services (i.e. local IT support)	19%
Learning Technology Support Unit (i.e. staff development unit for LT support)	36%
Educational Development Unit (i.e. unit for all academic staff development)	19%
Local Support (provided by immediate users of VLE)	21%
Dedicated VLE support unit (unit with specific function of VLE support)	17%

The role of Central IT services as reduced however when it comes to administration of the VLE system. System administration is taken to mean tasks such as the configuration of courses and users (?). This function seems to be spread over a greater number of units indicating that the hands on running of VLEs is more likely to involve a specialist unit, particularly Learning Technology Support units, when compared with technical support. This is not to say Central services do not have strong presence here as well as they are still the leading provider of system administration as can be seen by Table 5.4.

Table 5.4 Provision of VLE System Administration by Unit (Questionnaire one, question 22)

Central IT Services/Learning and Information Services	55%
Distributed IT Services (i.e. local IT support)	20%
Learning Technology Support Unit (i.e. staff development unit for LT support)	45%
Educational Development Unit (i.e. unit for all academic staff development)	19%
Local Support (provided by immediate users of VLE)	22%
Dedicated VLE support unit (unit with specific function of VLE support)	20&

A comparison of the input of each unit for each role can be seen in Fig 5.2.

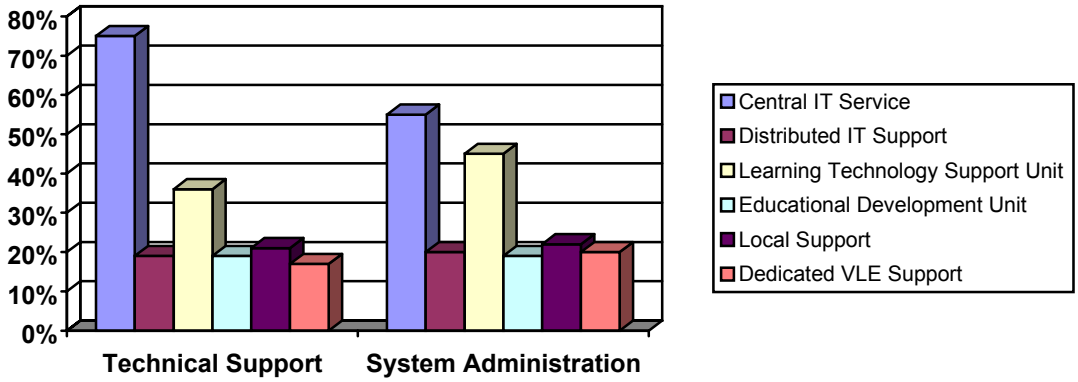

Fig 5.2: Technical support and system administration by unit. (Questionnaire one, question 22)

There are some interesting differences in the area of technical support and system administration between Pre 1992 and Post 1992 universities. The role of Central IT Services is much higher in Post 1992 universities with 74% providing technical support and 70% providing systems administration. This contrasts with 67% who provide technical support and 52% who provide systems administration in Pre 1992 universities. In terms of technical support immediate users of the VLE are twice as likely to be involved than in Post 1992 universities... This may indicate that Post 1992 universities are approaching centralized support and administration provision more than the older universities who are still implementing very much locally.

The overall summary of this section is that there is movement towards central implementation of VLEs from local implementations but this isn't particularly full. There is evidence that central services are involved in installing and providing technical support but are less involved in administration of the VLEs. There is not a great deal of evidence that Managed Learning Environments are being implemented although there is limited activity towards this sort of environment.

6.0 Staff Support

The use of VLEs is likely to increase substantially in the next year. Question 8: 'How many academic staff currently use VLEs in your institution?' and Question 11: 'How many academic staff plan to use VLEs in your institution within the next 12 months?' from Questionnaire 1 indicate that institutions expect the number of academic staff using VLEs to increase (Fig 6.1).

The aim of this section is to investigate the support mechanisms for this increase.

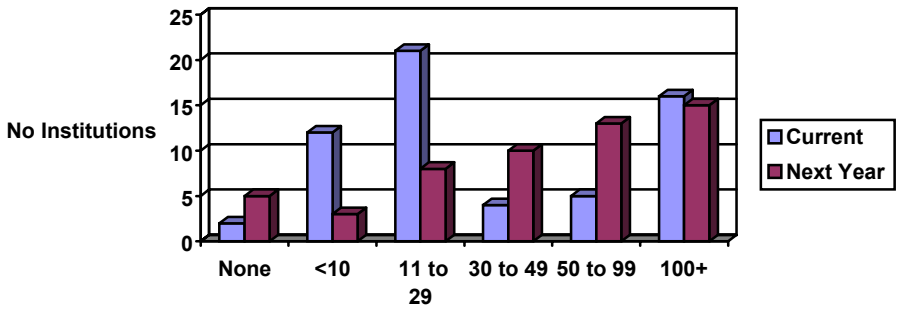

Fig 6.1 Numbers of staff using VLEs (Questionnaire one, question 8 & 11)

6.1 The Institutional View (Questionnaire 1)

Academics are expected to perform several roles – teaching, research, administration, personal tutoring. Question 25 asked 'Are academic staff allowed time for the development of courses using this VLE?'

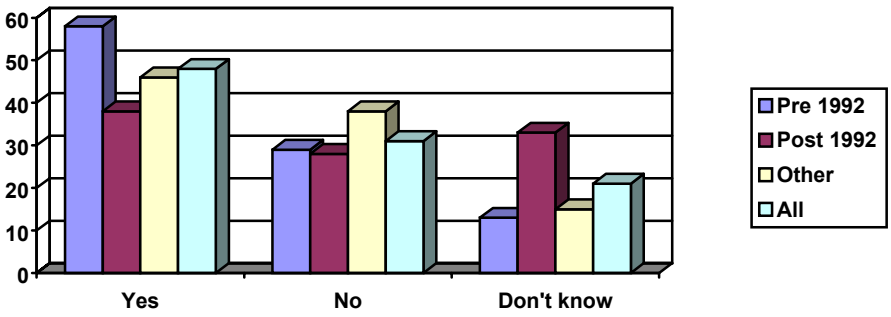

Fig 6.2: Percentage of institutions allowing staff development time (Questionnaire one, question 25)

Fig 6.2 indicates that just under 50% of all the institutions that replied allowed staff time to develop teaching using VLEs. Pre-1992 Universities appear to be more likely to allow staff development time, but there was a greater "don't know" reply from the Post-1992 Universities. It is likely that 50% is a reasonable indication of the number of institutions allowing development time.

Question 27 asked 'What units across the institution provide staff development and support for the use of VLEs?' and gave a list of options for support providers:

- Central IT Services/Learning and Information Services
- Distributed IT Services (ie local IT support)
- Learning Technology Support Unit (ie staff development unit for LT support) (LTSU)
- Educational Development Unit (ie unit for all academic staff development) (EDU)
- Local support (provided by immediate users of the VLE)
- Dedicated VLE support unit

Four areas of provision were listed:

- Staff development for pedagogic uses of VLEs
- Support in creating new courses
- Support in adding content and maintaining courses
- Support in creating and maintaining web pages

Fig 6.3 combines the support sources and the areas of support from the institutions perspective.

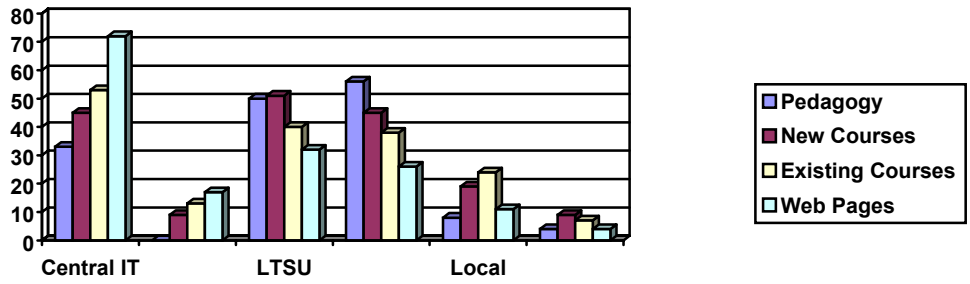

Fig 6.3: Support provided by different units (Questionnaire one, question 27)

Support for any of the four areas can be carried out by more than one support unit, but it is clear that Central IT and specialized support units (LTSUs and EDUs) are the most used, particularly in the pedagogy and development of new courses. Distributed IT units and local, person-to-person, support become more used once the course has been created.

The graph suggests that there is an overlap in provision of support – Central IT providing pedagogic support while LTSUs are helping develop web material.

6.2 The Local Users and those providing support to VLEs view (Questionnaire 2)

Local users have a different perspective of the support models. Question 19 asked 'Are academic staff allowed time for the development of courses using this VLE?'

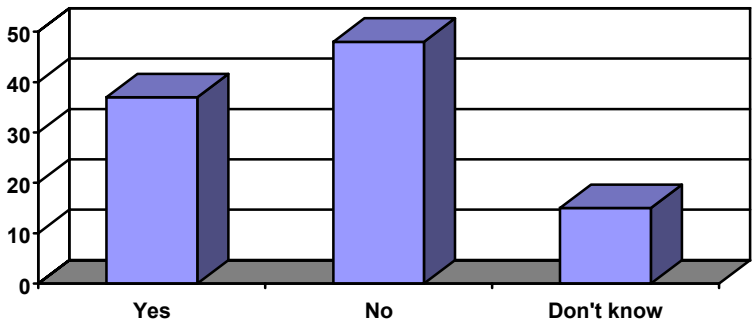

Fig 6.4: Percentage of institutions allowing staff development time (Questionnaire two, question 19)

Fig 6.4 can be compared with fig 6.2. Whereas the institutional view is that about 50% of institutions will allow staff development time, the local view is below 40%. The reason for this is unclear.

Question 21 asked the same question as Question 27 (Questionnaire 1) 'What units across the institution provide staff development and support for the use of VLEs?' and gave a similar list of options for support providers.

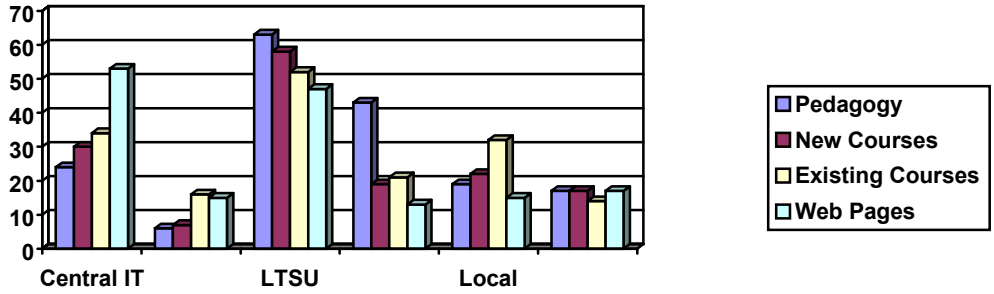

Fig 6.5: Course development support provided by different units (Questionnaire two, question 21)

Fig 6.5 can be compared with fig 6.3. The patterns are very similar, although there is an increase in the support provided by the dedicated VLE support units. Again, it is seen that the "specialized" units are providing support in more than one area.

There is a need to provide academics with the time and resources to develop good, pedagogically sound, material. Although the institutions believe they are doing so, this does not reflect the local experience.

There is cross unit expertise in the four areas of support.

Peer support is important.

7.0 Student Support

Aim of this section:
- indicate student training provided
- indicate level of special provision

7.1 Student Training

This section will consider what student support is provided within HEIs and from what source within the institution. The survey has confirmed that the introduction of VLEs is a new development for many HEIs (see section 3.0). They are a cultural change for both staff and students; the survey sought to establish the level of student support provided, the support mechanism and the source of that support.

Table 7.1 shows the distribution of how responding universities and colleges provide student support, based on the results of Questionnaire One. Institutions may provide more than one form of support and from different sources, as such it is difficult to present this data as a percentage, what stands out though is the final row which indicates the number of institutions, with VLEs, that provided no response. This suggests that student support is not provided, in different forms in over one third of all replying institutions. This is a relatively high proportion of those responding to the survey and is supported from the data in Questionnaire 2 (Table 7.2).

Table 7.1 Type of student support by unit (Questionnaire One, question 28)

	Face to face	Printed Guides	Online Support & Training	Web pages
Central IT	13	19	16	16
Distributed IT	2	3	2	2
LTSU	10	15	10	10
EDU	7	6	5	5
Local	17	5	7	3
Dedicated VLE Support	2	1	1	2
Total number of institutions	38	36	34	28
Number providing no support	24 (39%)	26 (42%)	28 (45%)	34 (55%)

Table 7.2 Type of student support by unit (Questionnaire Two, question 22)

	Face to face	Printed Guides	Online Support & Training	Web pages
Central IT	10	22	15	15
Distributed IT	9	7	5	2
LTSU	16	20	14	14
EDU	9	11	9	5
Local	32	20	16	12
Dedicated VLE Support	10	9	12	8
Total number of institutions	55	55	47	38
Number providing no support	30 (35%)	30 (35%)	38 (45%)	47 (55%)

What does this suggest? Firstly it suggests that students are being expected to make use of these new developments within their learning but without a consistent training provision across the sector. Secondly it supports the perception that the focus of the impact of VLEs on institutions is on staff rather than students; when compared with responses for staff support (see fig 6.3). And thirdly it reinforces that VLEs are still a very new development for which mature support mechanisms have yet to be developed. This matches with the impression identified earlier that VLEs are at this stage still in many cases a local, rather than central and strategic development.

Looking at the data overall where support is provided it can be seen that central IT services are a major provider of student support. As might be expected this is particularly apparent from the responses in Questionnaire One. Student support is provided in a number of different ways with face to face support and printed guides appearing to be slightly more common.

Comparing student support with time that a VLE has been used does not present a clear picture. There is some indication of increasing support with increased time; this is though not consistent and cannot be clearly disentangled from other criteria such as institution type. The data does suggest that more online and web page support is provided by old universities, which we have seen are also more recent users of VLEs. There is some variation in how support is provided between institution type. For example, in terms of face to face support it is interesting to note that in old universities the greatest proportion is delivered by central IT services; yet in new universities the greatest proportion is provided locally, by immediate users of VLEs.

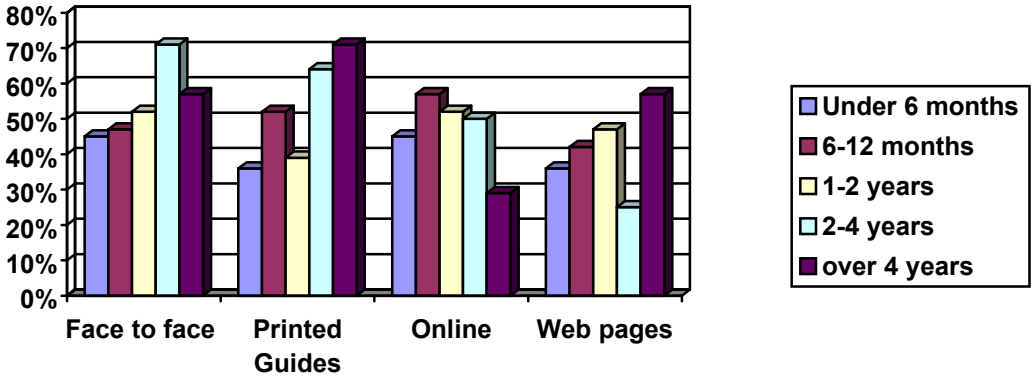

Fig 7.1: Support by time (figures shown as percentage of respondents by time period, questionnaire one, questions 6 & 22)

7.2 Specialist Support: Distance Learning

The use of VLEs for distance learning has been identified through this survey; is any special provision made for these students? The survey shows that 45% of those responding indicated that they made special provision for these students (ST3). Examples of the type of support provided includes:

- Special arrangements for technical support
- Support/helpline
- Outreach centres
- Making systems available through username and password access
- Identified helpdesk staff
- Special documentation
- Online guides
- Postal registration

Some of the responses provided indicate that the use of VLEs themselves is seen as special provision for distance learning students, with comments such as:

- Asynchronous discussion groups
- We are making courses available via 'our VLE'

The provision of specialist support is for over 50% of respondents an issue for future consideration; additional comments provided, indicate that such support is being developed or is being considered. This would prove a potentially positive area for the exchange of current practice.

Table 7.3 Is any special provision made for distance learning students? (Questionnaire one, question 29)

	Questionnaire One	Questionnaire Two
Yes	45%	44%
No	45%	51%
Don't Know	10%	8%

7.3 Specialist Support: Special Needs

The use of online learning is argued to provide opportunities for equality in learning. At the same time the use of technology can be exclusive. Provision for students with special needs is therefore important and must be addressed as Universities and Colleges will soon no longer be exempt from disability legislation. The responses to the questionnaires show that a greater proportion of institutions do not provide such specialist support (see ST4).

Table 7.4 Is any special provision made for students with special needs? (Questionnaire one, question 30)

	Questionnaire One	Questionnaire Two
Yes	25%	35%
No	57%	49%
Don't Know	18%	17%

Where support is provided and additional comment was given the indications of the support provided included:

- Special access points
- Specialised hardware
- Revised student desktop
- Working toward BOBBY approval for web pages
- Accessibility information service for staff
- A speak option for text in content
- Web access guidelines
- Use of RNIB recommended fonts

It is though apparent, as with distance learning, that institutions are working toward the provision of specialist support.

8.0 Conclusions

8.1 VLEs as part of a continuum of development

In 1991 a tranformational model was developed at MIT (Scott Morton, 1991) indicating the effect that IT can have in companies and how, over time, its implementation is perceived to introduce a growing number of benefits. This model has subsequently been adapted by a number of agencies, most recently by the Citscapes project (see: http://www.citscapes.ac.uk/) .[1] Their modified model indicates stages of development ranging from: Individualised (small scale, enthusiasts) – Localised – Coordinated – Transforming – Embedded '- 'Innovative'. It is only at the 'innovative' stage that VLEs are deemed to be introduced at an *institutional* level allied to the assumption that also by this stage, IT literacy is helping to drive rethinking of the learning processes and introducing more critical and reflective reasoning. So when analysing the results of the survey, it is important to note that VLEs should not be considered in isolation but rather as part of a continuum of development, as highlighted by earlier surveys, with an array of associated realignments in ways of supporting such developments amongst the UCISA community. In summary, this survey aims to contribute to a better understanding of some of those realignments.

8.2 Recommendations

The year 2001 has seen a range of activities from agencies in addition to UCISA. In addressing their particular constituencies, some of which clearly overlap with the UCISA community, ALT, JISC, BECTA and ILT have all held workshops, conferences or conducted research into issues relating to VLEs. It is essential that both between these organisations and as individuals within our institutions, we identify and act upon our shared objectives.

Core Recommendation

> **UCISA should seek to collaborate with all stakeholders to ensure the dissemination of best practise in the obtaining, training and use of VLEs.**

Recommendations

The UCISA community primarily represents support staff in Computing/Information Services. The recommendations that follow are in part where UCISA can act as an agent for change for its own constituency and where, in collaboration with other agencies, it can contribute to more holistic strategic developments.

1 UCISA should provide a strategic statement regarding VLEs, to assist Universities in preparing their own Strategy documents.

2 UCISA should invite its own members to identify what additional assistance they need in order to select and support VLEs within their own institutions.

3 UCISA must take into account that many key support staff work outside Computing/Information Services and identify ways of involving them.

4 UCISA could produce a gateway of relevant Web-based information and discussion lists.

5 UCISA should ensure that appropriate collaborative relationships are forged with all other relevant external agencies and stakeholders.

6 UCISA should encourage the development of local support teams, in which academics and support staff can collaborate both strategically and in course development and maintenance.

[1] Citscapes is a JISC-funded project, starting in July 2000, charged with investigating the present situation in student C&IT training or induction at universities and colleges throughout the United Kingdom. As part of its investigations, it too conducted a survey, and it is instructive to note the parallels in outcomes compared with the UCISA VLE Survey. There has in fact been some sharing of experiences between personnel responsible for both surveys.

7 UCISA should support the availability of academic staff training, especially as part of any institutional accreditation schemes, in both pedagogic and practical use of a VLE.

8 UCISA should share experience and resources regarding the most appropriate way of providing support to students.

9 UCISA should contribute to, participate in and publicise activities that promote good practice.

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